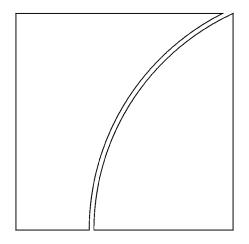
Committee on Payments and Market Infrastructures



Statistics on payment, clearing and settlement systems in the CPMI countries

Figures for 2016

October 2017

Preliminary release





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Note

It is important that the country tables are read in conjunction with the corresponding statistical methodology. Where the data provided are an exception to the methodology, this is indicated by in the table concerned. A second statistical methodology explains which data have been taken from the country tables for the comparative tables.

Notation used in this publication:

nap not applicable nav not available

0 exactly zero (not rounded to zero; country tables only)

Differences in totals are due to rounding.

Country tables



Table 1
Basic statistical data

	2012	2013	2014	2015	2016
Population (thousands)	22,794.5	23,191.9	23,550.6	23,894.9	24,256.6
GDP (AUD billions)	1,507.4	1,559.7	1,605.5	1,633.9	1,692.8
GDP per capita (AUD)	66,130	67,253	68,174	68,379	69,789
Consumer price inflation (%)	2.2	2.7	1.7	1.7	1.5
Exchange rate (AUD/USD):					
end of year	0.9630	1.1176	1.2192	1.3687	1.3820
average	0.9622	1.0416	1.1123	1.3396	1.3452

Table 2 Settlement media used by non-banks

(AUD billions, end of year)

	2012	2013	2014	2015	2016
Notes and coin in circulation outside banks	53.77	57.67	62.01	67.43	71.12
Value of transferable deposits	197.39	215.21	227.96	254.12	271.44
Narrow money supply (M1)	251.15	272.88	289.97	321.55	342.57
Memo:					
Transferable deposits in foreign currencies	nav	nav	nav	nav	nav
Outstanding value on e-money storage	nap	nap	nap	nap	nap

Table 3 Settlement media used by banks

(AUD billions, average for December)

	2012	2013	2014	2015	2016
Transferable balances held at the central bank	2.30	23.81	23.37	25.38	25.06
required reserves	nap	nap	nap	nap	nap
free reserves	2.30	23.81	23.37	25.38	25.06
Transferable balances held at other banks	nap	nap	nap	nap	nap
Memo:					
Credit extended by the central bank:					
intraday	16.09	4.45	4.88	4.49	4.55
overnight	0	0	0	0	0
longer refinancing operations (repos)	0	0	0	0	0

Table 4
Banknotes and coin
(AUD millions, end of year)

	2012	2013	2014	2015	2016
Total banknotes and coin issued	62,379.4	66,544.8	70,488.3	75,659.0	79,751.9
Total banknotes issued	58,981.7	63,018.1	66,854.3	71,923.9	75,839.6
AUD 100	24,583.1	26,836.5	29,203.6	32,447.2	34,646.1
AUD 50	29,000.3	30,675.4	32,163.0	33,921.8	35,341.4
AUD 20	3,464.0	3,514.7	3,430.9	3,439.4	3,505.7
AUD 10	1,133.0	1,163.9	1,202.9	1,236.0	1,288.6
AUD 5	801.3	827.6	853.9	879.4	1,057.7
Total coin issued	3,397.7	3,526.7	3,634.0	3,735.1	3,967.0
AUD 2	1,439.1	1,514.1	1,576.3	1,644.1	1,658.5
AUD 1	766.9	790.4	811.0	837.8	924.3
AUD 0.50	430.7	441.6	449.2	449.2	494.5
AUD 0.20	331.6	341.5	351.1	351.1	380.5
AUD 0.10	219.4	225.3	229.4	233.7	234.5
AUD 0.05	210.0	213.8	217.1	219.3	220.1
Banknotes and coin held by banks	8,610.4	8,873.8	8,483.3	8,227.0	8,629.2
Banknotes and coin in circulation outside banks	53,769.0	57,671.0	62,005.0	67,432.0	71,122.8

Table 5
Institutions offering payment services to non-banks (end of year)

Number of branches or offices 2 2 2 2 2 2 2 2 2		2012	2013	2014	2015	2016
Number of accounts (AUD billions) nav value value of accounts (AUD billions) nav value value of accounts (AUD billions) nav value value value value value of institutions nav value	Central bank					
Value of accounts (AUD billions) 23.09 32.43 32.40 27.94 38.62 Memor: Number of accounts, all nav nav nav nav nav nav Banks Banks Sumber of institutions 66 68 69 73 80 Number of branches or offices 5,504 5,478 5,496 5,480 5,357 Number of accounts (AUD billions) 1,765.71 1,948.04 2,156.70 2,297.13 2,449.83 Other institutions offering payment services to non-banks Number of institutions offering payment services to non-banks 101 97 92 81 69 Number of institutions offering payment services to non-banks 40 93 93 863 733 544 Number of institutions offering payment services to non-banks 5,496 9,49 9	Number of branches or offices	2	2	2	2	2
Memo: Number of accounts, all nav nav <td>Number of accounts</td> <td>nav</td> <td>nav</td> <td>nav</td> <td>nav</td> <td>nav</td>	Number of accounts	nav	nav	nav	nav	nav
Memo: Number of accounts, all nav nav <td>Value of accounts (AUD billions)</td> <td>23.09</td> <td>32.43</td> <td>32.40</td> <td>27.94</td> <td>38.62</td>	Value of accounts (AUD billions)	23.09	32.43	32.40	27.94	38.62
Banks Number of institutions 66 68 69 73 80 Number of branches or offices 5,504 5,478 5,496 5,480 5,357 Number of accounts (AUD billions) 1,765.71 1,948.04 2,156.70 2,297.13 2,449.83 Other institutions offering payment services to non-banks Number of institutions 101 97 92 81 69 Number of branches or offices 998 935 863 738 544 Number of accounts (thousands) nav nav nav nav nav Number of accounts ((AUD billions) 58.88 54.92 55.10 49.92 42.11 Building societies 8 99 9 9 7 4 Number of institutions 9 9 9 9 7 4 Value of accounts (AUD billions) 18.88 19.46 19.63 14.01 10.06 Credit unions 9 8 8 83 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td></td<>						
Number of institutions 66 68 69 73 80 Number of branches or offices 5,504 5,478 5,496 5,480 5,357 Number of branches or offices nav nav nav nav nav Value of accounts (AUD billions) 1,765.71 1,948.04 2,156.70 2,297.13 2,449.83 Other institutions offering payment services to non-banks Number of institutions 101 97 92 81 69 Number of branches or offices 998 935 863 738 544 Number of branches or offices 998 935 863 738 544 Number of accounts (AUD billions) 58.88 54.92 55.10 49.92 42.11 Building societies 258 259 259 198 76 Value of accounts (AUD billions) 18.88 19.46 19.63 14.01 10.06 Credit unions 9 8 8 83 74 65 Number of		nav	nav	nav	nav	nav
Number of branches or offices 5,504 number of accounts 5,478 number of accounts 5,480 nav	Banks					
Number of accounts (AUD billions) nav lage of	Number of institutions	66	68	69	73	80
Number of accounts (AUD billions) nav lage of	Number of branches or offices	5,504	5,478	5,496	5,480	5,357
Other institutions offering payment services to non-banks Number of institutions 101 97 92 81 69 Number of branches or offices 998 935 863 738 544 Number of accounts (thousands) nav nav nav nav nav Value of accounts (AUD billions) 58.88 54.92 55.10 49.92 42.11 Building societies Number of institutions 9 9 9 7 4 Number of branches or offices 258 259 259 198 76 4 Number of branches or offices 258 259 259 198 76 4 Number of branches or offices 258 259 259 198 76 4 Number of institutions 92 88 83 74 65 Number of branches or offices 740 676 604 540 468 Value of accounts (AUD billions) 168 166 162 155 150		•	*	· ·	•	•
Number of institutions 101 97 92 81 69 Number of branches or offices 998 935 863 738 544 Number of accounts (thousands) nav nav nav nav nav Value of accounts (AUD billions) 58.88 54.92 55.10 49.92 42.11 Building societies 8 54.92 55.10 49.92 42.11 Number of institutions 9 9 9 7 4 Number of branches or offices 258 259 259 198 76 Value of accounts (AUD billions) 18.88 19.46 19.63 14.01 10.06 Credit unions 92 88 83 74 65 Number of institutions 92 88 83 74 65 Number of branches or offices 740 676 604 540 468 Value of accounts (AUD billions) 168 166 162 155 150 Number o	Value of accounts (AUD billions)	1,765.71	1,948.04	2,156.70	2,297.13	2,449.83
Number of institutions 101 97 92 81 69 Number of branches or offices 998 935 863 738 544 Number of accounts (thousands) nav nav nav nav nav Value of accounts (AUD billions) 58.88 54.92 55.10 49.92 42.11 Building societies 8 54.92 55.10 49.92 42.11 Number of institutions 9 9 9 7 4 Number of branches or offices 258 259 259 198 76 Value of accounts (AUD billions) 18.88 19.46 19.63 14.01 10.06 Credit unions 92 88 83 74 65 Number of institutions 92 88 83 74 65 Number of branches or offices 740 676 604 540 468 Value of accounts (AUD billions) 168 166 162 155 150 Number o	Other institutions offering payment services to r	non-banks				
Number of accounts (thousands) nav n	Number of institutions		97	92	81	69
Number of accounts (thousands) nav n	Number of branches or offices	998	935	863	738	544
Value of accounts (AUD billions) 58.88 54.92 55.10 49.92 42.11 Building societies Number of institutions 9 9 9 7 4 Number of branches or offices 258 259 259 198 76 Value of accounts (AUD billions) 18.88 19.46 19.63 14.01 10.06 Credit unions 92 88 83 74 65 Number of institutions or offices 740 676 604 540 468 Value of accounts (AUD billions) 40.00 35.46 35.48 35.92 32.05 Institutions offering payment services to non-banks (total) 40.00 35.46 35.48 35.92 32.05 Institutions offering payment services to non-banks (total) 40.00 35.46 162 155 150 Number of institutions 6,504 6,415 6,361 6,220 5,903 Number of accounts held by non-banks (AUD billions) 1,847.68 2,035.39 2,244.20 2,374.99 2,530.56		nav	nav	nav	nav	nav
Building societies Number of institutions 9 9 9 7 4 Number of branches or offices 258 259 259 198 76 Value of accounts (AUD billions) 18.88 19.46 19.63 14.01 10.06 Credit unions Value of institutions 92 88 83 74 65 Number of branches or offices 740 676 604 540 468 Value of accounts (AUD billions) 40.00 35.46 35.48 35.92 32.05 Institutions offering payment services to non-banks (total) Number of institutions 168 166 162 155 150 Number of branches or offices 6,504 6,415 6,361 6,220 5,903 Number of accounts held by non-banks nav nav nav nav nav nav nav nav nav 2,374.99 2,530.56 Memo: Electronic money institutions nap	,	58.88	54.92	55.10	49.92	42.11
Number of institutions 9 9 9 7 4 Number of branches or offices 258 259 259 198 76 Value of accounts (AUD billions) 18.88 19.46 19.63 14.01 10.06 Credit unions 8 83 74 65 Number of institutions 92 88 83 74 65 Number of branches or offices 740 676 604 540 468 Value of accounts (AUD billions) 40.00 35.46 35.48 35.92 32.05 Institutions offering payment services to non-banks (total) Number of institutions 168 166 162 155 150 Number of branches or offices 6,504 6,415 6,361 6,220 5,903 Number of accounts held by non-banks nav nav nav nav nav nav nav nav 2,374.99 2,530.56 Memo: Electronic money institutions nap	,					
Number of branches or offices 258 259 259 198 76 Value of accounts (AUD billions) 18.88 19.46 19.63 14.01 10.06 Credit unions Number of institutions 92 88 83 74 65 Number of branches or offices 740 676 604 540 468 Value of accounts (AUD billions) 40.00 35.46 35.48 35.92 32.05 Institutions offering payment services to non-banks (total) Number of institutions 168 166 162 155 150 Number of branches or offices 6,504 6,415 6,361 6,220 5,903 Number of accounts held by non-banks nav nav nav nav nav nav nav nav 2,374.99 2,530.56 Memo: Electronic money institutions Number of institutions nap nap nap nap nap nap Coutstanding value		9	9	9	7	4
Credit unions Number of institutions 92 88 83 74 65 Number of branches or offices 740 676 604 540 468 Value of accounts (AUD billions) 40.00 35.46 35.48 35.92 32.05 Institutions offering payment services to non-banks (total) Number of institutions 168 166 162 155 150 Number of branches or offices 6,504 6,415 6,361 6,220 5,903 Number of accounts held by non-banks nav 2,374.99 2,530.56 35.46 35.48 35.92 2,374.99 2,530.56 35.46 35.48 35.92 2,374						76
Credit unions Number of institutions 92 88 83 74 65 Number of branches or offices 740 676 604 540 468 Value of accounts (AUD billions) 40.00 35.46 35.48 35.92 32.05 Institutions offering payment services to non-banks (total) Number of institutions 168 166 162 155 150 Number of branches or offices 6,504 6,415 6,361 6,220 5,903 Number of accounts held by non-banks nav 2,374.99 2,530.56 35.46 35.48 35.92 2,374.99 2,530.56 35.46 35.48 35.92 2,374	Value of accounts (AUD billions)	18.88	19.46	19.63	14.01	10.06
Number of branches or offices 740 676 604 540 468 Value of accounts (AUD billions) 40.00 35.46 35.48 35.92 32.05 Institutions offering payment services to non-banks (total) Number of institutions 168 166 162 155 150 Number of branches or offices 6,504 6,415 6,361 6,220 5,903 Number of accounts held by non-banks nav nav nav nav nav Value of accounts held by non-banks (AUD billions) 1,847.68 2,035.39 2,244.20 2,374.99 2,530.56 Memo: Electronic money institutions Number of institutions nap nap nap nap nap nap nap outstanding value on e-money storages issued by						
Number of branches or offices 740 676 604 540 468 Value of accounts (AUD billions) 40.00 35.46 35.48 35.92 32.05 Institutions offering payment services to non-banks (total) Number of institutions 168 166 162 155 150 Number of branches or offices 6,504 6,415 6,361 6,220 5,903 Number of accounts held by non-banks nav nav nav nav nav Value of accounts held by non-banks (AUD billions) 1,847.68 2,035.39 2,244.20 2,374.99 2,530.56 Memo: Electronic money institutions Number of institutions nap nap nap nap nap nap nap outstanding value on e-money storages issued by	Number of institutions	92	88	83	74	65
Value of accounts (AUD billions) 40.00 35.46 35.48 35.92 32.05 Institutions offering payment services to non-banks (total) Number of institutions 168 166 162 155 150 Number of branches or offices 6,504 6,415 6,361 6,220 5,903 Number of accounts held by non-banks nav nav nav nav nav nav value of accounts held by non-banks (AUD billions) 1,847.68 2,035.39 2,244.20 2,374.99 2,530.56 Memo: Electronic money institutions Number of institutions Number of institutions nap nap nap nap nap nap	Number of branches or offices		676	604	540	468
Number of institutions 168 166 162 155 150 Number of branches or offices 6,504 6,415 6,361 6,220 5,903 Number of accounts held by non-banks nav nav nav nav nav nav Value of accounts held by non-banks (AUD billions) 1,847.68 2,035.39 2,244.20 2,374.99 2,530.56 Memo: Electronic money institutions Number of institutions Outstanding value on e-money storages issued by		40.00	35.46	35.48	35.92	32.05
Number of institutions 168 166 162 155 150 Number of branches or offices 6,504 6,415 6,361 6,220 5,903 Number of accounts held by non-banks nav nav nav nav nav nav Value of accounts held by non-banks (AUD billions) 1,847.68 2,035.39 2,244.20 2,374.99 2,530.56 Memo: Electronic money institutions Number of institutions Outstanding value on e-money storages issued by	Institutions offering payment services to non-ba	nks (total)				
Number of accounts held by non-banks Value of accounts held by non-banks (AUD billions) 1,847.68 2,035.39 2,244.20 2,374.99 2,530.56 Memo: Electronic money institutions Number of institutions nap nap nap nap nap nap nap			166	162	155	150
Number of accounts held by non-banks Value of accounts held by non-banks (AUD billions) 1,847.68 2,035.39 2,244.20 2,374.99 2,530.56 Memo: Electronic money institutions Number of institutions nap nap nap nap nap nap nap	Number of branches or offices	6,504	6,415	6,361	6,220	5,903
Value of accounts held by non-banks (AUD billions) 1,847.68 2,035.39 2,244.20 2,374.99 2,530.56 Memo: Electronic money institutions Number of institutions nap nap nap nap nap nap Outstanding value on e-money storages issued by	Number of accounts held by non-banks	•	nav	·	•	nav
(AUD billions) 1,847.68 2,035.39 2,244.20 2,374.99 2,530.56 Memo: Electronic money institutions Number of institutions nap nap nap nap nap nap outstanding value on e-money storages issued by	•					
Electronic money institutions Number of institutions nap nap nap nap nap nap nap	•	1,847.68	2,035.39	2,244.20	2,374.99	2,530.56
Number of institutions nap nap nap nap nap outstanding value on e-money storages issued by	Memo:					
Number of institutions nap nap nap nap nap outstanding value on e-money storages issued by	Electronic money institutions					
Outstanding value on e-money storages issued by	•	nap	nap	nap	nap	nap
		•	•		•	•
Tiap Tiap Tiap Tiap	e-money institutions (AUD billions)	nap	nap	nap	nap	nap

Table 6
Payment card functions and accepting devices (end of year)

	2012	2013	2014	2015	2016
Cards issued in the country (thousands)					
Cards with a cash function	61,011	63,052	64,699	66,602	69,454
Cards with a debit function	38,986	40,104	41,264	42,714	45,197
Cards with a credit function ¹	22,025	22,949	23,435	23,888	24,257
Cards with an e-money function	nap	nap	nap	nap	nap
Total number of cards (irrespective of the number					
of functions on the card)	61,011	63,052	64,699	66,602	69,454
of which: cards with a combined debit, cash and					
e-money function	nap	nap	nap	nap	nap
Мето:					
Retailer cards	nav	nav	nav	nav	nav
Terminals located in the country					
ATMs	30,333	30,222	31,464	31,661	32,879
ATMs with a cash withdrawal function	30,333	30,222	31,464	31,661	32,879
ATMs with a credit transfer function	nav	nav	nav	nav	nav
POS terminals	755,524	804,486	843,605	956,167	954,174
EFTPOS terminals	755,524	804,486	843,605	956,167	954,174
E-money card terminals	nap	nap	nap	nap	nap
¹ Includes cards with a delayed debit function.					

Table 7
Indicators of the use of payment instruments and terminals by non-banks: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers ¹	1,640.8	1,746.0	1,784.6	1,922.1	2,090.8
paper-based	nap	nap	nap	nap	nap
non-paper-based	1,640.8	1,746.0	1,784.6	1,922.1	2,090.8
Direct debits	737.3	807.5	883.1	976.6	1,082.4
Card payments with cards issued in the country	4,773.7	5,301.2	5,862.9	6,522.5	7,334.3
payments by cards with a debit function	2,998.1	3,384.5	3,790.6	4,260.5	4,848.5
payments by cards with a credit function 1,2	1,775.6	1,916.8	2,072.3	2,262.0	2,485.8
E-money payment transactions	nap	nap	nap	nap	nap
Cheques	224.4	194.4	166.6	139.5	111.7
Other payment instruments ³	330.3	346.5	363.2	375.6	383.9
Total number of transactions with payment					
instruments	7,706.5	8,395.7	9,060.4	9,936.3	11,003.0
of which: cross-border transactions sent	nav	nav	nav	nav	nav
Мето:					
Cross-border transactions received	nav	nav	nav	nav	nav
Transactions per type of terminal					
Total transactions at terminals in the country					
Cash transactions ⁴	1,117.5	1,072.9	1,018.6	962.1	891.2
ATM cash withdrawals	826.4	790.1	743.7	693.2	622.7
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions	4,045.9	4,406.6	4,953.7	5,555.2	6,232.9
E-money card loading/unloading transactions	nap	nap	nap	nap	nap
E-money card payment transactions	nap	nap	nap	nap	nap

¹ Excludes BPAY. ² Includes payments by cards with a delayed debit function. ³ BPAY. ⁴ Includes cash-outs at point-of-sale terminals.

Table 8
Indicators of the use of payment instruments and terminals by non-banks: value of transactions (AUD billions, total for the year)

	2012	2013	2014	2015	2016		
Transactions per type of payment instrument							
Credit transfers ¹	7,128.3	7,747.1	7,908.9	8,255.7	8,440.2		
paper-based	nap	nap	nap	nap	nap		
non-paper-based	7,128.3	7,747.1	7,908.9	8,255.7	8,440.2		
Direct debits	5,856.8	5,897.6	5,628.2	5,792.7	5,895.4		
Card payments with cards issued in the country	422.5	451.3	485.8	520.1	551.9		
payments by cards with a debit function	171.7	188.8	208.0	228.1	249.1		
payments by cards with a credit function 1, 2	250.8	262.5	277.8	292.0	302.8		
E-money payment transactions	nap	nap	nap	nap	nap		
Cheques	1,206.9	1,220.3	1,228.5	1,228.4	1,154.9		
Other payment instruments ³	254.3	277.8	310.1	339.3	361.1		
Total value of transactions with payment							
instruments	14,868.8	15,594.1	15,561.5	16,136.2	16,403.5		
of which: cross-border transactions sent	nav	nav	nav	nav	nav		
Мето:							
Cross-border transactions received	nav	nav	nav	nav	nav		
Transactions per type of terminal							
Total transactions at terminals in the country							
Cash transactions ⁴	178.0	173.8	169.8	166.1	160.1		
ATM cash withdrawals	152.2	148.2	144.2	140.6	133.7		
ATM cash deposits	nav	nav	nav	nav	nav		
POS payment transactions	341.9	354.4	382.7	406.2	423.1		
E-money card loading/unloading transactions	nap	nap	nap	nap	nap		
E-money card payment transactions	nap	nap	nap	nap	nap		
Evaluate PRAV 2 Includes normante by cords with a deleved debit function 3 PRAV 4 Includes coch cuts at point of colo							

¹ Excludes BPAY. ² Includes payments by cards with a delayed debit function. ³ BPAY. ⁴ Includes cash-outs at point-of-sale terminals.

Table 9
Participation in selected interbank funds transfer systems (end of year)

	2012	2013	2014	2015	2016
RITS					
Number of participants ¹	82	85	88	87	95
Direct participants	60	61	59	60	60
Banks	50	51	48	49	49
Central bank	1	1	1	1	1
Other direct participants	9	9	10	10	10
General government	nap	nap	nap	nap	nap
Postal institution	nap	nap	nap	nap	nap
Clearing and settlement organisations	3	3	4	4	4
Other financial institutions	6	6	6	6	6
Other	0	0	0	0	0
Indirect participants	22	24	29	27	35
¹ RITS also has a number of non-participant members.					

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Table 10
Payments processed by selected interbank funds transfer systems: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Large-value and retail payment systems					
DITE					
RITS Total transactions sent	9.42	10.24	10.63	11.17	11.33
	€. . <u>−</u>				
Concentration ratio in terms of volume (%)	72.2	70.7	70.2	69.5	69.3

Table 11
Payments processed by selected interbank funds transfer systems: value of transactions (AUD billions, total for the year)

	2012	2013	2014	2015	2016
Large-value and retail payment systems					
RITS					
Total transactions sent	38,833.7	39.518.9	40.726.2	41.252.1	41.433.6
rotal transactions cont	00,000	00,010.0	10,120.2	,202	,
Concentration ratio in terms of value (%)	62.3	60.4	61.6	60.5	60.0

Table 12
Participation in SWIFT by domestic institutions
(end of year)

	2012	2013	2014	2015	2016
Members	0	0	0	0	0
of which: live	0	0	0	0	0
Sub-members	0	0	0	0	0
of which: live	0	0	0	0	0
Participants	0	0	0	0	0
of which: live	0	0	0	0	0
Total users	0	0	0	0	0
of which: live	0	0	0	0	0
Memo:					
Total SWIFT users	0	0	0	0	0
members	0	0	0	0	0
sub-members	0	0	0	0	0
participants	0	0	0	0	0
Source: SWIFT.					

Table 13
SWIFT message flows to/from domestic users (thousands, total for the year)

	2012	2013	2014	2015	2016
Total messages sent	0	0	0	0	0
of which:					
category I	0	0	0	0	0
category II	0	0	0	0	0
Total messages received	0	0	0	0	0
of which:					
category I	0	0	0	0	0
category II	0	0	0	0	0
Domestic traffic	0	0	0	0	0
Memo:					
Global SWIFT traffic	0	0	0	0	0
Source: SWIFT.			•		

Table 14
Number of participants in exchanges and trading systems (end of year)

	2012	2013	2014	2015	2016
ASX					
Total number of participants	81	72	72	71	67
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	0	0	0	0	0
other	81	72	72	71	67
Number of domestic participants	nav	nav	nav	nav	nav
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	0	0	0	0	0
other	nav	nav	nav	nav	nav
Number of foreign participants	nav	nav	nav	nav	nav
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	0	0	0	0	0
other	nav	nav	nav	nav	nav
ASX 24					
Total number of participants	nav	nav	nav	nav	nav

Table 15

Number of listed securities

(end of year)

	2012	2013	2014	2015	2016
ASX					
Total number of listed securities	2,188	2,195	2,208	2,238	2,215
equity	2,188	2,195	2,208	2,238	2,215
ASX 24					
Total number of listed securities	nap	nap	nap	nap	nap

Table 16

Market capitalisation of listed companies

(AUD billions, end of year)

	2012	2013	2014	2015	2016
ASX Total market capitalisation/equity	1,335.8	1,526.9	1,574.8	1,628.5	1,760.2
ASX 24 Total market capitalisation/equity	nap	nap	nap	nap	nap

Table 17

Number of executed trades

	2012	2013	2014	2015	2016
ASX					
Total number of executed securities trades	155,064.3	192,089.9	181,237.9	207,753.5	256,815.9
equity	155,064.3	192,089.9	181,237.9	207,753.5	256,815.9
Total number of executed derivatives trades	158,234.5	139,827.8	125,734.9	106,556.1	102,038.8
financial futures	nav	nav	nav	nav	nav
financial options	nav	nav	nav	nav	nav
other financial derivatives	nav	nav	nav	nav	nav
ASX 24					
Total number of executed securities trades	nap	nap	nap	nap	nap
Total number of executed derivatives trades	103,780.9	123,049.3	119,508.5	129,437.0	142,420.8
financial futures	99,711.0	118,220.5	115,594.0	127,093.6	140,216.8
financial options	3,467.3	4,431.1	3,513.2	1,991.0	1,757.6
commodity futures	570.6	380.6	372.8	321.6	424.2
commodity options	32.0	17.1	28.4	30.8	22.2

Table 18
Value of executed trades
(AUD billions, total for the year)

	2012	2013	2014	2015	2016
ASX					
Total value of executed securities trades	1,027.5	1,071.9	1,023.6	1,191.2	1,214.4
equity	1,027.5	1,071.9	1,023.6	1,191.2	1,214.4
Total value of executed derivatives trades	nav	nav	nav	nav	nav
ASX 24					
Total value of executed securities trades	nap	nap	nap	nap	nap
Total value of executed derivatives trades	nav	nav	nav	50,320	51,140

Table 19 Number of clearing members (end of year)

	2012	2013	2014	2015	2016
ASX Clear ¹					
Total number of clearing members	39	34	33	37	37
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	0	0	0	0	0
other	39	34	33	37	37
Number of domestic clearing members	nav	nav	nav	nav	nav
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	0	0	0	0	0
other	nav	nav	nav	nav	nav
Number of foreign clearing members	nav	nav	nav	nav	nav
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	0	0	0	0	0
other	nav	nav	nav	nav	nav
ASX Clear (Futures)					
Total number of clearing members	17	19	19	20	20
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	nav	nav	nav	11	17
other	17	19	19	9	3
Number of domestic clearing members	nav	nav	nav	nav	15
central bank	nav	nav	nav	nav	0
central counterparties (CCPs)	nav	nav	nav	nav	0
banks	nav	nav	nav	nav	13
other	nav	nav	nav	nav	2
Number of foreign clearing members	nav	nav	nav	nav	5
central bank	nav	nav	nav	nav	0
central counterparties (CCPs)	nav	nav	nav	nav	0
banks	nav	nav	nav	nav	4
<u>other</u>	nav	nav	nav	nav	1

¹ Until 2014, the total number included only active clearing members that clear for themselves and excluded inactive clearing members or clearing members that only clear for others.

Table 20 Number of contracts and transactions cleared					
	2012	2013	2014	2015	2016
ASX Clear					
Total number of contracts and transactions					
cleared	nav	nav	nav	nav	nav
ASX Clear (Futures)					
Total number of contracts and transactions					
cleared	nav	nav	nav	nav	nav

Table 21					
Value of contracts and transactions cleared					
	2012	2013	2014	2015	2016
ASX Clear					
Total value of contracts and transactions cleared	nav	nav	nav	nav	nav
ASX Clear (Futures)					
Total value of contracts and transactions cleared	nav	nav	nav	nav	nav

Table 22	
Number of direct participants in CSDs	
(end of year)	

	2012	2013	2014	2015	2016
ASX Settlement					
Total number of participants	83	77	82	79	79
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
central securities depositories	0	0	0	0	0
banks	1	1	1	1	1
other	82	76	81	78	78
Number of domestic participants	nav	nav	nav	nav	nav
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
central securities depositories	0	0	0	0	0
banks	1	1	1	1	1
other	nav	nav	nav	nav	nav
Number of foreign participants	nav	nav	nav	nav	nav
Austraclear					
Total number of participants	775	829	845	849	836
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
central securities depositories	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of domestic participants	nav	nav	nav	nav	nav
Number of foreign participants	nav	nav	nav	nav	nav

Table 23

Number of securities held on accounts at CSDs

(thousands, end of year)

	2012	2013	2014	2015	2016
ASX Settlement					
Total number of securities held ¹	2.188	2.195	2.208	2.238	2.215
equity	2.188	2.195	2.208	2.238	2.215
Austraclear					
Total number of securities held	nav	nav	nav	nav	nav
¹ Estimated from number of listed securities					

Table 24

Value of securities held on accounts at CSDs

(AUD billions, end of year)

	2012	2013	2014	2015	2016
ASX Settlement					
Total value of securities held	1,285.6	1,467.2	1,509.0	1,564.8	1,767.5
equity	1,285.6	1,467.2	1,509.0	1,564.8	1,767.5
Austraclear					
Total value of securities held	1,375.8	1,468.9	1,692.8	1,849.0	1,947.3
debt securities	1,375.8	1,468.9	1,692.8	1,849.0	1,947.3
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav

Table 25

Number of delivery instructions processed

	2012	2013	2014	2015	2016
ASX Settlement					
Total number of delivery instructions	nav	nav	nav	nav	nav
DVP	9,234.26	9,414.40	9,918.34	9,826.36	11,010.06
equity	9,234.26	9,414.40	9,918.34	9,826.36	11,010.06
free of payment	nav	nav	nav	nav	nav
Austraclear					
Total number of delivery instructions	338.53	347.17	339.18	330.15	316.01
DVP	338.53	347.17	339.18	330.15	316.01
debt securities	338.53	347.17	339.18	330.15	316.01
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
free of payment	nav	nav	nav	nav	nav
debt securities	nav	nav	nav	nav	nav
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav

Table 26

Value of delivery instructions processed

(AUD billions, total for the year)

	2012	2013	2014	2015	2016
ASX Settlement					
Total value of delivery instructions	nav	nav	nav	nav	nav
DVP	1,793.7	2,093.0	2,060.9	2,265.2	2,293.7
equity	1,793.7	2,093.0	2,060.9	2,265.2	2,293.7
free of payment	nav	nav	nav	nav	nav
Austraclear					
Total value of delivery instructions	nav	nav	nav	nav	nav
DVP	9,581.0	10,079.9	10,012.1	10,605.9	11,572.6
debt securities	9,581.0	10,079.9	10,012.1	10,605.9	11,572.6
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
free of payment	nav	nav	nav	nav	nav

Table 1
Basic statistical data

	2012	2013	2014	2015	2016
Population (thousands) ¹	11,054	11,105	11,157	11,268	11,322
GDP (EUR billions)	387.50	391.73	400.80	410.25	421.61
GDP per capita (EUR)	35,055	35,275	35,923	36,408	37,238
Consumer price inflation (in %) ¹	2.6	1.2	0.5	0.6	1.8
Exchange rate (EUR/USD):					
end of year	0.7579	0.7251	0.8237	0.9185	0.9487
average	0.7788	0.7532	0.7539	0.9019	0.9039

¹ Yearly average.

Table 2 Settlement media used by non-banks

(EUR billions, end of year)

	2012	2013	2014	2015	2016
Notes and coin in circulation outside banks ¹	nap	nap	nap	nap	nap
Value of transferable deposits ²	154.81	165.80	186.26	201.74	221.34
Narrow money supply (M1) ¹ <i>Memo:</i>	nap	nap	nap	nap	nap
Transferable deposits in foreign currencies	31.32	37.38	43.84	45.02	42.48
Outstanding value on e-money storage	0.068	0.060	0.031	0.028	0.018
on card-based products	0.068	0.060	0.031	0.028	0.018
on software- or network-based products	nap	nap	nap	nap	nap

¹ These figures are provided solely at an aggregated euro area level (see Euro area, Table 2). ² Value of overnight deposits held at Monetary Financial Institutions (MFIs) by non-MFIs (including "Central government" and "Rest of the world"). Due to a broader definition of counterparts, this indicator is not synonymous with the same term used in the ECB concept of narrow money supply M1.

Table 3 Settlement media used by banks

(EUR billions, average of last reserve maintenance period)

	2012	2013	2014	2015	2016
Transferable balances held at the central bank	8.804	8.079	6.955	12.798	18.208
required reserves	5.336	5.505	5.722	6.314	6.556
free reserves	3.468	2.574	1.233	6.484	11.652
Transferable balances held at other banks ¹ <i>Memo:</i>	68.332	60.782	40.513	38.590	41.550
Credit extended by the central bank:					
intraday	1.80	4.17	1.49	0.85	0.12
overnight	0	0	0	0	0
longer-term refinancing operations ²	40.01	14.95	9.98	7.65	14.02

¹ Value of overnight deposit accounts held by Belgian credit institutions at other credit institutions (EUR and foreign currencies, in Belgium and abroad). ² Non-intraday borrowing, inclusive of marginal lending facilities.

Table 4 Banknotes and coin¹

¹ These figures are provided solely at an aggregated euro area level (see Euro area, Table 4).

Table 5
Institutions offering payment services to non-banks (end of year)

	2012	2013	2014	2015	2016
Central bank					
Number of branches or offices ¹	6	5	5	5	3
Number of accounts (thousands) ²	0.238	0.213	0.200	0.197	0.185
Value of accounts (EUR billions) ²	0.685	0.490	0.444	1.280	2.366
Memo:					
Number of accounts, banks (thousands) ²	0.295	0.291	0.265	0.000	0.000
Banks					
Number of institutions	103	103	103	99	92
Number of branches or offices ³	3,820	3,738	7,082	6,639	6,791
Number of accounts (thousands) ²	16,551.0	16,791.0	25,959.0	29,519.6	29,633.4
of which: number of internet/PC-linked accounts					
(thousands)	10,608.6	11,128.9	17,1 4 2.9	19,211.7	19,661.2
Value of accounts (EUR billions) ²	154.13	165.31	185.80	200.42	218.98
Credit institutions legally incorporated in the re	eporting cour	ntry			
Number of institutions ⁴	44	39	43	37	35
Number of branches or offices ^{3, 4}	3,738	3,647	7,017	6,570	6,723
Value of accounts (EUR billions) ^{2, 5}	121.66	129.13	147.92	160.20	178.05
Branches of euro area-based credit institutions	5				
Number of institutions ⁴	41	47	42	44	28
Number of branches or offices ^{3, 4}	73	83	59	63	62
Value of accounts (EUR billions) ^{2, 5}	8.57	10.21	10.87	13.33	13.72
Branches of EEA-based credit institutions (out	side the euro	area)			
Number of institutions ⁴	9	8	8	8	4
Number of branches or offices ^{3, 4}	1	1	2	2	3
Value of accounts (EUR billions) ^{2, 5}	1.42	0.55	0.56	0.48	0.18
Branches of foreign banks					
Number of institutions ⁴	9	9	10	10	25
Number of branches or offices ^{3, 4}	8	7	4	4	3
Value of accounts (EUR billions) ^{2, 5}	22.47	25.42	26.45	26.41	27.03
Other institutions offering payment services to n	on-banks: po	ostal instituti	on		
Number of institutions	1	1	1	1	1
Number of branches or offices ⁶	1,340	1,343	1,344	1,341	1,337
Number of accounts (thousands) ^{2,7}	0.653	0.655	0.490	0.272	0.250
Value of accounts (EUR billions) ²	1.277	1.455	2.930	4.441	5.676
Institutions offering payment services to non-ba	nks (total)				
Number of institutions	105	105	105	101	94
Number of branches or offices	5,166	5,086	8,431	7,985	8,131
Number of accounts held by non-banks					
(thousands) ²	16,551.9	16,791.9	25,959.7	29,519.6	29,633.8
of which: number of internet/PC-linked accounts					
(thousands)	10,608.6	11,128.9	17,1 4 2.9	19,211.7	19,661.2
Value of accounts held by non-banks					
(EUR billions) ²	156.09	167.25	189.18	204.86	224.65
For the footnotes, see the end of the table.					

Table	_	1	N
ISDIO	_	/COnt	N

	2012	2013	2014	2015	2016
Memo:					
Electronic money institutions					
Number of institutions ⁸	7	9	10	10	8
Outstanding value on e-money storages issued by					
e-money institutions	0.01	0.01	0.03	0.03	0.04

¹ Head office, branches and agencies (bureaux). ² Overnight deposits. ³ From 2014, includes all places of business (also offices of independent agents). ⁴ The breakdown by legal incorporation is based here on the country of residence of the immediate parent as in the ECB MFI lists. ⁵ The breakdown by legal incorporation is based here on the country of residence of the ultimate parent in order for consistency with the ECB Structural Financial Indicators and the BIS international banking statistics. ⁶ Includes post offices as well as so-called "Points poste". ⁷ Excluding accounts held by the central government (for consistency with the figures reported under "Value of accounts (EUR billions)"). ⁸ These figures were revised in the 2014 edition so that they reflect only the ELMIs that were not credit Institutions. For a complete list, see the website of the National Bank of Belgium at www.nbb.be/pub/cp/domains/psd/li.htm?l=en.

Table 6
Payment card functions and accepting devices (end of year)

	2012	2013	2014	2015	2016
Cards issued in the country (thousands)	2012	2013	2017	2013	2010
Cards with a cash function	20,647.1	20,041.3	21,396.5	21,870.8	22,593.1
Cards with a debit function	16,196.8	15,684.4	16,223.5	17,021.9	16,900.6
Cards with a delayed debit function ¹	4,450.3	4,356.9	1,828.4	3,225.2	3,330.6
Cards with a credit function ¹	nav	nav	2,102.1	2,332.6	2,276.1
Cards with an e-money function ²	13,009.6	13,461.0	10,681.3	4,823.8	•
of which: cards with an e-money function which	13,009.6	13,461.0	10,001.3	4,023.0	4,862.6
have been loaded at least once ^{2,3}	2,032.0	1,965.8	2,000.0	126.2	277.1
have been loaded at least office	2,032.0	1,900.0	2,000.0	120.2	277.1
Total number of cards (irrespective of the number					
of functions on the card)	20,647.1	20,041.3	22,769.8	22,380.1	23,098.2
of which: cards with a combined debit, cash and			,	,	
e-money function ²	13,009.6	13,461.0	10,459.5	4,518.7	4,365.6
	-,	-, -	,	,	,
Memo:					
Retailer cards	nav	nav	nav	nav	nav
Terminals located in the country					
ATMs ^{4, 5}	15,658	14,861	12,680	15,634	17,418
ATMs with a cash withdrawal function	8,693	8,707	8,423	8,395	8,275
ATMs with a credit transfer function	9,965	10,034	7,789	7,911	7,779
POS terminals ⁵	136,253	140,114	183,208	185,281	187,018
of which: EFTPOS terminals	136,253	140,114	183,208	185,281	187,018
E-money card terminals ⁵	nav	nav	61,044	4,306	2,452
e-money card loading/unloading terminals	nav	nav	12,713	3,924	2,452
e-money card payment terminals	55,014	44,667	48,331	382	0

¹ From 2014, data distinguish between delayed debit cards and credit cards. ² E-money card payment terminals are no longer in service, because the provider has removed all the remaining Proton unloading terminals that they previously operated. E-money cards are now loaded or unloaded at ATMs and, increasingly, via mobile banking applications, which will gradually supplant the loading/unloading function at ATMs. ³ Estimated for 2014. ⁴ Each function is counted separately (to avoid double-counting, categories should not be summed). ⁵ From 2014, data provided directly by banks and payment institutions.

Table 7
Indicators of the use of payment instruments and terminals by non-banks: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers ^{1, 2}	946.77	1,022.80	1,366.39	1,257.72	1,273.84
paper-based ²	<i>4</i> 9.15	32.39	28.98	34.66	31.23
non-paper-based ²	897.61	990.41	1,337.42	1,223.06	1,242.60
Direct debits ¹	285.64	313.10	529.45	413.35	445.94
Card payments with cards issued in the country	1,226.88	1,332.25	1,508.24	1,556.88	1,702.23
payments by cards with a debit function	1,087.60	1,168.56	1,349.52	1,352.53	1,441.24
payments by cards with a delayed debit function	139.28	163.69	156.54	202.07	258.64
payments by cards with a credit function ³	nav	nav	2	2.27	2.34
E-money payment transactions	46.20	29.36	28.50	7.00	10.93
by cards with an e-money function	46.20	29.36	28.54	7.03	10.93
through other e-money storages	nap	nap	nap	nap	nap
Cheques ²	5.44	4.28	8.53	9.48	10.58
Other payment instruments	nap	nap	1.20	1.22	1.05
Curon paymont modalmente	Пар	Пар	1.20	1.22	1.00
Total number of transactions with payment					
instruments ²	2,510.91	2,701.80	3,442.36	3,269.26	3,444.55
of which: cross-border transactions sent ²	140.79	163.18	417.66	358.27	416.01
Memo:					
Cross-border transactions received ²	82.36	95.52	79.58	66.94	89.87
Cross-border transactions received	02.50	90.02	19.50	00.94	09.07
Transactions per type of terminal					
Total transactions at terminals in the country					
Cash transactions	420.10	429.05	360.52	327.08	323.45
ATM cash withdrawals	<i>4</i> 20.10	<i>4</i> 29.05	328.51	305.11	301.19
ATM cash deposits	nav	nav	32.02	21.96	22.26
POS payment transactions	1,178.04	1,275.75	1,339.43	1,462.46	1,587.83
E-money card loading/unloading transactions	6.77	4.81	4.05	1.54	2.48
E-money card payment transactions ²	46.20	29.36	26.41	1.44	1.63
a) Transactions at terminals in the country by cards	issued in the o	country			
Cash transactions	411.26	420.25	350.25	317.41	313.10
ATM cash withdrawals	411.26	<i>4</i> 20.25	318.23	295.45	290.84
ATM cash deposits	nav	nav	32.02	21.96	22.26
POS payment transactions	1,118.63	1,205.74	1,281.48	1,397.05	1,517.83
E-money card loading/unloading transactions	6.77	4.81	3.92	1.50	2.43
E-money card payment transactions ²	46.20	29.36	26.41	1.44	1.63
b) Transactions at terminals in the country by cards	issued outside	the country			
Cash transactions	8.84	8.80	10.28	9.66	10.35
ATM cash withdrawals	8.84	8.80	10.28	9.66	10.35
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions	59.41	70.01	57.94	65.41	69.99
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav
c) Transactions at terminals outside the country by c	ards issued in	the country			
Cash transactions	14.34	14.93	13.20	14.32	21.48
ATM cash withdrawals	14.34	14.93	13.20	14.32	21.48
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions	108.25	126.51	140.85	129.55	148.21
E-money card loading/unloading transactions	nav	nav	0.13	0.04	0.05
E-money card payment transactions	nav	nav	nav	nav	nav
¹ Includes some book-entry transfers. ² Revised data for	^{2012. 3} All m	ajor credit card	s are issued as	s delayed debit	cards.

Table 8
Indicators of the use of payment instruments and terminals by non-banks: value of transactions (EUR billions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					_
Credit transfers ¹	3,656.32	3,975.33	6,678.55	6,115.64	6,367.77
paper-based	394.37	461.60	283.91	220.43	261.91
non-paper-based	3,261.96	3,513.73	6,394.64	5,895.21	6,105.87
Direct debits ¹	71.25	78.28	120.07	101.43	110.64
Card payments with cards issued in the country	66.90	71.51	73.69	77.67	80.07
payments by cards with a debit function	53.82	56.72	59.60	60.22	60.97
payments by cards with a delayed debit function	13.09	14.79	13.69	17.03	18.79
payments by cards with a credit function ²	nav	nav	0	0.43	0.31
E-money payment transactions	0.23	0.14	0.36	0.43	0.59
by cards with an e-money function	0.23	0.14	0.30	0.05	0.14
· · · · · · · · · · · · · · · · · · ·					
through other e-money storages ³	nap	nap	0.29	0.31	0.45
Cheques ²	37.13	33.95	23.96	21.13	15.77
Other payment instruments ⁴	nap	nap	2.01	1.95	1.74
Total value of transactions with payment					
instruments	3,831.83	4,159.22	6,898.64	6,318.19	6,576.97
of which: cross-border transactions sent	989.40	1,014.08	1,515.03	1,462.46	1,960.95
Memo:					
Cross-border transactions received ²	1,186.94	1,046.92	1,173.36	2,505.45	1,351.19
Cross Border transactions received	1,100.04	1,040.02	1,170.00	2,000.40	1,001.10
Transactions per type of terminal					
Total transactions at terminals in the country					
Cash transactions	52.47	54.53	74.40	61.93	61.48
ATM cash withdrawals	52.47	<i>54.5</i> 3	44.47	<i>4</i> 2. <i>4</i> 5	<i>4</i> 2.21
ATM cash deposits	nav	nav	29.93	19. 4 8	19.27
POS payment transactions	62.96	66.64	66.92	70.81	73.13
E-money card loading/unloading transactions	0.20	0.14	0.11	0.18	0.27
E-money card payment transactions ²	0.20	0.14	0.10	0.07	0.08
a) Transactions at terminals in the country by cards	issued in the o	country			
Cash transactions	51.19	53.23	73.97	60.96	60.58
ATM cash withdrawals	51.19	53.23	44.04	41.48	41.32
ATM cash deposits	nav	nav	29.93	19. 4 8	19.27
POS payment transactions	58.62	61.96	62.56	66.60	69.68
E-money card loading/unloading transactions	0.20	0.14	0.11	0.18	0.27
E-money card payment transactions ²	0.20	0.14	0.09	0.07	0.08
b) Transactions at terminals in the country by cards	issued outside	the country			
Cash transactions	1.27	1.29	0.43	0.97	0.90
ATM cash withdrawals	1.27	1.29	0.43	0.97	0.90
ATM cash deposits	nav	nav	0.00	0	0
POS payment transactions	4.34	4.68	4.36	4.21	3.45
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav
c) Transactions at terminals outside the country by c	ards issued in	the country			
Cash transactions	2.02	2.09	2.37	2.08	2.05
ATM cash withdrawals	2.02	2.09	2.37	2.08	2.05
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions	8.28	9.55	9.90	8.09	9.11
E-money card loading/unloading transactions	nav	nav	nav	nav	0.00
E-money card payment transactions	nav	nav	0.01	0.01	0.01
¹ From 2014 includes cash management agreements	² From 2014	data dictinguis	h hatwaan dal	avad dahit car	de and cradit

¹ From 2014, includes cash management agreements. ² From 2014, data distinguish between delayed debit cards and credit cards. ³ Stored on e-money accounts. ⁴ From 2014, instruments not covered by the PSD Regulation.

Table 9
Participation in selected interbank funds transfer systems (end of year)

	2012	2013	2014	2015	2016
Large-value payment systems					
TARGET2-BE					
Number of participants	48	46	45	47	48
Direct participants	14	14	14	16	19
Banks	13	13	13	15	18
Central bank	1	1	1	1	1
Other direct participants	0	0	0	0	0
Postal institution	nap	nap	nap	nap	nap
Indirect participants	34	32	31	31	29
Retail payment systems					
CEC					
Number of participants	72	70	63	59	56
Direct participants	15	14	13	14	14
Banks	13	13	12	13	13
Central bank	1	0	0	0	0
Other direct participants	1	1	1	1	1
General government	0	0	0	0	0
Postal institution	0	0	0	0	0
Clearing and settlement organisations	0	0	0	0	0
Other financial institutions	0	0	0	0	0
Other	1	1	1	1	1
Indirect participants	57	56	50	45	42

Table 10
Payments processed by selected interbank funds transfer systems: volume of transactions¹
(millions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
TARGET2-BE					
Credit transfers sent	2.49	2.31	2.52	2.28	2.25
credit transfers sent within ELLIPS	0.68	0.59	0.65	0.56	0.50
credit transfers sent to another TARGET					
component	1.81	1.71	1.87	1.72	1.75
Memo:					
Credit transfers received from another TARGET					
component	1.71	1.75	1.47	1.50	1.57
Concentration ratio in terms of volume (%) ²	90.6	89.5	93.7	93.9	94.3
Concentiation ratio in terms of volume (70)	30.0	09.5	95.7	95.9	34.3
Retail payment systems					
CEC					
Total transactions sent	1,295.12	1,365.56	1,272.23	1,402.22	1,387.06
credit transfers	569.34	580.18	576.85	586.90	606.84
direct debits	135.30	124.97	11.65	125.47	182.64
card payments	161.22	198.72	201.17	249.12	296.80
ATM transactions	29.02	29.26	21.02	19.83	21.21
e-money transactions	0.44	0.28	0.11	0.00	0
cheques	3.02	2.46	2.04	1.53	1.15
other payment instruments	396.77	429.70	<i>4</i> 59.39	419.36	278.42
Concentration ratio in terms of volume (%) ²	85.6	86.7	89.0	87.6	87.7

¹ The table contains both customer and interbank transactions. ² Market share of the five largest participants in each payment system.

Table 11

Payments processed by selected interbank funds transfer systems: value of transactions¹
(EUR billions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
TARGET2-BE					
Credit transfers sent	18,712.57	16,177.33	16,247.94	15,627.37	16,957.87
credit transfers sent within ELLIPS credit transfers sent to another TARGET	2,793.31	2,724.83	2,385.86	1,593.96	1,539.95
component	15,919.26	13,452.49	13,862.08	14,033.41	15,417.92
Memo:					
Credit transfers received from another TARGET					
component	16,504.99	13,566.44	13,810.70	14,095.49	15,284.96
Concentration ratio in terms of value (%) ²	90.9	89.9	90.8	90.5	91.1
Retail payment systems					
CEC					
Total transactions sent	909.13	911.61	870.68	883.41	920.60
credit transfers	593.93	591.88	577.65	595.64	619.42
direct debits	27.97	26.62	2.38	22.48	34.94
card payments	112.48	117.07	123.33	121.75	124.88
ATM transactions	14.34	15.73	11.47	5.22	4.70
e-money transactions	0.21	0.15	0.07	0.00	0.00
cheques	32.93	26.99	20.75	11.37	7.06
other payment instruments	127.26	133.15	135.04	126.97	129.58
Concentration ratio in terms of value (%) ²	85.2	85.9	86.1	86.2	85.7

¹ The table contains both customer and interbank transactions. ² Market share of the five largest participants in each payment system.

Table 12
Participation in SWIFT by domestic institutions (end of year)

	2012	2013	2014	2015	2016
Members	22	22	22	24	25
of which: live	22	22	22	24	25
Sub-members	49	50	53	53	52
of which: live	49	49	53	52	52
Participants	48	58	59	60	67
of which: live	46	49	53	55	59
Total users	119	130	134	137	144
of which: live	117	120	128	131	136
Мето:					
Total SWIFT users	10,279	10,583	10,805	11,094	11,299
members	2,398	2,389	2,379	2,455	2,422
sub-members	3,340	<i>3,34</i> 3	3,353	3,395	3,367
participants	4,541	4,851	5,073	5,244	5,510
Source: SWIFT.					

Table 13
SWIFT message flows to/from domestic users (thousands, total for the year)

	2012	2013	2014	2015	2016
Total messages sent	373,679	396,554	444,125	489,180	512,253
of which:					
category I	16,903	17,194	16,246	14,418	12,766
category II	5,556	5,831	5,996	5,712	5,524
Total messages received of which:	208,423	231,166	246,228	269,827	271,653
category I	17,382	17,036	14,928	13,561	12,019
category II	6,065	6,014	5,865	5,986	6,070
Domestic traffic	23,842	25,567	27,540	29,955	27,795
Memo:					
Global SWIFT traffic	4,589,109	5,065,668	5,612,724	6,106,644	6,525,800
Source: SWIFT.					

Table 14
Number of participants in exchanges and trading systems (end of year)

	2012	2013	2014	2015	2016
Regulated off-exchange market					
Total number of participants	nap	nap	nap	nap	nap
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	nap	nap	nap	nap	nap
other	nap	nap	nap	nap	nap
Number of domestic participants	nap	nap	nap	nap	nap
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	nap	nap	nap	nap	nap
other	nap	nap	nap	nap	nap
Number of foreign participants	nap	nap	nap	nap	nap
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	nap	nap	nap	nap	nap
other	nap	nap	nap	nap	nap
Euronext Brussels					
Total number of participants	191	177	156	140	205
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of domestic participants	nav	nav	nav	nav	nav
Number of foreign participants	nav	nav	nav	nav	nav

Table 15

Number of listed securities

(thousands, end of year)

	2012	2013	2014	2015	2016
Euronext Brussels					
Total number of listed securities	1.615	3.500	5.231	8.165	6.894
debt securities	0.218	0.263	0.432	1.383	1.503
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	0.147	0.145	0.133	0.501	0.465
other	1.250	3.092	4.666	6.281	4.926

Table 16

Market capitalisation of listed companies

(EUR billions, end of year)

	2012	2013	2014	2015	2016
Regulated off-exchange market					
Total market capitalisation/equity	nap	nap	nap	nap	nap
Euronext Brussels					
Total market capitalisation/equity	227.2	271.6	312.8	379.4	358.9

Table 17

Number of executed trades

	2012	2013	2014	2015	2016
Euronext Brussels					
Total number of executed securities trades	14,880.0	14,140.0	14,631.0	19,467.0	19,222.0
debt securities	82.0	25.0	26.0	16.0	9.0
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	14,791.0	14,106.0	14,577.0	19,371.0	19,178.0
other	7.0	9.0	28.0	80.0	35.0
Total number of executed derivatives trades	1,423,604.0	1,421,238.0	1,061,266.0	900,171.0	953,215.0
financial futures	159,429.0	159,101.0	31,924.0	15,752.0	3,432.0
financial options	1,264,175.0	1,262,137.0	1,029,342.0	884,419.0	949,783.0
other financial derivatives	nav	nav	nav	nav	nav
commodity futures	nav	nav	nav	nav	nav
commodity options	nav	nav	nav	nav	nav
other commodity derivatives	nav	nav	nav	nav	nav

¹ The total number of executed securities trades handled by the regulated off-exchange market (in linear bonds, strips and treasury certificates) includes trades on MTS Belgium and Euro MTS.

Table 18
Value of executed trades

(EUR billions, total for the year)

	2012	2013	2014	2015	2016
Regulated off-exchange market					
Total value of executed securities trades ¹	nap	nap	nap	nap	nap
debt securities	nap	nap	nap	nap	nap
short-term paper	nap	nap	nap	nap	nap
bonds	nap	nap	nap	nap	nap
Total value of executed derivatives trades	nap	nap	nap	nap	nap
Euronext Brussels					
Total value of executed securities trades	81.00	86.51	91.90	131.63	121.11
debt securities	2.50	0.73	0.66	0.36	0.15
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	78.46	85.74	91.15	131.04	120.87
other	0.04	0.05	0.09	0.24	0.09
Total value of executed derivatives trades	7.27	7.30	5.97	5.57	5.42
financial futures	4.10	4.12	0.98	0.56	0.12
financial options	3.17	3.18	4.98	5.01	5.30
other financial derivatives	nav	nav	nav	nav	nav
commodity futures	nav	nav	nav	nav	nav
commodity options	nav	nav	nav	nav	nav
other commodity derivatives	nav	nav	nav	nav	nav

¹ The total number of executed securities trades handled by the regulated off-exchange market (in linear bonds, strips and Treasury certificates) includes trades on MTS Belgium and Euro MTS.

Table 22 Number of direct participants in CSDs (end of year)

	2012	2013	2014	2015	2016
NBB SSS					
Total number of participants	84	84	99	69	66
central bank	2	1	19	1	1
central counterparties (CCPs)	3	3	3	2	2
central securities depositories	4	5	6	6	6
banks	63	63	59	50	48
other	12	12	12	10	9
Number of domestic participants	50	50	68	45	52
central bank	1	1	19	1	1
central counterparties (CCPs)	2	2	2	0	0
central securities depositories	1	1	1	1	1
banks	35	35	35	37	45
other	11	11	11	6	5
Number of foreign participants	34	34	31	24	14
central bank	1	0	0	0	0
central counterparties (CCPs)	1	1	1	2	2
central securities depositories	3	4	5	5	5
banks .	28	28	24	13	3
other	1	1	1	4	4
Euroclear Belgium					
Total number of participants	73	76	78	77	74
central bank	1	1	1	1	1
central counterparties (CCPs)	1	1	1	1	1
central securities depositories	0	0	0	0	0
banks	27	31	34	34	33
other	44	43	42	41	39
Number of domestic participants	20	20	20	19	18
central bank	1	1	1	1	1
central counterparties (CCPs)	0	0	0	0	0
central securities depositories	0	0	0	0	0
banks	3	3	3	3	2
other	16	16	16	15	15
Number of foreign participants	53	56	58	58	56
central bank	0	0	0	0	0
central counterparties (CCPs)	1	1	1	1	1
central securities depositories	0	0	0	0	0
banks	24	28	31	31	31
other	28	27	26	26	24

Table 22 (cont)					
	2012	2013	2014	2015	2016
Euroclear Bank					
Total number of participants	1,391	1,474	1,539	1,602	1,617
central bank	97	109	107	109	105
central counterparties (CCPs)	4	4	7	4	3
central securities depositories	15	15	21	14	14
banks	322	348	397	454	447
other	953	998	1,007	1,021	1,048
Number of domestic participants	30	33	34	36	36
central bank	1	1	1	1	1
central counterparties (CCPs)	0	0	0	0	0
central securities depositories	2	2	2	2	2
banks	11	11	12	12	11
other	16	19	19	21	22
Number of foreign participants	1,361	1,441	1,505	1,566	1,581
central bank	96	108	106	108	104
central counterparties (CCPs)	4	4	7	4	3
central securities depositories	13	13	19	12	12
banks	311	337	385	442	436
other	937	979	988	1,000	1,026

Table 23
Number of securities held on accounts at CSDs (thousands, end of year)

	2012	2013	2014	2015	2016
NBB SSS					
Total number of securities held	1.85	2.06	2.12	2.36	nav
debt securities	1.85	2.06	2.12	2.36	nav
short-term paper	1.14	1.23	1.22	1.25	nav
bonds	0.71	0.83	0.90	1.11	nav
Euroclear Belgium					
Total number of securities held	0.82	1.04	0.97	1.09	1.09
debt securities	0.03	0.05	0.06	0.04	0.04
bonds	0.03	0.05	0.06	0.04	0.04
equity	0.45	0.40	0.37	0.34	0.29
other	0.35	0.59	0.55	0.71	0.75
Euroclear Bank ¹					
Total number of securities held	202.81	212.13	219.97	230.65	240.16
debt securities	156.89	167.73	173.95	188.58	201.11
short-term paper	23.93	28.82	36.96	40.64	<i>4</i> 5.36
bonds	132.96	138.91	136.99	147.94	155.75
equity	18.52	19.83	23.00	20.87	20.46
other	27.41	24.57	23.02	21.21	18.59
¹ The number of securities held on accounts at E	uroclear Bank represent t	he number of e	ligible securitie	s with holding.	

Table 24
Value of securities held on accounts at CSDs (EUR billions, end of year)

	2012	2013	2014	2015	2016
NBB SSS					
Total value of securities held	531.24	541.71	557.31	575.43	612.53
debt securities	531.24	541.71	557.31	575.43	612.53
short-term paper	61.43	<i>55.4</i> 3	62.82	67.37	75.91
bonds	469.81	486.28	494.49	508.06	536.62
Euroclear Belgium					
Total value of securities held	158.63	202.75	224.85	271.11	237.01
debt securities	0.14	0.24	0.44	0.18	0.40
bonds	0.14	0.24	0.44	0.18	0.40
equity	157.59	201.25	223.13	270.41	235.81
other	0.90	1.26	1.28	0.52	0.80
Euroclear Bank					
Total value of securities held	10,752.58	10,614.30	11,791.41	12,273.20	12,641.03
debt securities	10,038.59	9,997.55	10,871.16	11,275.63	11,550.55
short-term paper	590.26	540.34	602.32	705.41	694.42
bonds	9, <i>44</i> 8.33	9,457.21	10,268.84	10,570.23	10,856.12
equity	561.13	505.07	733.96	825.53	952.44
other	152.86	111.68	186.29	172.04	138.04

Table 25 Number of delivery instructions processed

	2012	2013	2014	2015	2016
NBB SSS					
Total number of delivery instructions	583	551	949	498	517
DVP	320	309	564	252	274
debt securities	320	309	564	252	274
short-term paper	57	64	118	54	53
bonds	263	245	446	198	221
free of payment	263	242	385	246	243
debt securities	263	242	385	246	243
short-term paper	36	32	52	34	32
bonds	227	210	333	212	211
Euroclear Belgium					
Total number of delivery instructions	1,801	1,908	2,118	2,467	2,377
DVP	1,719	1,830	2,034	2,363	2,216
debt securities	0	1	1	1	0
bonds	0	1	1	1	0
equity	1,707	1,813	2,005	2,289	2,179
other	12	16	28	73	37
free of payment	82	78	84	104	161
debt securities	0	0	0	0	0
bonds	0	0	0	0	0
equity	77	72	74	76	146
other	5	6	10	28	15
Euroclear Bank					
Total number of delivery instructions	64,858	70,096	75,708	83,725	84,550
DVP	53,850	57,879	62,262	68,801	69,740
debt securities	46,578	50,769	55,489	61,741	61,276
short-term paper	912	958	1,017	1,010	1,080
bonds	<i>4</i> 5,666	49,811	54,472	60,731	60,196
equity	6,937	6,736	6,402	6,692	8,160
other	335	374	371	368	304
free of payment	11,008	12,217	13,446	14,924	14,810
debt securities	8,951	10,174	11,250	12,530	11,883
short-term paper	300	306	321	304	293
bonds	8,651	9,868	10,929	12,226	11,590
equity	1,889	1,873	2,033	2,227	2,784
other	168	170	163	167	143

Table 26 Value of delivery instructions processed

(EUR billions, total for the year)

	2012	2013	2014	2015	2016
NBB SSS					
Total value of delivery instructions	10,250.1	8,262.6	10,838.4	8,028.2	8,714.3
DVP	5,981.2	4,905.8	5,106.3	4,631.9	5,265.8
debt securities	5,981.2	4,905.8	5,106.3	4,631.9	5,265.8
short-term paper	1,179.4	1,275. <i>4</i>	1,16 4 .6	1,066.0	1,028.5
bonds	4,801.8	3,630.4	3,941.7	3,565.9	4,237.3
free of payment	4,268.8	3,356.8	5,732.2	3,396.3	3,448.6
debt securities	4,268.8	3,356.8	5,732.2	3,396.3	3,448.6
short-term paper	957.7	996.1	1,472.2	941.5	811.3
bonds	3,311.2	2,360.7	4,260.0	2,454.8	2,637.3
Euroclear Belgium					
Total value of delivery instructions	552.9	783.3	835.5	933.5	958.3
DVP	526.4	752.7	793.6	897.0	790.2
debt securities	0.0	0.3	0.2	0.0	0.0
bonds	0.0	0.3	0.2	0.0	0.0
equity	526.3	752.3	793.1	896.3	790.0
other	0.1	0.1	0.2	0.7	0.2
free of payment	26.5	30.7	41.9	36.5	168.1
debt securities	0.0	0.0	0.1	0.0	0.0
bonds	0.0	0.0	0.1	0.0	0.0
equity	26.4	30.6	41.7	35.1	167.9
other	0.1	0.0	0.2	1.4	0.2
Euroclear Bank					
Total value of delivery instructions	308,953.5	342,231.9	388,500.3	439,953.6	445,980.6
DVP	261,264.0	294,924.9	334,826.8	381,913.9	386,482.4
debt securities	258,185.1	291,395.3	328,701.4	375,005.7	377,791.9
short-term paper	18,054.3	17,939.6	18,347.5	19,673.0	22,238.1
bonds	240,130.8	273,455.6	310,353.8	355,332.7	355,553.8
equity	2,729.4	2,710.3	4,445.5	6,447.6	8,400.7
other	349.4	819.3	1,680.0	460.6	289.8
free of payment	47,689.5	47,307.0	53,673.5	58,039.7	59,498.1
debt securities	44,557.4	44,192.7	50,391.1	54,299.1	55,024.4
short-term paper	5,547.0	4,559.5	4,402.3	4,150.8	4,368.4
bonds	39,010.3	39,633.2	45,988.8	<i>50,14</i> 8.3	50,656.0
equity	1,977.9	2,202.1	2,620.6	3,224.2	4,171.4
other	1,154.3	912.2	661.8	516.4	302.3

Table 1
Basic statistical data

	2012	2013	2014	2015	2016
Population (thousands) ¹	199,498	201,033	202,769	204,451	206,081
GDP (BRL billions) ¹	4,814.8	5,331.6	5,779.0	6,000.6	6,266.9
GDP per capita (BRL)	24,134	26,521	28,500	29,350	30,410
Consumer price inflation (%)	5.8	5.9	6.4	10.7	6.3
Exchange rate (BRL/USD):					
end of year	2.0435	2.3426	2.6562	3.9048	3.2591
average	1.9550	2.1605	2.3547	3.3387	3.4833

¹ Data have been revised from previous editions.

Table 2
Settlement media used by non-banks

(BRL billions, end of year)

	2012	2013	2014	2015	2016
Notes and coin in circulation outside banks	150.16	164.68	179.15	186.29	193.02
Value of transferable deposits ¹	174.89	179.83	172.46	148.12	154.79
Narrow money supply (M1)	325.05	344.51	351.60	334.42	347.81
Memo:					
Transferable deposits in foreign currencies	nap	nap	nap	nap	nap
Outstanding value on e-money storage	nav	nav	nav	nav	nav
on card-based products	nav	nav	nav	nav	nav
on software- or network-based products	nav	nav	nav	nav	nav
¹ Sight deposits only.					

Table 3
Settlement media used by banks

(BRL billions, average of last reserve maintenance period except as noted)

	2012	2013	2014	2015	2016
Transferable balances held at the central bank ¹	55.20	47.18	46.58	37.90	41.71
required reserves	55.20	47.18	46.58	37.90	41.71
free reserves ²	0	0	0	0	0
Transferable balances held at other banks ³ <i>Memo:</i>	nap	nap	nap	nap	nap
Credit extended by the central bank: ⁴					
intraday	<i>54.7</i> 3	56.14	81.42	69.99	63.16
overnight	62	0.00	0	0	0
longer refinancing operations (repos)	0	0	0	0	0

¹ Not including balance of settlement accounts held by non-bank financial institutions (data are negligible). ² Data are negligible. ³ In Brazil, banks taking sight deposits from the public at large are not allowed to hold this kind of deposit in another bank. ⁴ Last business day of the year. Where this value is negative, a zero position is reported (in the last years the Central Bank of Brazil has carried out open market transactions mainly with a view to draining liquidity from the market so as to mitigate the effects of its foreign exchange purchase transactions).

Table 4
Banknotes and coin
(BRL billions, end of year)

	2012	2013	2014	2015	2016
Total banknotes and coin issued	187.435	204.340	221.141	225.485	232.146
Total banknotes issued	182.610	198.693	215.163	219.526	225.941
BRL 100	61.543	68.794	79.628	84.606	89.561
BRL 50	92.622	101.303	107.226	108.180	110.585
BRL 20	16.891	16.322	15.819	14.826	14.322
BRL 10	7.223	7.308	7.189	6.837	6.441
BRL 5	2.354	2.740	2.943	2.683	2.569
BRL 2	1.827	2.077	2.209	2.245	2.314
BRL 1	0.150	0.149	0.149	0.149	0.149
Total coin issued	4.824	5.647	5.978	5.959	6.205
of which:					
BRL 1	2.355	2.642	2.821	2.997	3.151
BRL 0.50	1.068	1.178	1.256	1.300	1.343
BRL 0.25	0.576	0.641	0.675	0.696	0.712
BRL 0.10	0.543	0.594	0.620	0.637	0.656
BRL 0.05	0.250	0.271	0.286	0.294	0.308
BRL 0.01	0.032	0.319	0.319	0.032	0.032
Commemorative coin	0.001	0.001	0.002	0.002	0.004
Banknotes and coin held by banks	37.279	39.664	41.993	39.191	39.124
Banknotes and coin in circulation outside banks	150.156	164.675	179.148	186.294	193.022

Table 5
Institutions offering payment services to non-banks (end of year)

	2012	2013	2014	2015	2016
Central bank					
Number of branches or offices	9	9	9	9	9
Number of accounts (thousands) ¹	0.032	0.033	0.037	0.043	0.048
Value of accounts (BRL millions)	24.59	37.86	17.15	12.50	14.84
Memo:					
Number of accounts, banks (thousands)	0.132	0.131	0.130	0.133	0.134
Banks					
Number of institutions	160	155	152	153	154
Number of branches or offices ²	32,259	32,923	33,071	32,961	33,420
Number of accounts (thousands) ³ of which: number of internet/PC-linked accounts	162,881	172,855	nav	nav	nav
(thousands) ⁴	39,902	44,907	52,377	<i>54,633</i>	56,889
Value of accounts (BRL billions) ³	174.89	179.85	172.46	148.12	154.79
Government-owned banks		0.00			
Number of institutions	9	9	9	9	9
Number of branches or offices	12,239	12,879	13,181	13,258	13,193
Value of accounts (BRL billions) ⁵	94.17	92.56	92.90	83.09	90.85
Domestic private banks	0 1.17	02.00	02.00	00.00	00.00
Number of institutions	145	140	137	138	139
Number of branches or offices	20,009	20,032	19,878	19,692	20,215
Value of accounts (BRL billions) ⁵	80.72	87.27	79.55	65.02	63.94
Branches of foreign banks	00.72	01.21	70.00	00.02	00.01
Number of institutions	6	6	6	6	6
Number of branches or offices	11	12	12	11	12
Value of accounts (BRL billions)	0.00	0.02	0.00	0.01	0.00
Other institutions offering payment services to I	non-banks ⁶				
Number of institutions ¹	108,921	115,647	109,870	104,273	94,426
Number of branches or offices	147,034	152,635	145,934	138,829	128,097
Number of accounts (thousands)	nav	nav	nav	nav	nav
Value of accounts (BRL billions)	8.98	10.97	12.74	13.88	16.27
Institutions offering payment services to non-ba	inks (total)				
Number of institutions	109,082	115,803	110,023	104,427	94,581
Number of branches or offices Number of accounts held by non-banks	179,302	185,567	179,014	171,799	161,526
(thousands) ⁷ of which: number of internet/PC-linked accounts	162,881	172,855	nav	nav	nav
(thousands)	39,902	44,907	52,377	54,633	56,889
Value of accounts held by non-banks					
(BRL billions)	183.90	190.86	185.22	162.01	171.07
Memo:					
Electronic money institutions					
Number of institutions	nav	nav	nav	nav	nav
Outstanding value on e-money storages issued by					
e-money institutions (BRL billions)	nav	nav	nav	nav	nav

¹ Data have been revised from previous years. ² Includes both traditional and special branches. The latter are mainly restricted access branches (branches located in the premises of a private or public entity and providing services to this entity and its employees only). Temporary branches and specialised branches in microfinance and in gold trade were not included before 2013. Data have been revised from previous editions. ³ Sight deposit accounts only. Since January 2014, banks have not been required to report the number of accounts held by their clients. ⁴ Data from 2009 to 2012 have been revised. ⁵ Estimated value. ⁶ Includes credit unions and bank correspondents (non-financial entities acting as banks' agents, such as lottery houses, drugstores, supermarkets, post offices etc). ⁷ Does not include accounts held by non-banks in credit unions.

Table 6
Payment card functions and accepting devices (end of year)

	2012	2013	2014	2015	2016
Cards issued in the country (thousands)					
Cards with a cash function	335,558	348,185	350,250	349,991	344,844
Cards with a debit function ¹	293,347	301,934	313,220	317,355	318,394
Cards with a credit function ^{1,2}	153,248	160,996	160,026	163,104	148,868
Cards with an e-money function	2,651	3,318	2,673	2,436	1,920
of which: cards with an e-money function which					
have been loaded at least once	nav	nav	nav	nav	nav
Total number of cards (irrespective of the number					
of functions on the card)	nav	nav	nav	nav	nav
of which: cards with a combined debit, cash and					
e-money function	nav	nav	nav	nav	nav
Memo:					
Retailer cards ³	258,928	nav	nav	nav	nav
Terminals located in the country					
ATMs ⁴	175,139	182,538	184,446	182,378	175,947
ATMs with a cash withdrawal function	160,171	167,132	168,563	166,435	159,990
ATMs with a credit transfer function	nav	nav	nav	nav	nav
POS terminals ⁵	4,096,428	4,451,824	5,035,240	5,187,277	5,081,393
EFTPOS terminals	4,096,428	4,451,824	5,035,240	5,187,277	5,081,393
E-money card terminals	nav	nav	nav	nav	nav
e-money card loading/unloading terminals	nav	nav	nav	nav	nav
e-money card payment terminals	nav	nav	nav	nav	nav

¹ Data may be subject to annual revisions as reporting entities update and correct data. ² Includes delayed debit cards issued by American Express. ³ Source: Brazilian Payment Card Industry Association - ABECS. Since 2013, the source has no longer disclosed industry-level data on the retail cards sector. ⁴ Data have been revised since 2008. ⁵ Time series revised. Each terminal is counted separately, unless the terminals are based on a PC-technology solution used in multiple checkouts. In the latter case, each merchant location counts as one terminal, regardless of the number of checkouts.

Table 7
Indicators of the use of payment instruments and terminals by non-banks: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers ¹	9,074.13	9,588.02	9,560.77	10,084.49	10,214.45
paper-based	nap	nap	nap	nap	nap
non-paper-based	9,074.13	9,588.02	9,560.77	10,084.49	10,214.45
Direct debits ¹	4,357.91	4,953.40	5,557.07	5,427.00	5,335.71
Card payments with cards issued in the country ¹	8,601.35	9,928.23	10,993.63	12,025.55	12,695.14
payments by cards with a debit function	4,128.58	4,908.29	5,626.71	6,466.66	6,837.33
payments by cards with a credit function ²	4,472.77	5,019.94	5,366.92	5,558.89	5,857.81
E-money payment transactions ¹	36.00	38.08	27.78	24.37	23.40
by cards with an e-money function	36.00	38.08	27.78	24.37	23.40
through other e-money storages	nav	nav	nav	nav	nav
Cheques ¹	1,439.30	1,296.98	1,164.82	1,018.02	864.07
Total number of transactions with payment					
instruments ¹	23,508.68	25,804.71	27,304.06	28,579.44	29,132.77
of which: cross-border transactions sent ³	91.87	107.97	125.94	95.54	87.57
Memo:					
Cross-border transactions received	0.46	0.39	0.31	0.32	0.35
Transactions per type of terminal Total transactions at terminals in the country					
Cash transactions ⁴	4,225.61	4,459.18	4,567.44	4,614.48	4,392.54
ATM cash withdrawals	3,250.78	3,385.18	3,529.11	3,628.28	3,449.02
ATM cash deposits	769.82	859.31	801.76	735.92	715.20
POS payment transactions ⁵	8,601.35	9,928.23	10,993.63	12,025.55	12,695.14
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav
a) Transactions at terminals in the country by cards					
Cash transactions ⁴	4,225.61	4,459.18	4,567.44	4,614.48	4,392.54
ATM cash withdrawals	3,250.78	3,385.18	3,529.11	3,628.28	3,449.02
ATM cash deposits	769.82	859.31	801.76	735.92	715.20
POS payment transactions	8,601.35	9,928.23	10,993.63	12,025.55	12,695.14
E-money card loading/unloading transactions E-money card payment transactions	nav nav	nav nav	nav nav	nav nav	nav nav
b) Transactions at terminals in the country by cards			IIav	Hav	IIav
Cash transactions	nav	nav	nav	nav	nav
POS payment transactions	nav	nav	nav	nav	nav
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav
c) Transactions at terminals outside the country by	cards issued in	n the country			
Cash transactions	nav	nav	nav	nav	nav
POS payment transactions	91.71	107.84	125.79	95.38	87.44
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav

¹ Data may be subject to annual revisions as reporting entities update and correct data. ² Includes payments made with delayed debit cards issued by American Express. ³ Includes both card payments outside the country and remittances. ⁴ Also includes ATM credit transfers. ⁵ Payments through cards issued outside the country are not included.

Table 8
Indicators of the use of payment instruments and terminals by non-banks: value of transactions (BRL billions, total for the year)

Credit transfers 25,188.76 30,235.12 32,139.17 34,137.57 34,770.14 paper-based nap 1,104.73 1,104.73 1,104.73 1,104.73 1,20 1,20 1,20 1,20 <		2012	2013	2014	2015	2016
paper-based non-paper-based nap non-paper-based nap 25,188.76 30,235.12 32,139.17 34,137.57 34,770.14 Direct debits¹ 3,801.72 5,570.23 5,026.09 4,313.35 6,515.75 Card payments with cards issued in the country payments by cards with a debit function payments by cards with a debit function 237.45 292.90 348.32 389.53 430.43 payments by cards with a credit function² 465.46 534.00 593.88 653.44 674.30 E-money payment transactions 2.26 3.30 1.77 1.29 1.20 by cards with an e-money function 2.26 3.30 1.77 1.29 1.20 through other e-money storages nav nav<	Transactions per type of payment instrument					
non-paper-based 25,188.76 30,235.12 32,139.17 34,137.57 34,770.14 Direct debits¹ 3,801.72 5,570.23 5,026.09 4,313.35 6,515.75 Card payments with cards issued in the country payments by cards with a debit function 702.91 826.90 942.19 1,042.97 1,104.73 payments by cards with a debit function 237.45 292.90 348.32 389.53 430.43 payments by cards with a credit function² 465.46 534.00 593.88 653.44 674.30 E-money payment transactions 2.26 3.30 1.77 1.29 1.20 by cards with an e-money function 2.26 3.30 1.77 1.29 1.20 through other e-money storages nav 2,801.25 2,579.15 2,258.54 Total value of transactions with payment instruments 32,586.91 39,552.46 40,910.46 42,074.33 44,650.36 40,910.46 42,074.33 25.		25,188.76	30,235.12	32,139.17	34,137.57	34,770.14
Direct debits ¹ 3,801.72 5,570.23 5,026.09 4,313.35 6,515.75 Card payments with cards issued in the country payments by cards with a debit function 702.91 826.90 942.19 1,042.97 1,104.73 payments by cards with a debit function 237.45 292.90 348.32 389.53 430.43 payments by cards with a credit function ² 465.46 534.00 593.88 653.44 674.30 E-money payment transactions 2.26 3.30 1.77 1.29 1.20 by cards with an e-money function 2.26 3.30 1.77 1.29 1.20 through other e-money storages nav 2,801.25 2,579.15 2,258.54 Total value of transactions with payment instruments 32,586.91 39,552.46 40,910.46 42,074.33 44,650.36 of which: cross-border transactions sent ³ 21.83 24.15 27.16 25.89 22.73 <td>• •</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>nap</td>	• •	•	•	•	•	nap
Card payments with cards issued in the country payments by cards with a debit function 702.91 826.90 942.19 1,042.97 1,104.73 payments by cards with a debit function 237.45 292.90 348.32 389.53 430.43 payments by cards with a credit function ² 465.46 534.00 593.88 653.44 674.30 E-money payment transactions 2.26 3.30 1.77 1.29 1.20 by cards with an e-money function 2.26 3.30 1.77 1.29 1.20 through other e-money storages nav nav </td <td>· · · · · · · · · · · · · · · · · · ·</td> <td></td> <td>30,235.12</td> <td></td> <td></td> <td></td>	· · · · · · · · · · · · · · · · · · ·		30,235.12			
payments by cards with a debit function 237.45 292.90 348.32 389.53 430.43 payments by cards with a credit function² 465.46 534.00 593.88 653.44 674.30 E-money payment transactions 2.26 3.30 1.77 1.29 1.20 by cards with an e-money function 2.26 3.30 1.77 1.29 1.20 through other e-money storages nav	Direct debits ¹	•	•		•	6,515.75
payments by cards with a credit function ² 465.46 534.00 593.88 653.44 674.30 E-money payment transactions 2.26 3.30 1.77 1.29 1.20 by cards with an e-money function 2.26 3.30 1.77 1.29 1.20 through other e-money storages nav	· ·				·	1,104.73
E-money payment transactions 2.26 3.30 1.77 1.29 1.20 by cards with an e-money function 2.26 3.30 1.77 1.29 1.20 through other e-money storages nav nav nav nav nav nav nav nav Cheques 2,891.26 2,916.91 2,801.25 2,579.15 2,258.54 Total value of transactions with payment instruments 32,586.91 39,552.46 40,910.46 42,074.33 44,650.36 of which: cross-border transactions sent 21.83 24.15 27.16 25.89 22.73 Memo:		237.45		348.32		430.43
by cards with an e-money function through other e-money storages 2.26 3.30 1.77 1.29 1.20 Cheques nav na	payments by cards with a credit function ²	465.46	534.00	593.88	653.44	674.30
through other e-money storages nav n	E-money payment transactions	2.26	3.30	1.77		1.20
Cheques 2,891.26 2,916.91 2,801.25 2,579.15 2,258.54 Total value of transactions with payment instruments 32,586.91 39,552.46 40,910.46 42,074.33 44,650.36 of which: cross-border transactions sent³ 21.83 24.15 27.16 25.89 22.73 Memo:		2.26	3.30	1.77	1.29	1.20
Total value of transactions with payment instruments 32,586.91 39,552.46 40,910.46 42,074.33 44,650.36 of which: cross-border transactions sent 21.83 24.15 27.16 25.89 22.73 Memo:	through other e-money storages					nav
instruments 32,586.91 39,552.46 40,910.46 42,074.33 44,650.36 of which: cross-border transactions sent 21.83 24.15 27.16 25.89 22.73 Memo:	Cheques	2,891.26	2,916.91	2,801.25	2,579.15	2,258.54
of which: cross-border transactions sent ³ 21.83 24.15 27.16 25.89 22.73 Memo:	Total value of transactions with payment					
Memo:		32,586.91	39,552.46	40,910.46	42,074.33	44,650.36
	of which: cross-border transactions sent ³	21.83				22.73
	Momen					
110 1100 1101		1 75	1 65	1 37	1 82	1 61
	Cross sorder trainedeliene recent ed	0	1.00	1101	1.02	
Transactions per type of terminal	The state of the s					
Total transactions at terminals in the country	Total transactions at terminals in the country					
Cash transactions ⁴ 1,863.04 1,920.63 1,841.41 2,165.68 2,145.62	Cash transactions ⁴	1,863.04	1,920.63	1,841.41	2,165.68	2,145.62
ATM cash withdrawals 950.63 1,071.99 1,179.57 1,303.32 1,309.81	ATM cash withdrawals	950.63	1,071.99	1,179.57	1,303.32	1,309.81
ATM cash deposits 747.01 654.65 443.20 593.17 569.41	ATM cash deposits	747.01	654.65	443.20	593.17	569.41
POS payment transactions ⁵ 702.91 826.90 942.19 1,042.97 1,104.73	POS payment transactions ⁵	702.91	826.90	942.19	1,042.97	1,104.73
E-money card loading/unloading transactions nav nav nav nav nav	E-money card loading/unloading transactions	nav	nav	nav	nav	nav
				nav	nav	nav
a) Transactions at terminals in the country by cards issued in the country	a) Transactions at terminals in the country by cards	issued in the	country			
Cash transactions ⁴ 1,863.04 1,920.63 1,841.41 2,165.68 2,145.62	Cash transactions ⁴	1,863.04	1,920.63	1,841.41	2,165.68	2,145.62
ATM cash withdrawals 950.63 1,071.99 1,179.57 1,303.32 1,309.81	ATM cash withdrawals	950.63	1,071.99	1,179.57	1,303.32	1,309.81
ATM cash deposits 747.01 654.65 443.20 593.17 569.41	ATM cash deposits	747.01	654.65	443.20	593.17	569.41
POS payment transactions 702.91 826.90 942.19 1,042.97 1,104.73	POS payment transactions	702.91	826.90	942.19	1,042.97	1,104.73
E-money card loading/unloading transactions nav nav nav nav nav	E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions nav nav nav nav nav	E-money card payment transactions	nav	nav	nav	nav	nav
b) Transactions at terminals in the country by cards issued outside the country	b) Transactions at terminals in the country by cards	issued outsid	e the country			
		nav	nav	nav	nav	nav
ATM cash withdrawals nav nav nav nav nav	ATM cash withdrawals	nav	nav	nav	nav	nav
ATM cash deposits nav nav nav nav nav	ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions nav nav nav nav nav	POS payment transactions	nav	nav	nav	nav	nav
E-money card loading/unloading transactions nav nav nav nav nav	E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions nav nav nav nav nav	E-money card payment transactions	nav	nav	nav	nav	nav
c) Transactions at terminals outside the country by cards issued in the country	c) Transactions at terminals outside the country by	cards issued i	n the country			
		nav	nav	nav	nav	nav
ATM cash withdrawals nav nav nav nav nav	ATM cash withdrawals	nav	nav	nav	nav	nav
,	•	nav				nav
· ·	• •	20.87	23.17	26.02	24.61	21.39
, , , , , , , , , , , , , , , , , , , ,		nav	nav	nav	nav	nav
E-money card payment transactions nav						nav

¹ Data have been revised for 2013 and 2014 by a significant reporting entity. ² Includes payments made with delayed debit cards issued by American Express. ³ Includes both card payments outside the country and remittances. ⁴ Also includes ATM credit transfers. ⁵ Payments through cards issued outside the country are not included.

Table 9
Participation in selected interbank funds transfer systems (end of year)

	2012	2013	2014	2015	2016
Large-value payment systems					
STR					
Number of participants	171	169	172	181	187
Direct participants	171	169	172	181	187
Banks	134	131	130	133	134
Central bank	1	1	1	1	1
Other direct participants	36	37	41	47	52
General government	1	1	1	1	1
Postal institution	0	0	0	0	0
Clearing and settlement organisations	3	3	3	3	3
Other financial institutions	32	33	37	43	48
Other	0	0	0	0	0
SITRAF ¹					
Number of participants	nap	nap	nap	nap	nap
Direct participants	nap	nap	nap	nap	nap
Banks	nap	nap	nap	nap	nap
BmfBovespa-FX					
Number of participants	71	76	76	77	80
Direct participants	71	76	76	77	80
Banks	71	76	76	77	80
Retail payment systems					
COMPE					
Number of participants	136	131	129	119	118
Direct participants	136	131	129	119	118
Banks	123	118	115	106	104
Other direct participants	13	13	14	13	14
General government	0	0	0	0	0
Postal institution	0	0	0	0	0
Clearing and settlement organisations	0	0	0	0	0
Other financial institutions	13	13	14	13	14
Other	0	0	0	0	0
SILOC					
Number of participants	121	119	122	122	120
Direct participants	121	119	122	122	120
Banks	110	104	107	107	105
Other direct participants	11	15	15	15	15
General government	0	0	0	0	0
Postal institution	0	0	0	0	0
Clearing and settlement organisations	0	0	0	0	0
Other financial institutions	11	15	15	15	15
Other	0	0	0	0	0
SITRAF ¹					
Number of participants	99	99	102	101	101
Direct participants	99	99	102	101	101
Banks	86	87	88	88	87
Other direct participants	13	12	14	13	14
Other financial institutions	13	12	14	13	14
¹ Since 2012, SITRAF has been categorised as a r			17	10	14

Table 10
Payments processed by selected interbank funds transfer systems: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
STR Total transactions sent	23.030	30.413	36.502	42.538	69.585
Concentration ratio in terms of volume (%)	47.0	45.8	47.7	51.2	64.9
SITRAF ¹ Total transactions sent	nap	nap	nap	nap	nap
Concentration ratio in terms of volume (%)	nap	nap	nap	nap	nap
BmfBovespa-FX Total transactions sent	0.040	0.035	0.029	0.032	0.024
Concentration ratio in terms of volume (%)	45.4	47.8	47.3	34.8	26.0
Retail payment systems					
COMPE Total national transactions sent Cheques	1,030.379 1,030.379	887.384 887.384	799.735 799.735	711.600 711.600	694.330 694.330
Concentration ratio in terms of volume (%)	80.7	79.4	79.1	78.4	68.7
SILOC Total national transactions sent Credit transfers	4,183.598 <i>4,</i> 183.598	5,075.709 5,075.709	5,877.518 5,877.518	6,582.292 6,582.292	7,613.382 7,613.382
Concentration ratio in terms of volume (%)	84.7	84.0	85.2	84.4	82.9
SITRAF ¹ Total national transactions sent Credit transfers	115.5 115.5	175.7 175.7	226.9 226.9	294.1 294.1	411.3 411.3
Concentration ratio in terms of volume (%) ¹ Since 2012, SITRAF has been categorised as	76.2 a retail payment s	78.5 system.	80.9	81.5	82.4

Table 11
Payments processed by selected interbank funds transfer systems: value of transactions (BRL billions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
STR					
Total transactions sent	168,809.9	236,405.2	266,733.8	278,934.3	313,076.0
		·	·	·	
Concentration ratio in terms of value (%)	52.6	58.0	60.4	58.5	62.1
SITRAF ¹					
Total transactions sent	nap	nap	nap	nap	nap
	•	·	·		•
Concentration ratio in terms of value (%)	nap	nap	nap	nap	nap
BmfBovespa-FX					
Total transactions sent	998.5	1,131.5	830.4	1,088.4	1,054.0
	54.7	50.4	04.5	40.0	40.7
Concentration ratio in terms of value (%)	54.7	58.1	61.5	40.8	40.7
Retail payment systems					
СОМРЕ					
Total national transactions sent	1,122.5	1,122.8	1,104.6	1,041.2	1,044.6
Cheques	1,122.5	1,122.8	1,104.6	1,041.2	1,044.6
Concentration ratio in terms of value (%)	80.5	80.3	79.8	78.9	69.4
011.00					
SILOC Total national transactions sent	1,491.7	2,386.3	3,303.6	3,448.1	3,610.0
Credit transfers	1,279.8	2,090.7	2,907.4	2,952.2	2,991.3
Card payments	211.9	295.6	396.1	495.8	618.7
Concentration ratio in terms of value (%)	84.1	82.4	81.7	81.6	81.9
SITRAF ¹					
Total national transactions sent	3,039.0	3,490.6	3,878.6	4,131.9	4,346.5
Credit transfers	3,039.0	3,490.6	3,878.6	4,131.9	4,346.5
Concentration ratio in terms of value (0/)	00.0	04.4	04.0	04.0	00.0
Concentration ratio in terms of value (%) ¹ Since 2012, SITRAF has been categorised as	80.2 a retail payment s	81.1 system	81.8	81.6	82.3

Table 12
Participation in SWIFT by domestic institutions (end of year)

	2012	2013	2014	2015	2016
Members	23	22	19	21	21
of which: live	23	22	19	21	21
Sub-members	29	31	31	31	33
of which: live	29	31	30	31	33
Participants	49	52	61	61	59
of which: live	47	50	55	57	57
Total users	101	105	111	113	113
of which: live	99	103	104	109	111
Мето:					
Total SWIFT users	10,279	10,583	10,805	11,094	11,299
members	2,398	2,389	2,379	2,455	2,422
sub-members	3,340	3,343	3,353	3,395	3,367
participants	4,541	4,851	5,073	5,244	5,510
Source: SWIFT.					

Table 13 SWIFT message flows to/from domestic users (thousands, total for the year)

	2012	2013	2014	2015	2016
Total messages sent	10,437	11,660	22,209	25,254	26,556
of which:					
category I	2,901	2,887	3,194	3,078	3,083
category II	385	364	356	372	328
Total messages received	7,577	8,214	8,136	9,174	9,943
of which:					
category I	2,153	2,242	2,220	2,300	<i>2,4</i> 23
category II	347	364	410	429	423
Domestic traffic	138	155	166	197	359
Memo:					
Global SWIFT traffic	4,589,109	5,065,668	5,612,724	6,106,644	6,525,800
Source: SWIFT.					

Table 14

Number of participants in exchanges and trading systems¹
(end of year)

	2012	2013	2014	2015	2016
BmfBovespa-Equities					
Total number of participants	83	76	72	98	88
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	0	0	0	6	8
other	83	76	72	92	80
Number of domestic participants	83	76	72	98	88
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	0	0	0	6	8
other	83	76	72	92	80
Number of foreign participants	nap	nap	nap	nap	nap
BmfBovespa-Derivatives					
Total number of participants	66	60	58	86	72
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	3	3	4	10	4
other	63	57	54	76	68
Number of domestic participants	66	60	58	86	72
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	3	3	4	10	4
other	63	57	54	76	68
Number of foreign participants	nap	nap	nap	nap	nap

¹ Figures prior to 2010 cannot be broken down according to the nature of participants (banks, other).

Table 15
Number of listed securities
(end of year)

	2012	2013	2014	2015	2016
BmfBovespa-Equities					
Total number of listed securities	1,163	1,157	1,205	1,224	1,262
debt securities	241	300	280	297	313
bonds	241	300	280	297	313
equity	785	700	752	757	778
other	137	157	173	170	171
BmfBovespa-Derivatives					
Total number of listed securities	nap	nap	nap	nap	nap

Table 16

Market capitalisation of listed companies

(BRL billions, end of year)

	2012	2013	2014	2015	2016
BmfBovespa-Equities					
Total market capitalisation/equity	2,514.8	2,407.6	2,236.2	1,907.0	2,468.2
BmfBovespa-Derivatives					
Total market capitalisation/equity	nap	nap	nap	nap	nap

Table 17

Number of executed trades

(thousands, total for the year)

	2012	2013	2014	2015	2016
BmfBovespa-Equities					
Total number of executed securities trades	161,755.03	193,492.41	203,848.39	230,217.76	245,610.30
debt securities	2.97	2.48	2.00	1.87	2.91
bonds	2.97	2.48	2.00	1.87	2.91
equity	160,398.86	191,511.54	201,405.69	224,808.50	238,942.88
other	1,353.20	1,978.40	2,440.70	5,407.39	6,664.51
Total number of executed derivatives trades	31,331.13	27,107.81	24,284.11	14,628.09	16,248.28
financial futures	0	0	0	0	0
financial options	31,092.26	26,914.41	24,136.70	14,509.60	16,124.86
other financial derivatives	238.88	193.40	147.41	118.49	123. <i>4</i> 2
BmfBovespa-Derivatives					
Total number of executed securities trades	nap	nap	nap	nap	nap
Total number of executed derivatives trades	24,533.774	31,750.764	44,327.617	72,366.226	118,805.214
financial futures	23,978.220	31,254.932	43,763.802	71,919.972	118,425.549
financial options	<i>4</i> 2.555	25.244	27.596	31.793	27.042
other financial derivatives	0.002	0.020	0.072	0.155	0.067
commodity futures	505.707	465.535	529.822	407.674	346.368
commodity options	7.238	4.967	6.321	6.632	6.188
other commodity derivatives	0.052	0.066	0.004	0.000	0.000

Table 18
Value of executed trades

(BRL billions, total for the year)

	2012	2013	2014	2015	2016
BmfBovespa-Equities					
Total value of executed securities trades	2,505.45	2,814.93	2,482.02	2,359.41	2,568.30
debt securities	2.19	1.08	1.26	1.78	2.28
bonds	2.19	1.08	1.26	1.78	2.28
equity	2,456.82	2,768.14	2,438.35	2,291.69	2,491.20
other	46.45	45.70	42.41	65.94	74.81
Total value of executed derivatives trades	94.33	79.82	78.24	57.90	72.21
financial futures	0	0	0	0	0
financial options	68.90	57.12	57.82	41.53	56.07
other financial derivatives	<i>25.4</i> 3	22.70	20.42	16.37	16.14
BmfBovespa-Derivatives					
Total value of executed securities trades	nap	nap	nap	nap	nap
Total value of executed derivatives trades	48,410.737	54,517.208	47,239.799	59,937.817	58,511.289
financial futures	48,261.438	54,403.354	47,122.974	59,755.625	58,393.817
financial options	95.199	59.235	31.510	45.304	34.756
other financial derivatives	0.102	<i>5.496</i>	24.217	89.132	32.991
commodity futures	53.385	48.815	60.710	47.537	49.499
commodity options	0.563	0.168	0.361	0.219	0.226
other commodity derivatives	0.050	0.140	0.026	0.000	0

Table 19 Number of clearing members(end of year)

	2012	2013	2014	2015	2016
BmfBovespa-Equities					
Total number of clearing members	88	80	79	70	68
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	26	23	22	23	23
other	62	57	57	47	45
Number of domestic clearing members	88	80	79	70	68
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	26	23	22	23	23
other	62	57	57	47	45
Number of foreign clearing members	nap	nap	nap	nap	nap
BmfBovespa-Derivatives					
Total number of clearing members	74	70	69	58	57
central bank ¹	1	1	1	1	1
central counterparties (CCPs)	0	0	0	0	0
banks	28	27	28	29	28
other	45	42	40	28	28
Number of domestic clearing members	74	70	69	58	57
central bank ¹	1	1	1	1	1
central counterparties (CCPs)	0	0	0	0	0
banks	28	27	28	29	28
other	45	42	40	28	28
Number of foreign clearing members	nap	nap	nap	nap	nap
BmfBovespa-Securities					
Total number of clearing members	62	58	54	43	40
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	27	26	24	22	20
other	35	32	30	21	20
Number of domestic clearing members	62	58	54	43	40
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	27	26	24	22	20
other	35	32	30	21	20
Number of foreign clearing members	nap	nap	nap	nap	nap
For the footnotes, see the end of the table.					

Number of foreign clearing members

Table 19 (cont)					
	2012	2013	2014	2015	2016
CETIP					
Total number of clearing members	558	598	699	700	698
central bank	1	1	1	1	1
central counterparties (CCPs)	0	0	0	0	0
banks	165	174	185	185	183
other	392	<i>4</i> 23	513	514	514
Number of domestic clearing members	558	598	699	700	698
central bank	1	1	1	1	1
central counterparties (CCPs)	0	0	0	0	0
banks	165	174	185	185	183
other	392	423	513	514	514

¹ Time series revised. In previous publications, the central bank was not considered a clearing member. However the central Bank must now be considered as such because of one monetary policy instrument (FX swaps) that is cleared at BM&FBovespa.

nap

nap

nap

nap

nap

Table 20
Number of contracts and transactions cleared (thousands, total for the year)

	2012	2013	2014	2015	2016
BmfBovespa-Equities					
Total number of contracts and transactions					
cleared	193,086.2	220,600.2	228,132.5	244,845.8	260,474.4
Number of securities transactions cleared ¹	161,755.0	193,492.4	203,848.4	230,217.8	244,226.1
debt securities	3.0	2.5	2.0	1.9	2.9
bonds	3.0	2.5	2.0	1.9	2.9
equity	160,398.9	191,511.5	201,405.7	224,808.5	237,558.7
other	1,353.2	1,978.4	2,440.7	5,407.4	6,664.5
of which: number of repurchase transactions					
cleared	1,313.4	1,693.2	1,518.4	1,519.4	1,384.2
equity	1,313.4	1,693.2	1,518.4	1,519.4	1,384.2
Number of exchange-traded derivatives contracts					
cleared	31,331.1	27,107.8	24,284.1	14,628.1	16,248.3
financial futures	238.9	193.4	147.4	118.5	123.4
financial options	31,092.3	26,914.4	24,136.7	14,509.6	16,124.9
other financial derivatives	nav	nav	nav	nav	nav
Number of OTC derivatives contracts cleared	nap	nap	nap	nap	nap
BmfBovespa-Derivatives					
Total number of contracts and transactions					
cleared	712,342.2	703,202.5	637,526.9	701,326.3	794,111.8
Number of securities transactions cleared	nap	nap	nap	nap	nap
Number of exchange-traded derivatives contracts					
cleared	710,085.6	700,711.0	634,527.7	696,529.7	791,189.3
financial futures	591,436.8	647,534.1	579,790.6	659,356.0	746,900.5
financial options	115,888.2	50,827.1	52,007.2	34,733.7	42,192.4
other financial derivatives	1.0	48.6	193.1	523.5	189.7
commodity futures	2,034.9	1,970.0	2,175.6	1,534.2	1,529.1
commodity options	722.9	325.4	360.3	382.3	377.7
other commodity derivatives	1.8	5.7	1.0	0.0	0
Number of OTC derivatives contracts cleared	2,256.6	2,491.5	2,999.2	4,796.6	2,922.5
financial futures	nap	nap	nap	nap	nap
financial options	270.2	993.1	583.0	700.8	1,630.6
other financial derivatives	1,986.4	1,498.5	2,416.2	4,095.8	1,291.9
commodity futures	nap	nap	nap	nap	nap
commodity options	nap	nap	nap	nap	nap
other commodity derivatives	nav	nav	nav	nav	nav
For the footnotes, see the end of the table.					

Table 20 (cont)					
	2012	2013	2014	2015	2016
BmfBovespa-Securities					
Total number of contracts and transactions					
cleared	0.234	0.052	0.001	0.000	0
Number of securities transactions cleared	0.234	0.052	0.001	0.000	0
debt securities	0.234	0.052	0.001	0.000	0
government bonds	0.234	0.052	0.001	0.000	0
of which: number of repurchase transactions					
cleared	0.204	0.010	0.001	0.000	0
debt securities	0.204	0.010	0.001	0.000	0
government bonds	0.204	0.010	0.001	0.000	0
Number of exchange-traded derivatives contracts					
cleared	nap	nap	nap	nap	nap
Number of OTC derivatives contracts cleared	nap	nap	nap	nap	nap
CETIP					
Total number of contracts and transactions					
cleared	30,473.7	86,045.9	116,942.4	310,380.6	405,716.2
Number of securities transactions cleared	29,913.3	85,432.0	116,391.2	309,817.7	405,352.5
debt securities	29,913.3	85,432.0	116,391.2	309,817.7	405,352.5
short-term paper	2,665.3	3,073.3	3,810.4	19,234.2	77,447.1
bonds	27,208.0	82,323.5	112,554.2	290,562.2	327,886.8
government bonds	40.0	35.2	26.5	21.3	18.7
of which: number of repurchase transactions					
cleared	2,675.1	62,461.2	92,152.1	120,314.5	132,164.6
debt securities	2,675.1	62,461.2	92,152.1	120,314.5	132,164.6
short-term paper	2.9	3.2	2.3	2.1	0.3
bonds	2,670.8	62,457.9	92,149.8	120,312.5	132,164.1
government bonds	1.4	0.1	0.1	0.0	0.1
Number of exchange-traded derivatives contracts					
cleared	nap	nap	nap	nap	nap
Number of OTC derivatives contracts cleared	560.4	613.9	551.2	562.9	363.6
financial futures	nap	nap	nap	nap	nap
financial options	nap	nap	nap	nap	nap
other financial derivatives	560.4	613.9	551.2	562.9	363.6
¹ Exchange-traded transactions in the vast majority.					

Table 21
Value of contracts and transactions cleared (BRL billions, total for the year)

DustDavisons Faulties	2012	2013	2014	2015	2016
BmfBovespa-Equities Total value of contracts and transactions cleared	2,599.78	2,894.75	2,560.26	2,417.31	2,640.51
Value of securities transactions cleared ¹	2,505.45	2,814.93	2,482.02	2,359.41	2,568.30
debt securities	2.19	1.08	1.26	1.78	2.28
bonds	2.19	1.08	1.26	1.78	2.28
equity other	2,456.82 46.45	2,768.14 45.70	2,438.35 42.41	2,291.69 65.94	2,491.20 74.81
of which: value of repurchase transactions					
cleared	785.93	1,006.84	735.02	665.73	692.75
equity	785.93	1,006.84	735.02	665.73	692.75
Value of exchange-traded derivatives contracts	04.22	70.00	70.04	F7.00	70.04
cleared financial futures	94.33 <i>25.4</i> 3	79.82 22.70	78.24 20.42	57.90 16.37	72.21 16.14
financial options	68.90	57.12	57.82	41.53	56.07
other financial derivatives	nav	nav	nav	nav	nav
	Hav	nav	nav	nav	Hav
Value of OTC derivatives contracts cleared	nap	nap	nap	nap	nap
BmfBovespa-Derivatives					
Total value of contracts and transactions cleared	48,527.20	54,789.76	47,464.85	60,258.99	58,921.48
Value of securities transactions cleared	nap	nap	nap	nap	nap
Value of exchange-traded derivatives contracts					
cleared	48,410.74	54,517.21	47,239.80	59,937.82	58,511.29
financial futures	48,261.44	54,403.35	47,122.97	59,755.63	58,393.82
financial options	95.20	59.2 <i>4</i>	31.51	<i>45.30</i>	34.76
other financial derivatives	0.10 53.39	5.50 48.82	24.22 60.71	89.13 47.54	32.99 49.50
commodity futures commodity options	0.56	40.62 0.17	0.36	0.22	0.23
other commodity derivatives	0.05	0.17	0.03	0.00	0.23
Value of OTC derivatives contracts cleared	116.46	272.55	225.05	321.17	410.19
financial futures	nap	nap	nap	nap	nap
financial options	17.1 4	197. 6 2	104.24	116.38	347.01
other financial derivatives	99.32	74.92	120.81	204.79	63.18
BmfBovespa-Securities					
Total value of contracts and transactions cleared	40.13	3.85	0.02	0.00	0
Value of securities transactions cleared	40.13	3.85	0.02	0.00	0
debt securities	40.13	3.85	0.02	0.00	0
government bonds	40.13	3.85	0.02	0.00	0
of which: value of repurchase transactions					
cleared	39.41	2.90	0.02	0.00	0
debt securities	39.41	2.90	0.02	0.00	0
government bonds	39.41	2.90	0.02	0.00	0
Value of exchange-traded derivatives contracts					
cleared	nap	nap	nap	nap	nap
Value of OTC derivatives contracts cleared	nap	nap	nap	nap	nap
For the footnotes, see the end of the table.					

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	2012	2013	2014	2015	2016
CETIP					
Total value of contracts and transactions cleared	17,558.57	20,290.28	21,439.57	27,601.81	23,187.90
Value of securities transactions cleared	17,429.20	19,983.55	20,587.60	25,884.00	21,522.04
debt securities	17,429.20	19,983.55	20,587.60	25,884.00	21,522.04
short-term paper	8,810.33	<i>8,824.39</i>	8,696.01	10,879.06	9,049.69
bonds	8,609.67	11,153.74	11,884.31	14,997.93	12,463.70
government bonds	9.21	<i>5.4</i> 3	7.28	7.02	8.65
equity	nap	nap	nap	nap	nap
of which: value of repurchase transactions					
cleared	2,474.53	4,287.89	4,990.23	6,528.31	5,905.24
debt securities	2,474.53	4,287.89	4,990.23	6,528.31	5,905.24
short-term paper	18.06	23.49	23.01	23.33	2.86
bonds	2,456.30	4,264.38	4,967.21	6,504.97	5,902.36
government bonds	0.17	0.01	0.01	0.01	0.02
equity	nap	nap	nap	nap	nap
Value of exchange-traded derivatives contracts					
cleared	nap	nap	nap	nap	nap
Value of OTC derivatives contracts cleared	129.37	306.72	851.97	1,717.80	1,665.87
financial futures	nap	nap	nap	nap	nap
financial options	nap	nap	nap	nap	nap
other financial derivatives	129.37	306.72	851.97	1,717.80	1,665.87
¹ Exchange-traded transactions in the vast majority.					

Table 22 Number of direct participants in CSDs (end of year)

BmtBovespa-Equities 201 201 193 193 198 193 198 central bank 0 0 0 0 0 0 0 0 0		2012	2013	2014	2015	2016
central bank central counterparties (CCPs) 0		004	004	400	100	400
central counterparties (CCPs) 0	·					
central securities depositories 0 0 0 0 0 banks 46 47 45 66 69 other 1555 154 148 127 117 Number of domestic participants 201 201 193 193 186 central bank 0 0 0 0 0 0 0 central counterparties (CCPs) 0 0 0 0 0 0 0 banks 46 47 45 66 69 9 117 117 Number of foreign participants 0 <td></td> <td></td> <td></td> <td></td> <td>_</td> <td></td>					_	
banks other 46 47 45 66 69 other 155 154 148 127 117 Number of domestic participants central bank 0				-	_	
other 155 154 148 127 117 Number of domestic participants central bank 0	•			-	_	
Number of domestic participants 201 201 193 193 186 central bank 0						
central bank 0 <t< td=""><td>otner</td><td>155</td><td>154</td><td>148</td><td>127</td><td>117</td></t<>	otner	155	154	148	127	117
central counterparties (CCPs) 0	· · ·					
central securities depositories 0 <t< td=""><td></td><td>0</td><td>0</td><td>0</td><td>0</td><td></td></t<>		0	0	0	0	
banks other 46 the street of the	· · · · · · · · · · · · · · · · · · ·	0	0	0	0	0
other 155 154 148 127 117 Number of foreign participants 0 0 0 0 0 CETIP Total number of participants 558 598 699 700 698 central bank 1	central securities depositories	_		_	-	
Number of foreign participants 0 0 0 0 0 CETIP Total number of participants 558 598 699 700 698 central bank 1 51 514						
CETIP Total number of participants 558 598 699 700 698 central bank 1 514 518 od 0	other	155	154	148	127	117
Total number of participants central bank 558 598 699 700 698 central bank central counterparties (CCPs) 0	Number of foreign participants	0	0	0	0	0
central bank 1 5 183 other 392 423 513 514 514 514 Number of domestic participants 558 598 699 700 698 699 700 698 699 700 698 699 700 698 699 700 698 699 700 698 699 700 698 699 700 698 699 700 698 699 700 698 699 700 698 699 700 698 699 700 60 0 0 0 0 0 0 0 0 0 0	CETIP					
central counterparties (CCPs) 0 0 0 0 0 0 central securities depositories 0 0 0 0 0 0 banks 165 174 185 185 183 other 392 423 513 514 514 Number of domestic participants 558 598 699 700 698 central bank 1 <td>Total number of participants</td> <td>558</td> <td>598</td> <td>699</td> <td>700</td> <td>698</td>	Total number of participants	558	598	699	700	698
central securities depositories 0 0 0 0 0 banks 165 174 185 185 183 other 392 423 513 514 514 Number of domestic participants 558 598 699 700 698 central bank 1	central bank	1	1	1	1	1
banks other 165 174 185 185 183 other Number of domestic participants central bank 558 598 699 700 698 central bank 1	central counterparties (CCPs)	0	0	0	0	0
other 392 423 513 514 514 Number of domestic participants central bank 1	central securities depositories	0	0	0	0	0
Number of domestic participants 558 598 699 700 698 central bank 1	banks	165	174	185	185	183
central bank 1 <t< td=""><td>other</td><td>392</td><td>423</td><td>513</td><td>514</td><td>514</td></t<>	other	392	423	513	514	514
central counterparties (CCPs) 0	Number of domestic participants	558	598	699	700	698
central securities depositories 0 0 0 0 0 0 banks other 165 174 185 185 183 other 392 423 513 514 514 Number of foreign participants nap nap nap nap nap nap SELIC Total number of participants 499 497 486 484 471 central bank 1	central bank	1	1	1	1	1
banks other 165 392 174 185 185 185 183 514 183 514 514 Number of foreign participants nap nap nap nap nap nap nap nap nap nap nap	central counterparties (CCPs)	0	0	0	0	0
other 392 423 513 514 514 Number of foreign participants nap n	central securities depositories	0	0	0	0	0
SELIC Total number of participants 499 497 486 484 471 central bank 1 300 1	banks	165	174	185	185	183
SELIC Total number of participants 499 497 486 484 471 central bank 1 300 1	other	392	423	513	514	514
Total number of participants 499 497 486 484 471 central bank 1 1 1 1 1 1 1 central counterparties (CCPs)¹ 4 1 1 1 1 1 1 300 1	Number of foreign participants	nap	nap	nap	nap	nap
central bank 1 300 Number of domestic participants 499 497 486 484 471 471 2 2 2 317 314 300 Number of domestic participants 499 497 486 484 471 471 471 1 <td< td=""><td>SELIC</td><td></td><td></td><td></td><td></td><td></td></td<>	SELIC					
central counterparties (CCPs) ¹ 4 5 1 1 1 1 1 1 1 1 1 1 1 1 1 300 1 1 1 1 1 300 1	· · · · · · · · · · · · · · · · · · ·	499	497	486	484	471
central securities depositories 1 300 Number of domestic participants 499 497 486 484 471 central bank 1<	central bank	1	1	1	1	1
banks other 167 164 163 164 165 other Number of domestic participants central bank 499 497 486 484 471 central bank 1 1 1 1 1 1 1 central counterparties (CCPs) ¹ 4 4 4 4 4 4 4 4 4 4 4 5 6 6 6 6 6 6 6 7 1 3 1 1 3 1	central counterparties (CCPs) 1	4	4	4	4	4
other 326 327 317 314 300 Number of domestic participants central bank 499 497 486 484 471 central bank 1 3 1 3 1 3	central securities depositories	1	1	1	1	1
Number of domestic participants 499 497 486 484 471 central bank 1 1 1 1 1 1 1 central counterparties (CCPs)¹ 4 4 4 4 4 4 central securities depositories 1 3 1 3 1 3 1 3 1	banks	167	164	163	164	165
central bank 1 1 1 1 1 1 central counterparties (CCPs) ¹ 4 4 4 4 4 4 4 4 4 4 4 5 4 1 3 1 3 3 3 <td>other</td> <td>326</td> <td>327</td> <td>317</td> <td>314</td> <td>300</td>	other	326	327	317	314	300
central bank 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 5 4 1 3 <t< td=""><td>Number of domestic participants</td><td>499</td><td>497</td><td>486</td><td>484</td><td>471</td></t<>	Number of domestic participants	499	497	486	484	471
central securities depositories 1 2 <t< td=""><td></td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td></t<>		1	1	1	1	1
central securities depositories 1 2 <t< td=""><td>central counterparties (CCPs)¹</td><td>4</td><td>4</td><td>4</td><td>4</td><td>4</td></t<>	central counterparties (CCPs) ¹	4	4	4	4	4
banks 167 164 163 164 165 other 326 327 317 314 300 Number of foreign participants nap nap nap nap nap nap	· · · · · · · · · · · · · · · · · · ·	1		1	1	
other326327317314300Number of foreign participantsnapnapnapnapnap	·	167	164	163	164	165
· · · · · · · · · · · · · · · · · · ·						
· · · · · · · · · · · · · · · · · · ·	Number of foreign participants	nap	nap	nap	nap	nap
	<u> </u>			'		

Table 23
Number of securities held on accounts at CSDs (thousands, end of year)

	2012	2013	2014	2015	2016
BmfBovespa-Equities					
Total number of securities held	1.26	1.30	1.32	1.34	1.39
debt securities	0.14	0.15	0.16	0.16	0.18
bonds	0.14	0.15	0.16	0.16	0.18
equity	1.12	1.15	1.16	1.17	1.21
CETIP					
Total number of securities held	2,523.52	2,695.42	3,272.04	7,430.12	9,174.85
debt securities	2,523.52	2,695.42	3,272.04	7,430.12	9,174.85
short-term paper	160.68	256.34	358.10	616.97	785.66
bonds	2,362.84	2,439.07	2,913.94	6,813.15	8,389.20
SELIC					
Total number of securities held ¹	0.448	0.368	0.388	0.359	0.347
debt securities	0.448	0.368	0.388	0.359	0.347
short-term paper	0.003	0.002	0.003	0.002	0.002
bonds	0.445	0.366	0.385	0.357	0.345
¹ Government securities exclusively.					

Table 24
Value of securities held on accounts at CSDs (BRL billions, end of year)

1,233.38				
1 233 38				
1,200.00	1,087.37	1,109.86	946.32	1,283.91
4.65	3.86	4.52	7.34	7.93
4.65	3.86	4.52	7.34	7.93
1,228.72	1,083.52	1,105.34	938.98	1,275.98
3,454.41	3,768.62	4,138.98	4,442.84	4,985.93
3,454.41	3,768.62	4,138.98	4,442.84	4,985.93
184.29	547.92	1,032.88	713.73	1,029.63
3,270.12	3,220.69	3,106.10	3,729.11	3,956.30
2,927.44	3,073.39	3,445.29	4,184.43	4,837.28
2,927.44	3,073.39	3,445.29	4,184.43	4,837.28
35.35	67.25	73.48	112.67	71.81
2,892.10	3,006.14	3,371.81	4,071.77	4,765.47
	1,228.72 3,454.41 3,454.41 184.29 3,270.12 2,927.44 2,927.44 35.35	4.653.861,228.721,083.523,454.413,768.623,454.413,768.62184.29547.923,270.123,220.692,927.443,073.392,927.443,073.3935.3567.25	4.65 3.86 4.52 1,228.72 1,083.52 1,105.34 3,454.41 3,768.62 4,138.98 3,454.41 3,768.62 4,138.98 184.29 547.92 1,032.88 3,270.12 3,220.69 3,106.10 2,927.44 3,073.39 3,445.29 2,927.44 3,073.39 3,445.29 35.35 67.25 73.48	4.65 3.86 4.52 7.34 1,228.72 1,083.52 1,105.34 938.98 3,454.41 3,768.62 4,138.98 4,442.84 3,454.41 3,768.62 4,138.98 4,442.84 184.29 547.92 1,032.88 713.73 3,270.12 3,220.69 3,106.10 3,729.11 2,927.44 3,073.39 3,445.29 4,184.43 2,927.44 3,073.39 3,445.29 4,184.43 35.35 67.25 73.48 112.67

Table 25 Number of delivery instructions processed (thousands, total for the year)

2012 2013 2014 2015 2016 BmfBovesna-Equities

BmfBovespa-Equities					
Total number of delivery instructions	18,887.04	20,932.08	19,160.37	18,000.97	17,798.74
DVP	9,876.83	10,348.45	8,935.80	8,656.86	10,778.83
debt securities	11.67	5.14	4.86	6.17	6.98
bonds	11.67	5.14	4.86	6.17	6.98
equity	9,865.16	10,343.31	8,930.94	8,650.69	10,771.85
free of payment	9,010.22	10,583.62	10,224.57	9,344.11	7,019.92
debt securities	2.17	5.06	5.79	2.53	4.35
bonds	2.17	5.06	<i>5.7</i> 9	2.53	4.35
equity	9,008.05	10,578.56	10,218.79	9,341.57	7,015.56
CETIP					
Total number of delivery instructions	30,473.66	86,010.71	116,942.35	309,817.67	405,352.55
DVP	30,473.66	86,010.71	116,942.35	309,817.67	405,352.55
debt securities	30,473.66	86,010.71	116,942.35	309,817.67	405,352.55
short-term paper	3,575.88	3,419.04	4,158.13	19,483.96	77,447.05
bonds	26,897.78	82,591.67	112,784.22	290,333.71	327,905.49
free of payment	nav	nav	nav	nav	nav
SELIC					
Total number of delivery instructions	3,638.049	3,966.064	3,949.710	4,139.848	4,217.747
DVP	3,442.305	3,834.014	3,809.256	3,978.342	4,027.540
debt securities	3,442.305	3,834.014	3,809.256	3,978.342	4,027.540
short-term paper	0.000	0	0	0	0
bonds	3,442.305	3,834.014	3,809.256	3,978.342	4,027.540
free of payment	195.744	132.050	140.454	161.506	190.207
debt securities	195.744	132.050	140.454	161.506	190.207
bonds	195.744	132.050	140.454	161.506	190.207

Table 26
Value of delivery instructions processed

(BRL billions, total for the year)

	2012	2013	2014	2015	2016
BmfBovespa-Equities					
Total value of delivery instructions	5,323.8	5,816.5	5,601.3	4,996.1	4,572.7
DVP	992.8	1,052.7	966.7	897.7	967.8
debt securities	1.8	0.8	0.6	1.7	1.2
bonds	1.8	0.8	0.6	1.7	1.2
equity	991.0	1,051.9	966.1	896.0	966.6
free of payment	4,331.0	4,763.7	4,634.6	4,098.4	3,604.8
debt securities	1.9	0.9	0.8	8.5	8.0
bonds	1.9	0.9	0.8	8.5	8.0
equity	4,329.1	4,762.8	4,633.8	4,089.8	3,596.8
CETIP					
Total value of delivery instructions	17,558.6	20,290.3	21,439.6	25,884.0	21,522.0
DVP	17,558.6	20,290.3	21,439.6	25,884.0	21,522.0
debt securities	17,558.6	20,290.3	21,439.6	25,884.0	21,522.0
short-term paper	8,867.6	9,142.7	<i>9,453.3</i>	12,320.9	9,049.7
bonds	8,691.0	11,147.6	11,986.3	13,563.1	12,472.3
free of payment	nav	nav	nav	nav	nav
SELIC					
Total value of delivery instructions	360,200.0	521,691.2	624,174.3	698,225.3	730,010.2
DVP	356,624.9	516,481.6	619,793.9	692,793.7	724,632.9
debt securities	356,624.9	516,481.6	619,793.9	692,793.7	724,632.9
short-term paper	0.000	0	0	0	0
bonds	356,624.9	516,481.6	619,793.9	692,793.7	724,632.9
free of payment	3,575.0	5,209.6	4,380.3	5,431.6	5,377.3
debt securities	3,575.0	5,209.6	4,380.3	5,431.6	5,377.3
bonds	3,575.0	5,209.6	4,380.3	<i>5,4</i> 31.6	5,377.3

Table 1
Basic statistical data

	2012	2013	2014	2015	2016
Population (thousands) ¹	34,540	34,936	35,340	35,702	36,039
GDP (CAD billions) ²	1,839.6	1,928.4	1,999.9	1,992.2	2,071.3
GDP per capita (CAD) ²	53,260	55,197	56,592	55,801	57,476
Consumer price inflation (%) ¹	1.5	0.9	1.9	1.1	1.4
Exchange rate (CAD/USD):					
end of year ³	0.9949	1.0636	1.1601	1.3840	1.3427
average ⁴	0.9996	1.0299	1.1045	1.2787	1.3248

¹ Yearly average. ² Data have been revised from previous editions. ³ Closing spot rate for the year. ⁴ Average noon spot rate for the year.

Table 2
Settlement media used by non-banks¹

(CAD billions, end of year)

	2012	2013	2014	2015	2016
Notes and coin in circulation outside banks	62.22	65.54	69.42	74.64	79.35
Value of transferable deposits	598.45	654.81	699.40	757.12	831.92
Narrow money supply ²	660.67	720.35	768.84	831.76	911.27
Memo:					
Transferable deposits in foreign currencies ³	87.86	95.32	113.34	140.53	151.61
Outstanding value on e-money storage	nav	nav	nav	nav	nav

¹ Data have been revised from previous editions to reflect a change in reporting methodology. ² M1+(gross) equals currency in circulation outside banks plus all Canadian dollar chequable deposits held at chartered banks, trust and loan companies, credit unions and caisses populaires (excl deposits of these institutions). ³ Not included in definition of narrow money.

Table 3
Settlement media used by banks

(CAD billions, average for December)

	2012	2013	2014	2015	2016
Transferable balances held at the central bank	0.063	0.187	0.176	0.707	0.502
required reserves	nap	nap	nap	nap	nap
free reserves	0.063	0.187	0.176	0.707	0.502
Transferable balances held at other banks ¹	1.886	2.018	1.894	2.458	2.658
Memo:					
Credit extended by the central bank:					
intraday ²	0	0	0	0	0
overnight ³	0	0.000	0	0	0.002
longer refinancing operations 4	0.692	0.848	1.397	4.718	7.602

¹ Data have been revised from previous editions to reflect a change in reporting methodology. ² Collateral associated with the operation of the LVTS (Canada's large-value payment system) is pledged to the Bank of Canada at the beginning of each day and is used to cover any participant's permitted negative funds positions during the day. ³ Advances to the members of the Canadian Payments Association (CPA), made at the end of the day to facilitate settlement in the LVTS; these advances are to be paid back on the following business day with interest. ⁴ Securities purchased under resale agreements.

Table 4
Banknotes and coin
(CAD billions, end of year)

	2012	2013	2014	2015	2016
Total banknotes and coin issued	69.238	72.241	75.737	81.355	86.472
Total banknotes issued	63.700	66.616	70.024	75.497	80.479
CAD 1,000	0.898	0.858	0.825	0.795	0.765
CAD 100	32.742	35.039	37.324	41.032	43.561
CAD 50	10.145	10.744	11.234	12.018	12.380
CAD 20	17.202	17.230	17.801	18. 7 29	17.703
CAD 10	1.204	1.264	1.276	1.315	1.339
CAD 5	1.131	1.103	1.188	1.232	1.227
CAD 2 ¹	0.212	0.211	0.210	0.210	0.209
CAD 1 ²	0.153	0.153	0.153	0.152	0.152
other ³	0.013	0.013	0.013	0.013	0.013
Total coin issued	5.538	5.625	5.713	5.733	5.993
Banknotes and coin held by banks ⁴	7.014	6.702	6.319	6.716	7.124
Banknotes and coin in circulation outside banks ⁴	62.224	65.539	69.418	74.639	79.348

¹ The CAD 2 banknote was replaced by the CAD 2 coin in 1996. ² The CAD 1 banknote was replaced by the CAD 1 coin in 1987. ³ Includes the banknotes previously issued by chartered banks, the Dominion of Canada, provinces, defunct banks, as well as the CAD 25 and 500 notes. All of these notes are out of print. ⁴ Data have been revised from previous editions to reflect a change in reporting methodology.

Table 5
Institutions offering payment services to non-banks¹
(end of year)

	2012	2013	2014	2015	2016
Central bank					
Number of branches or offices ²	1	1	1	1	1
Number of accounts, non-banks ³	3	3	3	3	3
Value of accounts (CAD billions), all ³	0.063	0.187	0.176	0.707	0.502
Memo:					
Number of accounts, all ³	15	15	15	16	16
Number of accounts, banks ³	12	12	12	13	13
Banks					
Number of institutions ⁴	76	76	77	75	81
Number of branches or offices	6,987	7,039	7,064	7,041	6,928
Number of accounts	nav	nav	nav	nav	nav
Value of accounts (CAD billions)	546.74	602.17	622.61	673.62	742.31
Domestic banks		00-11		01010-	
Number of institutions	22	24	24	23	28
Number of branches or offices	6,732	6,788	6,807	6,783	6,684
Value of accounts (CAD billions)	517.93	570.16	588.39	634.31	702.36
Foreign bank subsidiaries					
Number of institutions	25	23	23	23	22
Number of branches or offices	223	220	222	224	208
Value of accounts (CAD billions)	20.22	21.16	21.85	24.25	24.24
Foreign bank branches					
Number of institutions	29	29	30	29	31
Number of branches or offices	32	31	35	32	36
Value of accounts (CAD billions)	8.59	10.86	12.38	15.05	15.71
Other institutions offering payment services to n	on-banks				
Number of institutions	805	752	726	687	625
Number of branches or offices	nav	nav	nav	nav	nav
Number of accounts	nav	nav	nav	nav	nav
Value of accounts (CAD billions)	85.26	83.68	91.95	99.87	109.28
Local credit unions and caisses populaires					
Number of institutions	771	724	694	654	597
Number of branches or offices	3,117	3,031	2,972	2,914	2,848
Value of accounts (CAD billions)	76.53	73.38	76.05	82.52	88.86
Trust and loan companies ⁵					
Number of institutions	33	27	31	32	27
Number of branches or offices	nav	nav	nav	nav	nav
Value of accounts (CAD billions)	1.16	0.92	0.86	0.87	0.99
Governmental savings institutions Number of institutions	1	1	1	1	1
Number of branches or offices	170	171	171	172	172
Value of accounts (CAD billions) ⁶					173
value of accounts (CAD billions)	7.58	9.39	15.03	16.48	19.43
For the footnotes, see the end of the table.					

Table 5 (cont)					
	2012	2013	2014	2015	2016
Institutions offering payment services to non	-banks (total)				
Number of institutions	882	829	804	763	707
Number of branches or offices	nav	nav	nav	nav	nav
Number of accounts held by non-banks Value of accounts held by non-banks	nav	nav	nav	nav	nav
(CAD billions) ⁷	632.06	686.04	714.74	774.19	852.10

Memo:

e-money institutions

Outstanding value on e-money storages issued by

Electronic money institutions Number of institutions nav nav nav

nav

nav

nav

nav

nav

nav

¹ Data have been revised from previous editions to reflect a change in reporting methodology.² There are five regional offices and two Agency Operations Centres but only the head office offers payment services. ³ Figures represent the number of accounts held at the Bank of Canada by CPA members for the settlement of the LVTS. ⁴ Some foreign bank subsidiaries and foreign bank branches are associated with the same parent bank. For the purposes of this table, each institution is recorded separately. ⁵ Othose companies that are federally regulated and are not bank-owned are included.⁶ The large increase in 2014 reflects a change in reporting methodology to include notice deposits in addition to demand deposits. ⁷ Includes value of accounts held at the central bank by banks and non-banks.

Table 6
Payment card functions and accepting devices (thousands, end of year)

	2012	2013	2014	2015	2016
Cards issued in the country					
Cards with a cash function	nav	nav	nav	nav	nav
Cards with a debit function ¹	23,600.00	23,900.00	25,000.00	24,800.00	28,700.00
Cards with a delayed debit function	nap	nap	nap	nap	nap
Cards with a credit function ²	78,439.03	81,127.26	76,581.34	72,066.52	75,300.00
Cards with an e-money function	nav	nav	nav	nav	nav
of which: cards with an e-money function which					
have been loaded at least once	nav	nav	nav	nav	nav
Total number of cards (irrespective of the number					
of functions on the card)	nav	nav	nav	nav	nav
Memo:					
Retailer cards ³	7,020.83	6,116.58	5,756.51	2,332.13	1,587.79
Terminals located in the country					
ATMs ⁴	59.10	65.00	65.99	66.43	67.99
ATMs with a cash withdrawal function ^{4, 5}	59.10	65.00	65.99	66.43	67.99
ATMs with a credit transfer function 4,6	16.88	18.58	18.78	18.71	18.55
POS terminals ⁷	794.00	829.00	879.00	1,301.40	1,400.80
of which: EFTPOS terminals	794.00	829.00	879.00	1,301.40	1,400.80
E-money card terminals	nav	nav	nav	nav	nav
e-money card loading/unloading terminals	nav	nav	nav	nav	nav
e-money card payment terminals	nav	nav	nav	nav	nav

¹ Only cards that are actively used to make purchases at POS terminals have been reported. ² The decrease in 2014 reflects a change in reporting methodology by one issuer. ³ Number of accounts has been reported. ⁴ Data have been revised from previous editions to reflect a change in reporting methodology. ⁵ Number of ATMs on the Interac network is reported. ⁶ Credit transfer functions are, for the most part, limited to proprietary ATMs. Access to the credit transfer functions on these ATMs is restricted to the clients of the associated proprietary institution. ATMs are reported for eight of the largest banks operating in Canada. ⁷ Figures represent those terminals with at least a debit function and do not include terminals that only have a credit function; includes both shared and proprietary networks. The increase in 2015 reflects a change in the estimation methodology of unique EFTPOS terminals.

Table 7
Indicators of the use of payment instruments and terminals by non-banks: volume of transactions¹ (millions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers ²	1,136.01	1,225.35	1,262.43	1,317.64	1,350.52
paper-based ^{2, 3}	8.60	7.45	5.86	4.01	2.23
non-paper-based ^{2, 4}	1,127.41	1,217.90	1,256.57	1,313.62	1,348.28
Direct debits ²	699.27	728.37	762.32	791.34	825.92
Card payments with cards issued in the country	7,484.81	8,099.24	8,796.76	9,241.87	9,930.58
payments by cards with a debit function	4,357.31	4,518.93	4,899.00	5,169.00	5,428.00
payments by cards with a delayed debit function	nap	nap	nap	nap	nap
payments by cards with a credit function	3,127.50	3,580.31	3,897.76	4,072.87	4,502.58
E-money payment transactions	nav	nav	nav	nav	nav
Cheques ²	805.45	761.14	708.86	648.21	502.67
Other payment instruments	0.71	0.72	0.54	0.48	0.41
Total number of transactions with payment					
instruments	10,126.26	10,814.82	11,530.92	11,999.53	12,610.10
of which: cross-border transactions sent	nav	nav	nav	nav	nav
Мето:					
Cross-border transactions received	nav	nav	nav	nav	nav
Transactions per type of terminal					
Total transactions at terminals in the country					
Cash transactions ⁵	797.89	751.24	713.72	682.76	648.74
ATM withdrawals ⁵	573.40	558.26	531.47	510.04	483.51
ATM deposits ⁵	224.50	192.98	182.25	172.72	165.23
POS payment transactions ⁶	7,484.81	8,099.24	8,796.76	9,241.87	9,930.58
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav

¹ Data have been revised from previous editions to reflect a change in reporting methodology. ² Includes transactions cleared by the Automated Clearing Settlement System (ACSS); excludes on-us transactions. ³ Bill payments initiated at ATMs and bank tellers. ⁴ Includes bill payments initiated over the telephone or internet, Automatic Funds Transfer (AFT) credits, and corporate-to-corporate credit via EDI. ⁵ Transactions are reported for eight of the largest banks operating in Canada. Values include on-us transactions. ⁶ Figures for POS transactions involving cards with a credit function represent the volume of transactions for cards issued in Canada and include transactions conducted at terminals in other countries.

Table 8
Indicators of the use of payment instruments and terminals by non-banks: value of transactions¹ (CAD billions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers ²	2,043.93	2,241.87	2,420.70	2,570.25	2,723.00
paper-based ^{2, 3}	10.29	11.07	10.81	7.86	4.39
non-paper-based ^{2, 4}	2,033.65	2,230.80	2,409.89	2,562.39	2,718.60
Direct debits ²	574.67	611.28	642.46	676.94	695.28
Card payments with cards issued in the country	546.12	570.93	614.70	632.87	666.45
payments by cards with a debit function ⁵	190.45	196.10	211.00	217.00	222.00
payments by cards with a delayed debit function	nap	nap	nap	nap	nap
payments by cards with a credit function	355.67	374.83	403.70	415.87	444.45
E-money payment transactions	nav	nav	nav	nav	nav
Cheques ²	2,990.64	2,935.19	2,977.47	2,997.65	2,465.00
Other payment instruments	1.35	1.35	0.87	0.71	0.59
Total value of transactions with payment					
instruments	6,156.71	6,360.61	6,656.20	6,878.41	6,550.32
of which: cross-border transactions sent	nav	nav	nav	nav	nav
Memo:					
Cross-border transactions received	nav	nav	nav	nav	nav
Transactions per type of terminal					
Total transactions at terminals in the country					
Cash transactions	nav	nav	nav	nav	nav
ATM withdrawals	nav	nav	nav	nav	nav
ATM deposits	nav	nav	nav	nav	nav
POS payment transactions ⁶	546.12	570.93	614.70	632.87	666.45
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav

¹ Data have been revised from previous editions to reflect a change in reporting methodology. ² Includes transactions cleared by the Automated Clearing Settlement System (ACSS); excludes on-us transactions. ³ Bill payments initiated at ATMs and bank tellers. ⁴ Includes bill payments initiated over the telephone or internet, Automatic Funds Transfer (AFT) credits and corporate-to-corporate credits via EDI. ⁵ Includes the value of cash-back transactions. ⁶ Figures for POS transactions involving cards with a credit function represent the value of transactions for cards issued in Canada and include transactions conducted at terminals in other countries.

Table 9
Participation in selected interbank funds transfer systems (end of year)

	2012	2013	2014	2015	2016
Large-value payment systems					
Large Value Transfer System (LVTS)					
Number of participants	89	90	84	82	82
Direct participants	16	16	16	17	17
Banks	12	12	12	13	13
Central bank	1	1	1	1	1
Other direct participants	3	3	3	3	3
General government	nap	nap	nap	nap	nap
Postal institution	nap	nap	nap	nap	nap
Clearing and settlement organisations	nap	nap	nap	nap	nap
Other financial institutions	3	3	3	3	3
Other	nap	nap	nap	nap	nap
Indirect participants	73	74	68	65	65
Retail payment systems					
Automated Clearing Settlement System (ACSS)					
Number of participants	122	117	123	123	124
Direct participants	12	12	12	12	12
Banks	8	8	8	8	8
Central bank	1	1	1	1	1
Other direct participants	3	3	3	3	3
General government	nap	nap	nap	nap	nap
Postal institution	nap	nap	nap	nap	nap
Clearing and settlement organisations	nap	nap	nap	nap	nap
Other financial institutions	3	3	3	3	3
Other	nap	nap	nap	nap	nap
Indirect participants	110	105	111	111	112
Interac e-Transfer					
Number of participants	nav	nav	nav	258	259
Direct participants	nav	nav	nav	nap	nap
Indirect participants	nav	nav	nav	nap	nap

Table 10
Payments processed by selected interbank funds transfer systems: volume of transactions¹ (millions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
Large Value Transfer System					
Total transactions sent	7.03	7.58	7.92	8.09	8.57
credit transfers	7.03	7.58	7.92	8.09	8.57
Concentration ratio in terms of volume (%)	80.9	80.9	80.4	81.0	81.1
Retail payment systems					
Automated Clearing Settlement System ²					
Total transactions sent	6,505.97	6,734.16	6,776.37	6,983.25	7,329.80
credit transfers ³	1,136.01	1,225.35	1,262.43	1,317.64	1,350.52
direct debits ⁴	699.27	728.37	762.32	791.34	825.92
card payments ⁵	3,636.91	3,799.85	3,833.52	4,025.98	4,456.75
ATM transactions ⁶	227.61	218.73	208.70	199.61	193.54
cheques	805.45	761.14	708.86	648.21	502.67
other payment instruments	0.71	0.72	0.54	0.48	0.41
Concentration ratio in terms of volume (%)	79.9	85.8	89.2	85.9	86.7
Interac e-Transfer					
Total transactions sent	32.24	47.22	71.24	106.62	158.00
direct debits	32.24	47.22	71.24	106.62	158.00
Concentration ratio in terms of volume (%)	nav	nav	nav	nav	nav

¹ Figures exclude on-us transactions. ² Data have been revised from previous editions to reflect a change in reporting methodology. ³ Bill payments initiated at ATMs, bank tellers, over the telephone or internet, AFT credits and EDI. ⁴ AFT debits and payments and refunds for goods and services initiated online. ⁵ POS debits and refunds. ⁶ Point of service disbursement of currency on shared networks.

Table 11

Payments processed by selected interbank funds transfer systems: value of transactions¹ (CAD billions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
Large Value Transfer System					
Total transactions sent	38,171.0	37,609.4	38,652.8	43,026.2	44,161.6
credit transfers	38,171.0	37,609.4	38,652.8	43,026.2	44,161.6
Concentration ratio in terms of value (%) ²	74.4	72.2	76.4	76.8	76.8
Retail payment systems					
Automated Clearing Settlement System ²					
Total transactions sent	5,798.0	5,982.5	6,233.7	6,440.8	6,089.3
credit transfers ³	2,043.9	2,241.9	2,420.7	2,570.2	2,723.0
direct debits ⁴	574.7	611.3	642.5	676.9	695.3
card payments ⁵	161.0	167.1	166.9	170.4	180.9
ATM transactions ⁶	26.4	25.7	25.3	24.9	24.5
cheques	2,990.6	2,935.2	2,977.5	3,027.0	2,465.0
Concentration ratio in terms of value (%)	80.1	79.5	80.1	76.8	77.1
Interac e-Transfer					
Total transactions sent	13.5	20.4	30.9	44.7	63.0
direct debits	13.5	20.4	30.9	44.7	63.0
Concentration ratio in terms of value (%)	nav	nav	nav	nav	nav

¹ Figures exclude on-us transactions. ² Data have been revised from previous editions to reflect a change in reporting methodology. ³ Bill payments initiated at ATMs, bank tellers, over the telephone or internet, AFT credits and EDI.⁴ AFT debits and payments and refunds for goods and services initiated online. ⁵ POS debits and refunds. ⁶ Point of service disbursement of currency on shared networks.

Table 12
Participation in SWIFT by domestic institutions (end of year)

	2012	2013	2014	2015	2016
Members	17	17	17	17	17
of which: live	17	17	17	17	17
Sub-members	38	37	38	39	41
of which: live	37	37	38	38	39
Participants	36	38	45	55	59
of which: live	35	38	41	49	58
Total users	91	92	100	111	117
of which: live	89	92	96	104	114
Memo:					
Total SWIFT users	10,279	10,583	10,805	11,094	11,299
members	2,398	2,389	2,379	2,455	2,422
sub-members	3,340	3,343	3,353	3,395	3,367
participants	4,541	4,851	5,073	5,244	5,510
Source: SWIFT.					

Table 13
SWIFT message flows to/from domestic users (thousands, total for the year)

3 2014	2015	2016
75,588	79,091	82,842
15,802	16,445	17,199
7,557	7,783	8,267
57,939	61,574	68,323
16,965	17,965	19,050
8,436	8,252	8,584
15,457	15,849	17,409
5,612,724	6,106,644	6,525,800
}	5,612,724	5,612,724 6,106,644

Table 14
Number of participants in exchanges and trading systems (end of year)

	2012	2013	2014	2015	2016
TSX ¹					
Total number of participants	118	111	103	88	84
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of domestic participants	116	111	103	88	84
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of foreign participants	nap	nap	nap	nap	nap
MX					
Total number of participants	87	91	87	86	75
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of domestic participants	47	46	42	44	38
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of foreign participants	40	45	45	42	37
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
NGX					
Total number of participants	248	259	264	269	286
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of domestic participants	nav	nav	nav	nav	nav
Number of foreign participants	nav	nav	nav	nav	nav
ICE					
Total number of participants	nav	nav	nav	nav	nav
For the footnotes, see the end of the table.					

Tabla	11	(nont)
Table	14	I COIIL

	2012	2013	2014	2015	2016
CSE ²	2012	2010	2014	2010	2010
Total number of participants	88	87	84	73	71
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of domestic participants	88	87	84	73	71
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of foreign participants	nap	nap	nap	nap	nap
Alpha ³					
Total number of participants	80	77	74	69	67
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of domestic participants	nav	nav	nav	nav	nav
Number of foreign participants	nav	nav	nav	nav	nav

¹ Data include statistics from The Toronto Stock Exchange (TSX) and the TSX Venture Exchange. ² The Canadian Securities Exchange (CSE), formerly the Canadian National Stock Exchange (CNSX), was recognized as a stock exchange by the Ontario Securities Commission in May 2004. CSE also operates an alternative trading system in Canada called Pure Trading. Pure Trading is excluded from the CSE statistics. ³ Alpha ATS is a Canadian alternative trading system for equities listed in the Canadian capital markets. It commenced operations on 7 November 2008.

Table 15 Number of listed securities (end of year)

	2012	2013	2014	2015	2016
TSX ¹					
Total number of listed securities	4,254	4,156	4,016	3,776	3,577
debt securities	258	210	208	178	152
bonds	258	210	208	178	152
equity	3,971	3,886	3,761	3,559	3,374
other	74	61	47	39	51
MX					
Total number of listed securities	nap	nap	nap	nap	nap
NGX					
Total number of listed securities	nap	nap	nap	nap	nap
ICE					
Total number of listed securities	nap	nap	nap	nap	nap
CSE ²					
Total number of listed securities	189	209	266	316	313
debt securities	18	18	18	18	14
bonds	18	18	18	18	14
equity	163	184	241	291	295
other	8	7	7	7	4
Alpha					
Total number of listed securities	nav	nav	nav	nav	nav

¹ Data include statistics from The Toronto Stock Exchange (TSX) and the TSX Venture Exchange - including data for issuers on NEX, a board established for issuers that have fallen below TSX Venture's listing standards (164 at end-2006, 162 at end-2007, 181 at end-2008, 197 at end-2009 and 181 at end-2010). Data have been revised from previous editions. ² The Canadian Securities Exchange (CSE), formerly the Canadian National Stock Exchange (CNSX), was recognized as a stock exchange by the Ontario Securities Commission in May 2004. CSE also operates an alternative trading system in Canada called Pure Trading. Pure Trading is excluded from the CSE statistics.

Table 16

Market capitalisation of listed companies

(CAD billions, end of year)

	2012	2013	2014	2015	2016
TSX ¹ Total market capitalisation/equity	2,050.0	2,245.9	2,425.1	2,207.0	2,678.7
MX Total market capitalisation/equity	nap	nap	nap	nap	nap
NGX Total market capitalisation/equity	nap	nap	nap	nap	nap
ICE Total market capitalisation/equity	nap	nap	nap	nap	nap
CSE ² Total market capitalisation/equity	1.1	1.5	2.4	2.3	3.2
Alpha Total market capitalisation/equity	nav	nav	nav	nav	nav

¹ Data include statistics from The Toronto Stock Exchange (TSX) and the TSX Venture Exchange. Data have been revised from previous editions to reflect a change in methodology. ² The Canadian Securities Exchange (CSE), formerly the Canadian National Stock Exchange (CNSX), was recognized as a stock exchange by the Ontario Securities Commission in May 2004. CSE also operates an alternative trading system in Canada called Pure Trading. Pure Trading is excluded from the CSE statistics.

Table 17
Number of executed trades
(thousands, total for the year)

	2012	2013	2014	2015	2016
TSX ^{1, 2}					_
Total number of executed securities trades	186,086.8	174,377.2	203,482.5	217,696.0	236,621.3
debt securities	256.5	226.3	176.5	174.1	177.8
bonds	256.5	226.3	176.5	174.1	177.8
equity	185,692.6	174,041.6	203,195.2	217,490.2	236,621.3
other	137.7	109.4	110.8	31.7	51.0
				0	01.0
Total number of executed derivatives trades	nap	nap	nap	nap	nap
MX ²					
Total number of executed securities trades	nap	nap	nap	nav	nav
Total number of executed derivatives trades	64,364.7	66,269.9	69,987.5	76,672.2	91,922.4
financial futures	34,940.8	40,902.8	44,420.1	45,368.4	38,406.6
financial options	29,423.9	25,367.1	25,567.3	31,303.8	53,515.8
NGX					
Total number of executed securities trades	nap	nap	nap	nap	nap
Total number of executed derivatives trades	362.6	340.9	339.8	331.5	368.1
financial futures	nav	nav	nav	nav	nav
commodity futures	nav	nav	nav	nav	nav
commodity options	nap	nap	nap	nap	nap
other commodity derivatives	362.6	340.9	339.8	331.5	368.1
ICE					
Total number of executed securities trades	nap	nap	nap	nap	nap
Total number of executed derivatives trades	5,039.2	5,688.3	5,676.3	5,746.0	6,431.5
commodity futures	4,872.5	5,491.8	5,554.6	5,579.7	6,245.3
commodity options	166.7	196.5	121.7	166.3	186.3
CSE ³					
Total number of executed securities trades	55.7	48.1	208.1	189.7	748.5
debt securities	0.1	0.1	0.1	0.0	0.0
bonds	0.1	0.1	0.1	0.0	0.0
equity	54.9	48.0	208.0	189.7	748.5
other	0.8	0.0	0	0.0	0.0
Total number of executed derivatives trades	nap	nap	nap	nap	nap
Alpha ⁴					
Total number of executed securities trades	64,348.6	55,278.3	61,349.4	44,039.5	19,129.1
debt securities	nav	nav	nav	nav	nav
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	64,348.6	55,278.3	61,349.4	44,039.5	19,129.1
Total number of executed derivatives trades	nap	nap	nap	nap	nap
					

¹ Data include statistics from The Toronto Stock Exchange (TSX) and the TSX Venture Exchange. ² Data have been revised from previous editions. ³ The Canadian Securities Exchange (CSE), formerly the Canadian National Stock Exchange (CNSX), was recognized as a stock exchange by the Ontario Securities Commission in May 2004. CSE also operates an alternative trading system in Canada called Pure Trading. Pure Trading is excluded from the CSE statistics. ⁴ Alpha ATS is a Canadian alternative trading system for equities listed in the Canadian capital markets. It commenced operations on 7 November 2008.

Table 18
Value of executed trades
(CAD billions, total for the year)

	2012	2013	2014	2015	2016
TSX ¹					_
Total value of executed securities trades	1,216.12	1,160.89	1,275.73	1,316.30	1,410.53
debt securities	5.93	4.38	4.42	5.67	6.29
bonds	5.93	4.38	4.42	5.67	6.29
equity	1,209.73	1,156.28	1,271.08	1,310.58	1,404.10
other	0.46	0.23	0.23	0.05	0.14
Total value of executed derivatives trades	nap	nap	nap	nap	nap
MX					
Total value of executed securities trades	nap	nap	nap	nav	nav
Total value of executed derivatives trades	22,946.01	25,267.64	27,401.53	25,146.63	nav
financial futures	22,355.21	24,584.37	26,906.22	24,461.43	nav
financial options	590.80	683.28	495.32	685.20	nav
NGX					
Total value of executed securities trades	nap	nap	nap	nap	nap
Total value of executed derivatives trades	16.83	29.04	34.13	14.94	10.84
financial futures	nav	nav	nav	nav	nav
commodity futures	nav	nav	nav	nav	nav
commodity options	nap	nap	nap	nap	nap
other commodity derivatives	16.83	29.04	34.13	14.94	10.84
ICE					
Total value of executed securities trades	nap	nap	nap	nap	nap
Total value of executed derivatives trades	57.37	59.62	49.09	52.86	61.45
commodity futures	57.33	59.57	49.06	52.82	61. 4 0
commodity options	0.04	0.05	0.03	0.04	0.04
CSE ²					
Total value of executed securities trades	0.18	0.12	0.50	0.36	1.60
debt securities	0.00	0.01	0.00	0.03	0.07
bonds	0.00	0.01	0.00	0.03	0.07
equity	0.16	0.11	0.49	0.32	1.53
other	0.02	0.00	0	0.00	0.00
Total value of executed derivatives trades	nap	nap	nap	nap	nap
Alpha ³					
Total value of executed securities trades	336.37	227.78	227.20	165.42	138.70
debt securities	nav	nav	nav	nav	nav
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	336.37	227.78	227.20	165.42	1,987.00
Total value of executed derivatives trades	nap	nap	nap	nap	nap

¹ Data include statistics from The Toronto Stock Exchange (TSX) and the TSX Venture Exchange. Data have been revised from previous editions. ² The Canadian Securities Exchange (CSE), formerly the Canadian National Stock Exchange (CNSX), was recognized as a stock exchange by the Ontario Securities Commission in May 2004. CSE also operates an alternative trading system in Canada called Pure Trading. Pure Trading is excluded from the CSE statistics. ³ Alpha ATS is a Canadian alternative trading system for equities listed in the Canadian capital markets. It commenced operations on 7 November 2008.

Table 19
Number of clearing members
(end of year)

	2012	2013	2014	2015	2016
CDCC					
Total number of clearing members	40	37	34	36	35
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	4	3	3	3	3
other	36	34	31	33	32
Number of domestic clearing members	40	37	34	36	35
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	4	3	3	3	3
other	36	34	31	33	32
Number of foreign clearing members	nap	nap	nap	nap	nap
NGX					
Total number of clearing members	248	259	264	269	286
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of domestic clearing members	nav	nav	nav	nav	nav
Number of foreign clearing members	nav	nav	nav	nav	nav
ICE					
Total number of clearing members	9	9	9	9	9
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of domestic clearing members ¹	9	9	9	9	9
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of foreign clearing members	nap	nap	nap	nap	nap

¹ All ICE members are Canadian corporations with offices in Canada, though some may be wholly owned subsidiaries of foreign corporations.

Table 20 Number of contracts and transactions cleared (thousands, total for the year)

	2012	2013	2014	2015	2016
CDCC					
Total number of contracts and transactions	440 444 00	450 004 00	400 440 00	470 000 00	000 000 00
cleared ¹	146,114.00	152,824.00	160,448.00	179,230.00	230,830.00
Number of securities transactions cleared	14,356.00	16,352.00	18,292.00	24,464.00	35,070.00
debt securities	12,334.00	14,670.00	nap	nap	nap
bonds	12,334.00	14,670.00	nap	nap	nap
equity	nap	nap	nap	nap	nap
other ²	2,022.00	1,682.00	18,292.00	24,464.00	35,070.00
of which: number of repurchase transactions	40.00	470.00	600.00	644.00	674.00
cleared	42.00	472.00	680.00	614.00	674.00
Number of exchange-traded derivatives contracts					
cleared	128,730.00	132,540.00	140,100.00	153,530.00	175,388.00
financial futures	69,882.00	81,806.00	88,956.00	90,920.00	100,052.00
financial options	58,848.00	50,734.00	51,144.00	62,610.00	75,336.00
Number of OTO desirestings contracts also and	0.000.00	0.000.00	0.050.00	4 000 00	4 000 00
Number of OTC derivatives contracts cleared	3,028.00	3,932.00	2,056.00	1,236.00	1,690.00
financial options	3,028.00	3,932.00	2,056.00	1,236.00	1,690.00
NGX					
Total number of contracts and transactions					
cleared	735.19	694.19	694.59	679.72	754.44
Number of securities transactions cleared	nap	nap	nap	nap	nap
Number of evolution traded derivatives contracts					
Number of exchange-traded derivatives contracts cleared	725.19	681.76	679.69	662.96	736.22
commodity futures	nav	nav	nav	nav	nav
commodity options	nav	nav	nav	nav	nav
other commodity derivatives	725.19	681.76	679.69	662.96	736.22
outer commonly derivatives	720.10	001.70	070.00	002.00	700.22
Number of OTC derivatives contracts cleared	10.00	12.43	14.90	16.76	18.22
commodity futures	nav	nav	nav	nav	nav
commodity options	nav	nav	nav	nav	nav
other commodity derivatives	10.00	12.43	14.90	16.76	18.22
ICE					
ICE					
Total number of contracts and transactions	E 056 00	5 742 10	E 720 47	5 770 21	6 462 67
cleared	5,056.90	5,743.10	5,720.47	5,779.31	6,462.67
Number of securities transactions cleared	nap	nap	nap	nap	nap
	•	•		·	·
Number of exchange-traded derivatives contracts					
cleared	5,056.90	5,743.10	5,720.47	5,779.31	6,462.67
commodity futures	4,873.90	5,497.70	5,559.02	5,589.83	6,254.17
commodity options	183.00	245.40	161. 4 5	189.48	208.50
Number of OTC derivatives contracts cleared	nan	nan	nan	nan	nan
	nap	nap in 2014 reflects	nap	nap	nap
The	large mercase	2017 16116018	, a change in le	Porming memor	aciogy.

Table 21
Value of contracts and transactions cleared (CAD billions, total for the year)

	2012	2013	2014	2015	2016
CDCC ¹					
Total value of contracts and transactions cleared	nav	nav	nav	nav	nav
Value of securities transactions cleared	nav	nav	nav	nav	nav
of which: value of repurchase transactions					
cleared	1,838.24	8,057.36	10,502.75	10,494.05	13,505.32
Value of exchange-traded derivatives contracts					
cleared	nav	nav	nav	nav	nav
financial futures	nav	nav	nav	nav	nav
financial options	5.92	5.06	5.36	6.12	6.95
Value of OTC derivatives contracts cleared	nav	nav	nav	nav	nav
financial futures	nav	nav	nav	nav	nav
financial options	0.25	0.33	0.20	0.10	0.13
NGX ²					
Total value of contracts and transactions cleared	51.48	79.78	91.78	49.14	46.24
Value of securities transactions cleared	nap	nap	nap	nap	nap
Value of exchange-traded derivatives contracts					
cleared	33.66	58.07	68.26	29.87	21.67
commodity futures	nav	nav	nav	nav	nav
commodity options	nav	nav	nav	nav	nav
other commodity derivatives	33.66	58.07	68.26	29.87	21.67
Value of OTC derivatives contracts cleared	17.83	21.71	23.53	19.27	24.57
commodity futures	nav	nav	nav	nav	nav
commodity options	nav	nav	nav	nav	nav
other commodity derivatives	17.83	21.71	23.53	19.27	24.57
ICE					
Total value of contracts and transactions cleared	57.58	60.22	49.40	53.12	61.73
Value of securities transactions cleared	nap	nap	nap	nap	nap
Value of exchange-traded derivatives contracts					
cleared	57.58	60.22	49.40	53.12	61.73
commodity futures	57.34	59.63	49.10	52.90	61.49
commodity options	0.24	0.59	0.30	0.22	0.24
Value of OTC derivatives contracts cleared	nap	nap	nap	nap	nap
¹ Data have been revised from previous editions. ² Dolla	r values for NG	X are calculate	ed using a weig	hted average p	rice.

Table 22 Number of direct participants in CSDs (end of year)

	2012	2013	2014	2015	2016
CDS ¹					
Total number of participants	100	100	100	100	93
central bank	1	1	1	1	1
central counterparties (CCPs)	2	2	2	2	2
central securities depositories	3	3	3	3	3
banks	11	11	11	11	11
other	83	83	83	83	76
Number of domestic participants	95	95	95	92	86
central bank	1	1	1	1	1
central counterparties (CCPs)	2	2	2	2	2
central securities depositories	0	0	0	0	0
banks	11	11	11	10	10
other	81	81	81	79	73
Number of foreign participants	5	5	5	8	7
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
central securities depositories	3	3	3	3	3
banks	0	0	0	1	1
other	2	2	2	4	3

¹ CDS also offers central counterparty services through its Continuous Net Settlement (CNS) and FINet functions.

Table 23
Number of securities held on accounts at CSDs (thousands, end of year)

	2012	2013	2014	2015	2016
CDS					
Total number of securities held	78.17	76.76	75.36	75.15	52.53
debt securities	34.69	34.40	33.14	33.09	29.95
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	43.48	42.36	42.22	42.07	22.58

Table 24
Value of securities held on accounts at CSDs (CAD billions, end of year)

	2012	2013	2014	2015	2016
CDS					
Total value of securities held	4,130.8	4,340.2	4,621.1	4,597.6	5,075.6
debt securities	2,486.5	2,535.5	2,669.9	2,798.3	2,841.4
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	1,644.2	1,804.7	1,951.2	1,799.3	2,234.1

Table 25

Number of delivery instructions processed

(thousands, total for the year)

	2012	2013	2014	2015	2016
CDS ¹					
Total number of delivery instructions	360,316.3	352,480.8	429,681.1	446,471.7	475,300.2
DVP	360,316.3	352,480.8	429,681.1	446,471.7	475,300.2
debt securities	4,902.6	5,914.6	6,063.9	5,883.7	6,075.9
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	2,822.7	2,764.5	2,863.5
equity	355,413.7	346,566.2	423,617.2	440,588.0	469,224.3
other	nav	nav	nav	nav	nav
¹ Data have been revised from previous editions.					

Table 26

Value of delivery instructions processed

(CAD billions, total for the year)

	2012	2013	2014	2015	2016
CDS ^{1, 2}					_
Total value of delivery instructions	92,722.7	116,144.7	122,243.7	125,294.6	127,772.3
DVP	92,722.7	116,144.7	122,243.7	125,294.6	127,772.3
debt securities	87,983.5	111,201.0	116,585.3	119,299.6	120,206.4
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	78,254.6	78,077.2	83,084.8
equity	4,739.2	4,943.7	5,658.4	5,995.0	7,565.9
other	nav	nav	nav	nav	nav

¹ Data have been revised from previous editions. ² Where transactions were denominated in US dollars, the average annual exchange rate was used in converting to Canadian dollars.

Table '	1	
Basic	statistical	data

	2012	2013	2014	2015	2016
Population (millions) ¹	1,350.7	1,360.7	1,367.8	1,374.6	1,382.7
GDP (CNY billions)	51,932.2	56,884.5	63,646.3	67,670.8	74,412.7
GDP per capita (CNY)	38,449	41,805	46,531	49,229	53,817
Consumer price inflation (%) ¹	2.6	2.6	2.0	1.0	1.0
Exchange rate (CNY/USD):					
end of year	6.2860	6.0970	6.1190	6.4940	6.9370
average	6.3130	6.1930	6.1430	6.2280	6.6420
¹ Yearly average.					

Table 2 Settlement media used by non-banks

(CNY billions, end of year)

	2012	2013	2014	2015	2016
Notes and coin in circulation outside banks	nav	nav	nav	nav	nav
Value of transferable deposits ¹	25,400.4	27,871.7	28,779.7	33,773.7	41,825.3
Narrow money supply (M1) ²	30,867.3	33,729.1	34,805.6	40,095.3	48,655.7
Memo:					
Transferable deposits in foreign currencies	nav	nav	nav	nav	nav
Outstanding value on e-money storage	nav	nav	nav	nav	nav
¹ Demand deposits. ² Notes and coin in circulation plus sight and other transactions deposits.					

Table 3 Settlement media used by banks

(CNY billions, average for December)

	2012	2013	2014	2015	2016
Transferable balances held at the central bank ¹	19,114.6	20,536.9	22,659.7	21,266.1	23,986.7
required reserves	nav	nav	nav	nav	nav
free reserves	nav	nav	nav	nav	nav
Transferable balances held at other banks	nav	nav	nav	nav	nav
Memo:					
Credit extended by the central bank:					
intraday	nav	nav	nav	nav	nav
overnight	nav	nav	nav	nav	nav
longer refinancing operations (repos)	nav	nav	nav	nav	nav
¹ Deposits with the central bank.					

Table 4
Banknotes and coin
(CNY billions, end of year)

	2012	2013	2014	2015	2016
Total banknotes and coin issued	nav	nav	nav	nav	nav
Total banknotes issued	nav	nav	nav	nav	nav
Total coin issued	nav	nav	nav	nav	nav
Banknotes and coin held by banks Banknotes and coin in circulation outside banks	nav	nav	nav	nav	nav
Dankhotes and com in circulation outside banks	nav	nav	nav	nav	nav

Table 5 Institutions offering payment services to non-banks (end of year)

	2012	2013	2014	2015	2016
Central bank					
Number of branches or offices ¹	2,112	2,112	2,113	2,099	2,099
Number of accounts, all	nav	nav	nav	nav	nav
Value of accounts	nav	nav	nav	nav	nav
Banks					
Number of institutions	3,747	3,949	4,089	4,262	4,399
Number of branches or offices	nav	nav	nav	nav	nav
Number of accounts	nav	nav	nav	nav	nav
Value of accounts	nav	nav	nav	nav	nav
Branches of foreign banks					
Number of institutions	nav	nav	nav	nav	nav
Number of branches or offices	nav	nav	nav	nav	nav
Value of accounts	nav	nav	nav	nav	nav
Institutions offering payment services to non-ban	ks (total)				
Number of institutions	3,748	3,950	4,090	4,263	4,400
Number of branches or offices	nav	nav	nav	nav	nav
Number of accounts held by non-banks	nav	nav	nav	nav	nav
Value of accounts held by non-banks	nav	nav	nav	nav	nav
Memo:					
Electronic money institutions					
Number of institutions	nav	nav	nav	nav	nav
Outstanding value on e-money storages issued by					
e-money institutions	nav	nav	nav	nav	nav

¹ Includes Shanghai head office, regional branches and operations offices, sub-branches and operations offices, sub-branches in provincial capital cities, sub-branches in quasi province-level cities and county-level sub-branches.

Table 6
Payment card functions and accepting devices (thousands, end of year)

	2012	2013	2014	2015	2016
Cards issued in the country					
Cards with a cash function ¹	3,534,147.3	4,213,892.8	4,935,718.6	5,442,312.9	6,124,638.0
Cards with a debit function ²	3,203,052.1	3,823,100.4	4,480,623.6	5,010,106.3	5,659,603.1
Cards with a delayed debit function	nap	nap	nap	nap	nap
Cards with a credit function ³	331,095.3	390,792.4	455,095.0	432,206.5	465,034.9
Cards with an e-money function	nap	nap	nap	nap	nap
Total number of cards (irrespective of the number					
of functions on the card)	3,534,147.3	4,213,892.8	4,935,718.6	5,442,312.9	6,124,638.0
of which: cards with a combined debit, cash and					
e-money function	nap	nap	nap	nap	nap
Memo:					
Retailer cards	nav	nav	nap	nap	nap
Terminals located in the country					
ATMs ⁴	415.6	520.0	614.9	866.7	924.2
ATMs with a cash withdrawal function	415.6	520.0	614.9	866.7	924.2
ATMs with a credit transfer function	415.6	520.0	614.9	866.7	924.2
POS terminals	7,117.8	10,632.1	15,935.2	22,821.0	24,535.0
EFTPOS terminals	nap	nap	nap	nap	nap
E-money card terminals	nap	nap	nap	nap	nap

¹ All bank cards issued by banking financial institutions have a cash function. ² Bank cards issued by banking financial institutions with functions of transfer clearing and access to cash. ³ Bank cards issued by banking financial institutions with functions of consumer credit, transfer clearing and access to cash. Includes quasi-credit cards. ⁴ All ATMs have both a withdrawal function and a credit transfer function.

Table 7
Indicators of the use of payment instruments and terminals by non-banks: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers	1,410.00	1,837.17	2,569.04	6,342.76	7,900.26
paper-based	nav	nav	nav	nav	nav
non-paper-based	nav	nav	nav	nav	nav
Direct debits	nav	nav	nav	nav	nav
Card payments with cards issued in the country	9,009.07	12,970.95	19,754.40	29,029.95	38,329.07
payments by cards with a debit function	nav	nav	nav	nav	nav
payments by cards with a delayed debit function	nap	nap	nap	nap	nap
payments by cards with a credit function	nav	nav	nav	nav	nav
E-money payment transactions	nap	nap	nap	nap	nap
Cheques	783.67	693.43	578.22	417.01	293.41
Other payment instruments	nav	nav	nav	nav	nav
Total number of transactions with payment					
instruments	11,202.74	15,501.56	22,901.65	35,789.72	46,564.86
of which: cross-border transactions sent	nav	nav	nav	nav	nav
Мето:					
Cross-border transactions received	nav	nav	nav	nav	nav
Transactions per type of terminal					
Total transactions at terminals in the country					
Cash transactions	11,452.56	12,874.53	13,715.11	14,568.41	15,692.77
ATM cash withdrawals	11,452.56	12,874.53	13,715.11	14,568.41	15,692.77
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions	9,009.07	12,970.95	19,754.40	29,029.95	38,371.19
E-money card loading/unloading transactions	nap	nap	nap	nap	nap
E-money card payment transactions	nap	nap	nap	nap	nap_

Table 8
Indicators of the use of payment instruments and terminals by non-banks: value of transactions (CNY billions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers	629,008	880,418	1,078,717	2,409,937	2,675,179
paper-based	nav	nav	nav	nav	nav
non-paper-based	nav	nav	nav	nav	nav
Direct debits	nav	nav	nav	nav	nav
Card payments with cards issued in the country	20,826	31,832	42,384	55,001	56,498
payments by cards with a debit function	nav	nav	nav	nav	nav
payments by cards with a delayed debit function	nap	nap	nap	nap	nap
payments by cards with a credit function	nav	nav	nav	nav	nav
E-money payment transactions	nap	nap	nap	nap	nap
Cheques	296,366	287,697	269,986	238,232	187,794
Other payment instruments	nav	nav	nav	nav	nav
Total value of transactions with payment					
instruments	946,199	1,199,946	1,391,087	2,703,169	2,919,484
of which: cross-border transactions sent	nav	nav	nav	nav	nav
Memo:					
Cross-border transactions received	nav	nav	nav	nav	nav
Transactions per type of terminal					
Total transactions at terminals in the country					
Cash transactions	15,264	19,355	21,826	24,006	25,724
ATM cash withdrawals	15,264	19,355	21,826	24,006	25,724
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions	20,826	31,832	42,384	55,001	56,512
E-money card loading/unloading transactions	nap	nap	nap	nap	nap
E-money card payment transactions	nap	nap	nap	nap	nap_

Table 9
Participation in selected interbank funds transfer systems (end of year)

	2012	2013	2014	2015	2016
Large-value and retail payment systems					
HVPS					
Number of participants	119,214	125,937	131,653	137,488	141,329
Direct participants	1,783	1,799	773	656	305
Banks	1,064	1,073	373	268	268
Central bank	678	686	355	355	3
Other direct participants	41	40	45	33	34
General government	0	0	0	0	0
Postal institution ¹	0	0	0	0	0
Clearing and settlement organisations	9	9	9	9	10
Other financial institutions ²	32	31	36	24	24
Other	0	0	0	0	0
Indirect participants	117,431	124,138	130,880	136,832	141,024
Retail payment systems					
BEPS					
Number of participants	119,115	125,823	131,522	137,012	140,825
Direct participants	1,791	1,807	774	640	284
Banks	1,064	1,073	373	268	265
Central bank	678	686	355	355	3
Other direct participants	49	48	46	17	16
General government	0	0	0	0	0
Postal institution	0	0	0	0	0
Clearing and settlement organisations	1	1	1	1	1
Other financial institutions	32	31	29	16	15
Other	16	16	16	0	0
Indirect participants	117,324	124,016	130,748	136,372	140,541
¹ Postal institution is not considered as a bank before 2007.	² Including	urban credit co	operatives and	rural credit coo	peratives.

Table 10
Payments processed by selected interbank funds transfer systems: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Large-value and retail payment systems					
HVDC					
HVPS	470.00	505.40	740.57	700.04	005.07
Total transactions sent	470.36	595.49	712.57	788.84	825.67
Concentration ratio in terms of volume (%)	57.6	58.6	58.4	58.3	57.7
, ,					
Retail payment systems					
BEPS					
Total transactions sent	753.94	1040.28	1,435.80	1,835.27	2,348.30
credit transfers	nav	nav	nav	nav	nav
direct debits	nav	nav	nav	nav	nav
card payments	nav	nav	nav	nav	nav
ATM transactions	nav	nav	nav	nav	nav
e-money transactions	nav	nav	nav	nav	nav
cheques	nav	nav	nav	nav	nav
other payment instruments	nav	nav	nav	nav	nav
Concentration ratio in terms of volume (%)	63.0	63.2	62.4	67.7	70.8

Table 11
Payments processed by selected interbank funds transfer systems: value of transactions (CNY billions, total for the year)

	2012	2013	2014	2015	2016
Large-value and retail payment systems					_
HVPS					
Total transactions sent	1,771,997	2,060,762	2,346,893	2,952,057	3,616,298
Concentration ratio in terms of value (%)	40.3	41.0	35.1	33.8	26.2
Retail payment systems					
BEPS					
Total transactions sent	18,548	20,315	22,075	24,940	30,913
credit transfers	nav	nav	nav	nav	nav
direct debits	nav	nav	nav	nav	nav
card payments	nav	nav	nav	nav	nav
ATM transactions	nav	nav	nav	nav	nav
e-money transactions	nav	nav	nav	nav	nav
cheques	nav	nav	nav	nav	nav
other payment instruments	nav	nav	nav	nav	nav
Concentration ratio in terms of value (%)	47.2	47.3	53.6	58.4	60.8

Table 12
Participation in SWIFT by domestic institutions (end of year)

	2012	2013	2014	2015	2016
Members	49	50	51	52	52
of which: live	49	50	51	52	52
Sub-members	129	131	135	146	149
of which: live	124	128	131	143	145
Participants	136	166	176	223	258
of which: live	133	161	171	201	239
Total users	314	347	362	421	459
of which: live	306	339	353	396	436
Memo:					
Total SWIFT users	10,279	10,583	10,805	11,094	11,299
members	2,398	2,389	2,379	2,455	2,422
sub-members	3,340	3,343	3,353	3,395	3,367
participants	4,541	4,851	5,073	5,244	5,510
Source: SWIFT.					

Table 13
SWIFT message flows to/from domestic users (thousands, total for the year)

	2012	2013	2014	2015	2016
Total messages sent	31,436	34,227	39,414	47,091	49,797
of which:					
category I	12,949	13,524	14,426	15,342	16,109
category II	3,610	3,689	3,932	4,229	4,138
Total messages received	58,490	60,915	65,625	70,801	72,363
of which:					
category I	29,904	30,322	31,772	31, 4 55	31,394
category II	7,350	7,702	8,265	8,232	8,263
Domestic traffic	4,751	4,485	5,261	8,487	8,997
Memo:					
Global SWIFT traffic	4,589,109	5,065,668	5,612,724	6,106,644	6,525,800
Source: SWIFT.					

Table 14
Number of participants in exchanges and trading systems (end of year)

	2012	2013	2014	2015	2016
Shanghai Stock Exchange					
Total number of participants	228	240	258	262	272
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	0	0	0	0	0
other	228	240	258	262	272
Number of domestic participants	228	240	258	262	272
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	0	0	0	0	0
other	228	240	258	262	272
Number of foreign participants	0	0	0	0	0
Shenzhen Stock Exchange					
Total number of participants	119	119	120	122	129
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of domestic participants	119	119	120	122	129
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of foreign participants ¹	0	0	0	0	0

¹ In China, foreign participants are requested to submit orders to the trading system through domestic agents instead of submitting directly by themselves. Therefore, the number of foreign participants is counted as 0.

Table 15

Number of listed securities

(end of year)

	2012	2013	2014	2015	2016
Shanghai Stock Exchange					
Total number of listed securities	2,098	2,786	3,758	5,914	9,647
debt securities	1,059	1,731	2,646	4,538	8,130
bonds	1,059	1,731	2,646	4,538	8,130
equity	998	997	1,044	1,141	1,250
other ¹	41	58	68	235	267
Shenzhen Stock Exchange					
Total number of listed securities	2,190	2,328	2,523	3,440	4,481
debt securities	381	460	527	1,179	2,057
bonds	381	460	527	1,179	2,057
equity	1,581	1,577	1,657	1,784	1,908
other ¹	228	291	339	477	516
¹ Includes ETFs, funds and warrants.					

Table 16

Market capitalisation of listed companies

(CNY billions, end of year)

	2012	2013	2014	2015	2016
Shanghai Stock Exchange Total market capitalisation/equity	15,869.8	15,116.5	24,500.4	29,765.6	28,845.3
Shenzhen Stock Exchange Total market capitalisation/equity	7,165.9	8,791.2	12,857.3	23,611.0	22,307.8

Table 17

Number of executed trades

(thousands, total for the year)

	2012	2013	2014	2015	2016
Shanghai Stock Exchange					
Total number of executed securities trades	980,089.8	1,254,207.8	1,742,742.9	5,288,773.7	2,537,233.7
debt securities	48,888.0	89,747.9	123,124.3	99,139.1	100,458.7
bonds	48,888.0	89,747.9	123,124.3	99,139.1	100,458.7
equity	925,549.6	1,153,367.2	1,590,879.5	5,134,079.5	2,383,188.4
other ¹	5,652.2	11,092.7	28,739.2	55,555.1	53,586.5
Total number of executed derivatives trades	0	0	0	0	0
Shenzhen Stock Exchange					
Total number of executed securities trades	982,615.7	1,387,207.0	1,851,665.7	4,907,784.2	3,814,712.5
debt securities	31,325.0	78,649.0	108,835.6	71,065.4	105,153.7
bonds	31,325.0	78,649.0	108,835.6	71,065.4	105,153.7
equity	935,567.0	1,289,443.0	1,712,972.4	4,655,650.5	3,623,916.7
other ¹	15,724.0	19,115.0	29,857.6	181,068.3	85,642.1
Total number of executed derivatives trades	0	0	0	0	0
¹ Includes ETFs, funds and warrants.					

Table 18
Value of executed trades
(CNY billions, total for the year)

	2012	2013	2014	2015	2016
Shanghai Stock Exchange					
Total value of executed securities trades	54,753.52	86,509.83	128,149.80	266,369.08	283,872.45
debt securities	37,981.89	62,583.94	86,684.86	122,853.37	224,717.52
bonds	37,981.89	62,583.94	86,684.86	122,853.37	224,717.52
equity	16,454.50	23,026.60	37,716.64	133,104.03	50,174.56
other ¹	317.14	899.29	3,748.30	10,411.68	8,980.37
Total value of executed derivatives trades	0	0	0	0	0
Shenzhen Stock Exchange					
Total value of executed securities trades	17,865.00	29,667.00	44,470.82	136,105.13	93,442.59
debt securities	2,358.00	5,241.00	6,820.39	8,721.66	13,634.44
bonds	2,358.00	5,241.00	6,820.39	8,721.66	13,634.44
equity	15,012.00	23,846.00	36,675.09	122,495.00	77,597.99
other ¹	495.00	580.00	975.34	4,888.47	2,210.16
Total value of executed derivatives trades	0	0	0	0	0
¹ Includes ETFs, funds and warrants.					

Table 19
Number of clearing members
(end of year)

	2012	2013	2014	2015	2016
SD&C					
Total number of clearing members	223	226	230	251	256
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	27	28	39	40	40
other	nav	nav	nav	nav	nav
Number of domestic clearing members	161	164	168	189	194
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	23	24	31	32	32
other	nav	nav	nav	nav	nav
Number of foreign clearing members ¹	62	62	62	62	62
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	4	4	8	8	8
other	nav	nav	nav	nav	nav

¹ Foreign clearing members only participate in SD&C's clearing services for the B share market. For the B share market, foreign entities such as brokers or banks conduct trading activities via domestic brokers as their agents, therefore they are not regarded as direct trading members of the stock exchanges. However, these foreign entities settle their trades directly with SD&C according to the relevant business rules of SD&C.

Table 20

Number of contracts and transactions cleared

(millions, total for the year)

	2012	2013	2014	2015	2016
SD&C Total number of contracts and transactions					
cleared	nav	nav	nav	nav	nav
Number of securities transactions cleared	nav	nav	nav	nav	nav
of which: number of repurchase transactions cleared	nap	nap	nap	nap	nap
Number of exchange-traded derivatives contracts cleared	nap	nap	nap	nap	nap
Number of OTC derivatives contracts cleared	nap	nap	nap	nap	nap

Table 21

Value of contracts and transactions cleared

(CNY billions, total for the year)

	2012	2013	2014	2015	2016
SD&C					
Total value of contracts and transactions cleared	nav	nav	nav	nav	nav
Value of securities transactions cleared	nav	nav	nav	nav	nav
of which: value of repurchase transactions cleared	nap	nap	nap	nap	nap
Value of exchange-traded derivatives contracts cleared	nap	nap	nap	nap	nap
Value of OTC derivatives contracts cleared	nap	nap	nap	nap	nap

Table 22 Number of direct participants in CSDs (end of year)

	2012	2013	2014	2015	2016
SD&C					
Total number of participants	nap	nap	nap	nap	nap
CDC Depository and Settlement System					
Total number of participants ¹	12,415	6,075	6,681	10,018	15,300
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
central securities depositories	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of domestic participants	nav	nav	nav	nav	nav
Number of foreign participants	nav	nav	nav	nav	nav

¹ According to the definition of direct participants in the Red Book, the system of SD&C is a non-tiered system. SD&C operates all the accounts of (private) customers directly on behalf of securities companies and custodian banks. Securities companies and custodian banks do not operate their customers' accounts in SD&C's system. They are therefore not regarded as 'depository participants' as other tiered systems often are.

Table 23
Number of securities held on accounts at CSDs (thousands, end of year)

	2012	2013	2014	2015	2016
SD&C					
Total number of securities held	4.094	5.069	6.330	8.508	13.055
debt securities	nav	nav	nav	nav	nav
equity	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
CDC Depository and Settlement System					
Total number of securities held	3.570	4.234	4.857	6.163	7.459
debt securities	3.566	4.231	4.854	6.163	7.459
short-term paper	2.898	3.418	3.955	4.866	5.723
bonds	0.668	0.813	0.899	1.297	1.736
other	0.004	0.003	0.003	0.000	0

Table 24

Value of securities held on accounts at CSDs

(CNY billions, end of year)

	2012	2013	2014	2015	2016
SD&C					
Total value of securities held	24,513.1	26,202.8	40,566.6	57,918.1	59,090.4
debt securities	nav	nav	nav	nav	nav
equity	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
CDC Depository and Settlement System					
Total value of securities held ¹	23,756.9	25,911.3	28,729.7	35,042.2	43,726.8
debt securities	nav	nav	nav	nav	nav
equity	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav

¹ Total value of securities equals the total number of securities multiplied by the market price of the relevant securities at the end of the year.

Table 25

Number of delivery instructions processed

(millions, total for the year)

	2012	2013	2014	2015	2016
SD&C					
Total number of delivery instructions ¹	2,058.6	2,855.8	3,890.3	10,393.5	6,595.1
DVP	nav	nav	nav	nav	nav
free of payment	nav	nav	nav	nav	nav
CDC Depository and Settlement System					
Total number of delivery instructions	0.6	0.5	0.5	0.7	1.0
DVP	nav	nav	nav	nav	nav
free of payment	nav	nav	nav	nav	nav

¹ The statistical caliber of this index is adjusted to unilateral calculation, along with a retroactive adjustment on the data of 2007 to 2015.

Table 26

Value of delivery instructions processed

(CNY billions, total for the year)

	2012	2013	2014	2015	2016
SD&C					
Total value of delivery instructions ¹	104,915.2	171,447.0	251,625.8	516,253.2	590,237.3
DVP	nav	nav	nav	nav	nav
free of payment	nav	nav	nav	nav	nav
CDC Depository and Settlement System					
Total value of delivery instructions	70,842.8	36,975.2	30,987.1	60,542.5	79,535.8
DVP	nav	nav	nav	nav	nav
free of payment	nav	nav	nav	nav	nav

¹ The statistical caliber of this index is adjusted to unilateral calculation, along with a retroactive adjustment on the data of 2007 to 2015.

Table 1
Basic statistical data

	2012	2013	2014	2015	2016
Population (thousands) ¹	336,567	337,278	338,013	339,020	340,283
GDP (EUR billions)	9,835.8	9,932.8	10,153.7	10,498.2	10,772.9
GDP per capita (EUR)	29,224	29,450	30,039	30,966	31,659
Consumer price inflation (%) ^{1, 2}	2.5	1.4	0.4	0.0	0.2
Exchange rate (EUR/USD):					
end of year	0.7579	0.7251	0.8237	0.9185	0.9487
average	0.7788	0.7532	0.7539	0.9019	0.9039

For the period under review, euro area member countries are Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Spain; Greece became a member on 1 January 2001; Slovenia became a member on 1 January 2007; Cyprus and Malta became members on 1 January 2008; Slovakia became a member on 1 January 2009; Estonia became a member on 1 January 2011; Latvia became a member on 1 January 2014; Lithuania 1 January 2015.

Source: ECB. Data as of 9 December 2016.

Table 2
Settlement media used by non-MFIs

(EUR billions, end of year)

	2012	2013	2014	2015	2016
Notes and coin in circulation outside MFIs	876.8	921.2	980.6	1,048.9	1,087.3
Value of overnight deposits held by non-MFIs ¹	4,582.3	4,822.8	5,348.1	5,979.3	6,598.4
Narrow money supply (M1) ² <i>Memo:</i>	5,151.4	5,425.9	5,967.8	6,631.5	7,238.3
Overnight deposits in foreign currencies held by					
non-MFIs	325.7	356.0	449.6	485.0	501.0
Outstanding value on e-money storage ³	4.033	4.699	5.708	7.170	21.394
on card-based products	2.381	2.668	3.003	3.323	3.705
on software- or network-based products	1.567	1.929	2.580	3.710	17.555

¹ Held at monetary financial institutions (MFIs). The counterpart sector "non-MFIs" includes the component sectors "Central government" and "Rest of the world". The indicator is not synonymous with the same term used in the ECB concept of M1. ² Cannot be calculated from the above two items in this table (see also footnote 1). ³ Includes small institutions excluded from subcategories.

Source: ECB. Data as of 9 December 2016.

¹ Yearly average. ² Harmonised index (HICP), annual percentage changes.

Table 4
Banknotes and coin
(EUR millions, end of year)

	2012	2013	2014	2015	2016
Total banknotes and coin issued	938,173.0	982,425.4	1,043,810.7	1,111,805.5	1,155,399.0
Total banknotes issued	912,593.0	956,184.8	1,016,538.1	1,083,430.3	1,126,184.3
EUR 500	293,733.1	291,570.4	303,022.0	306,779.8	269,925.7
EUR 200	36,846.9	39,777.1	40,779.9	41,378.9	46,722.8
EUR 100	170,614.2	185,001.5	201,616.6	214,478.2	243,257.8
EUR 50	321,858.9	348,141.6	375,431.6	419,913.6	461,569.0
EUR 20	59,767.7	61,776.7	64,665.7	68,791.3	71,809.8
EUR 10	21,706.8	21,555.5	22,443.0	23,257.7	23,873.4
EUR 5	8,065.5	8,362.0	8,579.4	8,830.8	9,025.8
Total coin issued	23,658.3	24,207.7	25,003.1	26,012.1	26,933.2
EUR 2	9,866.2	10,188.8	10,579.9	11,138.4	11,630.1
EUR 1	6,464.9	6,512.9	6,657.2	6,816.0	6,977.3
EUR 0.50	2,669.9	2,716.0	2,790.3	2,875.6	2,950.4
EUR 0.20	1,914.8	1,951.3	2,013.3	2,085.8	2,155.5
EUR 0.10	1,240.8	1,272.4	1,315.5	1,367.6	1,414.8
EUR 0.05	828.5	857.2	895.7	936.1	975.5
EUR 0.02	411.5	432.4	457.2	480.9	502.3
EUR 0.01	261.7	276.8	294.0	311.8	327.3
Banknotes and coins held by MFIs	61,386.0	61,204.3	63,176.3	62,879.1	68,126.0
Banknotes and coins in circulation outside MFIs	876,787.0	921,221.2	980,634.5	1,048,926.5	1,087,272.0
Source: ECB.					

Table 9
Participation in selected interbank funds transfer systems (end of year)

	2012	2013	2014	2015	2016
Large-value payment systems					
TARGET2 ¹					
Number of participants	4,484	2,326	2,365	2,270	2,414
Direct participants	1,172	1,535	1,600	1,604	1,775
Banks	1,063	1,428	1,494	1,497	1,667
Central bank	29	24	23	25	26
Other direct participants	80	83	83	81	82
General government	8	8	7	7	7
Clearing and settlement organisations	<i>4</i> 5	47	51	52	55
Other financial institutions	17	17	16	16	15
Other	10	11	10	7	5
Indirect participants	3,312	791	765	666	639
EURO1 / STEP1					
Number of participants	235	212	199	183	168
Direct participants	235	212	199	183	168
Banks	235	212	199	183	168
Central bank	0	0	0	0	0
Other direct participants	0	0	0	0	0
Retail payment systems					
STEP2 XCT Service ^{2, 3}					
Number of participants	nav	nav	nav	nav	nav
Direct participants	nav	nav	nav	nav	nav
Banks	nav	nav	nav	nav	nav
Central bank	nav	nav	nav	nav	nav
Other direct participants	nav	nav	nav	nav	nav
General government	nav	nav	nav	nav	nav
Clearing and settlement organisations	nav	nav	nav	nav	nav
Other financial institutions	nav	nav	nav	nav	nav
Other	nav	nav	nav	nav	nav
Indirect participants	nav	nav	nav	nav	nav
STEP2 ICT Service ^{2, 4}					
Number of participants	68	70	69	nav	nav
Direct participants	6	6	6	nav	nav
Banks	6	6	6	nav	nav
Central bank	0	0	0	nav	nav
Other direct participants	0	0	0	nav	nav
Indirect participants	62	64	63	nav	nav
For the footnotes, see the end of the table.					

Table 9	/1
Table 9	CONT

	2012	2013	2014	2015	2016
STEP2 SCT Service ²					
Number of participants	4,696	4,823	4,806	4,825	4,844
Direct participants	125	127	128	136	138
Banks	113	114	114	121	123
Central bank	9	10	11	12	12
Other direct participants	3	3	3	3	3
General government	0	0	0	0	0
Clearing and settlement organisations	0	0	0	0	0
Other financial institutions	0	0	0	0	0
Other	3	3	3	3	3
Indirect participants	4,571	4,696	4,678	4,689	4,706
STEP2 SDD B2B Service					
Number of participants	3,366	3,438	3,402	3,408	3,373
Direct participants	74	78	83	90	94
Banks	66	70	73	80	82
Central bank	7	7	8	7	9
Other direct participants	1	1	2	3	3
General government	0	0	0	0	0
Clearing and settlement organisations	0	0	0	0	0
Other financial institutions	0	0	0	0	0
Other	1	1	2	3	3
Indirect participants	3,292	3,360	3,319	3,318	3,279
STEP2 SDD CORE Service					
Number of participants	3,874	4,024	3,927	3,922	3,910
Direct participants	90	93	94	102	109
Banks	79	81	81	90	97
Central bank	8	9	10	9	9
Other direct participants	3	3	3	3	3
General government	0	0	0	0	0
Clearing and settlement organisations	0	0	0	0	0
Other financial institutions	0	0	0	0	0
Other	3	3	3	3	3
Indirect participants	3,784	3,931	3,833	3,820	3,801

¹ At end-2015, the 20 euro area central banks (including the ECB) and four central banks from non-euro area countries (Bulgaria, Denmark, Poland and Romania) are participating in, or connected to, TARGET2. ² Cross-border credit transactions (XCT), Italian Credit Transfer (ICT), SEPA Credit Transfer (SCT). ³ STEP2 XCT Service closed in December 2011. ⁴ STEP2 ICT Service closed in September 2014.

Source: ECB.

Table 10
Payments processed by selected interbank funds transfer systems: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
TARGET2					
Total transactions sent ¹	89.62	91.34	87.76	88.59	88.96
intra-member state	56.37	56.61	54.64	55.98	55.98
inter-member state	33.25	34.73	33.13	32.62	33.00
Concentration ratio in terms of volume (%)	nav	nav	nav	nav	nav
EURO1 / STEP1					
Total transactions sent	66.59	64.14	57.68	55.26	53.34
credit transfers	66.49	64.04	57.61	55.21	53.30
direct debits	0.03	0.03	0.01	0.01	0.01
other payment instruments	0.07	0.07	0.05	0.04	0.03
Concentration ratio in terms of volume (%)	32.7	31.6	32.2	33.6	35.9
Retail payment systems					
STEP2 XCT Service ^{2, 3}					
Total transactions sent	nav	nav	nav	nav	nav
credit transfers	nav	nav	nav	nav	nav
Concentration ratio in terms of volume (%)	nav	nav	nav	nav	nav
STEP2 ICT Service ^{2, 4}					
Total transactions sent	309.70	277.96	23.48	nav	nav
credit transfers	309.70	277.96	23.48	nav	nav
Concentration ratio in terms of volume (%)	99.9	99.9	99.9	nav	nav
STEP2 SCT Service					
Total transactions sent ⁵	641.43	1,082.98	3,791.09	4,047.46	4,218.43
credit transfers	641.43	1,082.98	3,784.12	4,040.87	4,211.75
Concentration ratio in terms of volume (%)	46.4	37.7	45.7	44.5	42.9
STEP2 SDD B2B Service					
Total transactions sent	1.6	5.2	78.8	82.9	83.8
credit transfers	0.1	0.3	3.3	2.4	2.2
direct debits	1.6	4.9	75.5	80.5	81.6
Concentration ratio in terms of volume (%)	85.0	74.0	55.0	54.0	54.1
STEP2 SDD CORE Service					
Total transactions sent	64.1	440.9	5,063.8	5,195.6	6,116.8
credit transfers	2.4	14.3	138.8	133.9	138.3
direct debits	61.7	426.6	4,925.0	5,061.7	5,978.5
Concentration ratio in terms of volume (%)	93.0	84.0	59.0	62.0	65.4
¹ May not equal the sum of components as some co					border credit

¹ May not equal the sum of components as some countries' figures have been reported as confidential. ² Cross-border credit transactions (XCT), Italian Credit Transfer (ICT), SEPA Credit Transfer (SCT). ³ STEP2 XCT Service closed in December 2011. ⁴ STEP2 ICT Service closed in September 2014. ⁵ Includes R-transactions (eg cancellations, rejections, returns, refunds).

Source: ECB.

Table 11
Payments processed by selected interbank funds transfer systems: value of transactions (EUR billions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
TARGET2					
Total transactions sent ¹	711,025.8	559,696.0	498,726.5	508,982.3	485,811.8
intra-member state	522,985.1	389,611.0	317,167.7	332,995.0	304,761.7
inter-member state	187,856.7	170,004.8	181,492.0	175,906.1	181,263.6
Concentration ratio in terms of value (%)	13.0	16.9	15.7	17.1	17.9
EURO1 / STEP1					
Total transactions sent	57,907.3	48,677.7	41,249.9	44,142.5	41,103.6
credit transfers	54,177.7	45,619.4	41,240.4	44,134.4	41,096.8
direct debits	3,728.1	2,827.5	8.4	7.1	5.9
other payment instruments	1.4	230.8	1.1	1.0	0.9
Concentration ratio in terms of value (%)	51.9	47.4	48.6	50.7	48.9
Retail payment systems					
STEP2 XCT Service ^{2, 3}					
Total transactions sent	nav	nav	nav	nav	nav
credit transfers	nav	nav	nav	nav	nav
Concentration ratio in terms of value (%)	nav	nav	nav	nav	nav
STEP2 ICT Service ^{2, 4}					
Total transactions sent	1,044.0	919.6	67.6	nav	nav
credit transfers	1,044.0	919.6	67.6	nav	nav
Concentration ratio in terms of value (%)	99.9	99.9	99.7	nav	nav
STEP2 SCT Service					
Total transactions sent ⁵	2,445.6	3,661.7	9,325.4	10,493.9	11,307.1
credit transfers	2,445.6	3,661.7	9,305.6	10,476.8	11,289.4
Concentration ratio in terms of value (%)	26.6	27.0	35.7	35.1	34.9
STEP2 SDD B2B Service					
Total transactions sent	11.1	94.2	580.2	605.0	676.4
credit transfers	0.4	3.6	13.4	9.4	10.0
direct debits	10.7	90.6	566.8	595.6	666.3
Concentration ratio in terms of value (%)	76.0	81.0	57.0	58.0	53.2
STEP2 SDD CORE Service					
Total transactions sent	11.1	73.3	1,099.5	1,118.5	1,185.8
credit transfers	0.5	3.4	31.6	26.8	26.3
direct debits	10.6	69.9	1,067.9	1,091.7	1,159.4
Concentration ratio in terms of value (%)	85.0	71.0	56.0	58.0	60.6

¹ May not equal the sum of components as some countries' figures have been reported as confidential. ² Cross-border credit transactions (XCT), Italian Credit Transfer (ICT), SEPA Credit Transfer (SCT). ³ STEP2 XCT Service closed in December 2011. ⁴ STEP2 ICT Service closed in September 2014. ⁵ Includes R-transactions (eg cancellations, rejections, returns, refunds). Source: ECB.

Table 1
Basic statistical data

	2012	2013	2014	2015	2016
Population (thousands) ¹	65,241	65,565	66,074	66,381	66,628
GDP (EUR billions)	2,087.0	2,115.9	2,149.2	2,193.9	2,227.0
GDP per capita (EUR)	31,989	32,272	32,527	33,051	33,425
Consumer price inflation (%) ¹	2.2	1.0	0.6	0.1	0.3
Exchange rate (EUR/USD):					
end of year	0.7579	0.7251	0.8237	0.9185	0.9487
average	0.7788	0.7532	0.7539	0.9019	0.9039
1					

¹ Yearly average.

Table 2 Settlement media used by non-banks

(EUR billions, end of year)

	2012	2013	2014	2015	2016
Notes and coin in circulation outside banks ¹	nap	nap	nap	nap	nap
Value of transferable deposits ²	612.93	635.17	679.31	793.03	874.16
Narrow money supply (M1) ¹	nap	nap	nap	nap	nap
Memo:					
Transferable deposits in foreign currencies	20.71	24.60	26.66	45.49	52.48
Outstanding value on e-money storage	0.042	0.039	0.039	0.000	0
on card-based products	0.042	0.039	0.039	0.000	0
on software- or network-based products	0	0	0	0	0

¹ These figures are provided solely at an aggregated euro area level (see Euro area, Table 2). ² Includes deposits in French overseas territories.

Table 3 Settlement media used by banks

(EUR billions, average of last reserve maintenance period)

	2012	2013	2014	2015	2016
Transferable balances held at the central bank	75.92	43.11	36.42	104.68	172.04
required reserves	19.37	19.56	19.88	20.64	21.86
free reserves	56.56	23.55	16.54	84.04	150.18
Transferable balances held at other banks ¹ <i>Memo:</i>	111.42	84.66	115.36	137.18	130.45
Credit extended by the central bank:					
intraday ²	480.399	<i>450.459</i>	406.265	402.766	nap
overnight ³	0.744	0.000	0	0	0
longer-term refinancing operations 4	179.005	69.196	62.440	83.457	70.411

¹ Value for the fourth quarter of the period. ² Since 2005, in addition to intraday repos, amounts include autocollateralisation operations processed in the French SSS (RGV2 then ESES France as from November 2007). Furthermore, since February 2008, BDF has adopted a new collateral management system and moved from an earmarking system to a pooling system. ³ Marginal lending facility and fine-tuning operations. ⁴ Main refinancing operations and longer-term refinancing operations.

Table 4

Banknotes and coin¹

¹ These figures are provided solely at an aggregated euro area level (see Euro area, Table 4).

Table 5
Institutions offering payment services to non-banks (end of year)

	2012	2013	2014	2015	2016
Central bank					
Number of branches or offices	96	96	98	98	98
Number of accounts (thousands)	29	29	29	28	28
Value of accounts (EUR billions) ¹ Memo:	22.03	21.75	14.80	16.09	14.46
Number of accounts, banks (thousands)	0.366	0.364	0.351	0.353	0.360
Banks ²					
Number of institutions	639	623	496	496	496
Number of branches or offices	37,930	37,767	37,523	37,084	36,575
Number of accounts (thousands)	78,383	79,481	80,433	81,562	81,620
of which: number of internet/PC-linked accounts	nav	nav	nav	nav	nav
Value of accounts (EUR billions)	560.06	587.49	643.18	776.94	859.70
Credit institutions legally incorporated in the rep	_	-			
Number of institutions	596	579	413	413	413
Number of branches or offices	37,930	37,767	37,523	37,084	36,575
Value of accounts (EUR billions)	560.06	587.49	643.18	776.94	859.70
Branches of euro area-based credit institutions					
Number of institutions	31	32	38	38	38
Number of branches or offices	nav	nav	nav	nav	nav
Value of accounts	nav	nav	nav	nap	nap
Branches of EEA-based credit institutions (outside		•			
Number of institutions	9	9	24	24	24
Number of branches or offices	nav	nav	nav	nav	nav
Value of accounts	nav	nav	nav	nap	nap
Branches of non-EEA based banks			0.4	0.4	0.4
Number of institutions	3	3	21	21	21
Number of branches or offices	nav	nav	nav	nav	nav
Value of accounts	nav	nav	nav	nap	nap
Other institutions offering payment services to nor	า-banks ³				
Number of institutions	1	1	1	1	1
Number of branches or offices	nav	nav	nav	nav	nav
Number of accounts (thousands)	nav	nav	nav	nav	nav
Value of accounts (EUR billions)	55.31	57.46	48.12	nap	nap
Institutions offering payment services to non-bank		.			
Number of institutions	641	625	498	498	498
Number of branches or offices	38,026	37,863	37,621	37,182	36,673
Number of accounts held by non-banks	- 0.440	-0 -10	00.400	04 = 00	0.4.0.40
(thousands)	78,412	79,510	80,462	81,590	81,648
of which: number of internet/PC-linked accounts	nav	nav	nav	nav	nav
Value of accounts held by non-banks	007.40	000 70	700.40	700.00	07440
(EUR billions)	637.40	666.70	706.10	793.03	874.16
Memo:					
Electronic money institutions	_		_	_	_
Number of institutions ⁴	5	4	5	7	8
Outstanding value on e-money storages issued by	40.00	00.00	00.00	0.00	^
e-money institutions	42.00	39.00	39.00	0.00	0
Includes the overnight deposits of the central public adnicounted in this category. Includes credit institutions.	nınıstrations.	- Excludes i	nvestment firms.	Only the	Treasury is

Table 6
Payment card functions and accepting devices (thousands, end of year)

	2012	2013	2014	2015	2016
Cards issued in the country					
Cards with a cash function ¹	92,608.5	88,183.3	85,671.6	80,717.7	81,766.9
Cards with a payment function	82,313.0	82,222.7	81,040.2	77,689.8	78,872.2
Cards with a debit function	80,109.8	80,084.9	55,270.4	50,238.6	50,342.2
Cards with a delayed debit function	23,379.3	23,809.0	38,757.1	28,124.5	29,581.9
Cards with a credit function	26,842.7	19,611.2	24,919.5	19,900.4	19,690.3
Cards with an e-money function	26,721.6	23,102.2	14,201.1	3,029.6	2,749.1
of which: cards with an e-money function which					
have been loaded at least once	2,008.4	1,932.2	3,591.9	1,597.4	1,607.3
Total number of cards (irrespective of the number					
of functions on the card)	99,099.0	99,311.6	101,523.7	94,627.5	94,243.3
of which: cards with a combined debit, cash and	,	,-	, , , ,	- ,-	,
e-money function	25,407.4	22,473.7	11,714.6	2,414.5	1,754.4
Мето:					
Retailer cards	nav	nav	nav	nav	nav
Terminals located in the country					
ATMs	58.5	58.6	114.9	60.7	58.5
ATMs with a cash withdrawal function	58.5	nav	110.1	57.5	57.4
ATMs with a credit transfer function	nav	nav	50.5	38.9	40.0
POS terminals	1,400.0	1,344.4	1,604.5	1,495.9	1,487.3
of which: EFTPOS terminals ¹	1,400.0	1,344.4	1,101.6	734.8	1,110.7
E-money card terminals	71.0	47.0	45.4	1.2	347.7
e-money card loading/unloading terminals	39.2	29.5	21.2	1.2	127.8
e-money card payment terminals	71.0	47.0	45.4	0.5	311.2
¹ Manual imprinters are no longer used.					

Table 7
Indicators of the use of payment instruments and terminals by non-banks: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers ¹	3,097.20	3,250.23	3,416.95	3,621.14	3,752.85
paper-based	nav	nav	146.5	141.27	141.37
non-paper-based	nav	nav	3,270.4	3,479.40	3,611.48
Direct debits	3,543.38	3,107.73	3,541.46	3,879.07	3,962.65
Card payments with cards issued in the country	8,474.98	8,964.30	9,437.92	10,287.51	10,997.00
payments by cards with a debit function	nav	nav	4,924.2	6,124.53	7,634.53
payments by cards with a delayed debit function	nav	nav	1,357.1	1,916.48	2,196.63
payments by cards with a credit function	nav	nav	85. <i>4</i>	245.6	254.36
E-money payment transactions	52.25	50.53	52.91	36.37	38.06
by cards with an e-money function	52.24	50.53	49.95	18.42	5.71
through other e-money storages	nav	nav	3.0	17.94	32.36
Cheques	2,805.62	2,620.57	2,482.82	2,311.45	2,137.45
Other payment instruments ²	94.89	92.74	25.93	72.46	19.93
Cutor payment moduments	04.00	02.1 T	20.00	72.40	10.00
Total number of transactions with payment					
instruments	18,068.32	18,086.10	18,957.98	20,208.01	20,907.94
of which: cross-border transactions sent ³	426.47	555.81	547.90	610.34	646.66
Memo:					
Cross-border transactions received ³	448.20	823.14	433.73	409.61	475.89
Transactions per type of terminal					
Total transactions at terminals in the country					
Cash transactions	1,661.90	1,646.82	nav	1,895.85	2,690.19
ATM cash withdrawals	1,661.90	1,646.82	1,605.70	1,704.78	1,668.09
ATM cash deposits	nav	nav	nav	191.1	1,022.10
POS payment transactions	8,499.70	8,983.59	8,603.53	9,307.28	9,092.53
E-money card loading/unloading transactions	6.06	5.91	nav	2.20	0.00
E-money card payment transactions	nav	nav	48.5	20.1	1.95
a) Transactions at terminals in the country by cards	issued in the	country			
Cash transactions	1,622.49	1,606.32	1,599.97	1,861.53	2,575.96
ATM cash withdrawals	1,622.49	1,606.32	1,570.57	1,670.46	1,634.15
ATM cash deposits	nav	nav	29.4	191.06	941.81
POS payment transactions	8,152.67	8,578.48	8,249.81	8,940.74	8,807.26
E-money card loading/unloading transactions	6.06	5.91	5.26	2.20	0.00
E-money card payment transactions	nav	nav	48.5	20.0	1.91
b) Transactions at terminals in the country by cards	issued outside	e the country			
Cash transactions	39.41	40.49	nav	34.32	114.23
ATM cash withdrawals	39.41	40.49	35.13	34.32	33.94
ATM cash deposits	nav	nav	nav	0.0	80.29
POS payment transactions	347.03	405.11	353.73	366.54	285.27
E-money card loading/unloading transactions	nap	nap	nap	0.0	0
E-money card payment transactions	nav	nav	0.0	0.042	0.045
c) Transactions at terminals outside the country by	cards issued ir	n the country			
Cash transactions	46.69	48.71	nav	54.83	48.20
ATM cash withdrawals	46.69	48.71	36.63	48.61	48.20
ATM cash deposits	nav	nav	nav	6.2	0.00
POS payment transactions	322.31	385.81	325.03	456.31	499.86
E-money card loading/unloading transactions	nap	nap	nap	0.0	0
E-money card payment transactions	nav	nav	nav	0.0	0.000
¹ From 2005 to 2007, client (ie non-MFI) transactions on	lv: from 2008 a	also includes tr	ansactions initi	ated by MFIs to	non-MFIs 2

¹ From 2005 to 2007, client (ie non-MFI) transactions only; from 2008, also includes transactions initiated by MFIs to non-MFIs. ² Usually bills of exchange. ³ From 2006, includes transactions processed in high-value payment systems.

Table 8
Indicators of the use of payment instruments and terminals: value of transactions (EUR billions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers ¹	24,114.69	23,198.46	24,046.38	23,369.97	23,696.78
paper-based	nav	nav	4,198.1	2,520.45	2,487.61
non-paper-based	nav	nav	19,848.3	20,844.02	21,209.17
Direct debits	1,310.88	1,399.30	1,514.55	1,451.18	1,492.13
Card payments with cards issued in the country	421.57	438.43	443.31	472.06	492.13
payments by cards with a debit function	nav	nav	215.8	258.01	310.07
payments by cards with a delayed debit function	nav	nav	77.6	111.15	128.71
payments by cards with a credit function	nav	nav	5.5	13.05	13.26
E-money payment transactions	0.113	0.109	0.244	0.402	0.591
by cards with an e-money function	0.113	0.109	0.205	0.051	0.392
through other e-money storages	nav	nav	0.04	0.35	0.20
Cheques	1,628.46	1,320.02	1,216.04	1,172.84	1,077.31
Other payment instruments ²	356.54	330.26	0.38	243.56	0.13
Total value of transactions with payment					
instruments	27,832.25	26,686.58	27,221.50	26,823.00	26,759.73
of which: cross-border transactions sent ³	7,812.97	6,790.32	4,990.14	5,467.81	5,399.15
	,	,	•	•	•
Memo:					
Cross-border transactions received ³	7,913.05	7,386.13	8,379.02	7,178.96	7,134.35
	,	•	•	•	•
Transactions per type of terminal					
Total transactions at terminals in the country					
Cash transactions	135.41	135.92	nav	170.26	201.30
ATM cash withdrawals	135.41	135.92	134.65	144.65	146.28
ATM cash deposits	nav	nav	nav	25.6	55.02
POS payment transactions	429.68	425.93	414.73	429.64	383.02
E-money card loading/unloading transactions	0.117	0.112	nav	0.047	0.005
E-money card payment transactions	nav	nav	0.2	0.090	0.068
a) Transactions at terminals in the country by cards	issued in the	country			
Cash transactions	129.23	129.59	147.04	164.16	191.19
ATM cash withdrawals	129.23	129.59	128.77	138.56	140.21
ATM cash deposits	nav	nav	18.3	25.61	50.98
POS payment transactions	398.97	390.97	381.16	396.21	361.04
E-money card loading/unloading transactions	0.117	0.112	0.098	0.047	0.005
E-money card payment transactions	nav	nav	0.2	0.086	0.064
b) Transactions at terminals in the country by cards	issued outside	e the country			
Cash transactions	6.17	6.33	nav	6.10	10.11
ATM cash withdrawals	6.17	6.33	5.88	6.10	6.07
ATM cash deposits	nav	nav	nav	0.0	4.04
POS payment transactions	30.70	34.96	33.56	33.43	21.98
E-money card loading/unloading transactions	nap	nap	nap	0.0	0
E-money card payment transactions	nav	nav	0.0	0.004	0.004
c) Transactions at terminals outside the country by	cards issued in	n the country			
Cash transactions	5.83	6.02	nav	7.66	6.48
ATM cash withdrawals	5.83	6.02	4.46	6.04	6.48
ATM cash deposits	nav	nav	nav	1.6	0.00
POS payment transactions	22.60	25.00	17.66	25.98	30.03
E-money card loading/unloading transactions	nap	nap	0.00	0.00	0
E-money card payment transactions	nav	nav	nav	0.00	0
1 From 2005 to 2007, client (ie non-MEI) transactions only	" from 2009 ol	laa inaludaa tra	naastiana initia	tod by MEIo to	non MEIo 2

¹ From 2005 to 2007, client (ie non-MFI) transactions only; from 2008, also includes transactions initiated by MFIs to non-MFIs. ² Usually bills of exchange. ³ From 2006, includes transactions processed in high-value payment systems.

Table 9
Participation in selected interbank funds transfer systems (end of year)

	2012	2013	2014	2015	2016
Large-value payment systems					
TARGET2-BDF					
Number of participants	320	328	320	317	329
Direct participants	114	124	121	123	133
Banks	108	118	116	119	129
Central bank	1	1	1	1	1
Other direct participants	5	5	4	3	3
Postal institution	0	0	0	0	0
Clearing and settlement organisations	2	2	2	2	2
Other financial institutions	3	3	2	1	1
Other	0	0	0	0	0
Indirect participants ¹	206	204	199	194	196
Retail payment systems					
CORE (FR) ²					
Number of participants	419	380	367	367	363
Direct participants	10	10	10	10	10
Banks	8	8	8	8	8
Central bank	1	1	1	1	1
Other direct participants	1	1	1	1	1
General government	0	0	0	0	0
Postal institution	0	0	0	0	0
Clearing and settlement organisations	0	0	0	0	0
Other financial institutions	1	1	1	1	1
Other	0	0	0	0	0
Indirect participants ¹	409	370	357	357	353

¹ Before 18 February 2008, branches of cooperative banks were registered as sub-accounts of their head institution and therefore not counted in the number of participants. Since February 2008, these banks have become indirect participants. Furthermore, some foreign institutions located outside the euro area have joined the system as indirect participants. ² Launched on 28 January 2008, CORE progressively replaced the former retail payment infrastructure SIT, closed on 25 October 2008.

Table 10
Payments processed by selected interbank funds transfer systems: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
TARGET2-BDF					
Credit transfers sent	8.66	9.12	9.38	8.94	7.95
credit transfers sent within TARGET component credit transfers sent to another TARGET	4.52	4.53	5.13	5.06	4.79
component	4.14	4.59	4.26	3.88	3.16
Мето:					
Credit transfers received from another TARGET					
component	4.78	5.36	5.62	5.32	4.79
Concentration ratio in terms of volume (%)	53.7	54.2	55.0	55.5	61.2
Concentiation ratio in terms of voiding (78)	00	02	00.0	00.0	01.2
Retail payment systems					
CORE (FR) ¹					
Total transactions sent	13,432.05	13,635.44	13,924.87	14,180.17	14,432.23
credit transfers	1,943.79	1,969.02	2,021.45	2,086.36	2,177.40
direct debits	2,329.75	2,337.02	2,303.56	2,377.03	2,136.23
card payments	6,269.27	6,596.33	6,988.36	7,275.22	7,829.39
ATM transactions	616.10	611.21	614.33	599.22	582.63
e-money transactions	nap	nap	nap	nap	nap
cheques	2,198.52	2,050.31	1,926.43	1,774.73	1,640.97
other payment instruments ²	74.62	71.56	70.74	67.62	65.62
Concentration ratio in terms of volume (%)	82.7	83.0	84.0	82.7	82.5

¹ Launched on 28 January 2008, CORE progressively replaced the former retail payment infrastructure SIT, closed on 25 October 2008. 2008 figures correspond to the aggregation of transactions processed in SIT and CORE. ² Promissory notes.

Table 11
Payments processed by selected interbank funds transfer systems: value of transactions (EUR billions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
TARGET2-BDF					
Credit transfers sent	110,243.1	87,565.1	86,777.5	79,194.1	74,535.0
credit transfers sent within TARGET component credit transfers sent to another TARGET	74,224.4	53,538.7	47,773.3	42,430.3	38,466.6
component	36,018.7	34,026.5	39,004.2	36,763.9	36,068.4
Memo:					
Credit transfers received from another TARGET					
component	36,196.8	32,798.2	37,086.6	34,673.8	33,937.3
Concentration ratio in terms of value (%)	54.7	63.2	62.1	65.6	67.3
Retail payment systems					
CORE (FR) ¹					
Total transactions sent	5,405.6	5,376.7	5,373.6	5,541.0	5,513.0
credit transfers	2,602.8	2,760.9	2,852.1	3,055.6	3,233.2
direct debits	928.1	1,005.6	985.5	1,003.5	877.8
card payments	294.8	306.0	318.3	324.9	336.8
ATM transactions	37.3	37.6	38.1	38.0	37.9
e-money transactions	nap	nap	nap	nap	nap
cheques	1,266.4	1,016.4	933.7	898.3	819.4
other payment instruments ²	276.1	250.1	245.8	220.7	208.0
Concentration ratio in terms of value (%)	74.8	74.5	75.8	75.3	74.3

¹ Launched on 28 January 2008, CORE progressively replaced the former retail payment infrastructure SIT, closed on 25 October 2008. 2008 figures correspond to the aggregation of transactions processed in SIT and CORE. ² Promissory notes.

Table 12
Participation in SWIFT by domestic institutions (end of year)

	2012	2013	2014	2015	2016
Members	53	54	54	58	58
of which: live	52	53	53	58	58
Sub-members	106	107	107	115	116
of which: live	98	98	99	107	108
Participants	321	327	331	343	367
of which: live	228	232	238	251	275
Total users	480	488	492	516	541
of which: live	378	383	390	416	441
Memo:					
Total SWIFT users	10,279	10,583	10,805	11,094	11,299
members	2,398	2,389	2,379	2,455	2,422
sub-members	3,340	3,343	3,353	3,395	3,367
participants	4,541	4,851	5,073	5,244	5,510
Source: SWIFT.					

Table 13 SWIFT message flows to/from domestic users (thousands, total for the year)

	2012	2013	2014	2015	2016
Total messages sent	206,062	222,485	241,102	258,370	282,529
of which:					
category I	29,971	30,479	29,201	29,629	30,040
category II	13,681	13,774	13,756	14,794	14,934
Total messages received	231,149	249,224	272,504	298,340	314,484
of which:					
category I	28,082	28,471	27,801	28,403	28,187
category II	10,414	9,843	10,044	10,923	11,069
Domestic traffic	35,918	39,266	43,715	48,595	59,637
Мето:					
Global SWIFT traffic	4,589,109	5,065,668	5,612,724	6,106,644	6,525,800
Source: SWIFT.					

Table 14
Number of participants in exchanges and trading systems (end of year)

	2012	2013	2014	2015	2016
Euronext Paris					
Total number of participants	191	177	156	140	146
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of domestic participants	nav	nav	nav	nav	nav
Number of foreign participants	nav	nav	nav	nav	nav

Table 15 Number of listed securities

(end of year)

	2012	2013	2014	2015	2016
Euronext Paris					
Total number of listed securities	17,351	22,162	30,587	33,806	35,320
debt securities	2,282	2,532	2,573	2,628	2,647
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity ¹	562	556	550	547	538
other	14,507	19,074	27,464	30,631	32,135
¹ Number of companies with listed shares.					

Table 16 Market capitalisation of listed companies

(EUR billions, end of year)

	2012	2013	2014	2015	2016
Euronext Paris					
Total market capitalisation/equity	1,371.5	1,669.9	1,723.8	1,911.2	2,049.2

Table 17 Number of executed trades

(thousands, total for the year)

	2012	2013	2014	2015	2016
Euronext Paris ¹					
Total number of executed securities trades	121,038.0	109,377.0	121,091.0	147,112.0	142,006.0
debt securities	337.0	341.0	293.0	270.0	226.0
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	117,348.0	106,002.0	117,918.0	143,237.0	138,784.0
other	3,353.0	3,033.0	2,880.0	3,605.0	2,996.0
Total number of executed derivatives trades	89,847.2	76,249.3	77,201.2	75,335.9	70,244.7
financial futures	38,246.1	37,336.3	36,973.9	35,921.8	34,119.1
financial options	<i>39,4</i> 28.3	28,360.7	27,062.1	25,118.3	22,366.9
other financial derivatives	nav	nav	nav	nav	nav
commodity futures	10,042.6	8,840.8	10,787.4	11,909.8	12,115.4
commodity options	2,130.1	1,711.6	2,377.9	2,385.9	1,643.4

Table 18

Value of executed trades

(EUR billions, total for the year)

	2012	2013	2014	2015	2016
Euronext Paris					
Total value of executed securities trades	928.86	898.09	1,071.11	1,380.24	1,150.39
debt securities	3.66	4.38	3.99	4.29	3.66
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	858.32	830.54	993.79	1,245.79	1,025.88
other	66.89	63.17	73.32	130.16	120.84
Total value of executed derivatives trades	1,657.168	1,815.614	1,958.207	2,084.283	1,786.626
financial futures	1,270.811	1,465.608	1,581.496	1,717.822	1,488.965
financial options	242.219	238.656	262.130	236.890	171.096
commodity futures	143.100	110.804	113.936	128.961	126.197
commodity options	1.039	0.547	0.645	0.611	0.368

Table 19 Number of clearing members (end of year)

	2012	2013	2014	2015	2016
LCH.Clearnet SA, Total					
Total number of clearing members	114	109	110	110	100
central bank	0	0	0	0	0
central counterparties (CCPs)	1	1	1	1	1
banks	80	77	76	<i>7</i> 5	72
other	33	31	33	34	27
Number of domestic clearing members ¹	46	42	41	41	44
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	31	30	29	28	35
other	15	12	12	13	9
Number of foreign clearing members	68	67	69	69	56
central bank	0	0	0	0	0
central counterparties (CCPs)	1	1	1	1	1
banks	49	47	47	47	37
other	18	19	21	21	18

¹ France, Belgium, the Netherlands and Portugal.

Table 20
Number of contracts and transactions cleared (thousands, total for the year)

CH-Clearnet SA Total number of contracts and transactions cleared Total number of contracts and transactions cleared Total number of securities transactions cleared Total number of securities transactions cleared Total number of securities Total number of contracts and transactions Total number of contracts and transactions Total number of contracts and transactions Total number of securities Total number Total number of securities Total number To		2012	2013	2014	2015	2016
cleared 722,202.93 58,324.43 688,504.78 760,560.46 727,415.73 Number of securities transactions cleared debt securities 380,234.56 361,227.52 394,918.83 485,944.90 470,857.62 debt securities 2,933.60 3,226.47 3,512.85 3,666.67 3,669.68 short-term paper 458.68 510.11 519.88 439.06 479.37 bonds 2,474.92 2,7716.36 2,992.97 3,227.61 3,199.31 equity² 377,300.97 388,001.04 391,405.98 482,278.23 467,187.94 of which: number of repurchase transactions cleared 2,478.02 2,671.94 2,772.26 3,075.09 3,134.33 Number of exchange-traded derivatives contracts 2,478.02 297.086.60 293,561.62 274,598.55 256,499.58 financial options 341,965.58 297.086.60 293,561.62 274,598.55 256,499.58 financial futures 394,586.98 49,589.47 95,607.64 96,052.07 90,596.12 financial futures 20,590.11 18,003.5						_
Number of securities transactions cleared	Total number of contracts and transactions					
Accordance	cleared	722,202.93	658,324.43	688,504.78	760,560.46	727,415.73
short-term paper 458.68 510.11 519.88 439.06 479.37 bonds 2,474.92 2,716.36 2,992.97 3,227.61 3,190.31 equity² 377,300.97 358,001.04 391,405.98 482,278.23 467,187.94 of which: number of repurchase transactions cleared 2,478.02 2,671.94 2,772.26 3,075.09 3,134.33 Number of exchange-traded derivatives contracts 2 2,671.94 2,772.26 3,075.09 3,134.33 Number of exchange-traded derivatives contracts 2 2,778.06 293,561.62 274,598.55 256,499.58 51,699.58 51,699.58 51,699.58 297,086.60 293,561.62 274,598.55 256,499.58 51,699.58 13,617.01 13,003.55 21,786.69 95,050.64 96,052.07 90,596.12 271,713.40 21,786.69 23,061.62 274,598.55 256,499.58 13,217.01 20,590.11 18,003.55 21,786.69 24,085.82 433,127.01 20,590.11 21,003.55 21,786.69 24,085.82 24,466.60 20,590.11 24,085.82 45,	Number of securities transactions cleared ¹	380,234.56	361,227.52	394,918.83	485,944.90	470,857.62
short-term paper 458.68 510.11 519.88 439.06 479.37 bonds 2,474.92 2,716.36 2,992.97 3,227.61 3,190.31 equity² 377,300.97 358,001.04 391,405.98 482,278.23 467,187.94 of which: number of repurchase transactions cleared 2,478.02 2,671.94 2,772.26 3,075.09 3,134.33 Number of exchange-traded derivatives contracts 2 2,671.94 2,772.26 3,075.09 3,134.33 Number of exchange-traded derivatives contracts 2 2,788.02 293,561.62 274,598.55 256,499.58 financial futures 99,558.52 94,589.47 95,607.64 96,052.07 90,596.12 271,745.12 180,097.30 171,340.42 149,632.28 138,127.01 20,590.11 18,003.55 171,7340.42 149,632.28 138,127.01 20,590.11 18,003.55 17,764.02 21,786.69 24,086.88 4,828.35 3,315.85 Number of OTC derivatives contracts cleared 2.796 10.314 24.300 17.010 58.534 VEH. Clearnet SA, of	debt securities	2,933.60				
bonds equity² 2,474.92 2,716.36 2,992.97 3,227.61 3,190.31 of which: number of repurchase transactions cleared 2,478.02 2,671.94 2,772.26 3,075.09 3,134.33 Number of exchange-traded derivatives contracts cleared³ 341,965.58 297,086.60 293,561.62 274,598.55 256,499.58 financial lutures 99,558.52 94,589.47 96,607.64 96,052.07 90,596.12 financial options 217,451.26 180,973.06 171,340.42 149,632.28 138,127.01 commodity futures 20,590.11 18,003.50 21,786.69 24,085.85 256,499.58 Number of OTC derivatives contracts cleared 2.796 10.314 24.330 17.010 58.534 LCH.Clearnet SA, of which, in France 2.796 10.314 249,330 17.010 58.534 LCH.Clearnet SA, of which, in France 2.796 10.314 249,382.24 302,758.90 291,495.31 deared 435,116.33 389,741.81 409,697.62 459,311.39 436,221.16 Number of Securities transactions cleare	short-term paper	458.68	510.11	519.88	439.06	479.37
of which: number of repurchase transactions cleared 2,478.02 2,671.94 2,772.26 3,075.09 3,134.33 Number of exchange-traded derivatives contracts cleared³ 341,965.58 297,086.60 293,561.62 274,598.55 256,499.58 financial futures 99,558.52 94,589.47 95,607.64 96,052.07 90,596.12 financial options 217,451.26 180,973.06 171,340.42 149,632.28 138,127.01 commodity futures 20,590.11 18,003.50 21,766.88 24,085.85 24,460.60 commodity options 4,365.69 3,520.57 4,826.88 4,828.35 3,315.85 Number of OTC derivatives contracts cleared 2.796 10.314 24.330 17.010 58.534 LCH.Clearnet SA, of which, in France Total number of contracts and transactions cleared 435,116.33 389,741.81 409,697.62 459,311.39 436,221.16 Number of securities transactions cleared¹ 249,145.02 225,547.19 249,584.24 302,758.90 291,495.31 460 ts.21 45,078 42,214 38,026 41,642		2,474.92	2,716.36	2,992.97	3,227.61	3,190.31
cleared 2,478.02 2,671.94 2,772.26 3,075.09 3,134.33 Number of exchange-traded derivatives contracts cleared³ 341,965.58 297,086.60 293,561.62 274,598.55 256,499.58 financial futures 99,558.52 94,588.47 95,607.64 96,052.07 90,596.12 tinancial options 217,451.26 180,973.06 171,340.42 149,632.28 138,127.01 commodity futures 20,590.11 18,003.50 21,786.69 24,085.85 24,460.60 commodity options 4,365.69 3,520.57 4,826.88 4,828.35 3,315.85 Number of OTC derivatives contracts cleared 2.796 10.314 24.330 17.010 58.534 LCH.Clearnet SA, of which, in France 435,116.33 389,741.81 409,697.62 459,311.39 436,221.16 Number of securities transactions cleared¹ 249,145.02 225,547.19 249,584.24 302,758.90 291,495.31 debt securities 45.078 42.214 38.026 41.642 35.800 short-term paper 9.626	equity ²	377,300.97	358,001.04	391,405.98	482,278.23	467,187.94
cleared 2,478.02 2,671.94 2,772.26 3,075.09 3,134.33 Number of exchange-traded derivatives contracts cleared³ 341,965.58 297,086.60 293,561.62 274,598.55 256,499.58 financial futures 99,558.52 94,588.47 95,607.64 96,052.07 90,996.12 financial options 217,451.26 180,973.06 171,340.42 149,632.28 138,127.01 commodity futures 20,590.11 18,003.50 21,786.69 24,088.85 24,460.60 commodity options 4,365.69 3,520.57 4,826.88 4,828.35 3,315.85 Number of OTC derivatives contracts cleared 2.796 10.314 24.330 17.010 58.534 LCH.Clearnet SA, of which, in France 435,116.33 389,741.81 409,697.62 459,311.39 436,221.16 Number of securities transactions cleared¹ 249,145.02 225,547.19 249,584.24 302,758.90 291,495.31 debt securities 45.078 42.214 38.026 41.642 35.800 short-term paper 9.626	of which: number of repurchase transactions					
cleared³ 341,965.58 297,086.60 293,561.62 274,598.55 256,499.58 financial futures 99,558.52 94,589.47 95,607.64 96,052.07 90,596.12 financial options 217,451.26 180,973.06 171,340.42 149,632.28 183,127.01 commodity futures 20,590.11 18,003.50 21,786.69 24,065.85 24,460.60 commodity options 4,365.69 3,520.57 4,826.88 4,828.35 3,315.85 Number of OTC derivatives contracts cleared 2.796 10.314 24.330 17.010 58.534 LCH.Clearnet SA, of which, in France Total number of contracts and transactions cleared 435,116.33 389,741.81 409,697.62 459,311.39 436,221.16 Number of securities transactions cleared¹ 249,145.02 225,547.19 249,584.24 302,758.90 291,495.31 debt securities 45.078 42.214 38.026 41.642 35.800 short-term paper 9.626 7.246 9.716 16.050 16.050 15.21		2,478.02	2,671.94	2,772.26	3,075.09	3,134.33
financial futures 99,558.52 94,589.47 95,607.64 96,052.07 90,596.12 financial options 217,451.26 180,973.06 171,340.42 149,632.28 138,127.01 commodity futures 20,590.11 18,003.50 21,786.69 24,085.85 24,460.60 commodity options 4,365.69 3,520.57 4,826.88 4,828.35 3,315.85 LCH.Clearnet SA, of which, in France Total number of contracts and transactions cleared 435,116.33 389,741.81 409,697.62 459,311.39 436,221.16 Number of securities transactions cleared 435,116.33 389,741.81 409,697.62 459,311.39 436,221.16 Number of securities transactions cleared 435,116.33 389,741.81 409,697.62 459,311.39 436,221.16 Number of securities transactions cleared 45.078 42.214 30.26 41.642 35.800 short-term paper 9.626 7.246 9.716 16.050 15.214 bonds 35.452 34,968 28.310 25.592 20.586	Number of exchange-traded derivatives contracts					
financial futures 99,558.52 94,589.47 95,607.64 96,052.07 90,596.12 financial options 217,451.26 180,973.06 171,340.42 149,632.28 138,127.01 commodity futures 20,590.11 18,003.50 21,786.69 24,085.85 24,460.60 commodity options 4,365.69 3,520.57 4,826.88 4,828.35 3,315.85 LCH.Clearnet SA, of which, in France Total number of contracts and transactions cleared 435,116.33 389,741.81 409,697.62 459,311.39 436,221.16 Number of securities transactions cleared 435,116.33 389,741.81 409,697.62 459,311.39 436,221.16 Number of securities transactions cleared 435,116.33 389,741.81 409,697.62 459,311.39 436,221.16 Number of securities transactions cleared 45,078 42,214 30.26 41,642 35,800 short-term paper 9,626 7,246 9,716 16,050 15,214 bords 35,452 34,968 28,310 25,5592 25,592	cleared ³	341,965.58	297,086.60	293,561.62	274,598.55	256,499.58
financial options commodity futures 217,451.26 180,973.06 171,340.42 149,632.28 138,127.01 24,085.85 24,085.85 24,460.60 24,460.60 24,085.85 24,085.85 24,460.60 24,460.60 24,085.85 24,460.60 24,460.60 24,365.69 3,520.57 4,826.88 4,828.35 3,315.85 LCH.Clearnet SA, of which, in France Total number of contracts and transactions cleared 435,116.33 389,741.81 409,697.62 459,311.39 436,221.16 Number of securities transactions cleared 249,145.02 225,547.19 249,584.24 302,758.90 291,495.31 debt securities 45.078 42.214 38.026 41.642 35.800 short-term paper 9.626 7.246 9.716 16.050 15.214 bonds 35.452 34,968 28.310 25.592 20.586 equity² 249,099.94 225,504.98 249,546.21 302,717.26 291,495.51 of which: number of repurchase transactions cleared 185,968.51 164,184.31 160,089.06	financial futures	•		-	•	
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LCH.Clearnet SA, of which, in France Total number of contracts and transactions cleared 435,116.33 389,741.81 409,697.62 459,311.39 436,221.16 Number of securities transactions cleared¹ 249,145.02 225,547.19 249,584.24 302,758.90 291,495.31 debt securities 45.078 42.214 38.026 41.642 35.800 short-term paper 9.626 7.246 9.716 16.050 15.214 bonds 35.452 34.968 28.310 25.592 20.586 equity² 249,099.94 225,504.98 249,546.21 302,717.26 291,459.51 of which: number of repurchase transactions cleared nap	commodity options	4,365.69				
Total number of contracts and transactions cleared 435,116.33 389,741.81 409,697.62 459,311.39 436,221.16 Number of securities transactions cleared¹ 249,145.02 225,547.19 249,584.24 302,758.90 291,495.31 debt securities 45.078 42.214 38.026 41.642 35.800 short-term paper 9.626 7.246 9.716 16.050 15.214 bonds 35.452 34.968 28.310 25.592 20.586 equity² 249,099.94 225,504.98 249,546.21 302,717.26 291,459.51 of which: number of repurchase transactions cleared nap n	Number of OTC derivatives contracts cleared	2.796	10.314	24.330	17.010	58.534
Total number of contracts and transactions cleared 435,116.33 389,741.81 409,697.62 459,311.39 436,221.16 Number of securities transactions cleared¹ 249,145.02 225,547.19 249,584.24 302,758.90 291,495.31 debt securities 45.078 42.214 38.026 41.642 35.800 short-term paper 9.626 7.246 9.716 16.050 15.214 bonds 35.452 34.968 28.310 25.592 20.586 equity² 249,099.94 225,504.98 249,546.21 302,717.26 291,459.51 of which: number of repurchase transactions cleared nap n	LCH.Clearnet SA, of which, in France					
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debt securities 45.078 42.214 38.026 41.642 35.800 short-term paper 9.626 7.246 9.716 16.050 15.214 bonds 35.452 34.968 28.310 25.592 20.586 equity² 249,099.94 225,504.98 249,546.21 302,717.26 291,459.51 of which: number of repurchase transactions cleared nap nap <td>Number of securities transactions cleared¹</td> <td>249,145.02</td> <td>225,547.19</td> <td>249,584.24</td> <td>302,758.90</td> <td>291,495.31</td>	Number of securities transactions cleared ¹	249,145.02	225,547.19	249,584.24	302,758.90	291,495.31
bonds 35.452 34.968 28.310 25.592 20.586 equity² 249,099.94 225,504.98 249,546.21 302,717.26 291,459.51 of which: number of repurchase transactions cleared nap 1ap 1ap 1ap	debt securities				41.642	
bonds 35.452 34.968 28.310 25.592 20.586 equity² 249,099.94 225,504.98 249,546.21 302,717.26 291,459.51 of which: number of repurchase transactions cleared nap	short-term paper	9.626	7.246	9.716	16.050	15.214
equity ² 249,099.94 225,504.98 249,546.21 302,717.26 291,459.51 of which: number of repurchase transactions cleared nap nap nap nap nap nap nap Number of exchange-traded derivatives contracts cleared ³ 185,968.51 164,184.31 160,089.06 156,535.48 144,667.31 financial futures 78,304.68 76,167.48 75,890.20 73,862.28 69,690.25 financial options 82,708.04 66,492.76 57,585.29 53,759.00 47,200.61 commodity futures 20,590.11 18,003.50 21,786.69 24,085.85 24,460.60 commodity options 4,365.69 3,520.57 4,826.88 4,828.35 3,315.85 Number of OTC derivatives contracts cleared 2.796 10.314 24.330 17.010 58.534		<i>35.45</i> 2	34.968	28.310	25.592	
cleared nap nap nap nap nap Number of exchange-traded derivatives contracts 185,968.51 164,184.31 160,089.06 156,535.48 144,667.31 cleared³ 185,968.51 164,184.31 160,089.06 156,535.48 144,667.31 financial futures 78,304.68 76,167.48 75,890.20 73,862.28 69,690.25 financial options 82,708.04 66,492.76 57,585.29 53,759.00 47,200.61 commodity futures 20,590.11 18,003.50 21,786.69 24,085.85 24,460.60 commodity options 4,365.69 3,520.57 4,826.88 4,828.35 3,315.85 Number of OTC derivatives contracts cleared 2.796 10.314 24.330 17.010 58.534	equity ²	249,099.94	225,504.98	249,546.21	302,717.26	
cleared nap nap nap nap nap Number of exchange-traded derivatives contracts 185,968.51 164,184.31 160,089.06 156,535.48 144,667.31 cleared³ 185,968.51 164,184.31 160,089.06 156,535.48 144,667.31 financial futures 78,304.68 76,167.48 75,890.20 73,862.28 69,690.25 financial options 82,708.04 66,492.76 57,585.29 53,759.00 47,200.61 commodity futures 20,590.11 18,003.50 21,786.69 24,085.85 24,460.60 commodity options 4,365.69 3,520.57 4,826.88 4,828.35 3,315.85 Number of OTC derivatives contracts cleared 2.796 10.314 24.330 17.010 58.534	of which: number of repurchase transactions					
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financial futures 78,304.68 76,167.48 75,890.20 73,862.28 69,690.25 financial options 82,708.04 66,492.76 57,585.29 53,759.00 47,200.61 commodity futures 20,590.11 18,003.50 21,786.69 24,085.85 24,460.60 commodity options 4,365.69 3,520.57 4,826.88 4,828.35 3,315.85 Number of OTC derivatives contracts cleared 2.796 10.314 24.330 17.010 58.534	Number of exchange-traded derivatives contracts					
financial options 82,708.04 66,492.76 57,585.29 53,759.00 47,200.61 commodity futures 20,590.11 18,003.50 21,786.69 24,085.85 24,460.60 commodity options 4,365.69 3,520.57 4,826.88 4,828.35 3,315.85 Number of OTC derivatives contracts cleared 2.796 10.314 24.330 17.010 58.534	cleared ³	185,968.51	164,184.31	160,089.06	156,535.48	144,667.31
commodity futures 20,590.11 18,003.50 21,786.69 24,085.85 24,460.60 commodity options 4,365.69 3,520.57 4,826.88 4,828.35 3,315.85 Number of OTC derivatives contracts cleared 2.796 10.314 24.330 17.010 58.534	financial futures	78,304.68	76,167.48	75,890.20	73,862.28	69,690.25
commodity futures 20,590.11 18,003.50 21,786.69 24,085.85 24,460.60 commodity options 4,365.69 3,520.57 4,826.88 4,828.35 3,315.85 Number of OTC derivatives contracts cleared 2.796 10.314 24.330 17.010 58.534	financial options	· ·				
commodity options 4,365.69 3,520.57 4,826.88 4,828.35 3,315.85 Number of OTC derivatives contracts cleared 2.796 10.314 24.330 17.010 58.534	·	20,590.11				24,460.60
		•	•			
For the footnotes, see the end of the table.	Number of OTC derivatives contracts cleared	2.796	10.314	24.330	17.010	58.534
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Table 20 (cont)					
	2012	2013	2014	2015	2016
LCH.Clearnet SA, of which, in Belgium					
Total number of contracts and transactions					
cleared	32,216.1	30,882.3	31,806.5	41,348.5	40,449.5
Number of securities transactions cleared	30,074.4	28,400.7	29,559.6	39,425.6	38,777.3
debt securities	7.636	9.328	11.488	10.140	10.960
short-term paper	0.110	0.472	1.490	1.064	1.276
bonds	7.526	8.856	9.998	9.076	9.684
equity	30,066.8	28,391.4	29,548.1	39,415.4	38,766.3
of which: number of repurchase transactions					
cleared	7.636	9.328	11.488	10.140	10.960
debt securities ¹	7.636	9.328	11.488	10.140	10.960
short-term paper	0.110	0.472	1.490	1.064	1.276
bonds	7.526	8.856	9.998	9.076	9.684
Number of exchange-traded derivatives contracts	0.444.7	0.404.0	0.047.0	4 000 0	4.070.0
cleared	2,141.7	2,481.6	2,247.0	1,922.9	1,672.2
financial futures	120.4	72.8	69.2	32.5	6.9
financial options	2,021.3	2,408.8	2,177.8	1,890.4	1,665.3
commodity futures	nav	nav	nav	nav	nav
commodity options	nav	nav	nav	nav	nav
Number of OTC derivatives contracts cleared	nap	nap	nap	nap	nap
LCH.Clearnet SA, of which, in Italy					
Total number of contracts and transactions					
cleared	1,535.5	1,835.8	2,087.8	2,100.5	2,034.5
Number of securities transactions cleared	1,535.5	1,835.8	2,087.8	2,100.5	2,034.5
debt securities	1,535.5	1,835.8	2,087.8	2,100.5	2,034.5
short-term paper	292.7	335.3	343.3	268.1	275.6
bonds	1,242.8	1,500.4	1,744.4	1,832.4	1,759.0
of which: number of repurchase transactions					
cleared	1,347.7	1,512.2	1,581.8	1,716.1	1,646.9
debt securities	1,347.7	1,512.2	1,581.8	1,716.1	1,646.9
short-term paper	246.2	250.9	204.8	154.7	159.3
bonds	1,101.5	1,261.2	1,377.0	1,561.4	1,487.5
Number of exchange-traded derivatives contracts					
cleared	nap	nap	nap	nap	nap
Number of OTC derivatives contracts cleared	nap	nap	nap	nap	nap
For the footnotes, see the end of the table.		<u> </u>	<u> </u>		

Table 20 (cont)					
	2012	2013	2014	2015	2016
LCH. Clearnet SA, of which, in Netherlands					
Total number of contracts and transactions					
cleared	243,275	223,306	227,400	242,426	235,926
Number of securities transactions cleared	89,596	93,146	96,748	126,905	126,240
equity	89,596	93,146	96,748	126,905	126,240
of which: number of repurchase transactions					
cleared	nap	nap	nap	nap	nap
Number of exchange-traded derivatives contracts					
cleared	153,679	130,160	130,652	115,521	109,685
financial futures	20,957	18,088	19,075	21,538	20,424
financial options	132,722	112,071	111,577	93,983	89,261
commodity futures	nav	nav	nav	nav	nav
commodity options	nav	nav	nav	nav	nav
Number of OTC derivatives contracts cleared	nap	nap	nap	nap	nap
LCH.Clearnet SA, in Other					
Total number of contracts and transactions					
cleared	10,059.65	12,558.72	17,512.35	15,374.12	12,784.87

¹ Cash transactions. ² Contains all activities for Euronext cash markets (including bonds, shares and warrants). ³ Valuation at the trading price; data before 2008 include commodity products.

Table 21

Value of contracts and transactions cleared

(EUR billions, total for the year)					
LCH.Clearnet SA					
Total value of contracts and transactions cleared	66,897.74	78,493.32	81,011.36	86,621.28	87,027.91
Value of securities transactions cleared ¹	60,867.83	72,043.38	74,112.75	78,841.94	79,821.35
debt securities	58,130.08	69,276.52	70,882.62	74,766.61	76,372.75
short-term paper	9,034.62	10,803.91	7,799.84	6,157.33	7,206.40
bonds	49,095.46	58,472.61	63,082.78	68,609.28	69,166.36
equity ²	2,737.76	2,766.86	3,230.13	4,075.33	3,448.60
of which: value of repurchase transactions					
cleared	56,255.7	66,726.1	66,970.1	71,457.3	72,927.80
Value of exchange-traded derivatives contracts					
cleared ³	5,938.67	6,114.12	6,775.63	7,433.79	6,308.43
financial futures	3,939.61	4,298.63	4,770.19	5,508.35	4,782.03
financial options	1,642.97	1,546.63	1,726.74	1,611.24	1,235.78
commodity futures	293.14	225.77	230.24	262.15	255.14
commodity options	62.95	43.08	48.45	52.06	<i>35.48</i>
Value of OTC derivatives contracts cleared	91.24	335.82	122.98	345.55	898.12
LCH.Clearnet SA, France					
Total value of contracts and transactions cleared	5,677.68	6,192.77	6,559.15	7,644.47	7,045.35
Value of securities transactions cleared ¹	2,138.79	2,071.53	2,377.49	2,973.58	2,464.78
debt securities	320.17	316.73	315.32	373.88	318.42
short-term paper	92 <i>.4</i> 8	76.26	100.55	172.83	164.68
bonds	227.69	240.47	214.78	201.05	153.74
equity ²	1,818.62	1,754.79	2,062.12	2,599.69	2,146.36
of which: value of repurchase transactions					
cleared	nap	nap	nap	nap	nap
Value of exchange-traded derivatives contracts					
cleared ³	3,447.65	3,785.42	4,058.68	4,325.34	3,682.45
financial futures	2,596.54	2,983.91	3,241.01	3,527.51	3,036.22
financial options	495.03	532.65	538.97	484.28	355.61
commodity futures	293.14	225.77	230.24	261.50	255.14
commodity options	62.95	43.08	48.45	52.06	<i>35.48</i>
Value of OTC derivatives contracts cleared	91.24	335.82	122.98	345.55	898.12

For the footnotes, see the end of the table.

Tab	10 21	(cont
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	2012	2013	2014	2015	2016
LCH.Clearnet SA, Belgium					
Total value of contracts and transactions cleared	1,156.404	1,523.943	1,760.947	1,618.007	1,507.643
Value of securities transactions cleared	1,146.214	1,511.641	1,748.096	1,605.410	1,497.691
debt securities	985.330	1,341.012	1,566.831	1,345.387	1,259.255
short-term paper	12.734	65.834	215.753	124.651	124.163
bonds	972.596	1,275.178	1,351.078	1,220.736	1,135.092
equity	160.884	170.629	181.265	260.023	238.437
of which: value of repurchase transactions					
cleared	985.330	1,341.012	1,566.831	1,345.387	1,259.255
debt securities	985.330	1,341.012	1,566.831	1,345.387	1,259.255
short-term paper	12.734	65.834	215.753	124.651	124.163
bonds	972.596	1,275.178	1,351.078	1,220.736	1,135.092
Value of exchange-traded derivatives contracts					
cleared	10.190	12.302	12.850	12.597	9.952
financial futures	2.742	1.956	2.131	1.163	0.236
financial options	7.448	10.346	10.720	11.435	9.716
commodity futures	nav	nav	nav	nav	nav
commodity options	nav	nav	nav	nav	nav
Value of OTC derivatives contracts cleared	nap	nap	nap	nap	nap
For the footnotes, see the end of the table.					

Table 21 (cont)

	2012	2013	2014	2015	2016
LCH.Clearnet SA, Italy					
Total value of contracts and transactions cleared	28,970.37	38,775.17	43,087.03	43,438.27	40,640.17
Value of securities transactions cleared	28,970.37	38,775.17	43,087.03	43,438.27	40,640.17
debt securities	28,970.37	38,775.17	43,087.03	43,438.27	40,640.17
short-term paper	6,049.16	7,660.50	5, 186. 18	3,525.04	3,944.81
bonds	22,921.21	31,114.67	37,900.85	39,913.23	36,695.37
of which: value of repurchase transactions					
cleared	27,956.40	37,057.96	40,177.29	41,058.40	37,992.25
debt securities	27,956.40	37,057.96	40,177.29	41,058.40	37,992.25
short-term paper	<i>5,734.4</i> 8	7,130.02	<i>4,</i> 297.05	2,682.06	3,003.92
bonds	22,221.92	29,927.94	35,880.24	38,376.35	34,988.32
Value of exchange-traded derivatives contracts					
cleared	nap	nap	nap	nap	nap
Value of OTC derivatives contracts cleared	nap	nap	nap	nap	nap
LCH. Clearnet SA , Netherlands					
Total value of contracts and transactions cleared	3,197.90	3,098.85	3,608.91	4,251.85	3,633.63
Value of securities transactions cleared	717.98	784.02	908.38	1,159.35	1,019.84
equity	717.98	784.02	908.38	1,159.35	1,019.84
of which: value of repurchase transactions					
cleared	nap	nap	nap	nap	nap
Value of exchange-traded derivatives contracts					
cleared	2,479.92	2,314.83	2,700.54	3,092.50	2,613.79
financial futures	1,339.44	1,311.19	1,523.49	1,976.32	1,743.33
financial options	1,140.49	1,003.63	1,177.05	1,115.53	870.45
commodity futures	nav	nav	nav	0.6	nav
commodity options	nav	nav	nav	nav	nav
Value of OTC derivatives contracts cleared	nap	nap	nap	nap	nap
LCH.Clearnet SA, Others	27,895.38	28,902.59	25,995.31	29,668.68	34,201.11

¹ Cash transactions. ² Contains all activities for Euronext cash markets (including bonds, shares and warrants). ³ Valuation at the trading price; data before 2008 include commodity products.

Table 22 Number of direct participants in CSDs (end of year)

	2012	2013	2014	2015	2016
Euroclear France					
Total number of participants	156	157	152	147	137
central bank	1	1	1	1	1
central counterparties (CCPs)	1	1	1	1	1
central securities depositories	5	4	4	2	0
banks	97	100	101	99	99
other	52	51	45	44	36
Number of domestic participants	119	118	110	106	94
central bank	1	1	1	1	1
central counterparties (CCPs)	1	1	1	1	1
central securities depositories	0	0	0	0	0
banks	73	73	72	69	66
other	44	43	36	35	26
Number of foreign participants	37	39	42	41	nap
central bank	0	0	0	0	nap
central counterparties (CCPs)	0	0	0	0	0
central securities depositories	5	4	4	2	0
banks	24	27	29	30	33
other	8	8	9	9	10

Table 23
Number of securities held on accounts at CSDs (end of year)

	2012	2013	2014	2015	2016
Euroclear France ¹					
Total number of securities held	54,087	52,512	62,476	61,896	65,771
debt securities	27,674	22,311	24,908	17,815	17,278
short-term paper	8,417	7,284	6,753	5,641	<i>5,4</i> 96
bonds	19,257	15,027	18,155	12,174	11,782
equity	1,800	1,797	1,806	1,859	1,928
other	24,613	28,404	35,762	42,222	46,565

¹ Includes all types of financial instruments (French and foreign financial instruments, eurobonds and other international financial instruments).

Table 24
Value of securities held on accounts at CSDs (EUR billions, end of year)

	2012	2013	2014	2015	2016
Euroclear France ¹					
Total value of securities held	5,323.2	5,630.1	5,756.8	6,073.8	6,278.4
debt securities	2,925.3	2,938.4	2,995.2	3,029.1	3,077.9
short-term paper	894.7	771.0	683.4	<i>554.4</i>	455.5
bonds	2,030.6	2,167.4	2,311.8	2,474.8	2,622.4
equity	1,351.8	1,659.2	1,723.6	1,916.8	2,012.6
other	1,046.1	1,032.5	1,038.0	1,127.9	1,188.0

¹ Includes all types of financial instruments (French and foreign financial instruments, eurobonds and other international financial instruments).

Table 25
Number of delivery instructions processed

(thousands, total for the year)

	2012	2013	2014	2015	2016
Euroclear France					
Total number of delivery instructions	23,620	24,382	24,296	25,612	25,562
DVP ¹	21,137	21,982	21,719	22,465	22,082
debt securities	5,646	5,997	4,438	4,201	5,066
short-term paper	1,687	1,599	981	766	903
bonds	3,959	4,398	<i>3,4</i> 57	<i>3,435</i>	4,163
equity	11,953	12,169	13,443	14,158	13,342
other	3,538	3,816	3,838	4,106	3,674
free of payment	2,483	2,400	2,577	3,147	3,480
debt securities	554	491	545	702	736
short-term paper	149	107	99	81	77
bonds	405	384	446	621	659
equity	938	965	1,021	1,267	1,543
other	991	944	1,011	1,178	1,201

¹ Includes securities movements related to repurchase agreements.

Table 26
Value of delivery instructions processed

(EUR billions, total for the year)

	2012	2013	2014	2015	2016
Euroclear France					
Total value of delivery instructions	122,895.5	131,223.6	109,906.6	92,117.7	103,286.0
DVP ¹	105,725.9	115,954.6	82,192.7	74,960.2	80,400.9
debt securities	97,486.5	108,466.3	74,083.9	65,131.6	72,561.0
short-term paper	43,094.0	38,396.2	22,515.5	15,274.4	14,963.9
bonds	54,392.5	70,070.1	51,568.4	49,857.3	57,597.2
equity	4,857.9	5,258.7	6,241.6	7,540.0	6,042.7
other	3,381.5	2,229.6	1,867.2	2,288.5	1,797.1
free of payment	17,169.6	15,269.0	27,713.8	17,157.6	22,885.2
debt securities	13,606.1	11,914.8	12,467.5	12,859.1	11,418.9
short-term paper	6,937.0	4,920.0	4,309.6	3,205.5	2,805.3
bonds	6,669.1	6,994.7	8,157.9	9,653.6	8,613.6
equity	534.2	782.0	919.0	763.2	1,549.6
other	3,029.4	2,572.3	14,327.4	3,535.3	9,916.6

¹ Includes securities movements related to repurchase agreements.

Table 1
Basic statistical data

	2012	2013	2014	2015	2016
Population (thousands) ¹	80,426	80,646	80,983	81,687	82,491
GDP (EUR billions)	2,758.3	2,826.2	2,932.5	3,043.7	3,144.1
GDP per capita (EUR)	34,296	35,045	36,211	37,260	38,114
Consumer price inflation (%) ¹	2.1	1.6	0.8	0.1	0.4
Exchange rate (EUR/USD):					
end of year	0.7579	0.7251	0.8237	0.9185	0.9487
average	0.7788	0.7532	0.7539	0.9019	0.9039

¹ Annual average.

Table 2
Settlement media used by non-banks

(EUR billions, end of year)

	2012	2013	2014	2015	2016
Notes and coin in circulation outside banks ¹	nap	nap	nap	nap	nap
Value of transferable deposits ²	1,442.25	1,533.20	1,639.25	1,849.87	2,016.85
Narrow money supply (M1) ¹ Memo:	nap	nap	nap	nap	nap
Transferable deposits in foreign currencies	48.76	56.07	63.29	62.14	56.33
Outstanding value on e-money storage	0.081	0.084	0.089	0.103	0.103
on card-based products ³	0.081	0.084	0.089	0.103	0.103
on software- or network-based products	nav	nav	nav	nav	nav

¹ These figures are provided solely at an aggregated euro area level (see Euro area, Table 2). ² All overnight deposits are included - transferable and non-transferable overnight deposits. The counterpart sector "non-banks" includes the component sectors "Central government" and "Rest of the world". Thus, this indicator is not synonymous with the same term used in the ECB concept of narrow money supply (M1). ³ Encompasses only data of the German scheme "GeldKarte".

Table 3 Settlement media used by banks

(EUR billions, average of last reserve maintenance period)

	2012	2013	2014	2015	2016
Transferable balances held at the central bank	214.32	86.08	90.26	224.41	434.65
required reserves	28.57	27.26	28.60	31.20	33.55
free reserves	185.75	58.82	61.66	193.21	401.10
Transferable balances held at other banks ¹	119.19	93.68	124.53	125.77	165.11
Memo:					
Credit extended by the central bank:					
intraday	nav	nav	nav	nav	nav
overnight ²	0.088	0.054	0.017	0.061	0.029
longer-term refinancing operations ³	71.729	31.521	44.080	52.046	62.765

¹ Up to reference period 2009 all overnight deposits are included - transferable and non-transferable overnight deposits. ² Marginal lending facility.

³ Other monetary policy operations vis-à-vis the Eurosystem.

Table 4 Banknotes and coin¹

¹ These figures are provided solely at an aggregated euro area level (see Euro area, Table 4)

Table 5
Institutions offering payment services to non-banks (end of year)

	2012	2013	2014	2015	2016
Central bank					
Number of branches or offices	41	41	41	35	35
Number of accounts (thousands)	23.32	23.29	23.27	23.04	23.00
Value of accounts (EUR billions)	40.441	10.802	10.095	74.356	118.635
Banks					
Number of institutions	1,867	1,842	1,808	1,774	1,702
Number of branches or offices ¹	38,132	38,021	37,090	34,115	32,113
Number of accounts (thousands) ²	96,835.1	98,488.4	100,983.0	102,771.2	102,680.7
of which: number of internet/PC-linked accounts	•	,	,	,	·
(thousands) ²	50,601.3	54,238.1	57,974.0	61,286.6	62,829.9
Value of accounts (EUR billions) ³	1,413.86	1,528.13	1,630.57	1,776.08	1,898.13
Credit institutions legally incorporated in the	reporting coul	ntry	•		
Number of institutions	1,758	1,734	1,698	1,666	1,600
Number of branches or offices ¹	37,892	37,776	36,831	33,856	31,862
Value of accounts (EUR billions) ³	1,353.07	1,454.92	1,545.99	1,680.92	1,799.68
Branches of euro area-based credit institution	ıs	•	•	•	•
Number of institutions	65	63	64	60	55
Number of branches or offices	169	166	182	176	170
Value of accounts (EUR billions) ³	32.12	43.51	55.32	70.73	76.04
Branches of EEA-based credit institutions (ou	tside the euro	area)			
Number of institutions	25	25	27	29	28
Number of branches or offices	41	47	46	48	46
Value of accounts (EUR billions) ³	26.02	25.51	24.03	18.28	15.15
Branches of non-EEA based banks					
Number of institutions	19	20	19	19	19
Number of branches or offices	30	32	31	35	35
Value of accounts (EUR billions) ³	2.65	4.19	5.23	6.15	7.27
Other institutions offering payment services to	non-banks				
Number of institutions ⁴	47	46	44	46	46
Number of branches or offices	nav	nap	66.00	66.00	67.00
Number of accounts (thousands)	nap	nap	nap	7.48	7.16
Value of accounts	nap	nap	nap	nap	nap
For the footnotes, see the end of the table.					

e-money institutions (EUR millions)⁶

Table 5 (cont)					
	2012	2013	2014	2015	2016
Institutions offering payment services to non-ba	nks (total)				
Number of institutions ⁵	1,918	1,893	1,857	1,828	1,756
Number of branches or offices Number of accounts held by non-banks	38,173	38,062	37,197	34,216	32,215
(thousands) ² of which: number of internet/PC-linked accounts	96,858.4	98,511.7	101,013.7	102,801.7	102,710.8
(thousands) ² Value of accounts held by non-banks	50,601.3	54,259.9	57,987.1	61,300.2	62,844.0
(EUR billions)	1,454.30	1,538.94	1,640.84	1,850.85	2,016.70
Memo: Electronic money institutions Number of institutions	3	4	4	7	7
Outstanding value on e-money storages issued by	3	4	4	7	,

¹ Includes those post office branches of Deutsche Postbank AG which are entrusted with the semi-cashless payment systems on behalf of the Postbank AG. ² Up to 2014, includes only accounts for transferable deposits and not accounts for card-based emoney. ³ Includes transferable and non-transferable deposits as well as deposits for card-based e-money. ⁴ From reference period 2012 the number of payment institutions providing services through an established branch is added to the number of payment institutions resident in the country. The recent list of payment institutions resident in the country is published on the website of the German Federal Financial Supervisory Authority (BaFin):

nav

nav

nap

http://www.bafin.de/DE/DatenDokumente/Datenbanken/ZahlungsinstituteRegister/register_zahlungsinstitute_node.html. ⁵ Includes electronic money institutions. ⁶ Until reference period 2010 by approximation: liabilities to non-MFIs which mature daily.

Table 6
Payment card functions and accepting devices (end of year)

	2012	2013	2014	2015	2016
Cards issued in the country (thousands) ¹					_
Cards with a cash function	135,344.1	137,227.1	144,283.1	147,294.6	149,497.7
Cards with a debit function	105,593.6	105,169.3	103,352.1	106,102.7	108,618.8
Cards with a delayed debit function	23,909.6	24,780.7	26,861.7	28,245.2	27,990.8
Cards with a credit function	3,685.0	3,902.1	4,392.4	4,900.3	5,682.0
Cards with an e-money function of which: cards with an e-money function which	97,990.0	98,961.8	95,556.5	91,908.0	86,114.3
have been loaded at least once ²	3,466.9	3,507.1	4,018.7	2,887.5	3,160.2
Total number of cards (irrespective of the number					
of functions on the card)	141,868.7	143,114.0	148,347.7	151,135.6	154,269.5
of which: cards with a combined debit, cash and e-					
money function	88,785.5	90,054.3	94,415.5	89,893.3	83,446.4
Memo:					
Retailer cards ³	9,700.0	9,500.0	10,037.0	9,766.0	nav
Terminals located in the country					
ATMs ⁴	82,610	82,761	86,767	86,702	85,352
ATMs with a cash withdrawal function	56,025	56,035	58,014	58,811	58,340
ATMs with a credit transfer function	26,931	27,377	27,793	27,723	27,015
POS terminals ^{5, 6}	720,000	743,624	1,034,550	998,846	1,002,340
of which: EFTPOS terminals	720,000	743,624	654,381	655,244	658,335
E-money card terminals	272,437	271,322	419,655	448,833	437,405
e-money card loading/unloading terminals	53,834	53,903	60,514	61,118	60,038
e-money card payment terminals ⁶	218,603	217,419	419,655	387,715	377,367

¹ Payments with delayed debit and credit cards in Tables 7 and 8 include transactions with specific non-rechargeable retailer cards. However, this table does not encompass the numbers of the underlying cards. ² Up to the reference period 2013, only cards with an e-money function which are credit balanced at the end of the period. ³ Figures collected by PaySys Consultancy GmbH. ⁴ The total number of ATMs may, in some instances, be bigger than the sum of the number of ATMs with a cash withdrawal function and of ATMs with a credit transfer function, because it also encompasses the number of ATMs with a cash deposit function. ⁵ Encompasses only terminals with reference to the German scheme "Girocard". To avoid double-counting, the number of terminals includes the most widespread scheme only, since terminals usually accept different card brands. ⁶ Only active terminals (terminals with at least one transaction in the reference period). Figures collected by Deutsche Kreditwirtschaft (DK).

Table 7

Indicators of the use of payment instruments and terminals by non-banks: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument ¹					
Credit transfers ²	6,151.03	6,217.39	5,633.10	6,019.73	6,343.62
paper-based	847.20	816.08	623.46	612.24	570.90
non-paper-based	5,303.82	5,401.32	5,009.65	5,407.49	5,772.72
Direct debits ²	8,809.46	9,676.40	8,704.92	9,954.62	10,834.38
Card payments with cards issued in the country ³	3,182.20	3,632.84	3,433.87	3,690.60	4,073.98
payments by cards with a debit function	2,579.08	2,885.33	2,595.06	2,722.57	2,996.37
payments by cards with a delayed debit function	559.72	681.54	762.46	879.01	965.89
payments by cards with a credit function	43.40	65.97	76.36	89.02	111.73
E-money payment transactions	33.60	31.76	33.61	31.90	37.04
by cards with an e-money function	33.60	31.76	31.55	28.75	28.01
through other e-money storages	nav	nav	2.06	3.15	8.94
Cheques	34.41	31.33	29.88	21.40	18.47
Other payment instruments ⁴	nap	nap	104.64	104.74	115
Total number of transactions with payment					
instruments ⁴	18,210.69	19,589.73	17,940.03	19,822.98	21,422.53
of which: cross-border transactions sent	644.03	815.62	615.99	842.94	996.03
Memo:					
Cross-border transactions received	74.75	84.64	139.88	160.39	177.33
Payments by retailer cards with a payment					
function ⁵	37.40	38.70	45.30	37.60	35.53
For the footnotes, see the end of the table.					

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	2012	2013	2014	2015	2016
Transactions per type of terminal ⁶					
Total transactions at terminals in the country					
Cash transactions	2,211.28	2,209.70	2,175.69	2,312.20	2,345.73
ATM cash withdrawals	2,127.64	2,115.00	2,063.97	2,192.03	2,212.07
ATM cash deposits	83.64	94.69	111.72	120.17	133.67
POS payment transactions ⁷	2,907.25	3,254.87	3,039.65	3,140.18	3,376.50
E-money card loading/unloading transactions ⁸	6.20	6.63	5.27	4.00	2.88
E-money card payment transactions ⁹	nap	nap	25.15	26.23	28.66
a) Transactions at terminals in the country by cards	issued in the	country			
Cash transactions	2,211.28	2,209.70	2,143.02	2,284.86	2,315.83
ATM cash withdrawals	2,127.64	2,115.00	2,031.30	2,164.69	2,182.16
ATM cash deposits	83.64	94.69	111.72	120.17	133.67
POS payment transactions ⁷	2,907.25	3,254.87	2,870.24	2,995.33	3,219.37
E-money card loading/unloading transactions ⁸	6.20	6.63	5.27	4.00	2.88
E-money card payment transactions ⁹	nap	nap	25.15	26.23	27.34
b) Transactions at terminals in the country by cards	issued outside	the country			
Cash transactions	nap	nap	32.7	27.34	29.91
ATM cash withdrawals	nap	nap	32.7	27.34	29.91
ATM cash deposits	nap	nap	nav	nav	nav
POS payment transactions ⁷	nap	nap	144.4	144.86	157.12
E-money card loading/unloading transactions ⁸	nap	nap	nap	nap	nap
E-money card payment transactions ⁹	nap	nap	nav	nav	1.32
c) Transactions at terminals outside the country by	cards issued ir	the country			
Cash transactions	42.68	43.57	35.86	48.84	51.35
ATM cash withdrawals	<i>4</i> 2.68	43.57	35.86	48.84	51.35
ATM cash deposits	nap	nap	nap	nap	nap
POS payment transactions ⁷	308.55	409.74	204.13	269.56	290.41
E-money card loading/unloading transactions ⁸	nap	nap	nap	nap	nap
E-money card payment transactions ⁹	nap	nap	nap	nap	nap

¹ Includes transactions of national non-banks, irrespective of whether they are processed on an intra- or interbank basis. ¹ nclude both national and cross-border transactions. ² Simple book entries are included until reference period 2013. ³ Payments with delayed debit and credit cards include transactions with specific non-rechargeable retailer cards. Electronic direct debits known as "ELV" transactions are included here up to 2013. Since reference period 2014 ELV transactions are included in direct debits. ⁴ Since reference period 2014 including "Money remittances" and "Transactions via telecommunication, digital or IT device". ⁵ Figures collected by PaySys Consultancy GmbH. ⁶ Regardless of the type of card used. ⁷ Includes e-money card payment transactions up to reference period 2013. ⁸ Up to reference period 2013 only E-money-card loading transactions are included. ⁹ Due to a methodological break the figures for the years prior to 2014 published in previous Red Book publications are not anymore comparable with the ones published in this Red Book publication.

Table 8
Indicators of the use of payment instruments and terminals: value of transactions¹
(EUR billions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers ²	58,042.07	56,981.53	48,850.21	50,359.21	49,888.47
paper-based	5,8 4 2.71	5,219.00	3,183.95	3,287.76	3,351.61
non-paper-based	52,199.36	51,762.53	45,666.26	47,071.45	46,536.85
Direct debits ²	13,225.05	13,349.97	3,580.29	4,035.53	3,925.91
Card payments with cards issued in the country ³	198.33	223.58	235.18	245.74	259.99
payments by cards with a debit function	145.89	163.10	152.22	160.50	170.06
payments by cards with a delayed debit function	49.16	56.02	78.03	79.43	82.96
payments by cards with a credit function	3.28	4.45	4.94	5.82	6.97
E-money payment transactions	0.121	0.108	0.401	0.496	0.727
by cards with an e-money function	0.121	0.108	0.150	0.125	0.105
through other e-money storages	nav	nav	0	0.371	0.621
Cheques	226.94	201.37	170.47	155.03	153.74
Other payment instruments ⁴	nap	nap	217	218	221
Total value of transactions with payment					
instruments ⁴	71,692.51	70,756.55	53,053.51	55,013.78	54,450.32
of which: cross-border transactions sent	11,683.81	10,229.07	10,220.43	10,789.46	11,176.56
Memo:					
Cross-border transactions received	15,342.56	15,073.44	15,510.73	15,689.75	15,205.09
Payments by retailer cards with an payments					
function ⁵	1.96	1.94	1.81	1.92	1.79
For the footnotes, see the end of the table.					

Tab	1 – A	1	4 \
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	2012	2013	2014	2015	2016
Transactions per type of terminal ⁶					
Total transactions at terminals in the country					
Cash transactions	414.25	427.80	433.96	474.58	504.15
ATM cash withdrawals	342.27	345.15	341.81	369.47	384.25
ATM cash deposits	71.98	82.65	92.15	105.11	119.91
POS payment transactions ⁷	174.62	194.16	186.96	190.01	201.57
E-money card loading/unloading transactions ⁸	0.183	0.160	0.173	0.126	0.098
E-money card payment transactions ⁹	nap	nap	0.077	0.079	0.263
a) Transactions at terminals in the country by cards i	ssued in the co	ountry			
Cash transactions	414.25	427.80	428.05	469.88	499.13
ATM cash withdrawals	342.27	345.15	335.90	364.76	379.22
ATM cash deposits	71.98	82.65	92.15	105.11	119.91
POS payment transactions ⁷	174.62	194.16	172.36	176.72	188.16
E-money card loading/unloading transactions ⁸	0.183	0.160	0.173	0.126	0.098
E-money card payment transactions ⁹	nap	nap	0.077	0.079	0.172
b) Transactions at terminals in the country by cards i	ssued outside	the country			
Cash transactions	nap	nap	6	4.70	5.02
ATM cash withdrawals	nap	nap	6	4.70	5.02
ATM cash deposits	nap	nap	nav	nav	nav
POS payment transactions ⁷	nap	nap	13	13.29	13.41
E-money card loading/unloading transactions ⁸	nap	nap	nap	nap	nap
E-money card payment transactions ⁹	nap	nap	nav	nav	0.091
c) Transactions at terminals outside the country by c	ards issued in	the country			
Cash transactions	8.52	8.66	6.71	9.25	9.52
ATM cash withdrawals	8.52	8.66	6.71	9.25	9.52
ATM cash deposits	nap	nap	nap	nap	nap
POS payment transactions ⁷	23.83	29.53	20.03	23.10	23.64
E-money card loading/unloading transactions ⁸	nap	nap	nap	nap	nap
E-money card payment transactions ⁹	nap	nap	nap	nap	nap

¹ Includes transactions of national non-banks, irrespective of whether they are processed on an intra- or interbank basis. Includes both national and cross-border transactions. ² Simple book entries are included until reference period 2013. ³ Paymer with delayed debit and credit cards include transactions with specific non-rechargeable retailer cards. Electronic direct debits known as "ELV" transactions are included here up to 2013. Since reference period 2014 ELV transactions are included in direct debits. ⁴ Since reference period 2014 including "Money remittances" and "Transactions via telecommunication, digital or IT device". ⁵ Figures collected by PaySys Consultancy GmbH. ⁶ Regardless of the type of card used. ⁷ Includes e-money card payment transactions, up to reference period 2013. ⁸ Up to reference period 2013 only E-money-card loading transactions are included. ⁹ Due to a methodological break the figures for the years prior to 2014 published in previous Red Book publications are not anymore comparable with the ones published in this Red Book publication.

Table 9
Participation in selected interbank funds transfer systems (end of year)

2012	2013	2014	2015	2016
2,744	874	944	865	989
283	644	719	719	848
276	637	712	713	842
1	1	1	1	1
6	6	6	5	5
6	6	6	5	5
2,461	230	225	146	141
204	202	175	182	187
204	202	175	182	187
203	201	171	178	181
1	1	4	4	6
	2,744 283 276 1 6 6 2,461	2,744 874 283 644 276 637 1 1 6 6 6 6 2,461 230 204 202 204 202	2,744 874 944 283 644 719 276 637 712 1 1 1 6 6 6 6 6 6 2,461 230 225	2,744 874 944 865 283 644 719 719 276 637 712 713 1 1 1 1 6 6 6 5 6 6 6 5 2,461 230 225 146

Table 10
Payments processed by selected interbank funds transfer systems: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
T2 BBK					
Credit transfers sent	43.81	44.40	41.30	44.70	44.50
credit transfers sent within T2 BBK credit transfers sent to another TARGET	31.88	31.83	29.60	32.30	31.60
component	11.93	12.56	11.70	12.40	12.90
Memo:					
Credit transfers received from another TARGET					
component	9.55	9.61	8.90	8.63	8.90
Concentration ratio in terms of volume (%) ¹	50.1	50.0	49.2	52.5	51.4
Retail payment systems					
RPS ²					
Total transactions sent	2,817.08	3,115.51	4,036.10	3,764.14	4,168.03
credit transfers	1,098.99	1,214.42	1,620.80	1,332.65	1,237.34
cheques and direct debits ³	1,716.97	1,820.85	964.00	707.07	29.95
direct debits ⁴	1.12	80.24	1,451.33	1,496.85	1,721.15
card payments ⁵	nav	nav	nap	220.9	1,141.26
ATM transactions ⁵	nav	nav	nap	6.6	36.5
e-money transactions ⁵	nav	nav	nap	0.02	0.60
cheques ⁶	nav	nav	nap	nap	1.2
Concentration ratio in terms of volume (%) ¹	32.0	29.3	38.9	51.8	61.8

¹ Market share of the five largest senders of payment messages in each interbank payment system in relation to the number of transactions. Each participant with individual access to the payment system is counted separately, irrespective of any legal dependencies. ² RPS is connected to the STEP2 system of EBA CLEARING to carry out cross-border EU retail payments. ³ Includes domestic non-SEPA direct debits and other payment instruments which are technically processed in the same way as direct debits, such as debit card payments, ATM transactions, e-money payments (until 2014) and cheques (until 2015). ⁴ Direct debits based on SEPA format. ⁵ Only card transactions based on the SEPA Card Clearing format developed by the Berlin Group (mainly Girocard transactions). ⁶ Cheque transactions based on XML format (ISO 20022).

Table 11
Payments processed by selected interbank funds transfer systems: value of transactions (EUR billions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
T2 BBK					
Credit transfers sent	275,657.0	224,328.7	169,145.0	204,855.2	201,111.1
credit transfers sent within T2 BBK credit transfers sent to another TARGET	218,152.5	171,489.6	116,005.8	152,715.6	145,563.5
component	57,504.4	52,839.1	53,139.1	52,139.6	55,547.6
Мето:					
Credit transfers received from another TARGET					
component	57,994.5	52,344.8	52,708.5	51,716.6	54,819.5
Concentration ratio in terms of value (%) ¹	28.9	29.5	26.2	45.8	43.6
Concentration ratio in terms of value (76)	20.9	29.5	20.2	45.0	43.0
Retail payment systems					
RPS ²					
Total transactions sent	2,511.1	2,741.4	3,286.9	2,987.9	2,876.5
credit transfers	1,608.1	1,817.7	2,258.7	2,032.4	1,963.8
cheques and direct debits ³	897.0	827.3	224.8	160.5	98.8
direct debits ⁴	6.0	96.4	803.4	779.5	730.5
card payments ⁵	nav	nav	nap	14.3	67.1
ATM transaction ⁵	nav	nav	nap	1.2	5.8
e-money transactions ⁵	nav	nav	nap	0.0	0.0
cheques ⁶	nav	nav	nap	nap	0.0
Concentration ratio in terms of value (%) ¹	14.5	18.4	44.8	57.4	57.1

¹ Market share of the five largest senders of payment messages in each interbank payment system in relation to the number of transactions. Each participant with individual access to the payment system is counted separately, irrespective of any legal dependencies. ² RPS is connected to the STEP2 system of EBA CLEARING to carry out cross-border EU retail payments. ³ Includes domestic non-SEPA direct debits and other payment instruments which are technically processed in the same way as direct debits, such as debit card payments, ATM transactions, e-money payments (until 2014) and cheques (until 2015). ⁴ Direct debits based on SEPA format ⁵ Only card transactions based on the SEPA Card Clearing format developed by the Berlin Group (mainly Girocard transactions). ⁶ Cheque transactions based on XML format (ISO 20022).

Table 12
Participation in SWIFT by domestic institutions (end of year)

	2012	2013	2014	2015	2016
Members	109	109	109	113	111
of which: live	108	108	109	113	110
Sub-members	116	118	116	117	118
of which: live	105	106	104	105	106
Participants	210	222	232	254	289
of which: live	188	205	214	235	264
Total users	435	449	457	484	518
of which: live	401	419	427	453	480
Memo:					
Total SWIFT users	10,279	10,583	10,805	11,094	11,299
members	2,398	2,389	2,379	2,455	2,422
sub-members	3,340	3,343	3,353	3,395	3,367
participants	4,541	4,851	5,073	5,244	5,510
Source: SWIFT.					

Table 13
SWIFT message flows to/from domestic users (thousands, total for the year)

	2012	2013	2014	2015	2016
Total messages sent	359,783	364,241	394,710	430,448	429,311
of which:					
category I	75,592	74,304	67,110	67,282	67,899
category II	25,747	26,504	26,694	27,790	27,731
Total messages received of which:	314,182	320,982	346,039	377,854	390,403
	73,670	73,839	69,145	70,632	67,935
category I	•	,	*	*	*
category II	32,810	33,227	33, 108	34,311	32,894
Domestic traffic	71,436	65,287	75,314	78,622	75,140
Memo:					
Global SWIFT traffic	4,589,109	5,065,668	5,612,724	6,106,644	6,525,800
Source: SWIFT.					

Table 14
Number of participants in exchanges and trading systems (end of year)

	2012	2013	2014	2015	2016
Xetra					
Total number of participants	214	202	186	179	195
central bank	1	1	1	1	1
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of domestic participants	98	94	86	84	93
central bank	1	1	1	1	1
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of foreign participants	116	108	100	95	102
central bank	0	0	0	0	0
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Xetra Frankfurt Specialist ² (since 2011; before	re: Frankfurt Floor)				
Total number of participants	182	173	162	155	148
central bank	1	1	1	1	1
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of domestic participants	154	150	144	136	138
central bank	1	1	1	1	1
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of foreign participants	28	23	18	19	10
central bank	0	0	0	0	0
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
For the footnotes, see the end of the table.					

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	2012	2013	2014	2015	2016
Eurex ¹					
Total number of participants	576	589	597	609	608
central bank	0	0	0	0	0
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of domestic participants	136	73	67	60	69
central bank	0	0	0	0	0
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of foreign participants	440	516	530	549	539
central bank	0	0	0	0	0
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav

¹ Encompasses Eurex Frankfurt AG, Eurex Bonds GmbH, Eurex Repo GmbH and Eurex Zürich AG. ² On 23 May 2011 Frankfurt Floor Trading was transferred to Xetra, the international established trading platform of Deutsche Börse AG. The trading venue "Frankfurt" is named "Xetra Frankfurt Specialist" in the statistics. Instead of total turnover the figures in the statistics are related to order book turnover.

Table 15 Number of listed securities

(thousands, end of year)

	2012	2013	2014	2015	2016
Xetra					
Total number of listed securities	7.25	5.41	5.32	5.04	4.72
debt securities	1.96	0.06	0.00	0.00	0
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	1.12	1.11	1.16	1.02	0.59
other	4.17	4.24	4.15	4.02	4.13
Xetra Frankfurt Specialist (since 2011; befor	e: Frankfurt Floor)			
Total number of listed securities	1,175.29	1,330.25	1,412.58	1,614.75	1,618.33
debt securities	22.17	22.79	nav	nav	nav
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	0.75	0.72	0.67	0.62	0.59
other	1,152.37	1,306.75	1,411.91	1,614.13	1,617.74
Eurex					
Total number of listed securities	nap	nap	nap	nap	nap

Table 16

Market capitalisation of listed companies

(EUR billions, end of year)

	2012	2013	2014	2015	2016
Xetra					
Total market capitalisation/equity	1,305.8	1,709.5	1,683.5	1,781.6	1,630.4
Xetra Frankfurt Specialist (since 2011; before: Frankfurt market capitalisation/equity	nkfurt Floor) nap	nap	nap	nap	nap
Eurex					
Total market capitalisation/equity	nap	nap	nap	nap	nap

Table 17 Number of executed trades

(thousands, total for the year)

	2012	2013	2014	2015	2016
Xetra					
Total number of executed securities trades	109,031.5	109,081.3	115,410.6	143,306.3	144,364.9
debt securities	674.1	704.3	549.2	455.4	450.0
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity ¹	106,455.6	106,382.9	112,836.0	140,352.2	141,685.4
other	1,901.9	1,994.1	2,025.4	2,499.0	2,229.4
Total number of executed derivatives trades	nap	nap	nap	nap	nap
Xetra Frankfurt Specialist (since 2011; before: F	Frankfurt Floo	or)			
Total number of executed securities trades	4,337.7	4,182.0	3,946.0	4,557.1	2,997.4
debt securities	97.1	73.6	58.4	40.5	34.5
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity ^{1, 2}	1,459.6	1,312.0	1,634.3	2,143.6	772.6
other	2,781.0	2,796.3	2,253.3	2,373.0	2,190.3
Total number of executed derivatives trades	nap	nap	nap	nap	nap
Eurex ³					
Total number of executed securities trades	nap	nap	nap	nap	nap
Total number of executed derivatives trades	1,503,985.5	1,050,132.8	1,470,061.1	1,140,460.4	1,174,512.4
financial futures	856,626.0	529,907.6	901,499.5	552,664.9	599,178.4
financial options	647,359.6	520,225.2	568,561.6	587,795.6	575,334.0
other financial derivatives	nav	nav	nav	nav	nav

¹ Since 2008, these positions have contained exchange-traded funds (ETFs) and undertakings for collective investment in transferable securities (UCITS). ² Since 2009, these positions have contained reporting transactions. ³ Turnover in Germany and Switzerland.

Table 18
Value of executed trades
(EUR billions, total for the year)

58.02 18.78	1,156.80	1,283.41		
	1,156.80	1 202 /1		
18.78		1,203.41	1,636.70	1,375.05
	14.06	11.08	8.01	7.35
nav	nav	nav	nav	nav
nav	nav	nav	nav	nav
18.56	1,122.38	1,253.68	1,605.96	1,349.06
20.69	20.36	18.65	22.72	18.64
nap	nap	nap	nap	nap
rt Floor	·)			
44.86	104.10	110.18	132.11	133.31
15.42	9.61	8.26	6.48	4.47
nav	nav	nav	nav	nav
nav	nav	nav	nav	nav
99.52	61.01	81.87	102.93	110.32
29.92	33.48	20.05	22.70	18.52
nap	nap	nap	nap	nap
nap	nap	nap	nap	nap
65.94	91,687.95	92,528.16	38,473.72	33,839.37
28.26	72,050.97	72,493.28	21,979.97	20,424.91
37.68	19,636.98	20,034.88	16,493.75	13,414.46
nav	nav	nav	nav	nav
	nav 18.56 20.69 nap rt Flooi 44.86 15.42 nav nav 99.52 29.92 nap nap	nav nav 18.56 1,122.38 20.69 20.36 nap nap rt Floor) 44.86 104.10 15.42 9.61 nav nav nav nav 99.52 61.01 29.92 33.48 nap nap nap nap nap 65.94 91,687.95 28.26 28.26 72,050.97 37.68 19,636.98 nav nav nav	nav nav nav 18.56 1,122.38 1,253.68 20.69 20.36 18.65 nap nap nap rt Floor) 44.86 104.10 110.18 15.42 9.61 8.26 nav nav nav nav nav nav 99.52 61.01 81.87 29.92 33.48 20.05 nap nap nap nap nap nap 65.94 91,687.95 92,528.16 28.26 72,050.97 72,493.28 37.68 19,636.98 20,034.88 nav nav nav	nav nav nav nav 18.56 1,122.38 1,253.68 1,605.96 20.69 20.36 18.65 22.72 nap nap nap nap nap nap nap nap rt Floor) 44.86 104.10 110.18 132.11 15.42 9.61 8.26 6.48 nav nav nav nav nav nav nav nav 99.52 61.01 81.87 102.93 29.92 33.48 20.05 22.70 nap nap nap nap nap nap nap nap 165.94 91,687.95 92,528.16 38,473.72 28.26 72,050.97 72,493.28 21,979.97 37.68 19,636.98 20,034.88 16,493.75

¹ Since 2008, these positions have contained exchange-traded funds (ETFs) and undertakings for collective investment in transferable securities (UCITS). ² At market value, not nominal value. ³ Since 2009, these positions have contained reporting transactions. ⁴ Turnover in Germany and Switzerland.

Table 19 Number of clearing members (end of year)

	2012	2013	2014	2015	2016
Eurex Clearing AG					
Total number of clearing members	163	175	183	186	195
central bank	3	3	3	4	4
banks	160	172	180	182	186
Number of domestic clearing members	62	63	63	64	63
central bank	1	1	1	1	1
banks	61	62	62	63	61
Number of foreign clearing members	101	112	120	122	132
central bank	2	2	2	3	3
central counterparties (CCPs)	0	0	0	0	0
banks	99	110	118	119	125
other	nav	nav	nav	nav	nav

Table 20 Number of contracts and transactions cleared (millions, total for the year)

	2012	2013	2014	2015	2016
Eurex Clearing AG					
Total number of contracts and transactions					
cleared	3,514.68	3,313.52	3,171.40	3,581.52	3,689.06
Number of securities transactions cleared	195.41	208.80	188.26	236.31	234.10
debt securities	0.21	0.25	0.28	0.19	0.14
short-tem paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	195.19	208.56	187.99	236.12	233.97
other	nav	nav	nav	nav	nav
of which: number of repurchase transactions					
cleared	0.197	0.232	0.245	0.163	0.113
debt securities	0.197	0.232	0.245	0.163	0.113
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
Number of exchange-traded derivatives contracts					
cleared ¹	3,319.276	3,104.718	2,983.133	3,345.201	3,454.963
financial futures	1,974.189	1,923.186	1,832.760	1,992.823	2,171.957
financial options	1,344.465	1,179.714	1,147.993	1,352.256	1,282.814
commodity futures	0.590	1.745	2.355	0.120	0.191
commodity options	0.032	0.073	0.025	0.002	0.001
Number of OTC derivatives contracts cleared	0	0	0	0	0
¹ Turnover in Germany and Switzerland.					

Table 21
Value of contracts and transactions cleared (EUR billions, total for the year)

	2012	2013	2014	2015	2016
Eurex Clearing AG					
Total value of contracts and transactions cleared	192,497.0	207,039.6	217,550.0	245,756.7	236,174.8
Value of securities transactions cleared	19,274.5	23,400.9	31,950.0	26,008.3	15,181.5
debt securities	17,070.7	21,085.5	29,229.4	22,491.5	12,307.5
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	2,203.8	2,315.5	2,720.5	3,516.8	2,874.0
other	nav	nav	nav	nav	nav
of which: value of repurchase transactions					
cleared	16,837.5	20,863.0	28,959.8	22,250.8	12,084.2
debt securities	16,831.4	20,857.7	28,953.3	22,231.2	12,084.2
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	6.2	5.3	6.5	19.7	0.0
Value of exchange-traded derivatives contracts					
cleared ¹	173,222.4	183,623.4	185,364.9	219,444.5	220,123.0
financial futures	133,093.3	144,207.9	145,121.9	163,694.3	175,993.9
financial options	40,116.0	39,307.1	40,132.9	55,747.6	44,126.4
commodity futures	9.2	106.1	110.0	2.4	2.6
commodity options	3.8	2.3	0.2	0.1	0.1
Value of OTC derivatives contracts cleared	0	15.2	235.1	303.9	870.3
¹ Turnover in Germany and Switzerland.					

Table 22 Number of direct participants in CSDs (end of year)

	2012	2013	2014	2015	2016
Clearstream Banking AG					
Total number of participants	405	359	298	288	270
central bank	2	2	2	2	2
central counterparties (CCPs)	3	2	2	2	2
central securities depositories	11	14	11	10	10
banks	295	251	2 4 3	223	210
other	94	90	40	51	46
Number of domestic participants	199	182	179	169	164
central bank	1	1	1	1	1
central counterparties (CCPs)	2	2	2	2	2
central securities depositories	0	0	0	0	0
banks .	158	145	154	132	129
other	38	34	22	34	32
Number of foreign participants	206	177	119	119	106
central bank	1	1	1	1	1
central counterparties (CCPs)	1	0	0	0	0
central securities depositories	11	14	11	10	10
banks .	137	106	89	91	81
other	56	56	18	17	14

Table 23
Number of securities held on accounts at CSDs

(thousands, end of year)

2012	2013	2014	2015	2016
2,655.7	3,938.4	4,171.1	4,703.0	4,050.0
nav	nav	nav	nav	nav
nav	nav	nav	nav	nav
2,655.7	3,938.4	4,171.1	4,703.0	4,050.0
	2,655.7 nav nav	2,655.7 3,938.4 nav nav nav nav	2,655.7 3,938.4 4,171.1 nav nav nav nav nav nav	2,655.7 3,938.4 4,171.1 4,703.0 nav nav nav nav nav

¹ Non-debt securities. Since 2011, revision of data collection method and therefore exclusion of multiple data entries.

Table 24
Value of securities held on accounts at CSDs (EUR billions, end of year)

	2012	2013	2014	2015	2016
Clearstream Banking AG					_
Total value of securities held	6,003.10	6,376.07	7,573.77	7,806.77	7,719.22
debt securities	3,728.18	3,791.37	3,670.60	3,598.30	3,546.43
short-term paper	129.47	101.90	112.30	106.85	104.31
bonds	3,598.71	3,689.47	3,558.30	3,491.45	3,442.12
equity	1,944.10	2,284.75	1,778.12	1,803.89	1,898.20
other	330.82	299.95	2,125.05	2,404.58	2,274.58

Table 25
Number of delivery instructions processed

(thousands, total for the year)

	2012	2013	2014	2015	2016
Clearstream Banking AG					
Total number of delivery instructions	52,795.3	60,934.6	55,331.8	61,174.0	56,049.6
DVP	43,458.0	48,336.6	43,458.0	49,010.9	44,687.7
debt securities	5,469.1	6,712.6	4,166.6	3,691.5	2,707.3
short-term paper	135.3	462.6	391.1	385.0	328.1
bonds	5,333.8	6,250.0	3,775.5	3,306.5	2,379.2
equity	25,418.2	28,500.0	25,166.4	27,801.7	26,799.8
other	12,570.6	13,123.9	14,125.0	17,517.7	15,180.6
free of payment	9,337.4	12,598.0	11,873.8	12,163.1	11,361.9
debt securities	2,542.2	4,126.7	3,334.4	2,891.2	1,854.9
short-term paper	68.5	164.1	145.5	131.3	117.8
bonds	2,473.7	3,962.6	3,188.9	2,759.9	1,737.1
equity	6,137.7	7,704.8	7,779.1	8,636.1	8,807.1
other	657.5	766.4	760.3	635.8	699.9

Table 26
Value of delivery instructions processed

(EUR billions, total for the year)

	2012	2013	2014	2015	2016
Clearstream Banking AG					
Total value of delivery instructions	55,783.6	59,686.0	79,739.6	66,724.5	46,578.3
DVP	32,046.7	24,518.0	31,282.8	23,851.8	16,223.0
debt securities	11,860.4	19,624.0	25,833.8	16,787.3	10,780.9
short-term paper	965.7	1,544.0	1,529.0	1,453.5	1,237.3
bonds	10,894.6	18,080.0	24,304.9	15,333.8	9,543.6
equity	4,198.6	4,745.0	5,281.2	6,863.5	5,276.0
other	15,987.8	149.0	167.8	201.0	166.2
free of payment	23,737.0	35,168.0	48,456.9	42,872.8	30,355.3
debt securities	21,576.0	29,751.0	42,237.0	35,903.7	25,506.7
short-term paper	609.7	1,521.0	1,512.4	1,153.6	1,044.5
bonds	20,966.3	28,230.0	40,724.7	34,750.1	24,462.2
equity	2,136.1	5,317.0	6,079.4	6,834.0	4,804.3
other	24.9	100.0	140.4	135.0	44.3

Table '	1	
Basic	statistical	data

	2012	2013	2014	2015	2016
Population (thousands) ¹	7,171.0	7,210.9	7,252.9	7,309.7	7,377.1
GDP (HKD billions)	2,037.1	2,138.3	2,260.0	2,398.4	2,491.0
GDP per capita (HKD)	284,069	296,538	311,600	328,117	337,667
Consumer price inflation (%) ²	4.1	4.3	4.4	3.0	2.4
Exchange rate (HKD/USD):					
end of year	7.7510	7.7540	7.7580	7.7500	7.7560
average	7.7571	7.7566	7.7545	7.7524	7.7625
¹ At end-year. ² Yearly average.					

Table 2
Settlement media used by non-banks

(HKD billions, end of year)

	2012	2013	2014	2015	2016
Notes and coin in circulation outside banks ¹	281.86	313.88	330.09	349.34	390.47
Value of transferable deposits ²	639.06	686.46	786.59	904.04	1,038.30
Narrow money supply (M1) ³	920.92	1,000.34	1,116.67	1,253.38	1,428.77
Memo:					
Transferable deposits in foreign currencies	456.44	510.55	592.05	717.77	785.20
Outstanding value on e-money storage	nav	nav	nav	nav	nav

¹ Includes commemorative coins. ² Customers' demand deposits placed with licensed banks. ³ Notes and coins in circulation and customers' demand deposits placed with licensed banks.

Table 3 Settlement media used by banks

(HKD billions, end of period unless otherwise stated)

	2012	2013	2014	2015	2016
Transferable balances held at the central bank ¹	255.85	164.09	239.18	391.34	259.59
required reserves	nap	nap	nap	nap	nap
free reserves	nap	nap	nap	nap	nap
Transferable balances held at other banks	nap	nap	nap	nap	nap
Memo:					
Credit extended by the central bank: ²					
intraday ³	12,052.31	10,644.06	9,479.35	7,603.16	7,762.92
overnight ⁴	3.00	5.06	1.90	2.81	5.27
longer refinancing operations	nap	nap	nap	nap	nap
1 Closing balance of the aggregate balance of LIVD as	ttlamant aggrupt	2 Total for t	havoor ³ Lil	/D introduction	4 UKD

¹ Closing balance of the aggregate balance of HKD settlement accounts. ² Total for the year. ³ HKD intraday repos. ⁴ HKD discount window activities.

Table 4
Banknotes and coin
(HKD millions, end of year)

	2012	2013	2014	2015	2016
Total banknotes and coin issued	301,925	340,216	353,510	371,826	420,048
Total banknotes issued	291,675	329,325	342,165	360,165	407,795
HKD 1,000	169,229	190,766	168,724	169,101	190,896
HKD 500	74,105	85,681	116,700	131,741	152,354
		•	110,700	131,741 412	· ·
HKD 150	124	124			415
HKD 100	26,854	29,349	31,497	32,767	35,565
HKD 50	6,969	7,941	8,638	9,356	10,435
HKD 20	11,434	12,522	13,553	13,894	15,256
HKD 10	2,862	2,844	2,831	2,796	2,776
other denominations ¹	98	98	98	98	98
Total government notes issued	3,502	3,807	3,946	4,038	4,367
HKD 10	3,501	3,806	3,945	4,037	4,366
HKD 0.01 (demonetised)	1	1	1	1	1
Total coin issued	6,273	6,609	6,924	7,148	7,411
HKD 10	1,226	1,275	1,321	1,347	1,383
HKD 5	1,852	1,969	2,082	2,174	2,269
HKD 2	1,454	1,554	1,643	1,704	1,781
HKD 1	1,000	1,047	1,090	1,122	1,158
HKD 0.5	356	369	382	391	401
HKD 0.2	221	226	232	235	239
HKD 0.1	159	164	169	170	175
HKD 0.05 (demonetised)	5	5	5	5	5
TIND 0.03 (demonetised)	3	3	3	3	3
Commemorative coins	475	475	475	475	475
Banknotes and coin held by banks	20,060	26,337	23,424	22,486	29,578
Banknotes and coin in circulation outside banks ²	281,865	313,879	330,086	349,340	390,470
¹ HKD 25, 5 and 1 notes. ² Includes commemorative coi	•	•	•	•	· · · · · · · · · · · · · · · · · · ·

Table 5
Institutions offering payment services to non-banks (end of year)

	2012	2013	2014	2015	2016
Central bank					
Number of branches or offices ¹	0	0	0	0	0
Number of accounts, all	nap	nap	nap	nap	nap
Value of accounts	nap	nap	nap	nap	nap
Authorised institutions ²					
Number of institutions	200	201	203	199	195
Number of branches or offices	1,604	1,585	1,578	1,526	1,484
Number of accounts	nav	nav	nav	nav	nav
Value of accounts	nav	nav	nav	nav	nav
Licensed banks					
Number of institutions	155	156	159	157	156
Number of branches or offices	1,475	1,456	1,451	1,436	1,398
Restricted licence banks					
Number of institutions	21	21	21	24	22
Number of branches or offices	24	24	24	31	28
Deposit-taking companies					
Number of institutions	24	24	23	18	17
Number of branches or offices	105	105	103	59	58
Branches of foreign banks					
Number of institutions	141	143	145	142	140
Number of branches or offices	274	269	267	259	241

¹ The Hong Kong Monetary Authority has one overseas representative office (in New York); it does not offer payment services to non-banks. ² Licensed banks, restricted licence banks and deposit-taking companies. Each of these authorised institutions may be a branch of a foreign bank.

Table 6
Payment card functions and accepting devices (thousands, end of year)

	2012	2013	2014	2015	2016
Cards issued in the country					
Cards with a debit function	nav	nav	nav	nav	nav
Cards with a credit function ¹	17,437	18,123	18,510	19,044	19,184
Total number of cards (irrespective of the number					
of functions on the card)	nav	nav	nav	nav	nav

¹ This is the total number of credit cards issued in Hong Kong by American Express, China UnionPay, Diners Club, JCB, MasterCard and Visa.

Table 7
Indicators of the use of payment instruments and terminals by non-banks: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Card payments with cards issued in the country ¹	nav	nav	nav	nav	nav
payments by cards with a debit function	112.23	114.10	118.34	126.08	133.26
payments by cards with a credit function	431.62	462.11	482.01	515.88	556.39
¹ As some cards contain both debit and credit functions, th	is figure is not r	eadily available			

Table 8
Indicators of the use of payment instruments and terminals by non-banks: value of transactions (HKD billions, total for the year)

2012	2013	2014	2015	2016
nav	nav	nav	nav	nav
221.45	233.73	247.82	273.16	284.28
449.26	479.90	518.82	557.67	570.12
	nav 221.45	nav nav 221.45 233.73	nav nav nav 221.45 233.73 247.82	nav nav nav nav 221.45 233.73 247.82 273.16

¹ As some cards contain both debit and credit functions, this figure is not readily available.

Table 9
Participation in selected interbank funds transfer systems (end of year)

	2012	2013	2014	2015	2016
Large-value and retail payment systems					
CHATS ¹					
HKD CHATS					
Number of participants	152	154	159	156	153
Direct participants	152	154	159	156	153
Banks ²	151	153	158	155	152
Central bank	0	0	0	0	0
Other direct participants	1	1	1	1	1
General government	0	0	0	0	0
Postal institution	0	0	0	0	0
Clearing and settlement organisations	1	1	1	1	1
Other financial institutions	0	0	0	0	0
Other	0	0	0	0	0
USD CHATS					
Number of participants	222	223	222	219	217
Direct participants	92	94	100	100	105
Banks ²	91	93	99	99	104
Central bank	1	1	1	1	1
Indirect participants	130	129	122	119	112
EUR CHATS					
Number of participants	52	55	55	55	55
Direct participants	33	37	37	37	38
Banks ²	32	36	36	36	37
Central bank	1	1	1	1	1
Indirect participants	19	18	18	18	17
CNY CHATS					
Number of participants	174	184	199	219	212
Direct participants	174	184	199	219	212
Banks ²	129	136	142	143	142
Central bank	1	1	1	1	1
Other direct participants	44	47	56	75	69
General government	0	0	0	0	0
Postal institution	0	0	0	0	0
Clearing and settlement organisations	0	0	0	0	0
Other financial institutions	44	47	56	75	69
Other	0	0	0	0	0
Cheques					
In HKD					
Number of participants	138	136	137	133	133
Direct participants	138	136	137	133	133
Banks	138	136	137	133	133
In USD					
Number of participants	103	105	110	109	114
Direct participants	83	84	88	87	93
Banks	83	84	88	87	93
Indirect participants	20	21	22	22	21
In RMB					
Number of participants	77	82	82	82	84
Direct participants	77 	82	82	82	84
Banks	77	82	82	82	84
For the footnotes, see the end of the table.					

Table 9 (cont)					
	2012	2013	2014	2015	2016
ECG ³					
In HKD					
Number of participants	107	106	106	134	134
Direct participants	107	106	106	134	134
Banks	107	106	106	134	134
In USD					
Number of participants	32	32	33	110	115
Direct participants	32	32	33	88	94
Banks	32	32	33	88	94
Indirect participants	nav	nav	nav	22	21
In RMB					
Number of participants	47	48	49	91	91
Direct participants	47	48	49	91	91
Banks	47	48	49	91	91

¹ Clearing House Automated Transfer System; this is the RTGS system originally designed for HKD interbank payments. ² Bank refers to licensed bank and restricted licence bank, if applicable. ³ ECG refers to various types of bulk electronic payments to be cleared and settled through the clearing house on a multilateral netting basis.

Table 10
Payments processed by selected interbank funds transfer systems: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Large-value and retail payment systems					
CHATS ¹ HKD CHATS Concentration ratio in terms of volume	5.683	6.090	6.415	6.885	7.014
	58.572	58.273	57.446	56.187	58.000
USD CHATS Concentration ratio in terms of volume	3.817	4.342	4.675	4.929	5.510
	59.506	61.653	60.573	58.781	56.870
EUR CHATS Concentration ratio in terms of volume	0.108	0.118	0.131	0.141	0.146
	72.370	73.613	73.927	73.069	70.930
RMB CHATS Concentration ratio in terms of volume	1.087	1.560	2.972	4.252	3.814
	48.000	44.000	50.681	48.328	49.150
Cheques ² In HKD Concentration ratio in terms of volume	105.741	103.022	100.806	98.478	93.163
	nav	nav	nav	nav	nav
In USD	1.781	1.786	1.788	1.623	1.560
Concentration ratio in terms of volume	nav	nav	nav	nav	nav
In RMB	0.281	0.484	0.656	0.598	0.389
Concentration ratio in terms of volume	nav	nav	nav	nav	nav
ECG ^{2,3} In HKD Concentration ratio in terms of volume	86.385	90.382	94.415	98.691	99.616
	nav	nav	nav	nav	nav
In USD	0.005	0.013	0.011	0.011	0.016
Concentration ratio in terms of volume	nav	nav	nav	nav	nav
In RMB Concentration ratio in terms of volume	0.020	0.030	0.034	0.095	0.135
	nav	nav	nav	nav	nav

¹ Clearing House Automated Transfer System; this is the RTGS system originally designed for HKD interbank payments. The reported figures include only large-value interbank payments but not the net settlement of Cheques and ECG in the systems. ² The reported figures are on a gross basis before netting. ³ ECG refers to various types of bulk electronic payments to be cleared and settled through the clearing house on a multilateral netting basis.

Table 11
Payments processed by selected interbank funds transfer systems: value of transactions (HKD billions, total for the year)

	2012	2013	2014	2015	2016
Large-value and retail payment systems					
CHATS ¹ HKD CHATS Concentration ratio in terms of value	122,601	121,972	134,802	151,637	145,489
	48.283	49.014	50.306	49.555	48.000
USD CHATS Concentration ratio in terms of value	31,400	33,010	40,680	45,581	50,383
	64.218	58.407	59.787	59.198	65.000
EUR CHATS Concentration ratio in terms of value	1,433	1,419	1,480	776	682
	94	97	96	87	87
RMB CHATS Concentration ratio in terms of value	61,018	113,296	214,036	271,180	234,358
	nav	nav	nav	nav	nav
Cheques ² In HKD Concentration ratio in terms of value	6,886	7,196	7,620	7,891	7,249
	nav	nav	nav	nav	nav
In USD	544	565	610	594	646
Concentration ratio in terms of value	nav	nav	nav	nav	nav
In RMB	97	161	219	226	145
Concentration ratio in terms of value	nav	nav	nav	nav	nav
ECG ^{2,3} In HKD Concentration ratio in terms of value	15,251	18,948	20,932	25,066	15,827
	nav	nav	nav	nav	nav
In USD	11	26	21	28	35
Concentration ratio in terms of value	nav	nav	nav	nav	nav
In RMB Concentration ratio in terms of value	29	42	101	336	301
	nav	nav	nav	nav	nav

¹ Clearing House Automated Transfer System; this is the RTGS system originally designed for HKD interbank payments. The reported figures include only large-value interbank payments but not the net settlement of cheques and ECG in the systems. ² The reported figures are on a gross basis before netting. ³ ECG refers to various types of bulk electronic payments to be cleared and settled through the clearing house on a multilateral netting basis.

Table 12
Participation in SWIFT by domestic institutions (end of year)

	2012	2013	2014	2015	2016
Members	22	21	21	21	22
of which: live	22	21	21	21	22
Sub-members	185	188	190	193	189
of which: live	179	182	185	186	185
Participants	44	47	50	60	65
of which: live	38	45	46	54	59
Total users	251	256	261	274	276
of which: live	239	248	252	261	266
Мето:					
Total SWIFT users	10,279	10,583	10,805	11,094	11,299
members	2,398	2,389	2,379	2,455	2,422
sub-members	3,340	<i>3,34</i> 3	3,353	3,395	3,367
participants	4,541	4,851	5,073	5,244	5,510
Source: SWIFT.					

Table 13 SWIFT message flows to/from domestic users (thousands, total for the year)

2012 2013 2014 2015 2016 Total messages sent 117,540 137,587 159,560 186,710 196,321 of which: category I 21,577 25,210 26,456 27,098 28,099 category II 10,015 11,648 12,924 14,633 14,339 Total messages received 130,467 178,684 190,034 108,516 152,577 of which: 22,840 26,337 29,419 category I 27,800 31,550 category II 9,756 12,338 14,882 14,866 8,129 Domestic traffic 35,440 47,110 55,006 66,123 71,402 Memo:

4,589,109

5,065,668

5,612,724

Global SWIFT traffic

Source: SWIFT.

6,106,644 6,525,800

Table 14
Number of participants in exchanges and trading systems (end of year)

	2012	2013	2014	2015	2016
Hong Kong Stock Exchange					
Total number of participants	550	543	540	550	592
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	nap	nap	nap	nap	nap
other	550	<i>54</i> 3	540	550	592
Number of domestic participants	nav	nav	nav	nav	nav
Number of foreign participants	nav	nav	nav	nav	nav

Table 15 Number of listed securities

(end of year)

	2012	2013	2014	2015	2016
Hong Kong Stock Exchange					
Total number of listed securities	6,903	8,522	9,060	9,015	8,591
debt securities	269	403	640	762	892
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	1,548	1,644	1,753	1,867	1,974
other ¹	5,086	6,475	6,667	6,386	5,725

¹ Including preference shares, registered/derivative warrants, Callable Bull/Bear Contracts (CBBCs), equity-linked instruments, unit trusts/mutual funds and rights.

Table 16 Market capitalisation of listed companies

(HKD billions, end of year)

	2012	2013	2014	2015	2016
Hong Kong Stock Exchange					_
Total market capitalisation/equity	21,950.1	24,042.8	25,071.8	24,683.7	24,761.3

Table 17

Number of executed trades

(thousands, total for the year)

	2012	2013	2014	2015	2016
Hong Kong Stock Exchange					
Total number of executed securities trades	191,611	229,472	262,447	355,757	264,854
debt securities	nav	nav	nav	nav	nav
equity	nav	nav	nav	nav	nav
other ¹	191,611	229,472	262,447	355,757	264,854
Total number of executed derivatives trades	nap	nap	nap	nap	nap

¹ Including equity, debts, preference shares, registered/derivative warrants, equity-linked instruments, CBBCs, unit trusts/ mutual funds, rights and depository receipts.

Table 18

Value of executed trades

(HKD billions, total for the year)

	2012	2013	2014	2015	2016
Hong Kong Stock Exchange ¹					
Total value of executed securities trades	13,301.0	15,264.7	17,156.2	26,090.9	16,396.5
debt securities	nav	nav	nav	nav	nav
equity	nav	nav	nav	nav	nav
other ²	13,301.0	15,264.7	17,156.2	26,090.9	16,396.5
Total value of executed derivatives trades	nap	nap	nap	nap	nap

¹ Data for 2012 adjusted. ² Including equity, debts, preference shares, registered/derivative warrants, equity-linked instruments, CBBCs, unit trusts/ mutual funds, rights and depository receipts.

Table 19

Number of clearing members

(end of year)

	2012	2013	2014	2015	2016
HKSCC ¹					
Total number of clearing members	24,344	24,573	24,884	25,286	25,630
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	nap	nap	nap	nap	nap
other ²	24,344	24,573	24,884	25,286	25,630
Number of domestic clearing members	nap	nap	nap	nap	nap
Number of foreign clearing members	nap	nap	nap	nap	nap

¹ In the previous Red Book, data for this central counterparty can be found under the acronym CCASS, the Central Clearing and Settlement System operated by Hong Kong Securities Clearing Company Limited (HKSCC). ² Including clearing, custodian, stock pledgee, clearing agency and investor participants.

Table 20

Number of contracts and transactions cleared¹

(thousands, total for the year)

	2012	2013	2014	2015	2016
HKSCC ²					
Total number of contracts and transactions cleared	14,048	16,630	18,591	21,689	17,157
Number of securities transactions cleared	14,048	16,630	18,591	21,689	17,157
debt securities	nav	nav	nav	nav	nav
equity	nav	nav	nav	nav	nav
other ³	14,048	16,630	18,591	21,689	17,157
of which: number of repurchase transactions cleared	nap	nap	nap	nap	nap
Number of exchange-traded derivatives contracts cleared	nap	nap	nap	nap	nap
Number of OTC derivatives contracts cleared	nap	nap	nap	nap	nap

¹ Number of contracts and transactions cleared refers to the number of Continuous Net Settlement (CNS) stock positions settled after netting of CNS trades. ² In the previous Red Book, data for this central counterparty can be found under the acronym CCASS, the Central Clearing and Settlement System operated by Hong Kong Securities Clearing Company Limited (HKSCC). ³ Including equity, debts, preference shares, registered/derivative warrants, equity-linked instruments, CBBCs, unit trusts/ mutual funds, rights and depository receipts.

Table 21
Value of contracts and transactions cleared

(HKD billions, total for the year)

	2012	2013	2014	2015	2016
HKSCC ¹					
Total value of contracts and transactions cleared	24,222.7	28,037.8	31,668.6	47,738.3	30,689.2
Value of securities transactions cleared	24,222.7	28,037.8	31,668.6	47,738.3	30,689.2
debt securities	nav	nav	nav	nav	nav
equity	nav	nav	nav	nav	nav
other ²	24,222.7	28,037.8	31,668.6	47,738.3	30,689.2
of which: value of repurchase transactions					
cleared	nap	nap	nap	nap	nap
Value of exchange-traded derivatives contracts					
cleared	nap	nap	nap	nap	nap
Value of OTC derivatives contracts cleared	nap	nap	nap	nap	nap

¹ In the previous Red Book, data for this central counterparty can be found under the acronym CCASS, the Central Clearing and Settlement System operated by Hong Kong Securities Clearing Company Limited (HKSCC). ² Including equity, debts, preference shares, registered/ derivative warrants, equity-linked instruments, CBBCs, unit trusts/mutual funds, rights and depositary receipts.

Table 22 Number of direct participants in CSDs (end of year)

	2012	2013	2014	2015	2016
HKSCC ¹					
Total number of participants	24,344	24,573	24,884	25,286	25,630
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
central securities depositories	nav	nav	nav	nav	nav
banks	40	36	35	36	35
other ²	24,304	24,537	24,849	25,250	25,595
Number of domestic participants	nap	nap	nap	nap	nap
Number of foreign participants	nap	nap	nap	nap	nap
CMU ³					
Total number of participants	180	184	205	206	202
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
central securities depositories	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of domestic participants	nav	nav	nav	nav	nav
Number of foreign participants	nav	nav	nav	nav	nav

¹In the previous Red Book, data for this central counterparty can be found under the acronym CCASS, the Central Clearing and Settlement System operated by Hong Kong Securities Clearing Company Limited (HKSCC). ² Including brokers, investors, clearing agency and stock pledgee participants. ³ CMU is a CSD which provides clearing and settlement services for debt securities in Hong Kong SAR. These services are integrated with the depository services.

Table 23
Number of securities held on accounts at CSDs (thousands, end of year)

	2012	2013	2014	2015	2016
HKSCC ¹					
Total number of securities held	6,725	8,217	8,529	8,362	7,807
debt securities	83	91	102	106	106
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	1,554	1,649	1,756	1,869	1,976
other ²	5,088	6,477	6,671	6,387	5,725
CMU ³					
Total number of securities held	2.025	2.211	2.240	2.069	1.942
debt securities	2.025	2.211	2.240	2.069	1.942
short-term paper	0.889	0.972	0.973	0.791	0.739
bonds	1.136	1.239	1.267	1.278	1.203

¹In the previous Red Book, data for this central counterparty can be found under the acronym CCASS, the Central Clearing and Settlement System operated by Hong Kong Securities Clearing Company Limited (HKSCC).² Including preference shares, registered/derivative warrants, equity-linked instruments, CBBCs, unit trust/mutual funds, rights and depository receipts. ^{2 3}CMU is a CSD which provides clearing and settlement services for debt securities in Hong Kong SAR. These services are integrated with the depository services.

Table 24
Value of securities held on accounts at CSDs (HKD billions, end of year)

	2012	2013	2014	2015	2016
HKSCC ¹					
Total value of securities held	12,330.06	13,878.91	14,911.89	15,071.15	15,381.54
debt securities	nav	nav	nav	nav	nav
equity	nav	nav	nav	nav	nav
other ²	12,330.06	13,878.91	14,911.89	15,071.15	15,381.54
CMU ³					
Total value of securities held	1,542.07	1,787.59	1,827.33	1,868.77	1,974.97
debt securities	1,542.07	1,787.59	1,827.33	1,868.77	1,974.97
short-term paper	871.11	1,007.92	990.77	1,051.53	1,188.95
bonds	670.96	779.67	836.56	817.25	786.01

¹In the previous Red Book, data for this central counterparty can be found under the acronym CCASS, the Central Clearing and Settlement System operated by Hong Kong Securities Clearing Company Limited (HKSCC). ²Including equity, debts, preference shares, registered/derivative warrants, equity-linked instruments, CBBCs, unit trusts/ mutual funds, rights and depository receipts. ³CMU is a CSD which provides clearing and settlement services for debt securities in Hong Kong SAR. These services are integrated with the depository services.

Table 25 Number of delivery instructions processed

(thousands, total for the year)

	2012	2013	2014	2015	2016
HKSCC ¹					
Total number of delivery instructions ²	18,029	20,196	21,761	24,759	20,450
DVP	nav	nav	nav	nav	nav
free of payment	nav	nav	nav	nav	nav
СМИ					
Total number of delivery instructions	88.565	92.480	97.870	86.165	73.375
DVP	46.546	46.038	53.835	43.394	30.064
debt securities	46.546	46.038	53.835	43.394	30.064
short-term paper	15.803	15.243	15.700	8.034	6.937
bonds	30.743	30.795	38.135	35.360	23.127
free of payment	42.019	46.442	44.035	42.771	43.311
debt securities	42.019	46.442	44.035	42.771	43.311
short-term paper	15.993	12.790	14.958	6.466	8.465
bonds	26.026	33.652	29.077	36.305	34.846

¹In the previous Red Book, data for this central counterparty can be found under the acronym CCASS, the Central Clearing and Settlement System operated by Hong Kong Securities Clearing Company Limited (HKSCC). ² Both delivering and receiving instructions are counted.

Table 26 Value of delivery instructions processed

(HKD billions, total for the year)

	2012	2013	2014	2015	2016
HKSCC ¹					
Total value of delivery instructions ²	43,797.48	52,497.39	50,217.04	62,187.95	44,603.85
DVP	nav	nav	nav	nav	nav
free of payment	nav	nav	nav	nav	nav
СМИ					
Total value of delivery instructions	6,470.70	5,777.34	5,384.87	3,857.15	3,755.13
DVP	5,909.51	5,194.64	4,796.82	3,332.00	3,164.75
debt securities	5,909.51	5,194.64	4,796.82	3,332.00	3,164.75
short-term paper	5, 199.08	4,532.80	4,006.45	2,600.77	2,625.72
bonds	710.43	661.84	790.37	731.23	539.03
free of payment	561.19	582.70	588.05	525.15	590.39
debt securities	561.19	582.70	588.05	525.15	590.39
short-term paper	322.34	347.11	311.63	304.45	362.77
bonds	238.85	235.59	276.42	220.70	227.62

¹In the previous Red Book, data for this central counterparty can be found under the acronym CCASS, the Central Clearing and Settlement System operated by Hong Kong Securities Clearing Company Limited (HKSCC). ² Both delivering and receiving instructions are counted.

Table 1
Basic statistical data

	2012	2013	2014	2015	2016
Population (millions)	1,217	1,233	1,267	1,283	1,299
GDP (INR billions)	99,513.4	112,727.6	124,882.1	135,760.9	151,837.1
GDP per capita (INR)	81,769	91,425	98,565	105,815	116,888
Consumer price inflation (%)	7.5	6.3	6.4	4.9	4.9
Exchange rate (INR/USD):					
end of year	54.78	61.90	63.33	66.33	67.95
average	53.49	58.65	61.02	64.13	67.21

Table 2 Settlement media used by non-banks

(INR billions, end of year)

	2012	2013	2014	2015	2016
Notes and coin in circulation outside banks	11,301.2	12,476.3	13,863.3	15,972.2	12,636.7
Value of transferable deposits	10,739.0	12,340.9	13,563.1	14,916.6	19,547.6
Narrow money supply (M1)	18,128.7	19,896.9	21,885.8	24,581.5	20,004.6
Memo:					
Transferable deposits in foreign currencies	nap	nap	nap	nap	nap
Outstanding value on e-money storage	10.115	10.436	13.919	21.006	34.457
on card-based products	5.153	4.926	7.791	10.823	14.527
on software- or network-based products	4.96171	5.51017	6.128	10.183	19.929

Table 3 Settlement media used by banks

(INR billions, average for December)

2012	2013	2014	2015	2016
3,206.7	4,297.0	4,655.6	5,018.3	5,441.3
3,019.1	4,070.9	4,396.8	4,739.3	5,088.2
nav	nav	nav	nav	nav
nav	nav	nav	nav	nav
nav	nav	nav	nav	nav
nav	nav	nav	nav	nav
nav	nav	nav	nav	nav
	3,206.7 3,019.1 nav nav	3,206.7 4,297.0 3,019.1 4,070.9 nav nav nav nav nav nav	3,206.7 4,297.0 4,655.6 3,019.1 4,070.9 4,396.8 nav nav nav nav nav nav nav nav nav nav	3,206.7 4,297.0 4,655.6 5,018.3 3,019.1 4,070.9 4,396.8 4,739.3 nav

Table 4
Banknotes and coin
(INR billions, end of year)

	2012	2013	2014	2015	2016
Total banknotes and coin issued	11,800.37	13,006.96	14,482.95	16,634.32	13,352.34
Total banknotes issued ¹	11,650.20	12,833.54	14,291.95	16,418.80	13,105.14
INR 1,000	4,299.00	5,081.37	5,612.45	6,325.68	89.25
INR 500	5,359.50	5,702.48	6,563.91	7,853.75	2,940.98
INR 100	1,442.10	1,476.46	1,502.65	1,577.83	2,528.01
INR 50	173.05	172. 4 2	174.36	194.50	355.64
INR 20	76.50	85.69	86.99	98.47	203.15
INR 10	251.68	266.48	303.04	320.15	369.29
INR 5	36.87	37.14	37.02	36.80	36.45
Total coin issued	150.17	173.42	191.00	215.52	247.20
of which:					
INR 10	12.67	20.00	27.50	37.03	52.04
INR 5	53.38	58.00	63.80	<i>70.4</i> 5	78.91
INR 2	44.23	50.00	54.07	59.26	64.11
INR 1	32.89	<i>38.4</i> 2	38.63	41.78	45.14
other	7.00	7.00	7.00	7.00	7.00
Banknotes and coin held by banks	499.14	527.27	619.63	662.09	715.60
Banknotes and coin in circulation outside banks	11,301.23	12,476.28	13,863.32	15,972.23	12,636.74

¹ Including banknotes in INR 2,000, INR2 and INR 1 denominations.

Table 5
Institutions offering payment services to non-banks (end of year)

	2012	2013	2014	2015	2016
Central bank					
Number of branches or offices	17	17	20	20	20
Number of accounts (thousands)	0.084	0.084	0.048	0.051	0.051
Value of accounts, all (INR billions)	2,024.8	2,327.0	4,624.0	4,953.7	5,414.6
Memo:					
Number of accounts, banks (thousands) ¹	0.146	0.147	0.336	0.345	0.375
Banks					
Number of institutions	1,759	1,740	1,730	1,726	1,713
Number of branches or offices	122,092	128,193	136,964	144,164	148,629
Number of accounts (thousands)	nav	nav	nav	nav	nav
of which: number of internet/PC-linked accounts					
(thousands)	nav	nav	nav	nav	nav
Value of accounts (INR billions)	79,139.8	90,836.3	100,584.5	107,938.0	119,188.0
Public sector banks					
Number of institutions	26	27	27	27	27
Number of branches or offices	73,818	81,750	87,278	90,420	92,440
Value of accounts (INR billions)	57,457.0	65,890.2	71,954.8	74,861.8	80,792.7
Private banks					
Number of institutions	20	20	20	21	21
Number of branches or offices	21,985	18,090	20,070	22,799	24,672
Value of accounts (INR billions)	13,958.4	15,916.9	18,344.7	21,476.7	25,648.4
Regional rural banks					
Number of institutions	62	57	56	56	56
Number of branches or offices	17,096	18,426	19,472	20,416	21,057
Value of accounts (INR billions)	2,064.6	2,333.7	2,662.1	3,066.2	3,650.6
Urban co-operative banks ²					
Number of institutions	1,606	1,589	1,579	1,574	1,562
Number of branches or offices	8,790	9,526	9,722	10,091	10,091
Value of accounts (INR billions)	2,769.0	3,155.0	3,551.3	3,921.8	4,434.7
Non-scheduled commercial banks	,	•	,	,	•
Number of institutions	4	4	4	4	3
Number of branches or offices	79	90	106	118	80
Value of accounts (INR billions)	13.1	16.2	20.1	23.9	6.4
Branches of foreign banks					
Number of institutions	41	43	44	44	44
Number of branches or offices	324	311	316	320	289
Value of accounts (INR billions)	2,877.8	3,524.2	4,051.5	4,587.6	4,655.2
Other institutions offering payment services to n	on-banks: po	ost office			
Number of institutions ³	1	1	1	1	1
Number of branches or offices	nav	nav	nav	nav	nav
Value of accounts (INR billions)	nav	nav	nav	nav	nav
For the footnotes, see the end of the table.					

Table 5 (cor	

	2012	2013	2014	2015	2016
Institutions offering payment services to non-bar	nks (total)				
Number of institutions	1,761	1,742	1,732	1,728	1,715
Number of branches or offices	122,109	128,210	136,984	144,184	148,649
Number of accounts held by non-banks					
(thousands)	nav	nav	nav	nav	nav
of which: number of internet/PC-linked accounts Value of accounts held by non-banks	nav	nav	nav	nav	nav
(INR billions)	81,164.6	93,163.3	105,208.5	112,891.7	124,602.6
Memo:					
Electronic money institutions					
Number of institutions	nav	nav	nav	nav	nav
Outstanding value on e-money storages issued by					
e-money institutions	10,114.8	10,436.3	13,919.2	21,005.9	34,456.7
¹ For Mumbai only. ² Includes schedule and non-sch payment services.	edule urban c	ooperative bar	nks. ³ Depart	tment of Post	also provides

Table 6
Payment card functions and accepting devices (millions, end of year)

	2012	2013	2014	2015	2016
Cards issued in the country					
Cards with a cash function ¹	351.19	414.04	575.03	686.57	885.29
Cards with a debit function	331.20	394.42	553.45	661.54	854.87
Cards with a delayed debit function	0.44	0.43	0.46	0.53	0.58
Cards with a credit function	19.55	19.18	21.11	24.51	29.84
Cards with an e-money function	12.44	9.63	17.47	61.36	72.75
of which: cards with an e-money function which					
have been loaded at least once	nav	nav	nav	nav	nav
Total number of cards (irrespective of the number					
of functions on the card)	351.19	414.04	575.03	686.57	885.29
of which: cards with a combined debit, cash and e-					
money function ²	331.20	394.42	<i>553.45</i>	661.54	854.87
Memo:					
Retailer cards	nap	nap	nap	nap	nap
Terminals located in the country					
ATMs	0.114	0.162	0.189	0.212	0.222
ATMs with a cash withdrawal function	0.114	0.162	0.189	0.212	0.222
ATMs with a credit transfer function	nap	nap	nap	nap	nap
POS terminals	0.846	1.066	1.127	1.386	2.529
EFTPOS terminals	0.846	1.066	1.127	1.386	2.529
E-money card terminals	nav	nav	nav	nav	nav
¹ Cooperative bank data not available. ² Figures relate to	debit cards onl	V.			

Table 7
Indicators of the use of payment instruments and terminals by non-banks: volume of transactions (millions, total for the year)

Credit transfers 588.0 881.1 1,471.8 2,751.4 3,441.2 paper-based 586.0 981.1 1,471.8 2,751.4 3,441.2 Direct debits 176.5 192.9 230.1 2,826.3 364.1 Card payments with cards issued in the country 6,414.3 7,241.6 8,514.3 10,067.7 12,085.2 payments by cards with a debit function 5,999.2 6,771.9 7,872.5 9,247.0 10,962.7 payments by cards with a delayed debit function 399.1 512.0 619.4 791.7 10,983.7 payments by cards with a cedit function 399.1 512.0 619.4 791.7 10,983.7 by cards with an e-money function nav		2012	2013	2014	2015	2016
paper-based nap non-paper-based 586 0 981.1 1,471.8 2,751.4 3,441.2 3.441.2 3,441.2 Direct debits 176.5 192.9 230.1 283.6 384.3 3.441.2 0,285.2 Card payments with cards issued in the country payments by cards with a debit function payments by cards with a debit function payments by cards with a debit function payment by cards with a cerelit function function for payments by cards with a cerelit function function for payment by cards with a cerelit function f	Transactions per type of payment instrument					
non-paper-based 586.0 981.1 1,471.8 2,751.4 3,441.2 Direct debits 176.5 192.9 23.01 286.6 364.9 Card payments with cards issued in the country payments by cards with a debit function payments by cards with a delayed debit function 5,999.2 6,711.9 7,672.5 9,247.0 10,962.4 payments by cards with a delayed debit function payment transactions with a credit function 399.1 512.0 619.4 791.7 1,903.5 E-money payment transactions 66.1 133.6 310.7 748.0 1,963.5 by cards with an e-money function function function in the country through other e-money storages nav nav <td></td> <td></td> <td></td> <td>,</td> <td>·</td> <td>· ·</td>				,	·	· ·
Direct debits 176.5 192.9 230.1 288.6 364.9 Card payments with cards issued in the country payments by cards with a debit function payments by cards with a debit function payments by cards with a debit function 6,999.2 6,711.9 7,287.5 9,247.0 10,982.4 payments by cards with a debit function 16.0 17.7 22.4 29.0 29.0 29.0 29.0 29.0 29.0 29.0 29.0 <	• •	•	•	•	•	•
Card payments with cards issued in the country payments by cards with a debit function 5,999.2 6,711.9 7,872.5 9,247.0 10,962.4 payments by cards with a delayed debit function 16.0 17.7 22.4 29.0 29.4 payments by cards with a credit function 399.1 512.0 619.4 791.7 1,093.5 E-money payment transactions 66.1 133.6 31.07 748.0 1,963.7 by cards with an e-money function nav nav <td< td=""><td>• •</td><td></td><td></td><td></td><td>•</td><td>•</td></td<>	• •				•	•
payments by cards with a debit function 5,999.2 6,711.9 7,872.5 9,247.0 10,962.4 payments by cards with a delayed debit function 16.0 17.7 22.4 29.0 29.4 E-money payment transactions 66.1 133.6 310.7 748.0 1,993.7 E-money payment transactions by cards with an e-money function nav n						
payments by cards with a delayed debit function 16.0 17.7 22.4 29.0 29.4 E-money payment transactions 66.1 133.6 310.7 748.0 1,993.5 by cards with an e-money function nav nav nav nav nav through other e-money storages 1,313.7 1,257.3 1,195.8 1,096.4 1,206.7 Other payment instruments nap nap <td< td=""><td>· ·</td><td>·</td><td></td><td></td><td></td><td></td></td<>	· ·	·				
payments by cards with a credit function 399.1 bit 1.00 bit 3.0 bit 3.10.0 bit 3.10.7 748.0 1,963.7 bit 3.10.0 bit 3.10.		•	,		•	
E-money payment transactions						
by cards with an e-money function through other e-money storages nav	payments by cards with a credit function	399.1	512.0	619.4	791.7	1,093.5
through other e-money storages nav	E-money payment transactions	66.1	133.6	310.7	748.0	1,963.7
Cheques 1,313.7 1,257.3 1,195.8 1,096.4 1,206.7 Other payment instruments nap nap nap nap nap Total number of transactions with payment instruments of which: cross-border transactions sent 8,556.6 9,806.6 11,382.5 14,952.1 19,061.6 of which: cross-border transactions sent nav nav<	by cards with an e-money function	nav	nav	nav	nav	nav
Other payment instruments nap nap nap nap nap Total number of transactions with payment instruments 8,556.6 9,806.6 11,382.5 14,952.1 19,061.6 of which: cross-border transactions sent nav nav nav nav nav Total transactions per type of terminal Total transactions at terminals in the country Cash transactions at terminals in the country 5,532.7 6,095.8 7,068.7 8,079.4 8,569.4 ATM cash withdrawals 5,532.7 6,095.8 7,068.7 8,079.4 8,569.4 ATM cash deposits* nav	through other e-money storages	nav	nav	nav	nav	nav
Total number of transactions with payment instruments	Cheques	1,313.7	1,257.3	1,195.8	1,096.4	1,206.7
Total number of transactions with payment instruments	Other payment instruments	nap	nap	nap	nap	nap
instruments 8,556.6 9,806.6 11,382.5 14,952.1 19,061.6 of which: cross-border transactions sent nav nav nav nav nav Memo: Cross-border transactions received nav nav nav nav nav Transactions per type of terminal Total transactions at terminals in the country S.532.7 6,095.8 7,068.7 8,079.4 8,569.4 ATM cash withdrawals 5,532.7 6,095.8 7,068.7 8,079.4 8,569.4 ATM cash deposits 1 nav		•	·			•
of which: cross-border transactions sent nav	Total number of transactions with payment					
of which: cross-border transactions sent nav	instruments	8,556.6	9,806.6	11,382.5	14,952.1	19,061.6
Cross-border transactions received nav nav nav nav Transactions per type of terminal Total transactions at terminals in the country Cash transactions 5,532.7 6,095.8 7,068.7 8,079.4 8,569.4 ATM cash withdrawals 5,532.7 6,095.8 7,068.7 8,079.4 8,569.4 ATM cash deposits¹ nav nap	of which: cross-border transactions sent	nav	nav		nav	nav
Cross-border transactions received nav nav nav nav Transactions per type of terminal Total transactions at terminals in the country Cash transactions 5,532.7 6,095.8 7,068.7 8,079.4 8,569.4 ATM cash withdrawals 5,532.7 6,095.8 7,068.7 8,079.4 8,569.4 ATM cash deposits¹ nav nap						
Transactions per type of terminal Total transactions at terminals in the country 5,532.7 6,095.8 7,068.7 8,079.4 8,569.4 ATM cash withdrawals 5,532.7 6,095.8 7,068.7 8,079.4 8,569.4 ATM cash withdrawals 5,532.7 6,095.8 7,068.7 8,079.4 8,569.4 ATM cash deposits¹ nav nap	Memo:					
Total transactions at terminals in the country Cash transactions 5,532.7 6,095.8 7,068.7 8,079.4 8,569.4 ATM cash withdrawals 5,532.7 6,095.8 7,068.7 8,079.4 8,569.4 ATM cash deposits¹ nav nav nav nav nav POS payment transactions 865.7 1,091.1 1,423.2 1,959.3 3,486.4 E-money card loading/unloading transactions nap nap <td>Cross-border transactions received</td> <td>nav</td> <td>nav</td> <td>nav</td> <td>nav</td> <td>nav</td>	Cross-border transactions received	nav	nav	nav	nav	nav
Total transactions at terminals in the country Cash transactions 5,532.7 6,095.8 7,068.7 8,079.4 8,569.4 ATM cash withdrawals 5,532.7 6,095.8 7,068.7 8,079.4 8,569.4 ATM cash deposits¹ nav nav nav nav nav POS payment transactions 865.7 1,091.1 1,423.2 1,959.3 3,486.4 E-money card loading/unloading transactions nap nap <td>Transactions per type of terminal</td> <td></td> <td></td> <td></td> <td></td> <td></td>	Transactions per type of terminal					
Cash transactions 5,532.7 6,095.8 7,068.7 8,079.4 8,569.4 ATM cash withdrawals 5,532.7 6,095.8 7,068.7 8,079.4 8,569.4 ATM cash deposits¹ nav nap						
ATM cash withdrawals 5,532.7 6,095.8 7,068.7 8,079.4 8,569.4 ATM cash deposits 1 nav nap nap <t< td=""><td>•</td><td>5 532 7</td><td>6 095 8</td><td>7 068 7</td><td>8 079 4</td><td>8 569 4</td></t<>	•	5 532 7	6 095 8	7 068 7	8 079 4	8 569 4
ATM cash deposits¹ nav nap		·	•	•	•	•
POS payment transactions 865.7 1,091.1 1,423.2 1,959.3 3,486.4 E-money card loading/unloading transactions nap		-	•	-	•	-
E-money card loading/unloading transactions nap E-money card payment transactions nap 66.1 nap 133.6 nap 310.7 nap 748.0 1,963.7 a) Transactions at terminals in the country by cards issued in the country 5,525.4 6,087.3 7,059.9 8,071.5 8,561.3 ATM cash withdrawals 5,525.4 6,087.3 7,059.9 8,071.5 8,561.3 ATM cash deposits 1 nav nav <td< td=""><td>•</td><td></td><td></td><td></td><td></td><td></td></td<>	•					
E-money card payment transactions 66.1 133.6 310.7 748.0 1,963.7 a) Transactions at terminals in the country by cards issued in the country Cash transactions 5,525.4 6,087.3 7,059.9 8,071.5 8,561.3 ATM cash withdrawals 5,525.4 6,087.3 7,059.9 8,071.5 8,561.3 ATM cash deposits1 nav nav<	· ·		•	•	·	•
a) Transactions at terminals in the country by cards issued in the country Cash transactions 5,525.4 6,087.3 7,059.9 8,071.5 8,561.3 ATM cash withdrawals 5,525.4 6,087.3 7,059.9 8,071.5 8,561.3 ATM cash deposits 1 nav	•	•	•	•	•	•
Cash transactions 5,525.4 6,087.3 7,059.9 8,071.5 8,561.3 ATM cash withdrawals 5,525.4 6,087.3 7,059.9 8,071.5 8,561.3 ATM cash deposits 1 nav				310.7	740.0	1,963.7
ATM cash withdrawals 5,525.4 6,087.3 7,059.9 8,071.5 8,561.3 ATM cash deposits 1 nav nav <t< td=""><td>· · · · · · · · · · · · · · · · · · ·</td><td></td><td>-</td><td>7.050.0</td><td>0.074.5</td><td>0.504.0</td></t<>	· · · · · · · · · · · · · · · · · · ·		-	7.050.0	0.074.5	0.504.0
ATM cash deposits 1 nav		·	•	•	·	
POS payment transactions 850.3 1,075.0 1,405.0 1,936.3 3,451.3 E-money card loading/unloading transactions nav		*	•	•	*	•
E-money card loading/unloading transactions nav nav nav nav nav E-money card payment transactions 66.1 133.6 310.7 748.0 1,963.7 b) Transactions at terminals in the country by cards issued outside the country Cash transactions 7.3 8.4 8.8 7.9 8.1 ATM cash withdrawals 7.3 8.4 8.8 7.9 8.1 ATM cash deposits nap	·					
E-money card payment transactions 66.1 133.6 310.7 748.0 1,963.7 b) Transactions at terminals in the country by cards issued outside the country Cash transactions 7.3 8.4 8.8 7.9 8.1 ATM cash withdrawals 7.3 8.4 8.8 7.9 8.1 ATM cash deposits nap	· ·					
b) Transactions at terminals in the country by cards issued outside the country Cash transactions 7.3 8.4 8.8 7.9 8.1 ATM cash withdrawals 7.3 8.4 8.8 7.9 8.1 ATM cash deposits nap nap nap nap nap nap POS payment transactions 15.3 16.1 18.2 23.0 35.1 E-money card loading/unloading transactions nap nap nap nap nap nap E-money card payment transactions nap nap nap nap nap nap C) Transactions at terminals outside the country by cards issued in the country Cash transactions 5.4 5.9 6.8 7.6 7.8 ATM cash withdrawals 5.4 5.9 6.8 7.6 7.8 ATM cash deposits nap nap nap nap nap nap POS payment transactions 26.6 37.1 46.4 55.9 71.9 E-money card loading/unloading transactions nap nap nap nap nap						
Cash transactions7.38.48.87.98.1ATM cash withdrawals7.38.48.87.98.1ATM cash depositsnapnapnapnapnapnapPOS payment transactions15.316.118.223.035.1E-money card loading/unloading transactionsnapnapnapnapnapE-money card payment transactionsnapnapnapnapnapCash transactions at terminals outside the country by cards issued in the countryCash transactions5.45.96.87.67.8ATM cash withdrawals5.45.96.87.67.8ATM cash depositsnapnapnapnapnapPOS payment transactions26.637.146.455.971.9E-money card loading/unloading transactionsnapnapnapnapnapnap				310.7	748.0	1,963.7
ATM cash withdrawals7.38.48.87.98.1ATM cash depositsnapnapnapnapnapPOS payment transactions15.316.118.223.035.1E-money card loading/unloading transactionsnapnapnapnapnapE-money card payment transactionsnapnapnapnapnapC) Transactions at terminals outside the country by cards issued in the countryCash transactions5.45.96.87.67.8ATM cash withdrawals5.45.96.87.67.8ATM cash depositsnapnapnapnapnapnapPOS payment transactions26.637.146.455.971.9E-money card loading/unloading transactionsnapnapnapnapnapnap	,		•			
ATM cash depositsnapnapnapnapnapPOS payment transactions15.316.118.223.035.1E-money card loading/unloading transactionsnapnapnapnapnapE-money card payment transactionsnapnapnapnapnapc) Transactions at terminals outside the country by cards issued in the countryCash transactions5.45.96.87.67.8ATM cash withdrawals5.45.96.87.67.8ATM cash depositsnapnapnapnapnapPOS payment transactions26.637.146.455.971.9E-money card loading/unloading transactionsnapnapnapnapnapnap						
POS payment transactions 15.3 16.1 18.2 23.0 35.1 E-money card loading/unloading transactions nap		7.3	8.4	8.8	7.9	8.1
E-money card loading/unloading transactions nap	ATM cash deposits	nap	nap	nap	nap	nap
E-money card payment transactions nap	POS payment transactions	15.3	16.1	18.2	23.0	35.1
c) Transactions at terminals outside the country by cards issued in the country Cash transactions 5.4 5.9 6.8 7.6 7.8 ATM cash withdrawals 5.4 5.9 6.8 7.6 7.8 ATM cash deposits nap nap nap nap nap POS payment transactions 26.6 37.1 46.4 55.9 71.9 E-money card loading/unloading transactions nap nap nap nap	E-money card loading/unloading transactions	nap	nap	nap	nap	nap
Cash transactions 5.4 5.9 6.8 7.6 7.8 ATM cash withdrawals 5.4 5.9 6.8 7.6 7.8 ATM cash deposits nap	E-money card payment transactions	nap	nap	nap	nap	nap
ATM cash withdrawals 5.4 5.9 6.8 7.6 7.8 ATM cash deposits nap nap nap nap nap nap nap POS payment transactions 26.6 37.1 46.4 55.9 71.9 E-money card loading/unloading transactions nap nap nap nap	c) Transactions at terminals outside the country by c	ards issued in	the country			
ATM cash deposits nap nap nap nap nap nap POS payment transactions 26.6 37.1 46.4 55.9 71.9 E-money card loading/unloading transactions nap nap nap nap	Cash transactions	5.4	5.9	6.8	7.6	7.8
POS payment transactions 26.6 37.1 46.4 55.9 71.9 E-money card loading/unloading transactions nap nap nap nap	ATM cash withdrawals	5.4	5.9	6.8	7.6	7.8
E-money card loading/unloading transactions nap nap nap nap nap	ATM cash deposits	nap	nap	nap	nap	nap
E-money card loading/unloading transactions nap nap nap nap nap	•	-	-		-	-
	• •					
Emoney eard payment transactions trap trap trap trap trap trap	E-money card payment transactions	nap	nap	nap	nap	nap
¹ Some ATMs have the facility of cash deposit. This information is not collected.						<u> </u>

Table 8 Indicators of the use of payment instruments and terminals by non-banks: value of transactions (INR billions, total for the year)

	2012	2013	2014	2015	2016		
Transactions per type of payment instrument							
Credit transfers	707,634.7	780,744.2	817,011.3	912,028.8	1,106,350.5		
paper-based	nap	nap	nap	nap	nap		
non-paper-based	707,634.7	780,744.2	817,011.3	912,028.8	1,106,350.5		
Direct debits	1,083.1	1,268.7	1,804.7	2,496.0	3,692.4		
Card payments with cards issued in the country	18,765.1	22,323.8	25,736.8	29,634.9	30,541.3		
payments by cards with a debit function	17,393.4	20,612.5	23,621.9	26,960.6	26,901.8		
payments by cards with a delayed debit function	127.7	154.6	192.3	237.3	327.3		
payments by cards with a credit function	1,243.9	1,556.7	1,922.6	2,437.0	3,312.2		
E-money payment transactions	79.2	82.4	212.8	487.6	838.0		
by cards with an e-money function	nav	nav	nav	nav	nav		
through other e-money storages	<i>nav</i> 100,181.8	<i>nav</i> 93,438.2	<i>nav</i> 85,439.3	<i>nav</i> 81,860.8	<i>nav</i> 80,958.1		
Cheques Other payment instruments							
Other payment instruments	nap	nap	nap	nap	nap		
Total value of transactions with payment							
instruments	827,743.9	897,738.2	928,984.1	1,026,508.0	1,222,380.2		
of which: cross-border transactions sent	nap	nap	nap	nav	nav		
Memo:							
Cross-border transactions received	nap	nap	nap	nav	nav		
Transactions per type of terminal							
Total transactions at terminals in the country							
Cash transactions	16,664.50	19,674.83	22,431.92	25,401.77	23,631.12		
ATM cash withdrawals	16,664.50	19,674.83	22,431.92	25,401.77	23,631.12		
ATM cash deposits ¹	nav	nav	nav	nav	nav		
POS payment transactions	1,972.90	2,494.36	3,112.57	3,995.88	6,582.89		
E-money card loading/unloading transactions	nav	nav	nav	nap	nap		
E-money card payment transactions	78.67	80.87	212.85	487.58	838.01		
a) Transactions at terminals in the country by cards	issued in the	country					
Cash transactions	16,571.22	19,605.45	22,358.39	25,333.40	23,572.80		
ATM cash withdrawals	16,571.22	19,605.45	22,358.39	25,333.40	23,572.80		
ATM cash deposits	nav	nav	nav	nav	nav		
POS payment transactions	1,829.37	2,292.37	2,894.40	3,713.77	6,244.54		
E-money card loading/unloading transactions	nap	nap	nap	nav	nav		
E-money card payment transactions	78.67	80.87	212.85	487.58	838.01		
b) Transactions at terminals in the country by cards		•					
Cash transactions	93.28	69.37	73.53	68.37	58.32		
ATM cash withdrawals	93.28	69.37	73.53	68.37	58.32		
ATM cash deposits	nav	nav	nav	nap	nap		
POS payment transactions	143.53	201.99	218.18	282.11	338.35		
E-money card loading/unloading transactions	nap	nap	nap	nap	nap		
E-money card payment transactions	nap	nap	nap	nap	nap		
c) Transactions at terminals outside the country by		•					
Cash transactions	84.45	101.50	121.10	135.16	147.85		
ATM cash withdrawals	<i>84.4</i> 5	101.50	121.10	135.16	147.85		
ATM cash deposits	nav	nav	nav	nap	nap		
POS payment transactions	132.91	207.18	254.79	319.48	375.02		
E-money card loading/unloading transactions	nap	nap	nap	nap	nap		
E-money card payment transactions	nap	nap	nap	nap	nap		
Some ATMs have the facility of cash deposit. This information is not collected.							

Table 9
Participation in selected interbank funds transfer systems (end of year)

Direct participants		2012	2013	2014	2015	2016
Number of participants	Large-value payment systems					
Direct participants	RTGS					
Bank	Number of participants	160	172	177	192	193
Central bank	Direct participants	160	172	177	192	193
Other direct participants 14 14 12 14 General government nap <	Banks	145	157	164	177	185
General government	Central bank	1	1	1	1	1
Postal institution	Other direct participants	14	14	12	14	7
Clearing and settlement organisations	General government	nap	nap	nap	nap	nap
Other financial institutions 1 Other 9 nap	Postal institution	nap	nap	nap	nap	nap
Retail payment systems Cheque clearing Number of participants² 200 535 701 1,244 1,38 Direct participants 108 213 258 264 22 Banks 106 211 256 262 26 Central bank 1 <td>Clearing and settlement organisations</td> <td>5</td> <td>5</td> <td>6</td> <td>7</td> <td>1</td>	Clearing and settlement organisations	5	5	6	7	1
Cheque clearing Number of participants 108 213 258 264 27 262 262 262 263 264 27 263 263 264 27 263 264 27 263 264 27 263 27 263 27 263 27 263 27 263 27 263 27 263 27 27 27 27 27 27 27 2	Other financial institutions ¹	9	9	6	7	6
Cheque clearing	Other	nap	nap	nap	nap	nap
Number of participants² 200 535 701 1,244 1,38 Direct participants 108 213 258 264 22 Banks 106 211 256 262 26 Central bank 1 1 1 1 1 1 Other direct participants 1	Retail payment systems					
Direct participants 108 213 258 264 27 Banks 106 211 256 262 26 Central bank 1	Cheque clearing					
Banks	Number of participants ²	200	535	701	1,244	1,356
Central bank 1 <t< td=""><td>Direct participants</td><td>108</td><td>213</td><td>258</td><td>264</td><td>270</td></t<>	Direct participants	108	213	258	264	270
Other direct participants 1 <td>Banks</td> <td>106</td> <td>211</td> <td>256</td> <td>262</td> <td>268</td>	Banks	106	211	256	262	268
Postal institution 1	Central bank	1	1	1	1	1
Postal institution 1	Other direct participants	1	1	1	1	1
Number of participants		1	1	1	1	1
Number of participants 117 117 123 123 na Direct participants 117 117 123 123 na Banks 115 115 121 121 na Central bank 1 <td>Indirect participants³</td> <td>92</td> <td>322</td> <td>443</td> <td>980</td> <td>1,086</td>	Indirect participants ³	92	322	443	980	1,086
Direct participants 117 117 123 123 na Banks 115 115 121 121 na Central bank 11 1 1 1 1 1 na Other direct participants 11 1 1 1 1 1 na General government nav nav nav nav nav nav Postal institution 11 1 1 1 1 na Clearing and settlement organisations nav nav nav nav nav nav Other financial institutions nav nav nav nav nav nav nav Indirect participants nav nav nav nav nav nav nav NACH Number of participants nav 283 282 368 26 Direct participants nav 49 12 5 Banks Central bank nav nav nav nav nav nav nav Cother direct participants nav nav nav nav nav Central bank nav nav nav nav nav nav Central government nav nav nav nav nav nav Central government nav nav nav nav nav nav Postal institution nav nav nav nav nav nav Clearing and settlement organisations nav nav nav nav nav Clearing and settlement organisations	ECS/ NECS					
Direct participants 117 117 123 123 na Banks 115 115 121 121 na Central bank 11 1 1 1 1 1 na Other direct participants 11 1 1 1 1 1 na General government nav nav nav nav nav nav Postal institution 11 1 1 1 1 na Clearing and settlement organisations nav nav nav nav nav nav Other financial institutions nav nav nav nav nav nav nav Indirect participants nav nav nav nav nav nav nav NACH Number of participants nav 283 282 368 26 Direct participants nav 49 12 5 Banks Central bank nav nav nav nav nav nav nav Cother direct participants nav nav nav nav nav Central bank nav nav nav nav nav nav Central government nav nav nav nav nav nav Central government nav nav nav nav nav nav Postal institution nav nav nav nav nav nav Clearing and settlement organisations nav nav nav nav nav Clearing and settlement organisations	Number of participants	117	117	123	123	nav
Banks 115 115 121 121 na Central bank 1 1 1 1 1 1 1 na Other direct participants 1 1 1 1 1 1 1 na General government nav nav nav nav nav nav Postal institution 1 1 1 1 1 1 1 na Clearing and settlement organisations nav nav nav nav nav nav Other financial institutions nav nav nav nav nav nav Other nav nav nav nav nav nav nav nav Indirect participants nav nav nav nav nav nav nav NACH Number of participants nav 283 282 368 26 Direct participants nav 49 12 5 Banks nav nav nav nav nav nav nav nav Central bank nav nav nav nav nav nav Other direct participants nav nav nav nav nav Central bank nav nav nav nav nav nav Other direct participants nav nav nav nav nav nav Central finatitution nav nav nav nav nav nav Central finatitution nav nav nav nav nav nav Central institution nav nav nav nav nav nav Clearing and settlement organisations nav nav nav nav nav		117	117	123	123	nav
Other direct participants 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	· · · · ·	115	115	121	121	nav
General government nav	Central bank	1	1	1	1	nav
Postal institution 1 1 1 1 1 1 near Clearing and settlement organisations nav	Other direct participants	1	1	1	1	nav
Postal institution 1 1 1 1 1 1 near Clearing and settlement organisations nav	General government	nav	nav	nav	nav	nav
Other financial institutions Other Other Indirect participants NACH Number of participants nav nav nav nav nav nav nav nav nav na		1	1	1	1	nav
Other Indirect participantsnav navnav navnav navnav navNACHNumber of participantsnav28328236826Direct participantsnav49125BanksnavnavnavnavnavnavCentral banknavnavnavnavnavnavOther direct participantsnavnavnavnavnavnavGeneral governmentnavnavnavnavnavnavnavnavPostal institutionnavnavnavnavnavnavnavnavClearing and settlement organisationsnavnavnavnavnavnavnav	Clearing and settlement organisations	nav	nav	nav	nav	nav
Indirect participantsnavnavnavnavNACHNumber of participantsnav28328236826Direct participantsnav49125BanksnavnavnavnavnavCentral banknavnavnavnavnavnavOther direct participantsnavnavnavnavnavnavGeneral governmentnavnavnavnavnavnavnavPostal institutionnavnavnavnavnavnavnavClearing and settlement organisationsnavnavnavnavnavnav	Other financial institutions	nav	nav	nav	nav	nav
NACH Number of participants nav 283 282 368 26 Direct participants nav 49 12 5 Banks nav	Other	nav	nav	nav	nav	nav
Number of participantsnav28328236826Direct participantsnav49125BanksnavnavnavnavnavCentral banknavnavnavnavnavOther direct participantsnavnavnavnavnavGeneral governmentnavnavnavnavnavnavPostal institutionnavnavnavnavnavnavClearing and settlement organisationsnavnavnavnavnavnav	Indirect participants	nav	nav	nav	nav	nav
Direct participants nav 49 12 5 Banks nav nav nav nav nav nav nav Central bank nav nav nav nav nav nav nav Other direct participants nav nav nav nav nav nav General government nav nav nav nav nav nav Postal institution nav nav nav nav nav nav nav nav Clearing and settlement organisations nav nav nav nav nav nav	NACH					
Banks nav	Number of participants	nav	283	282	368	260
Central banknavnavnavnavOther direct participantsnavnavnavnavGeneral governmentnavnavnavnavnavPostal institutionnavnavnavnavnavClearing and settlement organisationsnavnavnavnavnav	Direct participants	nav	49	12	5	2
Other direct participants nav	Banks	nav	nav	nav	nav	nav
General government nav nav nav nav na Postal institution nav nav nav nav nav na Clearing and settlement organisations nav nav nav nav na	Central bank	nav	nav	nav	nav	nav
Postal institution nav nav nav nav nav nav nav nav nav na	Other direct participants	nav	nav	nav	nav	nav
Clearing and settlement organisations nav nav nav nav na	General government	nav	nav	nav	nav	nav
	Postal institution	nav	nav	nav	nav	nav
Other financial institutions nav nav nav nav nav	Clearing and settlement organisations	nav	nav	nav	nav	nav
Guioi แบลเดินแบบเจ แลง แลง แลง แลง เสีย	Other financial institutions	nav	nav	nav	nav	nav
Other nav nav nav nav na	Other	nav	nav	nav	nav	nav
	Indirect participants	nav		270	363	258
For the footnotes, see the end of the table.						

Table 9 (cont)					
	2012	2013	2014	2015	2016
UPI					
Number of participants	nap	nap	nap	nap	45
Direct participants	nap	nap	nap	nap	45
Banks	nap	nap	nap	nap	nap
Central bank	nap	nap	nap	nap	nap
Other direct participants	nap	nap	nap	nap	nap
General government	nap	nap	nap	nap	nap
Postal institution	nap	nap	nap	nap	nap
Clearing and settlement organisations	nap	nap	nap	nap	nap
Other financial institutions	nap	nap	nap	nap	nap
Other	nap	nap	nap	nap	nap
Indirect participants	nap	nap	nap	nap	nap
NEFT					
Number of participants ⁵	146	161	161	173	183
Direct participants	146	161	161	173	183
Banks	144	159	159	171	181
Central bank	1	1	1	1	1
Other direct participants	1	1	1	1	1
General government	nav	nav	nav	nav	nav
Postal institution	nav	nav	nav	nav	nav
Clearing and settlement organisations	nav	nav	nav	nav	nav
Other financial institutions	1	1	1	1	1
Other	nav	nav	nav	nav	nav
Indirect participants ³	nav	nav	nav	nav	nav
For the footnotes, see the end of the table.					
Card based payment					
Number of participants ⁶	53	54	55	56	54
Direct participants	53	54	55	56	54
Banks	53	54	55	56	54
Central bank	nav	nav	nav	nav	nav
Other direct participants	nav	nav	nav	nav	nav
Indirect participants	nav	nav	nav	nav	nav

¹ Includes Deposit Insurance and Credit Guarantee Corporation of India. ² Data pertain to Mumbai only. ³ Indicates submembers. ⁴ The participant details pertain to National ECS/NECS centralised at Mumbai. ⁵ Indicates participant details for NEFT system operationalised since November 2005. ⁶ Data pertain to Schedule Commercial Banks only.

Table 10
Payments processed by selected interbank funds transfer systems: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					_
RTGS					
Total transactions sent	68.51	81.10	92.77	98.33	107.84
Concentration ratio in terms of volume (%)	45.6	40.8	40.8	40.5	40.7
Retail payment systems					
Cheque clearing					
Total transactions sent ¹	1,313.66	1,257.30	1,195.81	1,096.37	1,206.69
credit transfers	nav	nav	nav	nav	nav
direct debits	nav	nav	nav	nav	nav
card payments	nav	nav	nav	nav	nav
ATM transactions	nav	nav	nav	nav	nav
e-money transactions	nav	nav	nav	nav	nav
cheques	1,313.66	1,257.30	1,195.81	1,096.37	1,206.69
other payment instruments	nav	nav	nav	nav	nav
Concentration ratio in terms of volume (%)	45.7	36.0	27.7	17.6	13.5
ECS/ NECS					
Total transactions sent ²	298.71	345.45	341.36	263.76	18.86
credit transfers	122.18	152.54	115.35	39.00	10.10
direct debits	176.53	192.91	226.01	224.75	8.76
card payments	nav	nav	nav	nav	nav
ATM transactions	nav	nav	nav	nav	nav
e-money transactions	nav	nav	nav	nav	nav
cheques	nav	nav	nav	nav	nav
other payment instruments	nav	nav	nav	nav	nav
Concentration ratio in terms of volume (%)	10.4	9.9	7.9	4.2	0.2
NACH					
Total transactions sent	nav	86.50	340.17	1425.08	2057.27
credit transfers	nav	86.49	336.10	1361.22	1701.12
direct debits	nav	0.01	4.07	63.86	356.15
card payments	nav	nav	nav	nav	nav
ATM transactions	nav	nav	nav	nav	nav
e-money transactions	nav	nav	nav	nav	nav
cheques	nav	nav	nav	nav	nav
other payment instruments	nav	nav	nav	nav	nav
Concentration ratio in terms of volume (%)	nav	2.5	7.9	22.9	23.1
UPI					
Total transactions sent	nap	nap	nap	nap	17.86
credit transfers	nap	nap	nap	nap	17.86
direct debits	nap	nap	nap	nap	nap
card payments	nap	nap	nap	nap	nap
ATM transactions	nap	nap	nap	nap	nap
e-money transactions	nap	nap	nap	nap	nap
cheques	nap	nap	nap	nap	nap
other payment instruments	nap	nap	nap	nap	nap
Concentration ratio in terms of volume (%)	nap	nap	nap	nap	0.2
For the footnotes, see the end of the table.					

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	2012	2013	2014	2015	2016
NEFT					
Total transactions sent	394.13	661.01	927.55	1252.88	1622.10
credit transfers	394.13	661.01	927.55	1252.88	1622.10
direct debits	nav	nav	nav	nav	nav
card payments	nav	nav	nav	nav	nav
ATM transactions	nav	nav	nav	nav	nav
e-money transactions	nav	nav	nav	nav	nav
cheques	nav	nav	nav	nav	nav
other payment instruments	nav	nav	nav	nav	nav
Concentration ratio in terms of volume (%)	13.7	18.9	21.5	20.2	18.2
Card based payment					
Total transactions sent ³	6,398.35	7,223.94	8,491.91	10,038.67	12,055.87
credit transfers	nav	nav	nav	nav	nav
direct debits	nav	nav	nav	nav	nav
card payments ⁴	865.66	1128.16	1 <i>4</i> 23.19	1959.29	3,486.44
ATM transactions	5,532.68	6,095.78	7,068.72	8,079.39	8,569.43
e-money transactions	nav	nav	nav	nav	nav
cheques	nav	nav	nav	nav	nav
other payment instruments	nav	nav	nav	nav	nav
Concentration ratio in terms of volume (%)	30.1	32.3	33.0	31.5	39.1

¹ The data are for total volume of cheques cleared in the country.² With the establishment of NACH in 2013, activity of ECS has been progressively wound down and migrated to NACH. Such migration has accelerated substantially in 2016. ³ POS payment transactions (irrespective of type of card used). ⁴ Data pertain to Schedule Commercial Banks only.

Table 11
Payments processed by selected interbank funds transfer systems: value of transactions (INR billions, total for the year)

	2012	2013	2014	2015	2016
Large-value and retail payment systems					
DTCC					
RTGS Total transactions sent	676,841.0	734,252.4	754,032.4	924 579 0	981,903.8
rotal transactions sent	676,641.0	734,252.4	754,032.4	824,578.0	961,903.6
Concentration ratio in terms of value (%)	40.1	41.0	45.8	48.5	52.0
Retail payment systems					
Cheque clearing					
Total transactions sent ¹	100,181.8	93,438.2	85,439.3	81,860.8	80,958.1
credit transfers	nav	nav	nav	nav	nav
direct debits	nav	nav	nav	nav	nav
card payments	nav	nav	nav	nav	nav
ATM transactions	nav	nav	nav	nav	nav
e-money transactions	nav	nav	nav	nav	nav
cheques	100,181.8	93,438.2	<i>85,4</i> 39.3	81,860.8	80,958.1
other payment instruments	nav	nav	nav	nav	nav
Concentration ratio in terms of value (%)	74.7	65.0	55.5	46.1	36.8
` ,					
ECS/ NECS					
Total transactions sent ²	2,854.4	3,760.2	3,758.9	2,710.9	183.2
credit transfers	1,771.3	2,492.2	2,019.1	1,059.4	144.1
direct debits	1,083.1	1,268.0	1,739.8	1,651.5	39.1
card payments	nav	nav	nav	nav	nav
ATM transactions	nav	nav	nav	nav	nav
e-money transactions	nav	nav	nav	nav	nav
cheques	nav	nav	nav	nav	nav
other payment instruments	nav	nav	nav	nav	nav
Concentration ratio in terms of value (%)	2.1	2.6	2.4	1.5	0.1
NACH					
Total transactions sent	nav	214.8	1,220.9	3,962.7	7,916.2
credit transfers	nav	214.1	1,156.0	3,118.2	4,262.9
direct debits	nav	0.7	64.9	844.5	3,653.2
card payments	nav	nav	nav	nav	nav
ATM transactions	nav	nav	nav	nav	nav
e-money transactions	nav	nav	nav	nav	nav
cheques	nav	nav	nav	nav	nav
other payment instruments	nav	nav	nav	nav	nav
Concentration ratio in terms of value (%) UPI	nav	0.2	0.8	2.2	3.6
Total transactions sent	nan	nan	nan	nan	69.5
credit transfers	nap <i>nap</i>	nap <i>nap</i>	nap <i>nap</i>	nap <i>nap</i>	69.5
direct debits	пар	пар	пар	пар	nap
card payments	пар	nap	•	пар	nap
ATM transactions		-	nap		-
e-money transactions	nap nap	nap nap	nap nap	nap nap	nap nap
cheques		-		-	
other payment instruments	nap nap	nap nap	nap nap	nap nap	nap nap
	•				-
Concentration ratio in terms of value (%)	nap	nap	nap	nap	0.032
For the footnotes, see the end of the table.					

Table 11 (cont)

	2012	2013	2014	2015	2016
NEFT	2012	2013	2014	2013	2010
Total transactions sent	29,022.4	43,785.5	59,803.8	83,273.1	120,039.7
credit transfers	29,022.4	43,785.5	59,803.8	83,273.1	120,039.7
direct debits	nav	nav	nav	nav	nav
card payments	nav	nav	nav	nav	nav
ATM transactions	nav	nav	nav	nav	nav
e-money transactions	nav	nav	nav	nav	nav
cheques	nav	nav	nav	nav	nav
other payment instruments	nav	nav	nav	nav	nav
Concentration ratio in terms of value (%)	21.7	30.5	38.9	46.9	54.6
Card based payment					
Total transactions sent ³	18,637.4	22,168.8	25,544.5	29,397.7	30,214.0
credit transfers	nav	nav	nav	nav	nav
direct debits	nav	nav	nav	nav	nav
card payments ⁴	1,972.9	2,493.9	3,112.6	3,995.9	6,582.9
ATM transactions	16,664.5	19,674.8	22,431.9	25,401.8	23,631.1
e-money transactions	nav	nav	nav	nav	nav
cheques	nav	nav	nav	nav	nav
other payment instruments	nav	nav	nav	nav	nav
Concentration ratio in terms of value (%)	1.5	1.7	2.0	2.3	3.0

¹ The data are for total volume of cheques cleared in the country.² With the establishment of NACH in 2013, activity of ECS has been progressively been wound down and migrated to NACH. Such migration has accelerated substantially in 2016. ³ POS payment transactions (irrespective of type of card used). ⁴ Data pertain to Schedule Commercial Banks only.

Table 12
Participation in SWIFT by domestic institutions (end of year)

	2012	2013	2014	2015	2016
Members	42	42	42	42	42
of which: live	42	42	42	42	42
Sub-members	44	45	47	49	47
of which: live	42	44	45	48	46
Participants	26	28	28	31	33
of which: live	24	27	27	28	29
Total users	112	115	117	122	122
of which: live	108	113	114	118	117
Memo:					
Total SWIFT users	10,279	10,583	10,805	11,094	11,299
members	2,398	2,389	2,379	2 <i>,45</i> 5	2,422
sub-members	3,340	3,343	3,353	3,395	3,367
participants	4,541	4,851	5,073	5,244	5,510
Source: SWIFT.					

Table 13 SWIFT message flows to/from domestic users

(thousands, total for the year)

	2012	2013	2014	2015	2016
Total messages sent	21,280	24,937	28,618	32,013	38,295
of which:					
category I	4,029	4,334	4,937	<i>5,4</i> 86	5,835
category II	1,571	1,650	1,691	1,788	1,930
Total messages received of which:	22,769	26,656	30,221	32,856	37,317
category I	9,000	10,025	10,789	11,515	12,272
category II	1,904	2,123	2,357	2,555	2,698
Domestic traffic	528	809	1,359	1,575	3,579
Мето:					
Global SWIFT traffic	4,589,109	5,065,668	5,612,724	6,106,644	6,525,800
Source: SWIFT.					

Table 14
Number of participants in exchanges and trading systems (end of year)

	2012	2013	2014	2015	2016
NDS					
Total number of participants	184	191	203	260	191
central bank	1	2	1	1	1
central counterparties (CCPs)	1	1	1	1	1
banks	121	126	140	159	127
other	61	62	61	99	62
Number of domestic participants	184	191	203	260	191
central bank	1	2	1	1	1
central counterparties (CCPs)	1	1	1	1	1
banks	121	126	140	159	127
other	61	62	61	99	62
Number of foreign participants	nap	nap	nap	nap	nap
NSE					
Total number of participants	1,422	1,472	1,428	1,430	1,429
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	1	1	1	1	1
banks	13	13	13	13	13
other	1,408	1,458	1,414	1,416	1,415
Number of domestic participants	1,422	1,472	1,425	1,427	1,426
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	1	1	1	1	1
banks	13	13	10	10	10
other	1,408	1, 45 8	1,414	1,416	1,415
Number of foreign participants	nap	nap	3	3	3
banks	nap	nap	3	3	3
BSE					
Total number of participants	1,386	1,376	1,413	1,435	1,440
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)		1	1	1	1
banks	11	5	10	25	28
other	1,374	1,370	1,402	1,409	1,411
Number of domestic participants	1,386	1,376	1,383	1,402	1,407
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	1	1	1	1	1
banks	11	5	10	25	28
other	1,374	1,370	1,372	1,376	1,378
Number of foreign participants	nap	nap	30	33	33
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	nap	nap	nap	nap	nap
other	nap	nap	30	33	33
For the footnotes, see the end of the table.					

Table 14 (cont)					
	2012	2013	2014	2015	2016
USE					
Total number of participants	385	361	313	nav	nav
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	1	1	1	nav	nav
banks	23	21	14	nav	nav
other	361	339	298	nav	nav
Number of domestic participants	385	361	313	nav	nav
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	1	1	1	nav	nav
banks	23	21	14	nav	nav
other	361	339	298	nav	nav
Number of foreign participants	nap	nap	nap	nap	nap
MCX-SX					
Total number of participants	939	959	930	909	830
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	1	1	1	1	1
banks	31	31	29	29	28
other	907	927	900	879	801
Number of domestic participants	939	959	930	909	830
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	1	1	1	1	1
banks	31	31	29	29	28
other	907	927	900	879	801

nap

nap

nap

nap

nap

Number of foreign participants

Table 15 Number of listed securities

(thousands, end of year)

	2012	2013	2014	2015	2016
NDS					
Total number of listed securities	1.840	1.970	2.160	2.410	2.929
debt securities	1.840	1.970	2.150	2.390	2.917
short-term paper	0.050	0.050	0.060	0.060	0.065
bonds	1.780	1.920	2.090	2.330	2.852
equity	nap	nap	nap	nap	nap
other	nap	nap	0.010	0.010	0.012
NSE					
Total number of listed securities	2.780	4.600	5.650	6.320	6.486
debt securities ¹	0.270	0.370	0.280	0.300	0.371
short-term paper	0.070	0.150	0.120	0.120	0.234
bonds ²	0.200	0.210	0.160	0.180	0.137
equity	1.570	1.500	1.480	1.780	1.787
other	0.950	2.730	3.890	4.250	4.328
BSE					
Total number of listed securities	10.940	13.500	15.030	16.340	17.346
debt securities	nav	5	8.520	9.520	10.594
short-term paper	nav	nav	nav	nav	nav
bonds	nav	5	8.520	9.520	10.594
equity	nav	9	6.500	6.810	6.752
other	nav	nav	nav	nav	nav
USE					
Total number of listed securities	nav	nav	nav	nav	nav
debt securities	nav	nav	nav	nav	nav
equity	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
MCX-SX					
Total number of listed securities	nav	0.010	0.080	0.160	0.242
debt securities	nav	nav	nav	nav	nav
equity	nav	0	0.080	0.160	0.242
other	nav	nav	nav	nav	nav

¹ Debentures issued by companies listed on the CM segment of the Exchange have been included. ² Government securities and bonds issued by companies listed on the CM segment have been included.

Table 16

Market capitalisation of listed companies

(INR billions, end of year)

	2012	2013	2014	2015	2016
NDS Total market capitalisation/equity	nav	nav	nav	nav	nav
NSE Total market capitalisation/equity	62,390.3	72,777.2	99,301.2	93,104.7	119,784.2
BSE Total market capitalisation/equity	63,878.8	74,153.0	101,492.9	94,753.3	121,545.3
USE Total market capitalisation/equity	nav	nav	nav	nav	nav
MCX-SX Total market capitalisation/equity	61,962.0	72,396.7	98,259.9	91,827.6	118,312.7

Table 17 Number of executed trades

(millions, total for the year)

	2012	2013	2014	2015	2016
NDS					
Total number of executed securities trades	0.659	0.819	1.087	1.019	1.510
debt securities	0.659	0.819	1.087	1.019	1.510
short-term paper	0.014	nav	0.058	0.046	0.040
bonds	0.645	nav	1.029	0.973	1.470
Total number of executed derivatives trades	nap	nap	nap	nap	nap
NSE					
Total number of executed securities trades	1,360.489	1,443.176	1,832.811	1,851.767	1,976.019
debt securities	0.203	0.231	0.233	0.266	0.314
bonds ¹	0.203	0.231	0.233	0.266	0.314
equity	1,359.770	1,442.713	1,832.480	1,851.500	1,975.704
other	0.516	0.232	0.097	0.001	0.001
Total number of executed derivatives trades	2,090.710	1,946.120	2,338.300	2,798.250	2,127.005
financial futures	927.971	<i>755.4</i> 88	743.100	810.599	617.818
financial options	1,162.740	1,190.631	1,595.200	1,987.651	1,509.186
other financial derivatives	nav	nav	nav	nav	nav
commodity futures	nav	nav	nav	nav	nav
commodity options	nav	nav	nav	nav	nav
other commodity derivatives	nav	nav	nav	nav	nav
BSE					
Total number of executed securities trades	323.511	363.215	711.072	411.689	391.850
debt securities	0.229	0.369	0.395	0.251	0.292
short-term paper	0.229	0.369	0	0	0
equity	323.282	362.846	710.677	411.439	391.558
Total number of executed derivatives trades	262.443	301.942	22.837	21.211	14.331
financial futures ²	4.822	4.038	12.472	14.524	11.239
financial options ³	257.622	297.904	10.365	6.688	3.092
other financial derivatives ⁴	nav	nav	nav	nav	nav
For the footnotes, see the end of the table.					_

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	2012	2013	2014	2015	2016
USE					
Total number of executed securities trades	nav	nav	nav	nav	nav
Total number of executed derivatives trades	0.680	0.580	0.061	nav	nav
financial futures ²	0.570	0.290	0.035	nav	nav
financial options ³	0.110	0.290	0.026	nav	nav
other financial derivatives ⁴	nav	nav	nav	nav	nav
commodity futures	nav	nav	nav	nav	nav
commodity options	nav	nav	nav	nav	nav
other commodity derivatives	nav	nav	nav	nav	nav
MCX-SX					
Total number of executed securities trades	0.011	1.688	0.000	0.019	0.020
debt securities	nap	0.000	nap	nap	nap
short-term paper	nap	nav	nap	nap	nap
bonds	nap	nav	nap	nap	nap
equity	0.011	1.688	0.000	0.019	0.020
Total number of executed derivatives trades	597.586	403.972	6.760	3.609	1.818
financial futures ²	<i>561.4</i> 22	350.333	6.626	3.488	1.790
financial options ³	36.164	53.639	0.133	0.121	0.011
other financial derivatives ⁴	nav	nav	nav	nav	0.017
commodity futures	nav	nav	nav	nav	nav
commodity options	nav	nav	nav	nav	nav
other commodity derivatives	nav	nav	nav	nav	nav

¹ Includes debentures. ² Consists of index futures and company futures. ³ Consists of index-based options and company options. ⁴ Consists of figures related to currency derivatives.

Table 18
Value of executed trades
(INR billions, total for the year)

	2012	2013	2014	2015	2016
NDS					
Total value of executed securities trades	65,998.4	89,392.9	258,916.8	269,778.2	404,389.1
debt securities	65,998.4	89,392.9	258,916.8	269,778.2	404,389.1
short-term paper	5,503.3	nav	73,355.1	53,561.2	46,444.7
bonds	60,495.1	nav	185,561.7	216,217.0	357,944.3
equity	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Total value of executed derivatives trades	nap	nap	nap	nap	nap
NSE					
Total value of executed securities trades	27,082.54	28,084.88	43,296.55	42,369.83	50,559.13
debt securities	18.77	17.26	21.82	29.07	36.13
bonds ¹	18.77	17.26	21.82	29.07	36.13
equity	27,043.98	28,061.27	43,271.80	42,340.60	50,522.89
other	19.80	6.36	2.93	0.15	0.12
Total value of executed derivatives trades	368,075.00	422,541.00	590,519.20	698,541.44	995,351.87
financial futures	105, 161.08	110,056.37	150,707.89	156,614.87	182,631.16
financial options	262,913.61	312,484.57	439,811.31	541,926.57	812,720.70
BSE					
Total value of executed securities trades	5,487.7	5,216.6	8,548.5	7,400.9	9,982.6
debt securities	39.4	23.0	41.4	57.6	54.6
short-term paper	39. <i>4</i>	23.0	41.4	57.6	54.6
equity	5,448.4	5,193.7	8,507.0	7,343.3	9,928.0
Total value of executed derivatives trades	71,635.2	92,194.3	223,132.5	73,530.5	33,065.7
financial futures ²	1,257.9	1,181.0	14,074.2	19,789.3	19,382.8
financial options ³	70,377.3	91,013.3	209,058.3	53,741.3	13,682.9
other financial derivatives ⁴	nav	nav	nav	nav	nav
commodity futures	nav	nav	nav	nav	nav
commodity options	nav	nav	nav	nav	nav
other commodity derivatives	nav	nav	nav	nav	nav
USE					
Total value of executed securities trades	nav	nav	nav	nav	nav
Total value of executed derivatives trades	1,323.5	3,016.2	521.9	nav	nav
financial futures ²	830.0	950.9	58.6	nav	nav
financial options ³	493.5	2,065.4	463.2	nav	nav
other financial derivatives 4	nap	nap	nap	nap	nap
For the footnotes, see the end of the table.					

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	2012	2013	2014	2015	2016
MCX-SX	2012	2010	201-1	2010	2010
Total value of executed securities trades	0.3	113.7	0.0	2.1	2.4
debt securities	nap	1.8	nap	nap	nap
short-term paper	nap	nav	nap	nap	nap
bonds	nap	nav	nap	nap	nap
equity	0.3	111.9	0.0	2.1	2.4
Total value of executed derivatives trades	33,112.3	25,743.3	6,603.3	3,473.9	3,004.8
financial futures ²	31,130.4	22,136.1	6,420.5	3,261.7	2,854.7
financial options ³	1,981.8	3,607.2	182.8	212.2	124.5
other financial derivatives ⁴	nap	nap	nap	nap	25

¹ Includes debentures. ² Consists of index futures and company futures. ³ Consists of index-based options and company options. ⁴ Consists of figures related to currency derivatives.

Table 19 Number of clearing members(end of year)

	2012	2013	2014	2015	2016
CCIL					
Total number of clearing members	255	264	266	269	271
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	140	146	1 <i>4</i> 5	150	154
other	115	118	121	119	117
Number of domestic clearing members	255	264	266	269	271
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	140	146	145	150	154
other	115	118	121	119	117
Number of foreign clearing members	nap	nap	nap	nap	nap
NSCCL					
Total number of clearing members	1,393	1,299	1,369	1,235	1,226
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	31	27	29	30	30
other	1362	1272	1,340	1,205	1,196
Number of domestic clearing members	1,393	1,299	1,369	1,235	1,226
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	31	27	29	30	30
other	1362	1,272	1,340	1,205	1,196
Number of foreign clearing members	nap	nap	nap	nap	nap
BOISL					
Total number of clearing members	nap	nap	nap	nap	nap
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	nap	nap	nap	nap	nap
other	nap	nap	nap	nap	nap
Number of domestic clearing members	nap	nap	nap	nap	nap
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	nap	nap	nap	nap	nap
other	nap	nap	nap	nap	nap
Number of foreign clearing members	nap	nap	nap	nap	nap
For the footnotes, see the end of the table.					

Table 19 (cont)					
	2012	2013	2014	2015	2016
ICCL					
Total number of clearing members	52	1,361	1,375	1,381	1,396
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	21	22	18	20	20
other	31	1,339	1,357	1,361	1,376
Number of domestic clearing members	52	1,354	1,368	1,374	1,389
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	21	15	11	13	13
other	31	1,339	1,357	1,361	1,376
Number of foreign clearing members	nap	7	7	7	7
banks	nap	7	7	7	7
MCX-SXCCL					
Total number of clearing members	513	582	579	573	498
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	26	26	25	25	25
other	487	556	554	<i>54</i> 8	473
Number of domestic clearing members	513	582	579	573	498
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	26	26	25	25	25
other	487	556	554	548	473
Number of foreign clearing members	nap	nap	nap	nap	nap

Table 20 Number of contracts and transactions cleared (millions, total for the year)

CCIL Total number of contracts and transactions cleared 0.770 0.940 1.207 1.136 1.642 Number of securities transactions cleared debt securities 0.700 0.867 1.087 1.019 1.510 of which: number of repurchase transactions cleared dobt securities 0.042 0.046 0.058 0.046 0.058 of which: number of repurchase transactions cleared dobt securities 0.042 0.046 0.109 0.136 0.168 short-term paper nav nav nav 0 0.029 0.020 bonds nav nav nav 0 0.106 0.148 Number of exchange-traded derivatives contracts nap <		2012	2013	2014	2015	2016
Cleared 0.770 0.940 1.207 1.136 1.642	CCIL					
Number of securities transactions cleared 0.700 0.867 1.087 1.019 1.510 debt securities 0.700 0.867 1.087 1.019 1.510 short-term paper 0.042 0.046 0.058 0.046 0.040 bonds 0.658 0.820 1.029 0.973 1.470 of which: number of repurchase transactions cleared 0.042 0.046 0.109 0.136 0.168 debt securities 0.042 0.046 0.109 0.136 0.168 debt securities 0.042 0.046 0.109 0.136 0.168 debt securities and transactions cleared 0.072 0.046 0.109 0.136 0.168 debt securities 0.042 0.046 0.109 0.136 0.168 debt securities and transactions cleared 0.072 0.073 0.000 0.000 0.000 0.106 0.148 Number of exchange-traded derivatives contracts cleared 0.070 0.073 0.120 0.106 0.148 Number of OTC derivatives contracts cleared 0.070 0.073 0.120 0.117 0.132 financial futures nap			0.040	4.00=	4 400	4 0 40
According	cleared	0.770	0.940	1.207	1.136	1.642
short-term paper bonds 0.042 0.046 0.058 0.020 0.058 0.020 0.046 0.058 0.040 0.046 0.040 0.093 0.047 0.044 0.040 0.029 0.047 0.046 0.009 0.036 0.036 0.068 0.068 0.009 0.036 0.068 0.009 0.020 0.020 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.0000	Number of securities transactions cleared	0.700	0.867	1.087	1.019	1.510
bonds 0.658 0.820 1.029 0.973 1.470 of which: number of repurchase transactions cleared debt securities 0.042 0.046 0.109 0.136 0.168 debt securities 0.042 0.046 0.109 0.136 0.168 short-term paper nav nav 0 0.029 0.020 bonds nav nav 0 0.029 0.020 Number of exchange-traded derivatives contracts cleared nap	debt securities	0.700	0.867	1.087	1.019	1.510
bonds 0.658 0.820 1.029 0.973 1.470 of which: number of repurchase transactions cleared debt securities 0.042 0.046 0.109 0.136 0.168 short-term paper nav nav nav 0.009 0.029 0.020 bonds nav nav nav 0 0.029 0.020 bonds nav nav nav 0 0.029 0.020 Number of exchange-traded derivatives contracts cleared nap	short-term paper	0.042	0.046	0.058	0.046	0.040
cleared debt securities 0.042 on.042 on.046 on.09 on.09 on.036 on.068 short-term paper naw naw naw on.00 on.09 on.020 on.020 bonds 0.042 on.040 on.040 on.09 on.09 on.036 on.068 on.068 short-term paper naw naw naw on.00 on.029 on.020 bonds 0.029 on.020 on.020 on.020 on.060 on.048 Number of exchange-traded derivatives contracts cleared name of OTC derivatives contracts cleared name of other financial futures nap		0.658	0.820	1.029	0.973	1.470
cleared debt securities 0.042 on.042 on.046 on.09 on.09 on.036 on.068 short-term paper naw naw naw on.00 on.09 on.020 on.020 bonds 0.042 on.040 on.040 on.09 on.09 on.036 on.068 on.068 short-term paper naw naw naw on.00 on.029 on.020 bonds 0.029 on.020 on.020 on.020 on.060 on.048 Number of exchange-traded derivatives contracts cleared name of OTC derivatives contracts cleared name of other financial futures nap	of which: number of renurchase transactions					
debt securities short-term paper bonds 0.042 nav 0.046 nav 0.109 nav 0.136 0.029 0.020 0.020 0.020 0.016 0.168 0.148 Number of exchange-traded derivatives contracts cleared nap	•	0.042	0.046	0.100	0.136	0 168
short-term paper bonds nav nav nav nav 0 0.029 0.020 0.148 Number of exchange-traded derivatives contracts cleared nap nap nap nap nap nap nap nap nap nap nap nap nap nap nap nap nap nap						
bonds nav nav 0 0.106 0.148 Number of exchange-traded derivatives contracts cleared nap						
Number of exchange-traded derivatives contracts cleared nap <						
cleared nap nap nap nap nap Number of OTC derivatives contracts cleared 0.070 0.073 0.120 0.117 0.132 financial futures nap nap <td>bonas</td> <td>nav</td> <td>nav</td> <td>U</td> <td>0.106</td> <td>0.148</td>	bonas	nav	nav	U	0.106	0.148
Number of OTC derivatives contracts cleared financial futures 0.070 nap						
financial futures financial options nap	cleared	nap	nap	nap	nap	nap
financial options other financial derivatives¹ nap other financial derivatives	Number of OTC derivatives contracts cleared	0.070	0.073	0.120	0.117	0.132
financial options other financial derivatives 1 nap other financial financial futures 3 nap other financial derivatives contracts 2 nap other financial derivatives contracts 2 nap other financial financial futures 3 nap other financial derivatives 2 nap other financial financial financial financial derivatives 2 nap other financial financial financial derivatives 2 nap other financial financial financial financial derivatives 3 nap other financial financial financial derivatives 3 nap other financial financial financial derivatives 3 nap other financial financia	financial futures	nap	nap	nap	nap	nap
other financial derivatives ¹ 0.070 0.073 0.120 0.117 0.132 NSCCL Total number of contracts and transactions cleared 3,450.5 3,388.8 4,170.8 4,649.7 4,102.7 Number of securities transactions cleared debt securities 1,359.8 1,442.7 1,832.5 1,851.5 1,975.7 debt securities transactions cleared 1,359.8 1,442.7 1,832.5 1,851.5 1,975.7 other nav	financial options	-	-	-	•	-
Total number of contracts and transactions cleared 3,450.5 3,388.8 4,170.8 4,649.7 4,102.7 Number of securities transactions cleared debt securities 1,359.8 1,442.7 1,832.5 1,851.5 1,975.7 debt securities nav nav </td <td>·</td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>	·		-	-	-	-
Total number of contracts and transactions cleared 3,450.5 3,388.8 4,170.8 4,649.7 4,102.7 Number of securities transactions cleared debt securities 1,359.8 1,442.7 1,832.5 1,851.5 1,975.7 debt securities nav nav </td <td>NECCI</td> <td></td> <td></td> <td></td> <td></td> <td></td>	NECCI					
cleared 3,450.5 3,388.8 4,170.8 4,649.7 4,102.7 Number of securities transactions cleared debt securities 1,359.8 1,442.7 1,832.5 1,851.5 1,975.7 debt securities nav nav <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
Number of securities transactions cleared debt securities 1,359.8 nav 1,442.7 nav 1,832.5 nav 1,851.5 nav 1,975.7 nav debt securities nav		2 450 5	2 200 0	4 470 0	4 6 4 0 7	4 400 7
debt securities nav equity² nav nav equity² nav nav nav nav nav nav nav nav nav nav nav nav	cleared	3,450.5	3,388.8	4,170.8	4,649.7	4,102.7
equity² other 1,359.8 nav 1,442.7 nav 1,832.5 nav 1,851.5 nav 1,975.7 nav of which: number of repurchase transactions cleared nav		1,359.8	1,442.7	1,832.5	1,851.5	1,975.7
other nav		nav	nav	nav	nav	nav
of which: number of repurchase transactions cleared nav	equity ²	1,359.8	1,442.7	1,832.5	1,851.5	1,975.7
Number of exchange-traded derivatives contracts cleared 2,090.7 1,946.1 2,338.3 2,798.3 2,127.0 financial futures 3 928.0 755.5 743.1 810.6 617.8 financial options 4 1,162.7 1,190.6 1,595.2 1,987.7 1,509.2 other financial derivatives nav nav nav nav nav nav commodity futures nav nav nav nav nav nav other commodity options nav nav nav nav nav nav nav nav other commodity derivatives nav	other	nav	nav	nav	nav	nav
Number of exchange-traded derivatives contracts cleared 2,090.7 1,946.1 2,338.3 2,798.3 2,127.0 financial futures 3 928.0 755.5 743.1 810.6 617.8 financial options 4 1,162.7 1,190.6 1,595.2 1,987.7 1,509.2 other financial derivatives nav nav nav nav nav nav commodity futures nav nav nav nav nav nav other commodity options nav nav nav nav nav nav nav nav other commodity derivatives nav	of which: number of repurchase transactions					
cleared 2,090.7 1,946.1 2,338.3 2,798.3 2,127.0 financial futures³ 928.0 755.5 743.1 810.6 617.8 financial options⁴ 1,162.7 1,190.6 1,595.2 1,987.7 1,509.2 other financial derivatives nav	<i>,</i>	nav	nav	nav	nav	nav
cleared 2,090.7 1,946.1 2,338.3 2,798.3 2,127.0 financial futures³ 928.0 755.5 743.1 810.6 617.8 financial options⁴ 1,162.7 1,190.6 1,595.2 1,987.7 1,509.2 other financial derivatives nav						
financial futures ³ financial options ⁴ financial options ⁴ financial options ⁴ other financial derivatives nav	· · · · · · · · · · · · · · · · · · ·	0.000.7	4.040.4	0.000.0	0.700.0	0.407.0
financial options 4 1,162.7 1,190.6 1,595.2 1,987.7 1,509.2 other financial derivatives nav nav nav nav nav nav nav commodity futures nav nav nav nav nav nav nav commodity options nav nav nav nav nav nav nav other commodity derivatives nav		•	•		•	
other financial derivatives						
commodity futures nav nav nav nav nav nav nav nav other commodity options nav	•	1,162.7	1,190.6	1,595.2	1,987.7	1,509.2
commodity options other commodity derivatives nav		nav	nav	nav	nav	nav
other commodity derivativesnavnavnavnavnavNumber of OTC derivatives contracts clearednavnavnavnavnavBOISL Total number of contracts and transactions cleared323.5navnavnavnav		nav	nav	nav	nav	nav
Number of OTC derivatives contracts cleared nav nav nav nav nav nav nav solst. BOISL Total number of contracts and transactions cleared 323.5 nav nav nav nav nav	• •	nav	nav	nav	nav	nav
BOISL Total number of contracts and transactions cleared 323.5 nav nav nav nav	other commodity derivatives	nav	nav	nav	nav	nav
Total number of contracts and transactions cleared 323.5 nav nav nav nav	Number of OTC derivatives contracts cleared	nav	nav	nav	nav	nav
cleared 323.5 nav nav nav nav	BOISL					
	Total number of contracts and transactions					
For the footnotes, see the end of the table.	cleared	323.5	nav	nav	nav	nav
	For the footnotes, see the end of the table.					

Table 20 (cont)					
	2012	2013	2014	2015	2016
Number of securities transactions cleared	nap	nap	nap	nap	nap
debt securities	nap	nap	nap	nap	nap
equity	nap	nap	nap	nap	nap
other	nap	nap	nap	nap	nap
of which: number of repurchase transactions					
cleared	nap	nap	nap	nap	nap
Number of exchange-traded derivatives contracts					
cleared	nap	nap	nap	nap	nap
Number of OTC derivatives contracts cleared	nap	nap	nap	nap	nap
ICCL					
Total number of contracts and transactions					
cleared	608.64	709.73	1,213.01	994.03	868.61
Number of securities transactions cleared	323.5	363.22	398.35	411.70	391.87
debt securities	nap	nap	nap	nap	nap
equity	nap	nap	nap	nap	nap
other	nap	nap	nap	nap	nap
of which: number of repurchase transactions					
cleared	nap	nap	nap	nap	nap
Number of exchange-traded derivatives contracts					
cleared	285.13	346.51	814.65	582.32	476.73
financial futures	18.41	15. 4 9	213.97	274.39	274.56
financial options	266.72	331.03	600.69	307.94	202.17
other financial derivatives	nap	nap	nap	nap	nap
commodity futures	nap	nap	nap	nap	nap
commodity options	nap	nap	nap	nap	nap
other commodity derivatives	nap	nap	nap	nap	nap
Number of OTC derivatives contracts cleared	nap	nap	nap	nap	nap
MCX-SXCCL					
Total number of contracts and transactions					
cleared	597.59	403.97	103.57	49.98	44.18
Number of securities transactions cleared	nav	nav	nav	nav	nav
of which: number of repurchase transactions					
cleared	nav	nav	nav	nav	nav
Number of exchange-traded derivatives contracts					
cleared	597.59	403.97	103.57	49.98	44.18
financial futures	561.42	350.33	100.60	46.75	<i>4</i> 2.35
financial options	36	53.64	2.96	3.23	1.83
other financial derivatives	nav	nav	nav	nav	nav
commodity futures	nav	nav	nav	nav	nav
commodity options	nav	nav	nav	nav	nav
other commodity derivatives	nav	nav	nav	nav	nav
Number of OTC derivatives contracts cleared	nav	nav	nav	nav	nav

¹ CCIL provides central trade processing services in Rupee Interest Rate Swaps (IRS) and Forward Rate Agreements (FRA). CCIL extends post-trade processing services such as Interest Rate Reset, Tracking payment obligation of members on their outstanding contracts etc and settlement on a Non Guaranteed basis. ² Transactions cleared in cash segment. ³ Data pertain to stock and index futures. ⁴ Data pertain to stock and index options.

Table 21
Value of contracts and transactions cleared (INR billions, total for the year)

	2012	2013	2014	2015	2016
CCIL					
Total value of contracts and transactions cleared	156,572.3	200,941.2	337,678.8	356,055.1	500,778.9
Value of securities transactions cleared	119,947.9	161,848.3	258,916.8	269,778.2	404,389.1
debt securities	119,947.9	161,848.3	258,916.8	269,778.2	404,389.1
short-term paper	29,660.9	46,656.7	73,355.1	53,561.2	46,444.7
bonds	90,287.1	115,191.6	185,561.7	216,217.0	357,944.3
of which: value of repurchase transactions					
cleared	54,027.7	72,281.3	157,355.1	172,492.8	235,647.6
debt securities	54,027.7	72,281.3	157,355.1	172,492.8	235,647.6
short-term paper	nav	nav	65,120.4	45,017.3	35,710.1
bonds	nav	nav	92,234.8	127,475.5	199,937.5
Value of exchange-traded derivatives contracts					
cleared	nap	nap	nap	nap	nap
Value of OTC derivatives contracts cleared ¹	36,624.4	39,093.0	78,762.0	86,276.9	96,389.8
financial futures	nap	nap	nap	nap	nap
financial options	nap	nap	nap	nap	nap
other financial derivatives	36,624.4	39,093.0	78,762.0	86,276.9	96,389.8
NSCCL					
Total value of contracts and transactions cleared	376,049.7	430,771.4	603,287.8	711,068.0	1,010,199.3
Value of securities transactions cleared	7,975.0	8,230.4	12,768.6	12,526.6	14,847.5
debt securities	nav	nav	nav	nav	nav
equity ²	7,975.0	8,230.4	12,768.6	12,526.6	14,847.5
other	nav	nav	nav	nav	nav
of which: value of repurchase transactions					
cleared	nav	nav	nav	nav	nav
Value of exchange-traded derivatives contracts					
cleared	368,074.7	422,540.9	590,519.2	698,541.4	995,351.9
financial futures ³	105,161.1	110,056.4	150,707.9	156,614.9	182,631.2
financial options ⁴	262,913.6	312,484.6	439,811.3	541,926.6	812,720.7
other financial derivatives	nav	nav	nav	nav	nav
commodity futures	nav	nav	nav	nav	nav
commodity options	nav	nav	nav	nav	nav
other commodity derivatives	nav	nav	nav	nav	nav
Value of OTC derivatives contracts cleared	nav	nav	nav	nav	nav
For the footnotes, see the end of the table.					

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	2012	2013	2014	2015	2016
BOISL					
Total value of contracts and transactions cleared	1,684.9	nav	nav	nav	nav
Value of securities transactions cleared	nap	nap	nap	nap	nap
debt securities	nap	nap	nap	nap	nap
equity	nap	nap	nap	nap	nap
other	nap	nap	nap	nap	nap
of which: value of repurchase transactions					
cleared	nap	nap	nap	nap	nap
Value of exchange-traded derivatives contracts					
cleared	nap	nap	nap	nap	nap
Value of OTC derivatives contracts cleared	nap	nap	nap	nap	nap
ICCL					
Total value of contracts and transactions cleared	73,320.8	93,999.5	226,130.3	80,931.4	43,048.3
Value of securities transactions cleared	1,684.90	1,802.4	2,998.4	7,400.9	9,982.6
debt securities	nav	nav	nav	nav	nav
equity	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
of which: value of repurchase transactions					
cleared	nap	nap	nap	nap	nap
Value of exchange-traded derivatives contracts					
cleared	71,635.9	92,197.1	223,132.0	73,530.5	33,065.7
financial futures	1,258.5	1,183.1	14,074.2	19,789.3	19,382.8
financial options	70,377.4	91,013.9	209,057.8	53,741.3	13,682.9
Value of OTC derivatives contracts cleared	nap	nap	nap	nap	nap
MCX-SXCCL					
Total value of contracts and transactions cleared	34.735	25.771	15.743	11.236	6.110
Value of securities transactions cleared	nav	nav	nav	nav	nav
of which: value of repurchase transactions					
cleared	nav	nav	nav	nav	nav
Value of exchange-traded derivatives contracts					
cleared	34.735	25.771	15.743	11.236	6.110
financial futures	33.555	22.934	15.306	10.680	5.870
financial options	1.180	2.838	0.437	0.556	0.239
other financial derivatives	nav	nav	nav	nav	nav
commodity futures	nav	nav	nav	nav	nav
commodity options	nav	nav	nav	nav	nav
other commodity derivatives	nav	nav	nav	nav	nav

¹ Post-trade processing, including arriving at settlement obligation (clearing) of OTC derivatives (IRS & FRAs) is being undertaken from August 2007. ² Transactions cleared in cash segment. ³ Data pertain to stock and index futures. ⁴ Data pertain to stock and index options.

Table 22 Number of direct participants in CSDs *(end of year)*

	2012	2013	2014	2015	2016
RBI (SSS)					
Total number of participants	297	304	344	361	371
central bank	3	4	5	10	10
central counterparties (CCPs)	1	1	1	1	1
central securities depositories	2	2	2	2	2
banks	168	173	205	218	232
other	123	124	131	130	126
Number of domestic participants	295	302	339	356	366
central bank	1	2	0	5	5
central counterparties (CCPs)	1	1	1	1	1
central securities depositories	2	2	2	2	2
banks	168	173	205	218	232
other ¹	123	124	131	130	126
Number of foreign participants	2	2	5	5	5
central bank	2	2	5	5	5
central counterparties (CCPs)	nav	nav	nav	nav	nav
central securities depositories	nav	nav	nav	nav	nav
banks .	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
NSDL					
Total number of participants	282	278	273	270	264
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	8	7	4	3	2
central securities depositories	nap	nap	nap	nap	nap
banks	52	<i>5</i> 2	51	50	48
other	222	219	218	217	214
Number of domestic participants	282	278	273	270	264
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	8	7	4	3	2
central securities depositories	nap	nap	nap	nap	nap
banks '	<i>5</i> 2	, 52	51	, 50	48
other	222	219	218	217	214
Number of foreign participants	nap	nap	nap	nap	nap
CDSL					
Total number of participants	578	579	575	583	589
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	1	1	1	1	1
central securities depositories	0	0	0	0	0
banks ,	35	42	<i>4</i> 5	<i>4</i> 5	47
other	542	536	529	537	541
Number of domestic participants	578	579	575	583	589
central bank	nap	nap	nap	nap	nap
central bank central counterparties (CCPs)	1 1	1 1	1 1	1 1	1 1
central securities depositories	0	0	Ó	Ö	0
banks	35	<i>4</i> 2	45	45	47
other	542	536	529	537	541
Number of foreign participants	nan	nan	nan	nan	nan
1	nap	nap	nap	nap	nap

¹ Includes financial institutions, primary dealers, insurance companies, state government, provident funds, mutual funds and trusts.

Table 23
Number of securities held on accounts at CSDs (millions, end of year)

	2012	2013	2014	2015	2016
RBI (SSS)					
Total number of securities held	0.002	0.002	0.002	0.002	0.003
debt securities	0.002	0.002	0.002	0.002	0.003
short-term paper	0.000	0.000	0.000	0.000	0.000
bonds	0.002	0.002	0.002	0.002	0.003
equity	nap	nap	nap	nap	nap
other ¹	0.000	0.000	0.000	0.000	0.000
NSDL					
Total number of securities held	686,475.8	795,503.4	927,357.0	1,100,209.0	1,317,625.4
debt securities	9,679.3	11,694.2	22,201.9	28,931.4	34,116.0
short-term paper	53.0	49.1	<i>4</i> 2.0	39.7	32.4
bonds	9,626.3	11,645.1	22,159.9	28,891.8	34,083.6
equity	629,978.8	700,533.5	811,849.1	931,336.2	1,050,983.1
other	46,817.7	83,275.7	93,306.0	139,941.3	232,526.3
CDSL					
Total number of securities held	151,729.4	177,309.9	206,012.4	226,625.8	255,227.4
debt securities	444.7	985.2	904.5	2,008.4	2,834.5
short-term paper	0.3	0.0	0.1	0.7	0.4
bonds	444.5	985.1	904.4	2,007.7	2,834.1
equity	137,631.0	160,896.6	185,968.0	207,041.4	232,613.9
other	13,653.6	15,428.2	19,139.9	17,576.0	19,779.0
¹ Includes relief bonds.					

Table 24
Value of securities held on accounts at CSDs (INR billions, end of year)

	2012	2013	2014	2015	2016
RBI (SSS)					
Total value of securities held	44,534.2	51,181.2	57,868.9	65,697.0	73,388.7
debt securities	44,534.2	51,181.2	57,847.7	65,665.1	73,320.8
short-term paper	2,997.6	3,391.3	3,494.5	3,646.9	3,347.9
bonds	41,536.5	47,789.9	54,353.2	62,018.3	69,973.0
equity	nap	nap	nap	nap	nap
other	nav	nav	21.2	31.9	67.9
NSDL					
Total value of securities held	76,790.3	89,398.8	117,483.1	117,156.7	146,487.0
debt securities	19,571.5	21,232.6	24,082.2	27,500.9	32,870.5
short-term paper	6,627.0	<i>6,455.9</i>	6,461.9	7,207.6	8,255.0
bonds	12,944.5	14,776.7	17,620.3	20,293.3	24,615.5
equity	55,834.9	66,198.9	90,916.0	86,927.0	110,003.2
other	1,383.8	1,967.2	2,485.0	2,728.8	3,613.2
CDSL					
Total value of securities held	9,850.4	10,876.2	13,945.2	13,238.2	17,755.4
debt securities	397.4	393.8	506.1	727.3	870.5
short-term paper	33.8	5.2	17.0	80.9	78.0
bonds	363.5	388.6	489.1	646.4	792.5
equity	9,228.9	10,259.0	13,196.4	12,230.1	16,478.8
other	224.1	223.4	242.7	280.8	406.0

Table 25 Number of delivery instructions processed

(thousands, total for the year)

	2012	2013	2014	2015	2016
RBI (SSS)					
Total number of delivery instructions	2,306.3	2,620.4	3,044.3	3,137.7	3,669.7
DVP	2,306.3	2,620.4	3,044.3	3,137.7	3,669.7
debt securities	2,306.3	2,620.4	3,044.3	3,137.7	3,669.7
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	nap	nap	nap	nap	nap
other	nav	nav	nav	nav	nav
free of payment	nav	nav	nav	nav	nav
NSDL					
Total number of delivery instructions	107,709.3	99,527.2	147,317.7	132,038.3	152,680.9
DVP	nav	nav	nav	nav	nav
free of payment	107,709.3	99,527.2	147,317.7	132,038.3	152,680.9
debt securities	620.0	708.1	691.7	723.9	844.5
short-term paper	224.8	220.6	197.3	183.3	167.7
bonds	395.2	487.5	494.4	540.6	676.8
equity	106,774.8	98,470.8	144,844.9	129,189.6	148,242.1
other	314.5	348.3	1,781.1	2,124.8	3,594.3
CDSL					
Total number of delivery instructions	68,410.6	69,213.8	104,669.7	95,161.3	110,119.1
DVP	57,208.2	59,283.6	90,894.6	81,101.4	95,305.5
debt securities	103.7	150.7	185.5	216.5	286.9
short-term paper	0	0	0	5	0.0
bonds	103.7	150.7	185.5	211.4	286.9
equity	56,212.0	57,961.4	88,586.6	78,341.9	93,125.1
other	892.5	1,171.6	2,122.6	2,543.0	1,893.5
free of payment	11,202.4	9,930.2	13,775.1	14,060.0	14,813.6
debt securities	39.8	48.6	52.5	70.3	75.7
short-term paper	0.2	0.2	0.3	0.4	0.3
bonds	39.6	48.5	52.1	69.9	75.4
equity	10,923.7	9,677.5	13,577.1	13,858.4	14,596.7
other	238.9	204.0	145.6	131.3	141.2

Table 26
Value of delivery instructions processed (INR billions, total for the year)

	2012	2013	2014	2015	2016
RBI (SSS) (trillions)					
Total value of delivery instructions	1,219.2	1,372.9	1,405.8	1,504.0	1,932.6
DVP	1,219.2	1,372.9	1,405.8	1,504.0	1,932.6
debt securities	1,219.2	1,372.9	1,405.8	1,504.0	1,932.6
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
free of payment	nav	nav	nav	nav	nav
NSDL					
Total value of delivery instructions	152,000.3	160,160.6	188,678.2	188,292.0	223,861.1
DVP	nap	nap	nap	nav	nav
free of payment	152,000.3	160,160.6	188,678.2	188,292.0	223,861.1
debt securities	121,237.0	125,606.4	136,791.4	139,230.0	156,135.8
short-term paper	105,382.0	102,979.8	112,090.5	114,315.4	119,105.7
bonds	15,855.0	22,626.6	24,700.9	24,914.7	37,030.1
equity	30,684.6	34,356.5	51,304.0	48,319.5	66,727.9
other	78.7	197.6	582.8	742.5	997.4
CDSL					
Total value of delivery instructions	6,163.1	8,234.7	13,130.3	11,497.5	19,710.6
DVP	4,139.1	6,076.5	10,949.6	9,093.0	15,734.3
debt securities	61.4	63.5	119.0	702.6	264.6
short-term paper	2.1	0.0	0	<i>5</i> 57	0.2
bonds	59.3	63.5	119.0	146.0	264.4
equity	3,942.5	5,840.7	10,574.4	8,017.8	14,904.5
other	135.2	172.4	256.2	372.7	565.1
free of payment	2,024.0	2,158.2	2,180.7	2,404.4	3,976.4
debt securities	294.6	327.4	172.0	172.9	297.7
short-term paper	194.6	209.2	55.6	38.1	17.5
bonds	100.0	118.2	116.4	134.8	280.2
equity	1,675.4	1,748.5	1,884.0	2,137.0	3,554.8
other	54.0	82.4	124.7	94.6	123.9

Table 1
Basic statistical data

	2012	2013	2014	2015	2016
Population (thousands) ¹	59,898.0	60,224.8	60,448.0	60,441.0	60,326.0
GDP (EUR billions)	1,613.3	1,604.6	1,621.8	1,645.4	1,672.4
GDP per capita (EUR)	26,934	26,644	26,830	27,224	27,723
Consumer price inflation (%) ¹	3.3	1.2	0.2	0.1	-0.1
Exchange rate (EUR/USD):					
end of year	0.7579	0.7251	0.8237	0.9185	0.9487
average	0.7788	0.7532	0.7539	0.9019	0.9039
¹ Yearly average.					

Table 2
Settlement media used by non-banks

(EUR billions, end of year)

	2012	2013	2014	2015	2016
Notes and coin in circulation outside banks ¹	nap	nav	nap	nap	nap
Value of transferable deposits ²	760.05	781.86	836.99	909.24	1,020.59
Narrow money supply (M1) ¹	nap	nap	nap	nap	nap
Memo:					
Transferable deposits in foreign currencies	11.589	13.095	14.338	15.852	16.292
Outstanding value on e-money storage	1.940	2.267	2.654	3.004	3.299
on card-based products	1.929	2.215	2.595	2.930	3.279
on software- or network-based products	0.011	0.052	0.059	0.074	0.020

¹ These figures are provided solely at an aggregated euro area level (see Euro area, Table 2). ² Current account deposits held at credit institutions and the Post Office. Transferable deposits held at branches of foreign banks are included.

Table 3 Settlement media used by banks

(EUR billions, average of last reserve maintenance period)

	2012	2013	2014	2015	2016
Transferable balances held at the central bank	38.026	23.422	16.841	20.081	42.960
required reserves	13.141	13.291	13.602	14.395	14.618
free reserves	24.885	10.132	3.239	5.886	28.342
Transferable balances held at other banks ¹ <i>Memo:</i>	22.967	22.365	21.249	21.289	21.742
Credit extended by the central bank:					
intraday	6.015	12.916	14.215	24.445	9.782
overnight ²	0.000	0	0	0	0
longer refinancing operations ³	273.324	230.170	180.688	155.337	200.991
¹ End-of-year figures. ² Marginal lending facility. ³ Other monetary policy operations vis-à-vis the Eurosystem.					

Table 4

Banknotes and coin¹

¹ These figures are provided solely at an aggregated euro area level (see Euro area, Table 4).

Table 5
Institutions offering payment services to non-banks (end of year)

	2012	2013	2014	2015	2016
Central bank					
Number of branches or offices	52	52	52	52	52
Number of accounts (thousands)	0.120	0.090	0.036	0.028	0.027
Value of accounts (EUR billions) Memo:	9.83	10.22	9.41	8.02	18.41
Number of accounts, banks (thousands)	0.222	0.200	0.204	0.193	0.186
Banks					
Number of institutions ¹	710	685	663	656	611
Number of branches or offices	32,875	31,760	30,726	30,259	29,039
Number of accounts (thousands) ²	38,970	42,597	43,168	44,789	40,169
of which: number of internet/PC-linked accounts	00,070	12,001	10,100	11,700	10,100
(thousands) ³	17,965	19,693	32,093	33,721	35,540
Value of accounts (EUR billions)	750.14	771.64	840.74	914.97	1,012.97
Credit institutions legally incorporated in the rep			040.74	314.37	1,012.97
Number of institutions	631	605	584	575	527
Number of branches or offices	32,550	31,501	30,472	30,004	28,869
Value of accounts (EUR billions)	728.29	752.41	812.99	876.29	974.69
Branches of euro area-based credit institutions	720.29	732.41	012.99	070.29	314.03
Number of institutions	53	53	53	57	59
Number of Institutions Number of branches or offices	105	112	117	132	139
	15.22	13.06	20.77	31.92	33.99
Value of accounts (EUR billions) Branches of EEA-based credit institutions (outsi			20.77	31.92	33.99
Number of institutions		-	17	16	10
Number of institutions Number of branches or offices	17 208	18 134	17 126	16 113	18 22
Value of accounts (EUR billions)	5.75	5.26	6.13	5.70	2.58
Branches of non-EEA-based credit institutions	0	0	0	0	7
Number of institutions	9	9	9	8	7
Number of branches or offices	12	13	11	10	9
Value of accounts (EUR billions)	0.88	0.91	0.86	1.05	1.81
Other institutions offering payment services to no	n-banks ⁴				
Number of institutions	49	51	40	40	40
Number of branches or offices	13,676	12,941	13,069	12,903	12,576
Number of accounts (thousands)	5,883	6,023	6,043	6,236	6,200
Value of accounts	41.45	43.90	43.95	43.95	49.64
Institutions offering payment services to non-bank	ks (total)				
Number of institutions	760	737	704	697	652
Number of branches or offices	46,603	44,753	43,847	43,214	41,667
Number of accounts held by non-banks					
(thousands)	44,853	48,620	49,211	51,025	46,370
of which: number of internet/PC-linked accounts					
(thousands)	17,965	19,693	32,093	33,721	35,540
Value of accounts held by non-banks	801.42	825.75	894.10	966.94	1,042.75
Memo:					
Electronic money institutions					
Number of institutions ⁵	3	4	5	4	4
Outstanding value on e-money storages issued by					
e-money institutions (EUR billions)	nav	nav	136.00	133.00	2,054.00
1 Banks are included from the year in which the licence is d					

¹ Banks are included from the year in which the licence is granted. ² Only current accounts are included. ³ Estimated. ⁴ Includes the Post Office and other financial institutions operating in the credit card market. ⁵ Undertakings other than banks authorised to issue electronic money on an exclusive basis.

Table 6
Payment card functions and accepting devices (thousands, end of year)

	2012	2013	2014	2015	2016
Cards issued in the country					
Cards with a cash function ¹	60,041.9	65,821.6	70,642.3	76,737.3	81,044.0
Cards with a debit function	39,707.2	44,215.6	47,036.2	50,316.7	53,176.0
Cards with a delayed debit function	nav	nav	nav	nav	nav
Cards with a credit function ²	28,472.9	27,570.7	26,605.9	26,837.3	24,044.0
Cards with an e-money function ¹ of which: cards with an e-money function which	18,803.8	21,606.0	22,596.0	25,175.3	26,096.0
have been loaded at least once	18,803.8	21,606.0	22,596.0	25,175.3	26,096.0
Total number of cards (irrespective of the number					
of functions on the card) ¹	88,514.8	93,392.3	97,248.3	103,574.6	105,088.0
of which: cards with a combined debit, cash and					
e-money function	nap	nap	nap	nap	nap
Memo:					
Retailer cards	nap	nap	nap	nap	nap
Terminals located in the country					
ATMs	50.75	50.04	49.65	50.53	49.29
ATMs with a cash withdrawal function	50.75	50.04	49.65	50.53	<i>4</i> 9.29
ATMs with a credit transfer function	<i>4</i> 8.27	47.71	<i>4</i> 9.65	50.53	<i>45.57</i>
POS terminals	1,510.61	1,584.19	1,847.46	1,979.42	2,226.13
of which: EFTPOS terminals ³	1,510.61	1,584.19	1,847.46	1,979.42	2,226.13
E-money card terminals ⁴	nav	nav	658.1	780.92	984.86
e-money card loading/unloading terminals	nav	nav	45.7	48.24	45.57
e-money card payment terminals	nav	nav	612.4	732.67	939.30

¹ Includes cards with an e-money function issued by the Post Office. ² Includes cards with a delayed debit function. ³ From 2010 onwards, refers strictly to terminals pertaining to reporting banks (resident in Italy), including those managed by third parties. ⁴ Includes e-money card terminals owned by the Post Office.

Table 7
Indicators of the use of payment instruments and terminals by non-banks: volume of transactions¹
(millions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers	1,261.27	1,261.07	1,347.23	1,471.03	1,410.60
paper-based	743.92	719.95	766.04	859.54	762.30
non-paper-based	517.35	541.12	581.18	611.50	648.30
Direct debits	602.27	624.34	608.09	682.25	790.70
Card payments with cards issued in the country	1,628.98	1,813.21	2,034.02	2,269.78	2,612.90
payments by cards with a debit function	1,091.52	1,225.77	1,390.06	1,617.15	1,836.50
payments by cards with a delayed debit function	nav	nav	nav	nap	nap
payments by cards with a credit function ²	537.46	<i>587.45</i>	643.96	652.63	776.40
E-money payment transactions ³	191.23	243.98	291.40	373.91	461.20
by cards with an e-money function	191.23	243.98	nav	nav	nav
Cheques	275.69	252.41	231.51	208.63	186.20
Other payment instruments	303.58	292.11	280.53	282.52	284.60
Total number of transactions with payment					
instruments ³	4,263.02	4,487.12	4,792.76	5,288.13	5,746.20
of which: cross-border transactions sent	nav	nav	70.97	98.02	125.10
Memo:					
Cross-border transactions received	113.00	133.38	34.58	37.92	41.80
Transactions per type of terminal					
Transactions at terminals in the country by cards iss	ued in the cou	intry			
Cash transactions	nav	nav	1,157.63	993.81	nav
ATM cash withdrawals	743.99	794.17	952.68	795.31	1,007.70
ATM cash deposits ⁴	nav	nav	204.95	198.50	nav
POS payment transactions	2,038.73	2,274.07	2,025.62	2,176.96	2,537.40
E-money card loading/unloading transactions ³	nav	36.71	41.03	49.00	57.70
E-money card payment transactions	nav	nav	221.40	131.00	432.10
	novmonto by o				don a manay

¹ Book-entry transactions are not included. ² Includes payments by cards with a delayed debit function. ³ Includes e-money purchase transactions with cards issued by the Post Office. ⁴ Where unavailable, data are estimated

Table 8
Indicators of the use of payment instruments and terminals: value of transactions¹
(EUR billions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers	7,853.08	8,033.85	7,290.09	6,940.60	7,004.40
paper-based	3,782.31	3,196.75	<i>3,245.5</i> 2	3,111.63	2,837.60
non-paper-based	4,070.78	4,837.10	4,044.57	3,828.97	4,166.80
Direct debits	385.42	356.66	316.88	358.75	365.20
Card payments with cards issued in the country	123.28	129.63	142.28	157.35	177.80
payments by cards with a debit function	73.70	78.79	88.37	103.20	115.40
payments by cards with a delayed debit function	nav	nav	nav	nap	nap
payments by cards with a credit function ²	<i>4</i> 9.58	50.85	53.91	54.15	62.30
E-money payment transactions ³	12.69	11.75	13.49	16.98	20.60
by cards with an e-money function	12.69	11.75	nav	nav	nap
Cheques	679.75	582.12	533.31	493.26	479.40
Other payment instruments	709.52	650.00	617.53	618.88	605.20
Total value of transactions with payment					
instruments ³	9,763.74	9,764.01	8,913.57	8,585.82	8,652.60
of which: cross-border transactions sent	nav	nav	388.01	403.14	1,989.20
Memo:					
Cross-border transactions received	1,911.19	1,937.45	21,902.00	1,758.70	1,810.10
Transactions per type of terminal					
Transactions at terminals in the country by cards iss	ued in the cou	intry			
Cash transactions	nav	nav	336.97	330.64	nav
ATM cash withdrawals	136.39	146.17	178.43	181.28	193.60
ATM cash deposits ⁴	nav	nav	158.54	149.36	nav
POS payment transactions	160.54	165.45	141.51	147.58	172.30
E-money card loading/unloading transactions ³	nav	nav	11.97	14.06	16.80
E-money card payment transactions	nav	nav	10.74	6.78	19.40
			laved debit fun		des e-money

¹ Book-entry transactions are not included. ² Includes payments by cards with a delayed debit function. ³ Includes e-money purchase transactions with cards issued by the Post Office. ⁴ Where unavailable, data are estimated .

Table 9
Participation in selected interbank funds transfer systems (end of year)

	2012	2013	2014	2015	2016
Large-value payment systems					
TARGET component: BI-REL, TARGET2-IT ¹					
Number of participants	426	170	167	156	148
Direct participants	103	102	105	100	99
Banks	98	97	100	95	94
Central bank	1	1	1	1	1
Other direct participants	4	4	4	4	4
General government	0	0	0	0	0
Postal institution	1	1	1	1	1
Clearing and settlement organisations	2	2	2	2	2
Other financial institutions	1	1	1	1	1
Other	0	0	0	0	0
Indirect participants	323	68	62	56	49
Retail payment systems					
All Italian CSMs ²					
Number of participants ³	nav	nap	76	72	69
Direct participants	87	83	76	72	69
Banks	81	78	72	68	65
Central bank	1	1	1	1	1
Other direct participants	5	4	3	3	3
General government	0	0	0	0	0
Postal institution	1	1	1	1	1
Clearing and settlement organisations	2	2	2	2	2
Other financial institutions	1	1	0	0	0
Other	1	0	0	0	0
Indirect participants	nav	nap	nap	nap	nap

¹ TARGET2 migration date: 19 May 2008. ² Figures refer to participants which are settlement members in the Italian CSMs.

Table 10
Payments processed by selected interbank funds transfer systems: volume of transactions¹
(millions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
TARGET component: BI-REL, TARGET2-IT ²					
Credit transfers sent	8.92	10.38	11.48	10.25	8.08
credit transfers sent within TARGET2-IT credit transfers sent to another TARGET	5.90	6.94	7.79	7.19	5.74
component	3.02	3.44	3.68	3.06	2.34
Мето:					
Credit transfers received from another TARGET					
component	4.95	5.30	4.70	4.49	3.86
Concentration ratio in terms of volume (%)	41.9	44.6	45.2	44.6	43.4
Retail payment systems					
All Italian CSMs					
Total number of transactions	2,248.93	2,302.07	1,883.00	1,927.88	2,097.73
credit transfers	409.03	378.41	126.00	154.09	275.96
direct debits	521.57	530.32	268.00	198.16	217.37
card payments	879.20	966.55	1,065.00	1,169.83	1,231.32
ATM transactions	209.87	219.70	228.00	233.89	219.11
e-money transactions	0.14	0.07	0.00	0	0
cheques	226.15	204.35	182.00	169.83	151.07
other payment instruments ³	2.99	2.67	14.00	2.09	2.90
Concentration ratio in terms of volume (%)	52.0	52.6	41.3	54.1	31.4

¹ The figures do no include liquidity transfer to Dedicated Cash Accounts started in 2015. ² TARGET2 migration date: 19 May 2008. ³ Payments between the banking system and the State Treasury, the Bank of Italy or the Post Office, and bills of exchange, interest and dividends paid on private securities deposited at Monte Titoli.

Table 11
Payments processed by selected interbank funds transfer systems: value of transactions¹
(EUR billions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
TAROFT common outs BLDFL TAROFTO IT ²					
TARGET component: BI-REL, TARGET2-IT ²			44 400 00		40.440.74
Credit transfers sent	32,663.33	37,465.23	41,420.29	32,208.63	18,416.54
credit transfers sent within TARGET2-IT credit transfers sent to another TARGET	22,781.76	25,084.81	26,866.72	19,539.64	8,222.85
component	9,881.57	12,380.41	14,553.57	12,668.99	10,193.70
Memo:					
Credit transfers received from another TARGET					
component	9,808.94	12,400.76	14,573.02	14,974.82	10,127.47
•	,	•	•	•	,
Concentration ratio in terms of value (%)	52.3	50.5	50.7	50.7	42.0
Retail payment systems					
All Italian CSMs					
Total value of transactions	2,792.015	2,556.044	1,477.960	1,490.480	1,520.896
credit transfers	1,343.249	1,209.937	430.950	561.221	599.194
direct debits	694.682	651.437	448.675	392.632	408.489
card payments	<i>57.7</i> 27	60.753	65.008	78.780	71.700
ATM transactions	31.995	33.153	<i>33.455</i>	33.935	31.606
e-money transactions	0.021	0.014	0.000	0	0
cheques	563.942	486.770	471.040	419.009	402.817
other payment instruments ³	100.398	113.979	28.817	4.902	7.089
Concentration ratio in terms of value (%)	57.5	57.6	53.9	47.7	32.7

¹ The figures do no include liquidity transfer to Dedicated Cash Accounts started in 2015. ² TARGET2 migration date: 19 May 2008. ³ Payments between the banking system and the State Treasury, the Bank of Italy or the Post Office, and bills of exchange, interest and dividends paid on private securities deposited at Monte Titoli.

Table 12
Participation in SWIFT by domestic institutions (end of year)

	2012	2013	2014	2015	2016
Members	99	93	91	89	84
of which: live	96	93	91	87	84
Sub-members	93	93	91	84	77
of which: live	89	89	87	80	70
Participants	96	103	111	112	112
of which: live	81	87	94	93	93
Total users	288	289	293	285	273
of which: live	266	269	272	260	247
Мето:					
Total SWIFT users	10,279	10,583	10,805	11,094	11,299
members	2,398	2,389	2,379	2,455	2,422
sub-members	3,340	3,343	3,353	3,395	3,367
participants	4,541	4,851	5,073	5,244	5,510
Source: SWIFT.					

Table 13
SWIFT message flows to/from domestic users (thousands, total for the year)

	2012	2013	2014	2015	2016
Total messages sent	104,026	112,110	135,896	145,751	145,492
of which:					
category I	17,281	17,152	16,604	16,945	14,656
category II	5,046	4,993	4,932	5,017	5,280
Total messages received of which:	88,977	91,580	102,519	108,835	109,490
category I	19,762	19,994	18,519	19,170	18,550
category II	4,328	4,115	4,228	4,365	4,678
Domestic traffic	10,553	11,953	13,483	16,897	22,536
Мето:					
Global SWIFT traffic	4,589,109	5,065,668	5,612,724	6,106,644	6,525,800
Source: SWIFT.		•	•		

Table 14
Number of participants in exchanges and trading systems (end of year)

	2012	2013	2014	2015	2016
Borsa Italiana					
Total number of participants	nav	nav	nav	nav	nav
MTS					
Total number of participants	87	79	77	72	73
central bank	1	1	1	1	1
central counterparties (CCPs)	2	2	2	0	0
banks	65	61	61	57	58
other	19	15	13	14	14
Number of domestic participants	51	45	44	39	41
central bank	1	1	1	1	1
central counterparties (CCPs)	1	1	1	0	0
banks	45	41	41	37	39
other	4	2	1	1	1
Number of foreign participants	36	34	33	33	32
central bank	0	0	0	0	0
central counterparties (CCPs)	1	1	1	0	0
banks	20	20	20	20	19
other	15	13	12	13	13
PCT					
Total number of participants	114	118	117	110	114
central bank	2	2	2	1	1
central counterparties (CCPs)	2	2	2	0	0
banks	82	87	85	<i>7</i> 8	82
other	28	27	28	31	31
Number of domestic participants	65	70	70	64	66
central bank	1	1	1	0	0
central counterparties (CCPs)	1	1	1	0	0
banks	54	60	60	52	54
other	9	8	8	12	12
Number of foreign participants	49	48	47	46	48
central bank	1	1	1	1	1
central counterparties (CCPs)	1	1	1	0	0
banks	28	27	25	26	28
<u>other</u>	19	19	20	19	19

Table 15 Number of listed securities (end of year)

	2012	2013	2014	2015	2016
Borsa Italiana					
Total number of listed securities	nav	nav	nav	nav	nav
MTS					
Total number of listed securities	113	113	113	113	113
debt securities	113	113	113	113	113
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	nap	nap	nap	0	0
other	nap	nap	nap	0	0
PCT					
Total number of listed securities	1,021	892	993	956	716
debt securities	1,021	892	993	956	716
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	nap	nap	nap	0	0
other	nap	nap	nap	0	0

Table 17

Number of executed trades

(thousands, total for the year)

	2012	2013	2014	2015	2016
Borsa Italiana					
Total number of executed securities trades	nav	nav	nav	nav	nav
Total number of executed derivatives trades	nav	nav	nav	nav	nav
MTS					
Total number of executed securities trades	108	178	275	211	216
debt securities	108	178	275	211	216
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
Total number of executed derivatives trades	nav	nav	nav	nav	nav
PCT					
Total number of executed securities trades	819	904	934	1,020	1,015
debt securities	819	904	934	1,020	1,015
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	nap	nap	nap	0	0
other	nap	nap	nap	0	0
Total number of executed derivatives trades	nav	nav	nav	nav	nav

Table 18

Value of executed trades

(EUR billions, total for the year)

	2012	2013	2014	2015	2016
Borsa Italiana					
Total value of executed securities trades	nav	nav	nav	nav	nav
Total value of executed derivatives trades	nav	nav	nav	nav	nav
MTS					
Total value of executed securities trades	568.0	904.2	1,487.3	1,225.2	1,384.7
debt securities	568.0	904.2	1,487.3	1,225.2	1,384.7
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	nap	nap	nap	0.0	0
other	nap	nap	nap	0.0	0
Total value of executed derivatives trades	nav	nav	nav	nav	nav
PCT					
Total value of executed securities trades	17,598.4	21,967.6	22,641.7	23,992.0	23,378.0
debt securities	17,598.4	21,967.6	22,641.7	23,992.0	23,378.0
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	nap	nap	nap	0.0	0
other	nap	nap	nap	0.0	0
Total value of executed derivatives trades	nav	nav	nav	nav	nav

Table 19
Number of clearing members
(end of year)

	2012	2013	2014	2015	2016
CCG ¹					
Total number of clearing members	74	83	81	82	87
central bank	0	0	0	0	0
central counterparties (CCPs)	1	1	1	1	1
banks	59	67	66	68	73
other	14	15	14	13	13
Number of domestic clearing members	57	64	62	59	66
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	52	59	58	55	62
other	5	5	4	4	4
Number of foreign clearing members	17	19	19	23	21
central bank	0	0	0	0	0
central counterparties (CCPs)	1	1	1	1	1
banks	7	8	8	13	11
other	9	10	10	9	9

Table 20 Number of contracts and transactions cleared (thousands, total for the year)

	2012	2013	2014	2015	2016
CCG					
Total number of contracts and transactions					
cleared	211,082.0	199,191.0	230,433.8	253,361.1	270,505.1
Number of securities transactions cleared	136,440.0	133,343.0	151,891.9	164,198.6	171,669.8
debt securities	15,331.0	13,457.0	12,597.6	12,362.5	10,600.2
short-term paper	nav	nav	nav	nav	nav
bonds	2,389.0	2,191.0	3,148.0	3,322.7	3,270.9
equity	120,955.0	119,773.0	139,200.3	151,718.2	161,051.5
other	154.0	113.0	94.0	118.0	18.1
of which: number of repurchase transactions					
cleared	953.0	1,077.0	1,033.6	1,145.3	1,252.4
debt securities	953.0	1,077.0	1,033.6	1,145.3	1,252.4
short-term paper	nav	nav	nav	nap	nav
bonds	nap	nap	nap	nap	nap
Number of exchange-traded derivatives contracts					
cleared	74,642.0	65,848.0	78,542.0	89,162.5	98,835.3
financial futures	28,867.0	20,647.0	26,894.0	36,775.0	38,302.4
financial options	45,769.0	45,183.0	51,631.0	52,379.9	60,525.5
other financial derivatives	6.0	nap	nap	nap	nap
commodity futures	nap	19.0	17.0	7.6	7.4
Number of OTC derivatives contracts cleared	nap	nap	nap	nap	nap

Table 21
Value of contracts and transactions cleared (EUR billions, total for the year)

	2012	2013	2014	2015	2016
CCG					
Total value of contracts and transactions cleared	25,862.71	34,803.79	35,055.92	38,652.37	38,934.04
Value of securities transactions cleared	24,706.29	33,544.62	33,129.54	36,281.33	36,870.34
debt securities	23,572.69	32,324.78	31,534.56	34,462.63	35,406.48
short-term paper	nav	nav	nav	nav	nav
bonds	37.52	41.17	91.23	89.89	88.60
equity	1,133.51	1,219.76	1,594.89	1,818.58	1,463.85
other	0.10	0.09	0.09	0.12	0.01
of which: value of repurchase transactions					
cleared	22,199.40	30,825.78	29,466.95	32,517.45	33,448.15
debt securities	22,199.40	30,825.78	29,466.95	32,517.45	33,448.15
short-term paper	nav	nav	nav	nav	nav
bonds	nap	nap	nap	nap	nap
Value of exchange-traded derivatives contracts					
cleared	1,156.42	1,259.17	1,926.38	2,371.03	2,063.70
financial futures	1,133.51	1,215.94	1,896.48	2,353.85	2,032.15
financial options	20.84	39.37	28.19	16.67	30.95
other financial derivatives	2.08	nap	nap	nap	nap
commodity futures	nap	3.86	1.70	0.51	0.60
Value of OTC derivatives contracts cleared	nap	nap	nap	nap	nap

Table 22 Number of direct participants in CSDs *(end of year)*

	2012	2013	2014	2015	2016
Monte Titoli					
Total number of participants	248	239	232	183	184
central bank	1	1	1	1	1
central counterparties (CCPs)	7	7	6	6	5
central securities depositories ¹	9	12	15	7	7
banks	118	108	100	62	59
other	113	111	110	107	112
Number of domestic participants	232	221	208	167	168
central bank	1	1	1	1	1
central counterparties (CCPs)	1	1	1	1	1
central securities depositories ¹	0	0	0	0	0
banks	118	108	97	58	54
other	112	111	109	107	112
Number of foreign participants	16	18	24	16	16
central bank	0	0	0	0	0
central counterparties (CCPs)	6	6	5	5	4
central securities depositories ¹	9	12	15	7	7
banks	0	0	3	4	5
other	1	0	1	0	0
¹ CSDs having a relationship with Monte Titoli.	_				

Table 23 Number of securities held on accounts at CSDs (thousands, end of year)

2012	2013	2014	2015	2016
43.79	42.37	38.24	43.32	29.64
34.90	32.42	28.74	33.73	15.52
nav	nav	nav	nav	nav
nav	nav	nav	nav	nav
1.04	0.98	1.25	1.16	1.54
7.85	8.97	8.25	8.43	12.58
	43.79 34.90 <i>nav</i> <i>nav</i> 1.04	43.79 42.37 34.90 32.42 nav nav nav nav 1.04 0.98	43.79 42.37 38.24 34.90 32.42 28.74 nav nav nav nav nav nav 1.04 0.98 1.25	43.79 42.37 38.24 43.32 34.90 32.42 28.74 33.73 nav nav nav nav nav nav nav nav 1.04 0.98 1.25 1.16

Table 24 Value of securities held on accounts at CSDs (EUR billions, end of year)

	2012	2013	2014	2015	2016
Monte Titoli ¹					
Total value of securities held	3,208.50	3,299.00	3,349.21	3,305.69	3,175.09
debt securities	2,743.20	2,775.65	2,721.11	2,630.71	2,584.99
short-term paper	163.87	157.44	140.73	110.86	100.97
bonds	2,579.33	2,618.21	2,580.38	2,519.85	2,484.02
equity	439.40	494.80	600.76	645.14	559.44
other	25.89	28.55	27.34	29.84	30.66
¹ Market value (average in the last month).					

Table 25
Number of delivery instructions processed¹
(thousands, total for the year)

2013 2012 2014 2015 2016 **Monte Titoli** 21,291.8 20,997.0 24,663.0 22,233.0 Total number of delivery instructions 23,718.0 DVP 18,708.8 18,598.0 21,843.0 20,946.0 18,885.4 debt securities 7,003.0 7,465.0 7,206.0 5,747.0 5,430.4 short-term paper 541.0 582.0 500.0 270.0 247.2 5,183.2 6,462.0 6,883.0 6,706.0 5,477.0 bonds 8,903.0 equity 8,919.0 10,390.0 11,117.0 9,756.4 other 2,787.0 2,230.0 4,247.0 4,082.0 3,698.5 free of payment 2,583.0 2,398.0 2,820.0 2,772.0 3,347.6 debt securities 1,043.0 939.0 951.0 863.0 828.3 short-term paper 70.5 54.0 51.0 33.0 29.5 bonds 973.0 885.0 900.0 830.0 798.8 1,489.5 1,418.0 1,824.0 1,879.0 2,431.1 equity other 50.0 41.0 45.0 30.0 88.2

Table 26
Value of delivery instructions processed

(EUR billions, total for the year)

2012 2014 2016 2013 2015 **Monte Titoli** Total value of delivery instructions 58.456.3 62,349.2 75.945.4 66.409.1 66,682.1 DVP 43,884.3 47,922.8 57,428.8 50,451.4 54,778.4 debt securities 42,279.3 46,409.3 55,365.8 48,467.4 53,032.9 short-term paper 9,585.3 8,944.7 6,567.5 4,256.3 5,919.9 bonds 32,694.0 37,464.7 48,798.3 44,211.1 47,113.0 equity 1,577.2 1,483.3 2,013.3 1,903.4 1,711.4 other 30.2 49 7 80.7 34 1 27.8 free of payment 14,572.0 14,426.4 18,516.6 15,957.6 11,903.7 debt securities 13,540.0 13,443.5 17,182.4 14,626.0 10,003.3 short-term paper 2,287.2 1,530.2 1,311.5 810.7 926.9 bonds 11,252.8 11,913.3 15,870.9 13,815.3 9,076.4 equity 1,013.6 969.9 1,309.3 1,304.5 1,776.4 other 18.4 13.0 24.9 27.2 124.0

¹ Includes transactions processed by the SSS (delivery instructions). Excludes multilateral net balances from the SSS.

¹ Includes transactions processed by the SSS (delivery instructions). Excludes multilateral net balances from the SSS.

Table 1
Basic statistical data

	2012	2013	2014	2015	2016
Population (thousands) ¹	127,593	127,414	127,237	127,095	126,933
GDP (JPY billions)	494,957	503,176	513,698	530,157	537,061
GDP per capita (JPY thousands)	3,879.2	3,949.1	4,037.3	4,171.3	4,231.1
Consumer price inflation (%)	-0.1	0.3	2.8	0.8	-0.1
Exchange rate (JPY/USD):					
end of year	86.11	104.94	119.62	120.39	117.07
average	79.75	97.62	105.82	121.08	108.65

¹ As of 1 October.

Sources: Bank of Japan; Ministry of Internal Affairs and Communications.

Table 2
Settlement media used by non-banks

(JPY billions, end of year)

	2012	2013	2014	2015	2016
Notes and coin in circulation outside banks ¹	83,070.2	85,270.7	88,163.3	93,560.3	97,302.7
Value of transferable deposits ²	477,149.0	506,601.5	529,651.0	551,361.4	604,066.1
Narrow money supply (M1)	560,219.2	591,872.2	617,788.3	644,915.4	701,286.0
Memo:					
Transferable deposits in foreign currencies ³	5,659.8	6,639.6	7,264.1	7,848.6	7,533.3
Outstanding value on e-money storages ⁴	161.5	184.4	212.2	240.5	262.9
on card-based products	161.5	184.4	212.2	240.5	262.9
on software- or network-based products	nav	nav	nav	nav	nav

¹ Notes and coin held by private corporations, individuals and local governments ("non-banks"). Includes commemorative coins. ² Demand deposits held at all deposit-taking institutions. ³ Demand deposits held at domestically licensed banks, branches of foreign banks and shinkin banks. ⁴ Sum of available data.

Source: Bank of Japan.

Table 3 Settlement media used by banks

(JPY billions, end of year except as noted)

	2012	2013	2014	2015	2016
Transferable balances held at the central bank ¹	42,879.0	96,806.9	162,113.5	230,569.3	297,542.3
required reserves	7,827.9	8,200.5	8,556.6	8,795.4	9,367.2
free reserves	35,051.1	88,606.4	153,556.9	221,773.9	288,175.1
Transferable balances held at other banks ² <i>Memo:</i>	5,342.1	8,524.2	8,034.3	8,874.7	23,592.0
Credit extended by the central bank:	137,078.9	199,395.8	282,703.0	375,377.0	467,856.9
intraday ³	28,310.3	28,986.4	29,380.1	21,908.7	6,780.5
overnight	nav	nav	nav	nav	nav
longer-term refinancing operations	nav	nav	nav	nav	nav

¹ Balances held by deposit-taking institutions subject to the reserve requirement system; average for the December reserve maintenance period. ² Aggregate of balances held at domestically licensed banks and shinkin banks; as of end-September. ³ Yearly peak average; estimated.

Source: Bank of Japan.

Table 4
Banknotes and coin¹
(JPY billions, end of year)

	2012	2013	2014	2015	2016
Total banknotes and coin issued	91,230.9	94,769.7	97,738.0	103,120.0	107,203.5
Total banknotes issued ²	86,653.4	90,143.1	93,081.8	98,430.0	102,461.2
of which:					
JPY 10,000	79,272.5	82,559.8	85,370.3	90,679.4	94,623.2
JPY 5,000	3,020.9	<i>3,153.4</i>	3,252.6	3,254.1	3,271.1
JPY 2,000	203.6	201.3	198.6	197.4	196.8
JPY 1,000	4,003.4	4,077.0	4,109.9	4,150.2	4,222.5
Total coin issued ³	4,577.5	4,626.5	4,656.2	4,690.0	4,742.2
of which:					
JPY 500	2,046.6	2,092.1	2,124.4	2,165.9	2,219.6
JPY 100	1,037.3	1,049.7	1,055.1	1,057.5	1,066.6
JPY 50	216.9	218.2	220.1	220.4	220.2
JPY 10	196.1	195.9	195.5	194.3	193.8
JPY 5	<i>55.4</i>	55.1	55.0	54.6	54.2
JPY 1	39.0	39.0	38.7	38.3	38.1
Banknotes and coin held by banks	8,160.7	9,499.0	9,574.7	9,559.7	9,900.8
Banknotes and coin in circulation outside banks	83,070.2	85,270.7	88,163.3	93,560.3	97,302.7

¹ Includes commemorative coins. ² Includes some types of banknotes which are no longer printed but are still in circulation.

Source: Bank of Japan.

³ Includes some types of coins which are no longer minted but are still in circulation.

Table 5
Institutions offering payment services to non-banks (end-March of the following year except as noted)

	2012	2013	2014	2015	2016
Central bank					
Number of branches or offices	33	33	33	33	33
Number of accounts (thousands)	0.086	0.082	0.082	0.082	0.082
Value of accounts	nav	nav	nav	nav	nav
Memo:					
Number of accounts, all (thousands)	0.549	0.539	0.538	0.534	0.535
Value of accounts, all (JPY billions) ¹	47,367.4	117,888.2	188,238.2	262,750.2	332,087.7
Banks					
Number of institutions	1,491	1,466	1,417	1,378	1,362
Number of branches or offices	54,469	54,283	54,017	53,812	nav
Number of accounts (thousands) of which: number of internet/PC-linked accounts	389,436	387,638	387,239	386,827	391,864
(thousands) ²	65,813	nav	nav	nav	nav
Value of accounts (JPY billions) ¹	434,455.2	457,678.2	481,666.6	507,305.8	556,250.1
Domestically licensed banks ³	,	,	,	,	,
Number of institutions	141	140	140	140	140
Number of branches or offices	36,156	36,140	36,111	36,104	36,031
Value of accounts (JPY billions) ¹	390,704.8	411,654.7	433,064.3	456,782.4	502,494.4
Cooperative and rural banks ⁴					
Number of institutions	1,293	1,271	1,223	1,185	1,170
Number of branches or offices	18,235	18,067	17,834	17,638	17,434
Value of accounts (JPY billions) ^{1, 5}	43,099.0	45,280.1	47,581.7	49,455.2	52,773.5
Branches of foreign banks					
Number of institutions	57	55	54	53	52
Number of branches or offices	78	76	72	70	nav
Value of accounts (JPY billions) ¹	651.4	743.4	1,020.6	1,068.2	982.2
Institutions offering payment services to non-ba	nks (total) ⁶				
Number of institutions	1,492	1,467	1,418	1,379	1,363
Number of branches or offices	54,502	54,316	54,050	53,845	nav
Number of accounts held by non-banks					
(thousands)	389,436	387,638	387,239	386,827	391,864
	65,813	nav	nav	nav	nav
· · · · · · · · · · · · · · · · · · ·					
(JPY billions) ¹	434,455.2	457,678.2	481,666.6	507,305.8	556,250.1
Memo:					
Electronic money institutions					
Number of institutions	nav	nav	nav	nav	nav
Outstanding value on e-money storages issued by					
e-money institutions	nav	nav	nav	nav	nav
Number of branches or offices Value of accounts (JPY billions) ¹ Institutions offering payment services to non-bath Number of institutions Number of branches or offices Number of accounts held by non-banks (thousands) of which: number of internet/PC-linked accounts (thousands) ² Value of accounts held by non-banks (JPY billions) ¹ Memo: Electronic money institutions Number of institutions Outstanding value on e-money storages issued by	78 651.4 anks (total) ⁶ 1,492 54,502 389,436 <i>65,813</i> 434,455.2 nav	76 743.4 1,467 54,316 387,638 <i>nav</i> 457,678.2 nav	72 1,020.6 1,418 54,050 387,239 <i>nav</i> 481,666.6	70 1,068.2 1,379 53,845 386,827 <i>nav</i> 507,305.8	nav 982.2 1,363 nav 391,864 <i>nav</i> 556,250.1

¹ Average for March of the following year. ² Based on a survey conducted by the Centre for Financial Industry Information Systems; the number of accounts used only for mobile banking is excluded. ³ Includes city banks, regional banks, regional banks II, trust banks, internet-only banks and Japan Post Bank. ⁴ Includes shinkin banks, Shinkin Central Bank, Norinchukin Bank, Shoko Chukin Bank, Shinkumi Federation Bank, National Federation of Labour Credit Associations, credit cooperatives, labour credit associations, agricultural cooperatives and fishery cooperatives. ⁵ Figures for shinkin banks only. ⁶ Sum of available data.

Sources: Bank of Japan; Japan Post Bank; Centre for Financial Industry Information Systems; Japanese Bankers Association.

Table 6
Payment card functions and accepting devices
(end-March of the following year except as noted)

	2012	2013	2014	2015	2016
Cards issued in the country (millions)					
Cards with a cash function ^{1, 2}	361.45	356.88	337.20	337.28	336.79
Cards with a debit function ^{2, 3}	417.00	418.00	419.00	421.00	422.00
Cards with a delayed debit function	nav	nav	nav	nav	nav
Cards with a credit function	259.79	267.22	258.90	266.00	nav
Cards with an e-money function ⁴	200.16	229.67	263.96	302.51	336.00
Total number of cards (irrespective of the number					
of functions on the card) ⁵	1,238.40	1,271.77	1,279.06	1,326.79	nav
of which: cards with a combined debit, cash and e-	•			•	
money function	nav	nav	nav	nav	nav
Memo:					
Retailer cards	nav	nav	nav	nav	nav
Terminals located in the country (thousands)					
ATMs ²	137.29	137.89	136.75	136.75	136.81
ATMs with a cash withdrawal function	137.29	137.89	136.75	136.75	136.81
ATMs with a credit transfer function	137.02	137.65	nav	nav	nav
POS terminals ⁶	1,877.70	1,951.16	nav	nav	nav
of which: EFTPOS terminals	nav	nav	nav	nav	nav
E-money card terminals ⁴	1,214.00	1,396.00	1,569.00	1,853.00	2,032.00
e-money card loading/unloading terminals	nav	nav	nav	nav	nav
e-money card payment terminals	1,214.00	1,396.00	1,569.00	1,853.00	2,032.00

¹ In reality, the number of cards with a cash function is still larger than that of cards with a debit function. ² As of end-September. ³ Figures for the J-Debit debit card scheme. ⁴ Based on the survey by the Bank of Japan. ⁵ Cards with multiple functions are counted multiple times. ⁶ Terminals with debit and credit functions are counted twice; as of September for credit and January of the following year for debit.

Sources: Centre for Financial Industry Information Systems; Japan Debit Card Promotion Association; Japan Consumer Credit Association; Bank of Japan.

Table 7
Indicators of the use of payment instruments and terminals by non-banks: volume of transactions (millions, total for the year except as noted)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers ^{1, 2}	1,494.22	1,513.54	1,548.72	1,582.35	1,609.99
paper-based	nav	nav	nav	nav	nav
non-paper-based	nav	nav	nav	nav	nav
Direct debits	nav	nav	nav	nav	nav
Card payments with cards issued in the country	6,826.74	nav	nav	nav	nav
payments by cards with a debit function ³	12.95	12.41	11.43	10.60	9.89
payments by cards with a delayed debit function	nav	nav	nav	nav	nav
payments by cards with a credit function ⁴	6,813.79	nav	nav	nav	nav
E-money payment transactions ^{1, 5}	2,720.27	3,293.86	4,039.55	4,678.45	5,191.60
by cards with an e-money function	2,720.27	3,293.86	4,039.55	4,678.45	5,191.60
through other e-money storages	nav	nav	nav	nav	nav
Cheques ⁶	77.45	73.05	68.86	64.10	59.42
Other payment instruments	nav	nav	nav	nav	nav
Total number of transactions with payment					
instruments ⁷	11,118.69	nav	nav	nav	nav
of which: cross-border transactions sent	nav	nav	nav	nav	nav
Memo:					
Cross-border transactions received	nav	nav	nav	nav	nav
Transactions per type of terminal					
Total transactions at terminals in the country					
Cash transactions ^{1, 7, 8}	285.23	275.96	265.05	251.40	250.85
ATM cash withdrawals	285.23	275.96	265.05	251.40	250.85
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions					
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions ^{1, 5}	2,720.27	3,293.86	4,039.55	4,678.45	5,191.60

¹ Figures for the year ending March of the following year. ² Includes transactions handled by the Zengin System and other retail payment networks; excludes credit transfers through on-us accounts. ³ Figures for the J-Debit debit card scheme. ⁴ Estimate by the Bank of Japan based on a survey by the Japan Consumer Credit Association. ⁵ Based on the survey by the Bank of Japan. ⁶ Total number of transactions handled by all bill and cheque clearing systems in Japan. ⁷ Sum of available data. ⁸ Excludes cash withdrawals from "own ATMs" of financial institutions.

Sources: Japanese Bankers Association; Japan Debit Card Promotion Association; Japan Consumer Credit Association; Bank of Japan.

Table 8
Indicators of the use of payment instruments and terminals by non-banks: value of transactions (JPY trillions, total for the year except as noted)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers ^{1, 2}	2,686.41	2,890.33	2,934.37	3,016.94	2,940.55
paper-based	nav	nav	nav	nav	nav
non-paper-based	nav	nav	nav	nav	nav
Direct debits	nav	nav	nav	nav	nav
Card payments with cards issued in the country	41.24	42.28	46.73	50.26	54.33
payments by cards with a debit function ³	0.56	0.49	0.46	0.43	0.40
payments by cards with a delayed debit function	nav	nav	nav	nav	nav
payments by cards with a credit function 4	40.69	41.79	46.27	49.83	53.93
E-money payment transactions ^{1, 5}	2.47	3.14	4.01	4.64	5.14
by cards with an e-money function	2.47	3.14	4.01	4.64	5.14
Cheques ⁶	369.20	366.44	332.66	299.03	424.22
Other payment instruments	nav	nav	nav	nav	nav
Total value of transactions with payment					
instruments ⁷	3,099.33	3,302.18	3,317.77	3,370.88	3,424.24
of which: cross-border transactions sent	nav	nav	nav	nav	nav
Memo:					
Cross-border transactions received	nav	nav	nav	nav	nav
Transactions per type of terminal					
Total transactions at terminals in the country					
Cash transactions ^{1, 7, 8}	13.24	12.86	12.53	12.15	11.97
ATM cash withdrawals	13.24	12.86	12.53	12.15	11.97
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions					
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions ^{1, 5}	2.47	3.14	4.01	4.64	5.14

¹ Figures for the year ending March of the following year. ² Includes transactions handled by the Zengin System and other retail payment networks; excludes credit transfers through on-us accounts. ³ Figures for the J-Debit debit card scheme. ⁴ Data are not continuous owing to a change in collection methodology: data are estimated up to 2012 but actual from 2013. ⁵ Based on the survey by the Bank of Japan. ⁶ Total value of transactions handled by all bill and cheque clearing systems in Japan. ⁷ Sum of available data. ⁸ Excludes cash withdrawals from "own ATMs" of financial institutions.

Sources: Japanese Bankers Association; Japan Debit Card Promotion Association; Japan Consumer Credit Association; Bank of Japan.

Table 9
Participation in selected interbank funds transfer systems (end of year)

	2012	2013	2014	2015	2016
Large-value payment systems					
BOJ-NET Funds Transfer System					
Number of participants	550	542	538	536	534
Direct participants	550	542	538	536	534
Banks	463	459	456	454	452
Central bank	0	0	0	0	0
Other direct participants	87	83	82	82	82
General government	0	0	0	0	0
Postal institution	0	0	0	0	0
Clearing and settlement organisations	40	38	38	38	38
Other financial institutions	46	44	43	43	43
Other	1	1	1	1	1
Indirect participants	0	0	0	0	0
Foreign Exchange Yen Clearing System					
Number of participants	206	203	202	201	201
Direct participants	27	27	28	27	27
Banks	26	26	27	26	26
Central bank	0	0	0	0	0
Other direct participants	1	1	1	1	1
Clearing and settlement organisations	1	1	1	1	1
Indirect participants	179	176	174	174	174
Retail payment systems					
Zengin System					
Number of participants	1,361	1,352	1,340	1,322	1,296
Direct participants	143	142	143	145	145
Banks	143	142	143	145	145
Indirect participants	1,218	1,210	1,197	1,177	1,151
Tokyo Clearing House					
Number of participants	318	317	315	312	305
Direct participants	105	106	106	106	106
Banks	104	105	105	105	105
Central bank	1	1	1	1	1
Other direct participants	0	0	0	0	0
Indirect participants	213	211	209	206	199
Sources: Japanese Bankers Association; Bank of Japan.					

Table 10
Payments processed by selected interbank funds transfer systems: volume of transactions (thousands, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
BOJ-NET Funds Transfer System ¹					
Credit transfers sent	15,295	16,276	16,686	16,904	16,495
domestic	nav	nav	nav	nav	nav
cross-border	nav	nav	nav	nav	nav
Memo:					
Cross-border credit transfers received	nav	nav	nav	nav	nav
Concentration ratio in terms of volume ²	47.5	45.8	49.4	48.0	49.1
Foreign Exchange Yen Clearing System					
Credit transfers sent	6,286	6,697	6,489	6,766	6,919
domestic	nav	nav	nav	nav	nav
cross-border	nav	nav	nav	nav	nav
Memo:					
Cross-border credit transfers received	nav	nav	nav	nav	nav
Concentration ratio in terms of volume	79.4	80.7	80.4	76.3	76.8
Retail payment systems					
Zengin System					
Total national transactions sent	1,460,891	1,480,708	1,514,859	1,548,337	1,576,006
credit transfers	nav	nav	nav	nav	nav
direct debits	nav	nav	nav	nav	nav
card payments	nav	nav	nav	nav	nav
ATM transactions	nav	nav	nav	nav	nav
e-money transactions	nav	nav	nav	nav	nav
cheques	nav	nav	nav	nav	nav
other payment instruments	nav	nav	nav	nav	nav
Concentration ratio in terms of volume	nav	nav	nav	nav	nav
Tokyo Clearing House					
Total national transactions sent	24,965	23,475	22,034	20,591	19,001
credit transfers	nav	nav	nav	nav	nav
direct debits	nav	nav	nav	nav	nav
card payments	nav	nav	nav	nav	nav
ATM transactions	nav	nav	nav	nav	nav
e-money transactions	nav	nav	nav	nav	nav
cheques	nav	nav	nav	nav	nav
other payment instruments	nav	nav	nav	nav	nav
Concentration ratio in terms of volume	nav	nav	nav	nav	nav
¹ All payments in the Foreign Exchange Yen Clearin					

¹ All payments in the Foreign Exchange Yen Clearing System and large-value payments in the Zengin System have been settled on an RTGS basis via the BOJ-Net Funds Transfer System from October 2008 and November 2011 respectively. ² Calculated based on transactions between participants in the system.

Sources: Japanese Bankers Association; Bank of Japan.

Table 11
Payments processed by selected interbank funds transfer systems: value of transactions (JPY trillions, total for the year)

domestic cross-border nav nav nav nav nav nav nav nav nav nav nav nav nav nav <th></th> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> <th>2016</th>		2012	2013	2014	2015	2016
Credit transfers sent domestic nav cross-border 27,233.9 28,536.8 30,527.4 33,095.8 33,641.8 Memo: Cross-border credit transfers received nav	Large-value payment systems					
domestic cross-border nav	BOJ-NET Funds Transfer System ¹					
cross-border nav nav <t< td=""><td></td><td>27,233.9</td><td>28,536.8</td><td>30,527.4</td><td>33,095.8</td><td>33,641.8</td></t<>		27,233.9	28,536.8	30,527.4	33,095.8	33,641.8
Memo: Cross-border credit transfers received nav	domestic	nav	nav	nav	nav	nav
Cross-border credit transfers received nav	cross-border	nav	nav	nav	nav	nav
Concentration ratio in terms of value 37.8 37.4 43.0 41.5 44.3	Memo:					
Proreign Exchange Yen Clearing System 2,460.2 2,912.9 3,055.0 3,840.9 3,933.6 domestic nav	Cross-border credit transfers received	nav	nav	nav	nav	nav
Credit transfers sent domestic 2,460.2 nav 2,912.9 nav 3,055.0 nav 3,840.9 nav 3,933.6 nav cross-border nav	Concentration ratio in terms of value ²	37.8	37.4	43.0	41.5	44.3
domestic nav	Foreign Exchange Yen Clearing System					
Cross-border nav nav nav nav nav Memo: Cross-border credit transfers received nav n	Credit transfers sent	2,460.2	2,912.9	3,055.0	3,840.9	3,933.6
Memo: Cross-border credit transfers received nav na	domestic	nav	nav	nav	nav	nav
Cross-border credit transfers received nav	cross-border	nav	nav	nav	nav	nav
Concentration ratio in terms of value 75.4 75.5 74.6 72.2 70.8 Retail payment systems Zengin System Total national transactions sent 2,651.9 2,855.7 2,899.1 2,982.4 2,905.5 credit transfers nav	Memo:					
Retail payment systems Zengin System Total national transactions sent 2,651.9 2,855.7 2,899.1 2,982.4 2,905.5 credit transfers nav	Cross-border credit transfers received	nav	nav	nav	nav	nav
Zengin System Total national transactions sent 2,651.9 2,855.7 2,899.1 2,982.4 2,905.5 credit transfers nav	Concentration ratio in terms of value	75.4	75.5	74.6	72.2	70.8
Total national transactions sent Credit transfers Credit transactions Credit transactions Credit transactions Credit transfers Credi	Retail payment systems					
credit transfers direct debits nav	Zengin System					
direct debits nav	Total national transactions sent	2,651.9	2,855.7	2,899.1	2,982.4	2,905.5
card paymentsnavnavnavnavnavATM transactionsnavnavnavnavnave-money transactionsnavnavnavnavnavnavchequesnavnavnavnavnavnavother payment instrumentsnavnavnavnavnavnavTokyo Clearing HouseTotal national transactions sent272.4269.8238.4209.8162.6credit transfersnavnavnavnavnavnavdirect debitsnavnavnavnavnavnavcard paymentsnavnavnavnavnavnavATM transactionsnavnavnavnavnavnave-money transactionsnavnavnavnavnavnavnavchequesnavnavnavnavnavnavnavother payment instrumentsnavnavnavnavnavnavnav	credit transfers	nav	nav	nav	nav	nav
ATM transactions e-money transactions nav	direct debits	nav	nav	nav	nav	nav
e-money transactions nav nav nav nav nav nav nav nav other payment instruments nav	card payments	nav	nav	nav	nav	nav
cheques other payment instrumentsnav navnav navnav navnav navnav navConcentration ratio in terms of valuenavnavnavnavnavTokyo Clearing HouseTotal national transactions sent272.4269.8238.4209.8162.6credit transfersnavnavnavnavnavdirect debitsnavnavnavnavnavnavcard paymentsnavnavnavnavnavnavnavATM transactionsnavna		nav	nav	nav	nav	nav
other payment instrumentsnavnavnavnavnavConcentration ratio in terms of valuenavnavnavnavnavTokyo Clearing HouseTotal national transactions sent272.4269.8238.4209.8162.6Credit transfersnavnavnavnavnavnavdirect debitsnavnavnavnavnavnavcard paymentsnavnavnavnavnavnavATM transactionsnavnavnavnavnavnave-money transactionsnavnavnavnavnavnavchequesnavnavnavnavnavnavother payment instrumentsnavnavnavnavnavnav		nav	nav	nav	nav	nav
Concentration ratio in terms of value nav	cheques	nav	nav	nav	nav	nav
Tokyo Clearing House Total national transactions sent 272.4 269.8 238.4 209.8 162.6 credit transfers nav nav nav nav nav nav nav direct debits nav nav nav nav nav nav nav nav nav ard payments nav nav nav nav nav nav nav nav nav e-money transactions nav nav nav nav nav nav nav cheques nav nav nav nav nav nav nav nav other payment instruments	other payment instruments	nav	nav	nav	nav	nav
Total national transactions sent 272.4 269.8 238.4 209.8 162.6 credit transfers nav	Concentration ratio in terms of value	nav	nav	nav	nav	nav
credit transfers nav nav nav nav nav nav nav nav nav na	Tokyo Clearing House					
direct debits nav nav nav nav nav nav nav card payments nav	Total national transactions sent	272.4	269.8	238.4	209.8	162.6
card payments nav	credit transfers	nav	nav	nav	nav	nav
ATM transactions nav nav nav nav nav nav nav e-money transactions nav nav nav nav nav nav nav cheques nav nav nav nav nav nav other payment instruments nav nav nav nav nav	direct debits	nav	nav	nav	nav	nav
e-money transactions nav nav nav nav nav nav nav cheques nav nav nav nav nav nav other payment instruments nav nav nav nav nav	card payments	nav	nav	nav	nav	nav
cheques nav nav nav nav nav nav other payment instruments nav nav nav nav nav	ATM transactions	nav	nav	nav	nav	nav
other payment instruments nav nav nav nav nav	e-money transactions	nav	nav	nav	nav	nav
	cheques	nav	nav	nav	nav	nav
	other payment instruments	nav	nav	nav	nav	nav
Concentration ratio in terms of value nav nav nav nav nav	Concentration ratio in terms of value	nav	nav	nav	nav	nav

¹ All payments in the Foreign Exchange Yen Clearing System and large-value payments in the Zengin System have been settled on an RTGS basis via the BOJ-Net Funds Transfer System from October 2008 and November 2011 respectively. ² Calculated based on the transaction between participants in the system.

Sources: Japanese Bankers Association; Bank of Japan.

Table 12
Participation in SWIFT by domestic institutions (end of year)

	2012	2013	2014	2015	2016
Members	118	115	114	114	115
of which: live	118	115	114	114	115
Sub-members	83	81	78	77	77
of which: live	80	79	75	74	74
Participants	51	53	56	63	74
of which: live	49	51	56	61	72
Total users	252	249	248	254	266
of which: live	247	245	245	249	261
Memo:					
Total SWIFT users	10,118	10,279	10,583	10,805	11,094
members	2,334	2,398	2,389	2,379	2,455
sub-members	3,355	3,340	3,343	3,353	3,395
participants	4,429	4,541	4,851	5,073	5,244
Source: SWIFT.					

Table 13
SWIFT message flows to/from domestic users (thousands, total for the year)

	2012	2013	2014	2015	2016
Total messages sent	118,611	95,479	105,094	111,150	136,560
of which:					
category I	10,956	10,809	10,971	10,288	11,694
category II	6,640	6,561	6,786	6,545	7,010
Total messages received of which:	86,880	79,572	89,679	90,782	103,571
category I	10,141	10,089	10,430	10,046	11,606
category II	8,071	7,767	8,891	8,591	9,158
Domestic traffic	17,549	18,507	19,143	15,282	18,756
Мето:					
Global SWIFT traffic	4,431,100	4,589,109	5,065,668	5,612,724	6,106,644
Source: SWIFT.					

Table 14
Number of participants in exchanges and trading systems (end of year)

	2012	2013	2014	2015	2016
Tokyo Stock Exchange (TSE) ^{1, 2}					
Total number of participants	127	126	95	95	93
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	34	28	0	0	0
other	93	98	95	95	93
Number of domestic participants	127	126	95	94	92
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	34	28	0	0	0
other	93	98	95	94	92
Number of foreign participants	0	0	0	1	1
Osaka Exchange (OSE) ^{1, 3}					
Total number of participants	99	79	111	110	108
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	1	1	26	26	26
other	98	78	85	84	82
Number of domestic participants	99	79	111	110	108
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	1	1	26	26	26
other	98	78	85	84	82
Number of foreign participants	0	0	0	0	0
Tokyo Financial Exchange (TFX)					
Total number of participants	68	51	49	51	51
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	28	17	16	16	16
other	40	34	33	35	35
Number of domestic participants	67	50	48	50	50
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	28	17	16	16	16
other	39	33	32	34	34
Number of foreign participants	1	1	1	1	1
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	0	0	0	0	0
other	1	1	1	1	1

¹ Following the merger of TSE and OSE, OSE's cash equity market was integrated into the TSE in July 2013, and TSE's derivatives market was integrated into the OSE in March 2014. ² Data from 2014 are only for securities trading systems. ³ Data from 2013 are only for derivatives trading systems.

Sources: Tokyo Stock Exchange; Osaka Exchange; Tokyo Financial Exchange.

Table 15 Number of listed securities

(end of year)

	2012	2013	2014	2015	2016
TSE ¹					
Total number of listed securities	2,618	3,732	3,787	3,846	3,891
debt securities	308	309	312	322	333
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity ²	2,293	3,406	3,456	3,502	3,533
other ³	17	17	19	22	25
OSE ¹					
Total number of listed securities	1,924	nap	nap	nap	nap
debt securities	305	nap	nap	nap	nap
short-term paper	nav	nap	nap	nap	nap
bonds	nav	nap	nap	nap	nap
equity ⁴	1,617	nap	nap	nap	nap
other ⁵	2	nap	nap	nap	nap
TFX					
Total number of listed securities	nap	nap	nap	nap	nap

¹ Following the merger of TSE and OSE, OSE's cash equity market was integrated into the TSE in July 2013. ² Number of listed companies. Excludes foreign stocks. ³ Number of convertible bonds. ⁴ Number of listed companies. Excludes foreign stocks, investment securities, covered warrants and subscription certificates. ⁵ Number of convertible bonds. Sources: Tokyo Stock Exchange; Osaka Exchange.

Table 16
Market capitalisation of listed companies¹

(JPY trillions, end of year)

	2012	2013	2014	2015	2016
TSE ² Total market capitalisation/equity	300.80	477.51	524.90	589.79	579.60
OSE ^{2, 3} Total market capitalisation/equity	177.12	nap	nap	nap	nap
TFX Total market capitalisation/equity	nap	nap	nap	nap	nap

¹ Figures show the aggregated market value of companies listed in each trading system. The companies listed in both TSE and OSE are counted twice. ² Following the merger of TSE and OSE, OSE's cash equity market was integrated into the TSE in July 2013. ³ Excludes foreign stocks, ETFs, investment securities, covered warrants and subscription certificates. Sources: Tokyo Stock Exchange; Osaka Exchange.

Table 17
Number of executed trades
(thousands, total for the year)

	2012	2013	2014	2015	2016
TSE					
Total number of executed securities trades	nav	nav	nav	nav	nav
Total number of executed derivatives trades	nav	nav	nap	nap	nap
OSE					
Total number of executed securities trades	nav	nav	nap	nap	nap
Total number of executed derivatives trades	nav	nav	nav	nav	nav
TFX					
Total number of executed securities trades	nap	nap	nap	nap	nap
Total number of executed derivatives trades	nav	nav	nav	nav	nav

Table 18 Value of executed trades (JPY trillions, total for the year)

	2012	2013	2014	2015	2016
TSE					
Total value of executed securities trades ¹	330.65	736.33	684.19	818.05	766.57
debt securities ²	0	0	0	0	0
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity ³	322.87	703.81	643.11	745.97	691.11
other ⁴	7.78	32.52	41.08	72.08	75.45
Total value of executed derivatives trades ⁵	nap	nap	nap	nap	nap
financial futures	nap	nap	nap	nap	nap
financial options	nap	nap	nap	nap	nap
OSE					
Total value of executed securities trades ¹	nap	nap	nap	nap	nap
equity	nap	nap	nap	nap	nap
other	nap	nap	nap	nap	nap
Total value of executed derivatives trades ⁵	1,699.34	2,326.54	2,279.85	2,656.92	2,293.35
financial futures ⁶	1,688.29	2,310.01	2,270.56	2,649.98	2,285.90
financial options ⁷	5.24	10.53	7.31	6.94	7.44
other financial derivatives ⁸	5.81	6.00	1.98	nap	nap
TFX					
Total value of executed securities trades	nap	nap	nap	nap	nap
Total value of executed derivatives trades ⁹	474.55	504.42	270.83	200.03	250.64
financial futures ¹⁰	474.55	504.42	270.83	200.03	250.64
financial options	nav	nav	nav	nav	nav
other financial derivatives	nav	nav	nav	nav	nav

¹ Following the merger of TSE and OSE, OSE's cash equity market was integrated into the TSE in July 2013. Data for OSE before the integration are included in figures for TSE. ² Negligible figure. ³ Excludes foreign stocks. ⁴ Convertible bonds, ETFs, REITs, investment securities, covered warrants and subscription certificates. ⁵ TSE's derivatives market was integrated into OSE in March 2014. Pre-integration data for TSE are included in figures for OSE. ⁶ Stock price index and JGB futures. ⁷ Options on stock price index, stock and JGB futures. ⁸ Exchange FX margin trading. ⁹ Sum of available data. ¹⁰ Mainly three-month euroyen futures.

Sources: Tokyo Stock Exchange; Osaka Exchange; Tokyo Financial Exchange.

Table 19
Number of clearing members
(end of year)

	2012	2013	2014	2015	2016
Japan Securities Clearing Corporation (JSCC) ^{1, 2}					
Total number of clearing members	139	139	138	136	132
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	41	38	39	39	35
other	98	101	99	97	97
Number of domestic clearing members	139	139	138	136	132
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	41	38	39	39	35
other	98	101	99	97	97
Number of foreign clearing members	0	0	0	0	0
JASDEC DVP Clearing Corporation (JDCC)					
Total number of clearing members	53	52	54	53	52
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	12	12	12	12	12
other	41	40	42	41	40
Number of domestic clearing members	53	52	54	53	52
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	12	12	12	12	12
other	41	40	42	41	40
Number of foreign clearing members	0	0	0	0	0
Japan Government Bond Clearing Corporation (JGI	BCC) ²				
Total number of clearing members	34	nap	nap	nap	nap
central bank	0	nap	nap	nap	nap
central counterparties (CCPs)	0	nap	nap	nap	nap
banks	6	nap	nap	nap	nap
other	28	nap	nap	nap	nap
Number of domestic clearing members	34	nap	nap	nap	nap
central bank	0	nap	nap	nap	nap
central counterparties (CCPs)	0	nap	nap	nap	nap
banks	6	nap	nap	nap	nap
other	28	nap	nap	nap	nap
Number of foreign clearing members	0	nap	nap	nap	nap
TFX					
Total number of clearing members	65	49	47	50	50
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	28	17	16	16	16
other	37	32	31	34	34
For the footnotes, see the end of the table.					

Table 19 (cont)					
	2012	2013	2014	2015	2016
Number of domestic clearing members	65	49	47	50	50
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	28	17	16	16	16
other	37	32	31	34	34
Number of foreign clearing members	0	0	0	0	0
OSE ³					
Total number of clearing members	83	nap	nap	nap	nap
central bank	0	nap	nap	nap	nap
central counterparties (CCPs)	0	nap	nap	nap	nap
banks	0	nap	nap	nap	nap
other	83	nap	nap	nap	nap
Number of domestic clearing members	83	nap	nap	nap	nap
central bank	0	nap	nap	nap	nap
central counterparties (CCPs)	0	nap	nap	nap	nap
banks	0	nap	nap	nap	nap
other	83	nap	nap	nap	nap

¹ JGBCC was merged with the JSCC in October 2013. ² OSE's clearing system was integrated into the JSCC in July 2013. Sources: Japan Securities Clearing Corporation; JASDEC DVP Clearing Corporation; Tokyo Financial Exchange; Osaka Exchange.

0

nap

nap

nap

nap

Number of foreign clearing members

Number of contracts and transactions cleared (thousands, total for the year)

	2012	2013	2014	2015	2016
JSCC ^{2, 3}					
Total number of contracts and transactions cleared	nav	nav	nav	nav	nav
Number of securities transactions cleared	nav	nav	nav	nav	nav
debt securities	nav	nav	nav	nav	nav
government bonds ⁴	1234.0	1118.7	1382.8	1659.1	1774.1
of which: number of repurchase transactions cleare	nav	nav	nav	nav	nav
Number of exchange-traded derivatives contracts					
cleared	nav	nav	nav	nav	nav
No object (OTO desired as a contract of cond					
Number of OTC derivatives contracts cleared	nav	nav	nav	nav	nav
JDCC					
Total number of contracts and transactions cleared	nav	nav	nav	nav	nav
JGBCC ²					
Total number of contracts and transactions cleared	nav	nap	nap	nap	nap
TFX					
Total number of contracts and transactions cleared	nav	nav	nav	nav	nav
OSE ³					
Total number of contracts and transactions cleared	nav	nav	nap	nap	nap
-	•				

¹ Number of contracts and transactions settled after the netting. ² JGBCC was merged with the JSCC in October 2013. Premerger data for JGBCC are included in figures for JSCC. ³ OSE's clearing service was integrated into the JSCC in July 2013. ⁴ Includes Treasury Discounting Bills (T-bills).

Source: Japan Securities Clearing Corporation.

Table 21
Value of contracts and transactions cleared

(JPY trillions, total for the year except as noted)

	2012	2013	2014	2015	2016
JSCC ^{2, 3}					
Total value of contracts and transactions cleared ⁴	2,436.3	2,247.6	2,881.8	3,515.0	3,821.5
Value of securities transactions cleared ⁵	2,436.3	2,247.6	2,881.8	3,515.0	3,821.5
debt securities	nav	nav	nav	nav	nav
government bonds ⁶	2,414.7	2,203.6	2,839.1	3,463.3	3,776.7
equity	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
of which: value of repurchase transactions cleared	nav	nav	nav	nav	nav
Value of exchange-traded derivatives contracts					
cleared	nav	nav	nav	nav	nav
Value of OTC derivatives contracts cleared ⁷	nav	nav	nav	nav	nav
JDCC ⁸					
Total value of contracts and transactions cleared	27.3	45.0	53.3	63.7	67.6
Value of securities transactions cleared	27.3	45.0	53.3	63.7	67.6
debt securities	nav	nav	nav	nav	nav
equity	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
of which: value of repurchase transactions cleared	nav	nav	nav	nav	nav
Value of exchange-traded derivatives contracts					
cleared	nap	nap	nap	nap	nap
Value of OTC derivatives contracts cleared	nap	nap	nap	nap	nap
JGBCC ²					
Total value of contracts and transactions cleared	nap	nap	nap	nap	nap
Value of securities transactions cleared	nap	nap	nap	nap	nap
debt securities	nap	nap	nap	nap	nap
government bonds ⁶	nap	nap	nap	nap	nap
of which: value of repurchase transactions cleared	nav	nap	nap	nap	nap
Value of exchange-traded derivatives contracts					
cleared	nap	nap	nap	nap	nap
Value of OTC derivatives contracts cleared	nap	nap	nap	nap	nap
For the footnotes, see the end of the table.					

Table 21 (cont)					
	2012	2013	2014	2015	2016
TFX					
Total value of contracts and transactions cleared	0.040	0.047	0.017	0.015	0.033
Value of securities transactions cleared	nap	nap	nap	nap	nap
Value of exchange-traded derivatives contracts					
cleared	0.040	0.047	0.017	0.015	0.033
financial futures	nav	nav	nav	nav	nav
financial options	nav	nav	nav	nav	nav
other financial derivatives	nav	nav	nav	nav	nav
Value of OTC derivatives contracts cleared	nap	nap	nap	nap	nap
OSE ^{3, 9}					
Total value of contracts and transactions cleared	2.934	7.268	nap	nap	nap
Value of securities transactions cleared	nap	nap	nap	nap	nap
Value of exchange-traded derivatives contracts	2.934	7.268	nap	nap	nap
financial futures	nav	nav	nap	nap	nap
financial options	nav	nav	nap	nap	nap
other financial derivatives 10	0.057	0.084	nap	nap	nap
Value of OTC derivatives contracts cleared	nap	nap	nap	nap	nap

¹ Value of contracts and transactions settled after the netting. ² JGBCC was merged with the JSCC in October 2013. Pre-merger data for JGBCC are included in figures for JSCC. ³ OSE's clearing service was integrated into the JSCC in July 2013. ⁴ Sum of available data. ⁵ Includes stocks, convertible bonds, ETFs, covered warrants and share options. ⁶ Includes Treasury Discounting Bills (T-bills). ⁷ JSCC started clearing of OTC derivatives contracts from 2011. Data for value of obligations assumed are available on the JSCC website. ⁸ Figures for the year ending March of the following year. ⁹ Data of 2013 are from January to July. ¹⁰ Exchange FX margin trading.

Sources: Japan Securities Clearing Corporation; JASDEC DVP Clearing Corporation; Tokyo Financial Exchange; Osaka Exchange.

Table 22 Number of direct participants in CSDs (end of year)

	2012	2013	2014	2015	2016
Bank of Japan (BOJ) ¹					
Total number of participants	291	283	280	279	279
central bank	1	1	1	1	1
central counterparties (CCPs)	6	4	4	4	4
central securities depositories	0	0	0	0	0
banks	196	192	190	189	190
other	88	86	85	85	84
Number of domestic participants	291	283	280	279	279
central bank	1	1	1	1	1
central counterparties (CCPs)	6	4	4	4	4
central securities depositories	0	0	0	0	0
banks	196	192	190	189	190
other	88	86	85	85	84
Number of foreign participants	0	0	0	0	0
Japan Securities Depository Center (JASDEC)					
a) System for stocks					
Total number of participants	199	186	177	175	171
central bank	0	0	0	0	0
central counterparties (CCPs)	5	4	4	4	4
central securities depositories	0	0	0	0	0
banks	18	18	18	18	18
other	176	164	155	153	149
Number of domestic participants	199	186	177	175	171
central bank	0	0	0	0	0
central counterparties (CCPs)	5	4	4	4	4
central securities depositories	0	0	0	0	0
banks	18	18	18	18	18
other	176	164	155	153	149
Number of foreign participants	0	0	0	0	0
b) System for commercial paper					
Total number of participants	67	65	66	66	68
central bank	1	1	1	1	1
central counterparties (CCPs)	0	0	0	0	0
central securities depositories	0	0	0	0	0
banks	31	30	31	31	33
other	35	34	34	34	34
Number of domestic participants	67	65	66	66	68
central bank	1	1	1	1	1
central counterparties (CCPs)	0	0	0	0	0
central securities depositories	0	0	0	0	0
banks	31	30	31	31	33
other	35	34	34	34	34
Number of foreign participants	0	0	0	0	0
For the footnotes, see the end of the table.					

Tab	e 22	(cont

	2012	2013	2014	2015	2016
c) System for corporate bonds					
Total number of participants	88	85	86	84	86
central bank	1	1	1	1	1
central counterparties (CCPs)	3	2	2	2	2
central securities depositories	0	0	0	0	0
banks	30	29	30	29	30
other	54	53	53	52	53
Number of domestic participants	88	85	86	84	86
central bank	1	1	1	1	1
central counterparties (CCPs)	3	2	2	2	2
central securities depositories	0	0	0	0	0
banks .	30	29	30	29	30
other	54	53	53	52	53
Number of foreign participants	0	0	0	0	0
d) System for investment trust					
Total number of participants	179	174	172	172	174
central bank	0	0	0	0	0
central counterparties (CCPs)	2	1	1	1	1
central securities depositories	0	0	0	0	0
banks	38	36	35	35	35
other	139	137	136	136	138
Number of domestic participants	179	174	172	172	174
central bank	0	0	0	0	0
central counterparties (CCPs)	2	1	1	1	1
central securities depositories	0	0	0	0	0
banks	38	36	35	35	35
other	139	137	136	136	138
Number of foreign participants	0	0	0	0	0

¹ Figures show the number of the JGB Book-Entry System. Includes the number of offline participants. Sources: Japan Securities Depository Center; Bank of Japan.

Table 23
Number of securities held on accounts at CSDs (end-March of the following year)

	2012	2013	2014	2015	2016
BOJ					
Total number of securities held	nav	nav	nav	nav	nav
JASDEC					
Total number of securities held	73,277	70,882	70,851	71,256	76,484
debt securities	62,412	59,147	58,011	57,442	61,530
short-term paper ¹	3,926	3,552	3,717	3,617	3,242
bonds ²	58,486	55,595	54,294	53,825	58,288
equity ³	3,737	3,773	3,860	3,906	3,975
other ⁴	7,128	7,962	8,980	9,908	10,979

¹ Commercial paper. ² Corporate and municipal bonds. ³ Stocks, warrants for new shares, investment units, preferred shares, beneficial interests in investment trusts and other items pertaining to these instruments. ⁴ Corporate bonds with warrants for new stocks and investment trusts.

Source: Japan Securities Depository Center.

Table 24
Value of securities held on accounts at CSDs

(JPY trillions, end of year except as noted)

	2012	2013	2014	2015	2016
BOJ					_
Total value of securities held	935.76	956.58	965.54	981.82	1003.69
debt securities	935.76	956.58	965.54	981.82	1003.69
government bonds ¹	935.76	956.58	965.54	981.82	1003.69
JASDEC ²					
Total value of securities held ³	382.39	850.80	1003.59	981.42	1,070.08
debt securities	266.54	265.81	266.00	263.41	270.24
short-term paper ⁴	13.76	12.61	14.22	12.95	13.10
bonds ⁵	252.78	253.20	251.78	250.46	257.15
equity ⁶	nav	460.35	595.62	556.74	626.36
other ⁷	115.85	124.64	141.97	161.26	173.48

¹ Includes T-bills. ² As of end-March of the following year. ³ Sum of available data. ⁴ Commercial paper. ⁵ Corporate and municipal bonds. ⁶ Stocks, warrants for new shares, investment units, preferred shares, beneficial interests in investment trusts and other items pertaining to these instruments. ⁷ Corporate bonds with warrants for new stocks and investment trusts. Sources: Japan Securities Depository Center; Bank of Japan.

Table 25
Number of delivery instructions processed (thousands, total for the year except as noted)

	2012	2013	2014	2015	2016
BOJ					
Total number of delivery instructions	4,210.8	4,356.1	4,654.4	4,455.7	4,409.7
DVP	2,739.1	2,827.5	3,248.4	3,232.4	3,327.2
debt securities	2,739.1	2,827.5	3,248.4	3,232.4	3,327.2
government bonds ¹	2,739.1	2,827.5	3,248.4	3,232.4	3,327.2
free of payment	1,471.7	1,528.6	1,406.1	1,223.4	1,082.5
debt securities	1,471.7	1,528.6	1,406.1	1,223.4	1,082.5
government bonds ¹	1,471.7	1,528.6	1,406.1	1,223.4	1,082.5
JASDEC ²					
Total number of delivery instructions	88,347.0	107,294.1	111,023.8	118,178.8	118,308.0
DVP	43,102.8	51,693.4	55,593.2	58,568.6	58,526.9
debt securities	253.4	250.9	317.8	283.2	165.8
short-term paper ³	118.8	127.9	197.0	173.0	55.3
bonds ⁴	134.6	123.0	120.8	110.2	110.5
equity ⁵	41,904.8	50,369.1	54,015.2	57,008.0	57,107.2
other ⁶	944.6	1,073.5	1,260.2	1,277.5	1,254.0
free of payment	45,244.2	55,600.7	55,430.6	59,610.2	59,781.1
debt securities	445.5	416.5	448.9	515.4	290.1
short-term paper ³	108.3	102.1	103.8	101.4	51.4
bonds ⁴	337.2	314.4	345.0	413.9	238.8
equity ⁵	42,183.4	52,114.2	51,668.1	55,741.3	56,015.4
other ⁶	2,615.2	3,070.0	3,313.7	3,353.6	3,475.6

¹ Includes T-bills. ² Figures for the year ending March of the following year. ³ Commercial paper. ⁴ Corporate and municipal bonds. ⁵ Stocks, warrants for new shares, investment units, preferred shares, beneficial interests in investment trusts and other items pertaining to these instruments. ⁶ Corporate bonds with warrants for new stocks and investment trusts. For investment trusts, figures for new issuance and redemption are reported.

Sources: Japan Securities Depository Center; Bank of Japan.

Table 26
Value of delivery instructions processed (JPY trillions, total for the year except as noted)

	2012	2013	2014	2015	2016
BOJ					
Total value of delivery instructions	20,617.4	22,125.9	24,712.7	24,800.7	21,301.6
DVP	10,336.2	10,811.3	13,231.7	13,360.1	13,175.9
debt securities	10,336.2	10,811.3	13,231.7	13,360.1	13,175.9
government bonds ¹	10,336.2	10,811.3	13,231.7	13,360.1	13,175.9
free of payment	10,281.1	11,314.7	11,480.9	11,440.6	8,125.8
debt securities	10,281.1	11,314.7	11,480.9	11,440.6	8,125.8
government bonds ¹	10,281.1	11,314.7	11,480.9	11,440.6	8,125.8
JASDEC ²					
Total value of delivery instructions ³	1,315.5	1,367.1	1,759.8	1,686.5	783.0
DVP^3	808.5	860.4	1,230.5	1,104.1	421.8
debt securities	706.7	719.2	1,094.0	981.8	321.4
short-term paper ⁴	643.0	662.4	1,037.9	930.8	270.4
bonds ⁵	63.7	56.9	56.1	51.0	51.0
equity	nav	nav	nav	nav	nav
other	101.8	141.1	136.5	122.3	100.4
free of payment ³	507.0	506.7	529.4	582.4	361.2
debt securities	445.1	422.8	444.5	494.8	278.5
short-term paper ⁴	365.3	344.1	342.2	341.3	198.3
bonds ⁵	79.8	78.7	102.2	153.5	80.2
equity	nav	nav	nav	nav	nav
other ⁶	62.0	83.9	84.9	87.6	82.7

¹ Includes T-bills. ² Figures for the year ending March of the following year. ³ Sum of available data. ⁴ Commercial paper.

Sources: Japan Securities Depository Center; Bank of Japan.

⁵ Corporate and municipal bonds. ⁶ Investment trusts; figures for new issuance and redemption are reported.

Table 1
Basic statistical data

	2012	2013	2014	2015	2016
Population (thousands)	50,004.4	50,219.7	50,424.0	50,617.1	50,801.4
GDP (KRW billions) ¹	1,377,457	1,429,445	1,486,079	1,564,124	1,637,421
GDP per capita (KRW)	27,546,694	28,463,847	29,471,684	30,901,129	32,231,802
Consumer price inflation (%)	2.2	1.3	1.3	0.7	1.0
Exchange rate (KRW/USD):					
end of year	1,071.10	1,055.30	1,099.20	1,172.00	1,208.50
average	1,126.88	1,095.04	1,053.22	1,131.49	1,160.50

¹The figure for 2015 has been revised since the previous Red Book edition.

Source: Bank of Korea.

Table 2 Settlement media used by non-banks

(KRW billions, end of year)

	2012	2013	2014	2015	2016
Notes and coin in circulation outside banks	44,174	53,316	64,439	76,343	86,830
Value of transferable deposits	425,837	462,327	521,384	632,110	nav
Narrow money supply (M1)	470,011	515,643	585,823	708,453	795,531
Memo:					
Transferable deposits in foreign currencies ¹	nap	nap	nap	nap	nap
Outstanding value on e-money storage ¹	nap	nap	nap	nap	nap
1 Net electified as M4					

¹Not classified as M1. Source: Bank of Korea.

Table 3 Settlement media used by banks

(KRW billions, average for December except as noted)

	2012	2013	2014	2015	2016
Transferable balances held at the central bank	39,292.0	41,631.0	45,340.0	51,146.0	55,804.0
required reserves	39,277.0	41,618.0	45,319.0	51,109.0	55,760.0
free reserves	14.0	13.0	21.0	37.0	45.0
Transferable balances held at other banks	nap	nap	nap	nap	nap
Memo:					
Credit extended by the central bank:					
intraday	1,906.0	1,381.0	1,539.0	989.0	1,255.0
overnight	nav	nav	nav	nav	nav
longer refinancing operations (repos) ¹	7.3	8.7	10.7	15.3	17.3

¹ Amount of the aggregate credit ceiling loan at the end of year.

Source: Bank of Korea.

Table 4
Banknotes and coin
(KRW billions, end of year)

	2012	2013	2014	2015	2016
Total banknotes and coin issued	54,222.90	63,249.90	74,823.70	86,631.40	97,254.30
Total basic served	50.470.00	04 405 00	70.040.00	0.4.000.00	04.000.40
Total banknotes issued	52,176.30	61,135.20	72,643.80	84,362.00	94,908.40
KRW 50,000 ¹	32,766.50	40,681.20	52,003.40	64,323.60	75,775.20
KRW 10,000	16,966.00	17,878.10	17,946.30	17,229.90	16,244.70
KRW 5,000	1,097.10	1,184.90	1,249.80	1,307.10	1,346.20
KRW 1,000	1,333.20	1,377.50	1,430.80	1,487.90	1,528.80
other ²	13.50	13.50	13.50	13.50	13.50
Total coin issued	2,046.50	2,114.70	2,179.90	2,269.40	2,345.90
of which:					
KRW 500	1,019.00	1,050.50	1,084.10	1,144.80	1,197.90
KRW 100	852.90	884.60	912.10	937.10	958.50
KRW 50	97.60	99.20	100.70	102.50	103.40
KRW 10	75.40	78.90	81.40	83.30	84.40
other ³	1.60	1.60	1.60	1.60	1.60
Banknotes and coin held by banks ⁴	10,041.00	9,925.00	10,376.00	10,275.00	10,411.00
Banknotes and coin in circulation outside banks ⁴	44,174.00	53,316.00	64,439.00	76,343.00	86,830.00

¹ Was printed in June 2009 for the first time. ² Banknotes which are no longer printed but are still in circulation. ³ Coins which are no longer issued but are still in circulation, including KRW 5 and KRW 1. ⁴ Excludes banknotes which are issued but not in circulation, as possessed for souvenirs.

Source: Bank of Korea.

Table 5
Institutions offering payment services to non-banks (end of year)

	2012	2013	2014	2015	2016
Central bank					
Number of branches or offices	17	17	17	17	17
Number of accounts (thousands) ¹	0.081	0.080	0.080	0.088	0.091
Value of accounts, all (KRW billions)	34,010.7	40,892.4	41,397.6	43,425.7	45,123.7
Memo:					
Number of accounts, banks (thousands)	0.258	0.260	0.260	0.266	0.253
Banks					
Number of institutions	57	57	57	59	60
Number of branches or offices	7,908	7,819	7,621	7,512	7,346
Number of accounts (thousands)	33,869	37,267	39,008	35,809	37,411
of which: number of internet/PC-linked accounts	nav	nav	nav	nav	nav
Value of accounts (KRW billions) ²	103,132.0	114,145.8	125,881.0	160,199.6	185,642.0
Domestically licensed banks					
Number of institutions	13	13	13	12	12
Number of branches or offices	5,767	5,666	5,487	5,380	5,222
Value of accounts (KRW billions)	68,102.8	76,054.6	79,931.4	97,397.0	111,533.9
Special purpose banks ³					
Number of institutions	5	5	5	5	5
Number of branches or offices	2,068	2,080	2,070	2,065	2,059
Value of accounts (KRW billions)	32,829.7	35,351.3	42,884.0	58,021.6	68,405.4
Branches of foreign banks	·		·	·	
Number of institutions	39	39	39	42	43
Number of branches or offices	73	73	64	67	65
Value of accounts (KRW billions)	2,199.5	2,739.9	3,065.6	4,781.0	5,702.7
Other institutions offering payment services to	non-banks				
Number of institutions	3,779	3,751	3,676	3,605	3,580
Number of branches or offices	11,094	10,885	10,453	10,299	10,209
Number of accounts (thousands)	nav	nav	nav	nav	nav
Value of accounts (KRW billions)	46,871.0	45,702.4	51,668.8	60,797.1	71,000.2
Federations of non-bank credit institutions ⁴					
Number of institutions	3,716	3,688	3,616	3,548	3,526
Number of branches or offices	6,556	6,505	6,467	6,409	6,391
Value of accounts (KRW billions) ²	19,793.8	22,119.5	24,553.0	28,355.7	32,379.1
Korea Post					
Number of institutions	1	1	1	1	1
Number of branches or offices	2,769	2,768	2,651	2,611	2,599
Value of accounts (KRW billions) ²	528.4	518.9	533.4	611.1	707.1
Financial investment companies					
Number of institutions	62	62	59	56	53
Number of branches or offices	1,769	1,612	1,335	1,279	1,219
Value of accounts (KRW billions) ⁵	26,548.9	23,064.0	26,582.5	31,830.2	37,914.0
For the footnotes, see the end of the table.		_			

Table 5 (cont)					
	2012	2013	2014	2015	2016
Institutions offering payment services to no	on-banks (total)				
Number of institutions	3,837	3,809	3,734	3,665	3,641
Number of branches or offices	19,019	18,721	18,091	17,828	17,572
Number of accounts held by non-banks Value of accounts held by non-banks	nav	nav	nav	nav	nav
(KRW billions)	184,013.7	200,740.6	218,947.4	264,422.4	301,765.9
Memo:					
Electronic money institutions					
Number of institutions	3	3	3	3	3

¹The figures for 2012-14 have been revised since the previous Red Book edition. ² Demand deposits only. ³ Korea Development Bank, Industrial Bank of Korea, Export-Import Bank of Korea, Nonghyup and National Federation of Fisheries. ⁴ Mutual Savings Banks, Credit Unions, Mutual Credits and Community Credit Cooperatives. ⁵ Includes Customer's deposit and Cash Management Accounts.

10.8

10.2

9.1

9.2

10.6

Sources: Bank of Korea; Financial Supervisory Service.

Outstanding value on e-money storages issued by

e-money institutions (KRW billions)

Table 6
Payment card functions and accepting devices (end of year)

	2012	2013	2014	2015	2016
Cards issued in the country (thousands)					
Cards with a debit function	148,376.5	149,282.5	154,050.6	159,229.0	164,018.8
Cards with a credit function	116,231.2	102,021.8	92,321.0	93,095.4	95,639.7
Cards with an e-money function	21,436.1	23,763.8	26,245.8	27,398.3	28,132.2
of which: cards with an e-money function which					
have been loaded at least once	nav	nav	nav	nav	nav
Total number of cards (irrespective of the number					
Total number of cards (irrespective of the number of functions on the card)	286,043.9	275,068.1	272,617.4	279,722.7	287,790.6
of which: cards with a combined debit, cash and	200,043.9	273,000.1	212,011.4	219,122.1	201,190.0
e-money function	nav	nav	nav	nav	nav
c money randaon	nav	nav	nav	Hav	nav
Memo:					
Retailer cards	nav	nav	nav	nav	nav
Terminals located in the country					
ATMs	122,908	124,236	122,289	121,344	120,306
ATMs with a cash withdrawal function	122,908	124,236	122,289	121,344	120,306
ATMs with a credit transfer function	122,908	124,236	122,289	121,344	120,306
POS terminals	nav	nav	nav	nav	nav
E-money card terminals	nav	nav	nav	nav	nav
Source: Bank of Korea.					

Table 7
Indicators of the use of payment instruments and terminals by non-banks: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers ¹	3,165.16	3,434.75	3,696.30	4,011.93	4,241.43
paper-based	307.99	286.70	273.49	266.43	248.18
non-paper-based	2,857.17	3,148.06	3,422.81	3,745.50	3,993.25
Direct debits ¹	1,652.96	1,702.21	1,700.00	1,709.12	1,771.45
Card payments with cards issued in the country	9,893.57	11,477.67	13,150.21	15,122.77	16,970.37
payments by cards with a debit function	2,545.30	3,443.43	4,401.63	<i>5,403.28</i>	6,398.63
payments by cards with a credit function	7,348.27	8,034.24	8,748.59	9,719.49	10,571.74
E-money payment transactions	69.64	47.88	38.80	33.30	31.50
by cards with an e-money function	69.64	47.88	38.81	33.31	31.52
through other e-money storages	nap	nap	nap	nap	nap
Cheques ²	460.14	364.25	310.33	254.04	200.43
Other payment instruments ³	0.42	0.38	0.30	0.30	0.30
Total number of transactions with payment					
instruments	15,241.88	17,027.15	18,896.00	21,131.47	23,215.48
of which: cross-border transactions sent	nav	nav	nav	nav	nav
Memo:					
Cross-border transactions received	nav	nav	nav	nav	nav
Transactions per type of terminal					
Total transactions at terminals in the country					
Cash transactions	259.97	270.45	271.03	269.88	259.66
ATM cash withdrawals	259.97	270.45	271.03	269.88	259.66
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions	9,893.57	11,477.67	13,150.21	15,122.77	16,970.37
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	69.64	47.88	38.81	33.31	31.52
1 Evolution transfers within the financial institution	² Includes prom	iccory notos	norganal about	use and sochi	or'o oboquoo

¹ Excludes transfers within the financial institution. ² Includes promissory notes, personal cheques and cashier's cheques. ³ Bills of exchange.

Source: Bank of Korea.

Table 8
Indicators of the use of payment instruments and terminals by non-banks: value of transactions (KRW billions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers ¹	13,148,601	13,873,157	15,291,174	17,658,126	18,325,399
paper-based	93,653	94,394	97,393	94,624	94,126
non-paper-based	13,054,948	13,778,763	15,193,782	17,563,503	18,231,274
Direct debits ¹	176,182	180,450	177,671	179,802	187,552
Card payments with cards issued in the country	570,761	597,129	630,609	686,339	769,276
payments by cards with a debit function	84,816	96,151	113,917	134,421	155,390
payments by cards with a credit function	485,945	500,978	516,692	551,918	613,886
E-money payment transactions	1,620	1,217	1,000	841	813
by cards with an e-money function	1,620	1,217	1,000	841	813
through other e-money storages	nav	nav	nav	nav	nav
Cheques ²	7,251,755	6,405,016	5,973,199	5,653,426	5,310,028
Other payment instruments ³	40,744	37,206	32,566	28,338	26,210
Total value of transactions with payment					
instruments	21,189,662	21,094,174	22,106,219	24,206,873	24,619,278
of which: cross-border transactions sent	nav	nav	nav	nav	nav
Memo:					
Cross-border transactions received	nav	nav	nav	nav	nav
Transactions per type of terminal					
Total transactions at terminals in the country					
Cash transactions	56,388	59,150	60,379	62,056	61,040
ATM cash withdrawals	56,388	59,150	60,379	62,056	61,040
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions	570,761	597,129	630,609	686,339	769,276
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	1,620	1,217	1,000	841	813

¹ Excludes transfers within the financial institution. ² Includes promissory notes, personal cheques and cashier's cheques.

Source: Bank of Korea.

 $^{^{\}rm 3}$ Bills of exchange.

Table 9
Participation in selected interbank funds transfer systems (end of year)

	2012	2013	2014	2015	2016
Large-value payment systems					
BOK-Wire+					
Number of participants	133	134	133	130	135
Direct participants	133	134	133	130	135
Banks	55	56	56	56	59
Central bank	1	1	1	1	1
Other direct participants	77	77	76	73	75
General government	nav	nav	nav	nav	nav
Postal institution	nav	nav	nav	nav	nav
Clearing and settlement organisations 1	5	5	5	6	6
Other financial institutions ²	64	63	63	59	61
Other ³	8	9	8	8	8
Indirect participants	nav	nav	nav	nav	nav
Retail payment systems					
Check Clearing System					
Number of participants	27	27	27	25	25
Direct participants	27	27	27	25	25
Banks	18	18	18	17	17
Central bank	1	1	1	1	1
Other direct participants	8	8	8	7	7
General government	nap	nap	nap	nap	nap
Postal institution	1	1	1	1	1
Clearing and settlement organisations	nap	nap	nap	nap	nap
Other financial institutions	0	0	O	O	0
Other ⁵	7	7	7	6	6
Interbank Shared Networks					
Number of participants	57	57	58	58	56
Direct participants	57	57	58	58	56
Banks	25	25	26	26	25
Central bank	0	0	0	0	0
Other direct participants	32	32	32	32	31
General government	nap	nap	nap	nap	nap
Postal institution	1	1	1	1	1
Clearing and settlement organisations	nap	nap	nap	nap	nap
Other financial institutions 4	25	25	25	25	24
Other ⁵	6	6	6	6	6
¹ Includes Korea Securities Depository, Korea Mo					

¹ Includes Korea Securities Depository, Korea Money Broker Corp., Korea Stock Exchange, CLS, Seoul Money Brokerage Services, GFI Korea Money Brokerage Ltd. ² Financial investment companies, insurance corporations and merchant banking corporations. ³ Includes Korean Federation of Community Credit Cooperatives, Credit Union Federation, Korea Deposit Insurance Corp., Korea Securities Finance Corp., Korea Federation of Savings Banks, National Forestry Cooperatives Federation, Korea Finance Corporation and National Agricultural Cooperative Federation. ⁴ Financial investment companies: under the Financial Investment Services and Capital Markets Act 2009, they are allowed to provide funds transfer services directly to individual customers. ⁵ Includes Mutual Credits, Korean Federation of Community Credit Cooperatives, Credit Union Federation, Source: Bank of Korea.

Table 10
Payments processed by selected interbank funds transfer systems: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
BOK-Wire+					
Total transactions sent	3.30	3.43	3.52	3.56	3.77
Concentration ratio in terms of volume (%)	28.0	26.6	28.1	27.8	33.0
Retail payment systems					
Check Clearing System					
Total transactions sent	308.61	241.09	203.64	164.85	129.38
cheques ¹	308.19	240.71	203.30	164.54	129.10
other payment instruments ²	0.4	0.4	0.3	0.3	0.3
Concentration ratio in terms of volume (%)	nav	nav	nav	nav	nav
Interbank Shared Networks					
Total transactions sent	3,750.09	4,055.83	4,340.67	4,703.83	5,051.34
credit transfers ³	2,424.40	2,683.36	2,914.17	3,217.38	3,486.31
direct debits ³	718.35	729.63	747.44	783.53	875.80
card payments ⁴	0.58	0.41	0.29	0.19	0.13
ATM transactions	606.75	642.43	678.77	702.73	689.09
e-money transactions	nav	nav	nav	nav	nav
Concentration ratio in terms of volume (%)	nav	nav	nav	nav	nav

¹ Includes promissory notes, personal cheques and cashier's cheques. ² Bills of exchange. ³ Excludes transfers within the financial institution. ⁴ Includes payments by cards with a debit function. Source: Bank of Korea.

Table 11
Payments processed by selected interbank funds transfer systems: value of transactions (KRW trillions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
BOK-Wire+					
Total transactions sent	56,307.1	57,713.7	60,003.1	67,792.8	73,835.3
Concentration ratio in terms of value (%)	35.2	32.7	33.8	34.3	39.2
Retail payment systems					
Check Clearing System					
Total transactions sent	4,280.7	3,711.3	3,090.1	2,531.3	2,241.5
cheques ¹	4,240.0	3,674.1	3,057.5	2,502.9	2,215.3
other payment instruments ²	40.7	37.2	32.6	28.3	26.2
Concentration ratio in terms of value (%)	nav	nav	nav	nav	nav
Interbank Shared Networks					
Total transactions sent	13,157.6	13,877.9	15,285.6	17,655.7	18,332.9
credit transfers ³	12,775.5	13,482.7	14,868.7	17,217.4	17,894.6
direct debits ³	90.8	89.3	87.9	90.5	97.3
card payments ⁴	0.023	0.016	0.011	0.008	0.005
ATM transactions	291.3	305.9	329.0	347.7	341.1
e-money transactions	nav	nav	nav	nav	nav
Concentration ratio in terms of value (%)	nav	nav	nav	nav	nav
1 Includes promissory notes personal chaques and	anahiar'a ahaguas	² Rills of ov	obongo 3 Ex	voludos transfo	ro within the

¹ Includes promissory notes, personal cheques and cashier's cheques. ² Bills of exchange. ³ Excludes transfers within the financial institution. ⁴ Includes payments by cards with a debit function. Source: Bank of Korea.

Table 12
Participation in SWIFT by domestic institutions (end of year)

	2012	2013	2014	2015	2016
Members	20	20	20	19	18
of which: live	20	20	20	19	18
Sub-members	44	44	44	49	51
of which: live	42	42	43	45	51
Participants	30	39	40	45	50
of which: live	26	34	38	41	45
Total users	94	103	104	113	119
of which: live	88	96	101	105	114
Memo:					
Total SWIFT users	10,279	10,583	10,805	11,094	11,299
members	2,398	2,389	2,379	2,455	2,422
sub-members	3,340	3,343	3,353	3,395	3,367
participants	4,541	4,851	5,073	5,244	5,510
Source: SWIFT.					

Table 13
SWIFT message flows to/from domestic users (thousands, total for the year)

	2012	2013	2014	2015	2016
Total messages sent	39,175	43,393	49,057	64,491	63,894
of which:					
category I	7,499	7,484	7,923	8,111	8,392
category II	2,163	2,170	2,284	3,561	3,397
Total messages received	23,943	26,031	28,401	37,986	39,269
of which:					
category I	5,995	6,163	<i>6,44</i> 3	<i>6,449</i>	6,695
category II	1,206	1,178	1,289	2,266	2,176
Domestic traffic	6,852	6,731	7,058	11,045	10,178
Мето:					
Global SWIFT traffic	4,589,109	5,065,668	5,612,724	6,106,644	6,525,800
Source: SWIFT.					

Table 14
Number of participants in exchanges and trading systems (end of year)

	2012	2013	2014	2015	2016
Korea Exchange					<u> </u>
Total number of participants	94	93	92	97	92
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	27	27	26	35	34
other	67	66	66	62	58
Number of domestic participants	94	93	92	97	92
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	27	27	26	35	34
other	67	66	66	62	58
Number of foreign participants	nap	nap	nap	nap	nap
Source: Korea Exchange.					

Table 15 Number of listed securities (end of year)

	2012	2013	2014	2015	2016
Korea Exchange					
Total number of listed securities	12,187	13,232	13,885	14,513	14,936
debt securities	10,247	11,255	11,850	12,364	12,687
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	1,940	1,977	2,035	2,149	2,249
other	nav	nav	nav	nav	nav
Source: Korea Exchange.					

Table 16

Market capitalisation of listed companies

(KRW trillions, end of year)

	2012	2013	2014	2015	2016
Korea Exchange					
Total market capitalisation/equity	1,263.4	1,306.2	1,336.8	1,448.4	1,514.3
Source: Korea Exchange.					

Table 17

Number of executed trades

(millions, total for the year)

	2012	2013	2014	2015	2016
Korea Exchange					
Total number of executed securities trades ¹	nav	nav	nav	nav	nav
Total number of executed derivatives trades	1,828.7	816.7	675.0	787.7	690.1
financial futures	253.3	236.2	212.9	295.7	319.5
financial options	1,575.4	580.5	462.1	491.9	370.6
other financial derivatives	nav	nav	nav	nav	nav
commodity futures ³	0.023	0.035	0.011	0.035	0
commodity options	nav	nav	nav	nav	nav
other commodity derivatives	nav	nav	nav	nav	nav

¹ The Korea Exchange does not collect data for the number of transactions or settlements, but can offer data for the value of transactions or settlements instead. ² The decrease in 2012 is due to the change in the KOSPI200 Option Multiplier from 100,000 to 500,000 as from the newly listed contract after 9 March 2012. ³ Gold and lean hog: Gold futures trading was abolished in November 2015, while lean hog futures had negligible trading volume due to lack of demand. Source: Korea Exchange.

Table 18

Value of executed trades

(KRW trillions, total for the year)

	2012	2013	2014	2015	2016
Korea Exchange					
Total value of executed securities trades ¹	3,100.63	2,758.75	2,853.69	3,993.70	5,193.19
debt securities	1,376.34	1,321.96	1,394.89	1,792.23	3,245.00
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	1,724.29	1,436.79	1,458.80	2,201.46	1,948.19
other	nav	nav	nav	nav	nav
Total value of executed derivatives trades	12,653.16	11,313.18	8,747.29	9,811.55	9,835.16
financial futures	12,348.34	11,050.13	8,568.56	9,626.56	9,707.11
financial options	304.68	262.87	178.68	184.84	128.04
other financial derivatives	nav	nav	nav	nav	nav
commodity futures ²	0.14	0.18	0.05	0.15	0
commodity options	nav	nav	nav	nav	nav
other commodity derivatives	nav	nav	nav	nav	nav

¹Total value of executed securities trades increased considerably in 2016 due to increased demand for safe assets, such as government bonds. ² Gold and lean hog: Gold futures trading was abolished in November 2015, while lean hog futures had negligible trading volume due to lack of demand.

Source: Korea Exchange.

Table 19
Number of clearing members
(end of year)

	2012	2013	2014	2015	2016
Korea Exchange					
Total number of clearing members	91	91	92	97	92
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	26	27	27	35	34
other	65	64	65	62	58
Number of domestic clearing members	70	70	71	68	65
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	16	17	17	16	16
other	54	53	54	52	49
Number of foreign clearing members	21	21	21	29	27
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	10	10	10	19	18
other	11	11	11	10	9
Korea Securities Depository ¹					
Total number of clearing members	91	91	90	85	84
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	21	21	20	19	19
other	70	70	70	66	65
Number of domestic clearing members	91	91	90	85	84
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	21	21	20	19	19
other	70	70	70	66	65
Number of foreign clearing members	nap	nap	nap	nap	nap

¹ KSD started clearing services for institutional investor stocks from January 2012. Source: Korea Exchange; Korea Securities Depository.

Table 20

Number of contracts and transactions cleared

(millions, total for the year)

	2012	2013	2014	2015	2016
Korea Exchange Total number of contracts and transactions cleared ¹	nav	nav	nav	nav	nav
Korea Securities Depository ² Total number of contracts and transactions cleared	26.95	24.92	26.16	28.86	28.07
Number of securities transactions cleared equity	26.95 26.95	24.92 24.92	26.16 26.16	28.86 28.86	28.07 28.07
of which: number of repurchase transactions cleared	nap	nap	nap	nap	nap
Number of exchange-traded derivatives contracts cleared	nap	nap	nap	nap	nap
Number of OTC derivatives contracts cleared	nap	nap	nap	nap	nap

¹ The Korea Exchange does not collect data for the number of transactions or settlements, but can offer data for the value of transactions or settlements instead. ² KSD started clearing services for institutional investor stocks from January 2012. Sources: Korea Exchange; Korea Securities Depository.

Table 21
Value of contracts and transactions cleared (KRW trillions, total for the year)

	2012	2013	2014	2015	2016
Korea Exchange					
Total value of contracts and transactions cleared ¹	450.78	463.62	492.16	520.83	523.00
Value of securities transactions cleared	424.98	437.62	470.13	496.63	442.02
debt securities	304.41	324.71	361.92	379.81	329.82
short-term paper	nav	nav	nav	nav	nav
bonds	12.55	12.26	11.88	14.46	16.29
government bonds	291.86	312.45	350.04	365.35	313.53
equity	120.57	112.91	108.21	116.82	112.20
other	nav	nav	nav	nav	nav
of which: value of repurchase transactions					
cleared	27.67	20.10	<i>4</i> 5.86	39.90	53.58
debt securities	27.67	20.10	<i>45.86</i>	39.90	53.58
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Value of exchange-traded derivatives contracts					
cleared ¹	25.8	26.0	21.6	21.7	27.4
financial futures	19.8	20.8	16.9	17.2	22.7
financial options	6.0	5.2	4.7	4.5	4.7
other financial derivatives	nav	nav	nav	nav	nav
commodity futures	0.0012	0.0015	0.0002	0.0007	0
commodity options	nav	nav	nav	nav	nav
other commodity derivatives	nav	nav	nav	nav	nav
Value of OTC derivatives contracts cleared	nav	nav	0.4	2.5	3.7
Korea Securities Depository ²					
Total value of contracts and transactions cleared ¹	194.14	170.16	164.71	170.93	157.75
Value of securities transactions cleared	194.14	170.16	164.71	170.93	157.75
equity	194.14	170.16	164.71	170.93	157.75
of which: value of repurchase transactions					
cleared	nap	nap	nap	nap	nap
Value of exchange-traded derivatives contracts					
cleared ¹	nap	nap	nap	nap	nap
Value of OTC derivatives contracts cleared	nap	nap	nap	nap	nap
1	· · · · · · · · · · · · · · · · · · ·	<u> </u>		•	

¹ Sum of available data. ² KSD started clearing services for institutional investor stocks from January 2012. Sources: Korea Exchange; Korea Securities Depository.

Table 22 Number of direct participants in CSDs (end of year)

	2012	2013	2014	2015	2016
Korea Securities Depository					
Total number of participants	300	295	299	298	352
central bank	1	1	1	1	1
central counterparties (CCPs)	0	0	0	0	0
central securities depositories	1	1	1	1	1
banks	50	51	50	49	49
other ¹	248	242	247	247	301
Number of domestic participants	300	295	299	298	352
central bank	1	1	1	1	1
central counterparties (CCPs)	0	0	0	0	0
central securities depositories	1	1	1	1	1
banks .	50	51	50	49	49
other ¹	248	242	247	247	301
Number of foreign participants	nav	nav	nav	nav	nav

¹ Total number of direct participants in CSDs – other increased in 2016, because the Financial Services Commission made it easier for hedge funds to become direct participant of CSDs from October 2015 by requiring registration only (instead of an approval as previously).

Source: Korea Securities Depository.

Table 23
Number of securities held on accounts at CSDs (thousands, end of year)

	2012	2013	2014	2015	2016
Korea Securities Depository					
Total number of securities held ¹	44.39	48.72	51.38	51.37	57.19
debt securities	16.36	18.61	20.43	21.93	23.09
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	3.81	3.90	4.09	4.30	4.70
other ²	24.22	26.21	26.86	25.14	29.40

¹ Sum of available data. ² Certificates of deposit and commercial paper. Source: Korea Securities Depository.

Table 24
Value of securities held on accounts at CSDs (KRW trillions, end of year)

	2012	2013	2014	2015	2016
Korea Securities Depository					
Total value of securities held ¹	1,622.37	1,753.97	1,845.88	1,961.42	2,022.23
debt securities	1,357.69	1,474.99	1,561.44	1,674.41	1,715.67
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	136.70	151.03	153.84	159.29	163.34
other ²	127.98	127.95	130.60	127.72	143.22

¹ Sum of available data; nominal value. ² Certificates of deposit and commercial paper. Source: Korea Securities Depository.

Table 25
Number of delivery instructions processed

(thousands, total for the year)

	2012	2013	2014	2015	2016
Korea Securities Depository					
Total number of delivery instructions ¹	7,716.00	7,709.24	7,814.96	8,613.68	8,937.79
DVP	7,626.17	7,624.70	7,746.29	8,549.45	8,885.09
debt securities	638.43	664.40	692.91	681.70	668.11
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	6,814.27	6,709.16	6,784.30	7,618.04	7,892.15
other	173.47	251.14	269.08	249.71	324.83
free of payment	89.83	84.54	68.67	64.23	52.70
debt securities	9.55	9.28	7.25	6.37	8.57
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	0.01	0	0	0	0
other	80.27	75.26	61.42	57.86	44.13

¹ Sum of available data.

Source: Korea Securities Depository.

Table 26 Value of delivery instructions processed

(KRW trillions, total for the year)

2012	2013	2014	2015	2016
6,231.35	6,286.71	7,565.10	7,832.39	7,695.87
5,533.92	5,654.59	6,941.32	7,082.20	7,131.56
5,293.65	5,394.22	4,950.07	4,983.87	4,646.84
nav	nav	nav	nav	nav
nav	nav	nav	nav	nav
136.36	112.91	243.57	271.65	249.62
103.91	147.46	1,747.68	1,826.68	2,235.10
697.43	632.12	623.78	750.19	564.31
143.00	131.74	87.89	87.57	56.15
nav	nav	nav	nav	nav
nav	nav	nav	nav	nav
0.06	0	0	0	0
554.37	500.38	535.89	662.62	508.16
	6,231.35 5,533.92 5,293.65 nav nav 136.36 103.91 697.43 143.00 nav nav 0.06	6,231.35 6,286.71 5,533.92 5,654.59 5,293.65 5,394.22 nav nav nav 136.36 112.91 103.91 147.46 697.43 632.12 143.00 131.74 nav	6,231.35 6,286.71 7,565.10 5,533.92 5,654.59 6,941.32 5,293.65 5,394.22 4,950.07 nav nav nav nav 136.36 112.91 243.57 103.91 147.46 1,747.68 697.43 632.12 623.78 143.00 131.74 87.89 nav	6,231.35 6,286.71 7,565.10 7,832.39 5,533.92 5,654.59 6,941.32 7,082.20 5,293.65 5,394.22 4,950.07 4,983.87 nav nav nav nav nav nav nav nav 136.36 112.91 243.57 271.65 103.91 147.46 1,747.68 1,826.68 697.43 632.12 623.78 750.19 143.00 131.74 87.89 87.57 nav nav nav nav nav nav nav nav 0.06 0 0 0

¹ Sum of available data.

Source: Korea Securities Depository.

Table 1
Basic statistical data

	2012	2013	2014	2015	2016
Population (thousands) ¹	116,284	117,645	118,978	120,285	121,567
GDP (MXN billions) ²	15,627	16,118	17,256	18,127	19,540
GDP per capita (MXN)	134,386	137,006	145,035	150,700	160,734
Consumer price inflation (%) ³	4.1	3.8	4.0	2.7	2.8
Exchange rate (MXN/USD):4					
end of year	13.0101	13.0765	14.7180	17.2070	20.6640
average	13.1685	12.7675	13.2983	15.8540	18.6570

¹ Start of the year. Source: CONAPO. ² Average of quarterly GDP at market prices. Source: INEGI. ³ Average for the year. Source: INEGI. ⁴ Exchange rate to pay obligations entered into in US dollars payable in Mexico (FIX). Source: Bank of Mexico.

Table 2
Settlement media used by non-banks

(MXN billions, end of year)

	2012	2013	2014	2015	2016
Notes and coin in circulation outside banks	734.03	792.93	928.78	1,088.11	1,262.74
Value of transferable deposits	1,380.23	1,529.32	1,712.01	1,925.07	2,129.30
Other	165.78	191.51	238.41	338.80	480.45
Narrow money supply (M1) ¹	2,280.05	2,513.76	2,879.20	3,351.98	3,872.48
Memo:					
Transferable deposits in foreign currencies	165.78	191.51	238.41	338.80	480.45
Outstanding value on e-money storage ²	nap	nap	nap	nap	nap

¹ National definition of M1 does not include non-residents. ² E-money products have not been widely adopted in Mexico. Source: Bank of Mexico.

Table 3
Settlement media used by banks

(MXN billions, average for December)

	2012	2013	2014	2015	2016
Transferable balances held at the central bank	279.482	279.339	321.192	265.898	216.040
required reserves	279.215	278.529	319.993	264.993	214.993
free reserves	0.267	0.810	1.199	0.905	1.047
Transferable balances held at other banks	13.404	12.462	10.663	10.663	20.890
Memo:					
Credit extended by the central bank:					
intraday	361.707	337.688	349.587	356.847	373.472
overnight ¹	19.336	9.185	8.645	0.993	0.913
longer refinancing operations ²	26.474	17.559	35.983	35.104	22.190

¹ SIAC overnight overdrafts + renewed intraday repos + overnight credit open market operations + overnight repos open market operations. ² Credit open market operations + repo open market operations.

Table 4
Banknotes and coin

(MXN millions, end of year)

	2012	2013	2014	2015	2016
Total banknotes and coin issued ¹					
Total banknotes issued ¹	814,242.2	885,256.9	1,027,102.0	1,200,027.4	1,376,486.6
MXN 1,000	71,668.0	72,538.0	82,081.0	83,281.0	82,332.0
MXN 500	503,592.5	561,099.0	686,287.0	838,417.0	990,486.5
MXN 200	153,570.0	162,359.8	165,195.6	176,148.8	191,171.2
MXN 100	55,838.0	58,318.6	60,702.9	65,250.9	71,014.8
MXN 50	22,177.8	23,187.0	24,587.1	27,201.8	29,727.5
MXN 20	7,134.4	7,493.2	7,986.8	9,466.8	11,493.5
MXN 10	261.5	261.3	261.3	261.1	261.0
Total coin issued ^{1, 2}	30,815.6	32,608.3	35,675.7	39,188.4	43,446.5
of which:					
MXN 100	942.1	942.8	943.3	944.0	944.6
MXN 50	88.5	88.5	88.5	88.5	88.5
MXN 20	346.4	470.8	806.4	907.4	1,004.6
MXN 10	10,159.3	10,812.6	12,049.9	13,653.2	15,540.0
MXN 5	8,148.9	8,573.2	9,313.9	10,230.2	11,221.9
MXN 2	2,996.7	3,090.1	3,215.6	3,374.4	3,627.0
MXN 1	4,585.8	4,848.0	5,245.7	5,714.5	6,393.4
MXN 0.5	1,709.0	1,865.7	2,032.3	2,249.4	2,572.7
Banknotes and coin held by banks	111,361.3	124,947.5	134,114.8	151,220.8	157,018.1
Banknotes and coin in circulation outside banks	734,034.3	792,927.7	928,777.2	1,088,106.3	1,262,735.4

¹ Due to approximation, the sum of the denominations may differ from the total. ² Includes coins with denominations MXN 0.20, 0.10 and 0.05.

Source: Bank of Mexico.

Table 5
Institutions offering payment services to non-banks (end of year)

	2012	2013	2014	2015	2016
Central bank					
Number of branches or offices ¹	1	1	1	1	1
Number of accounts, all (thousands) ³	0.098	0.100	0.112	0.112	0.114
Value of accounts, all (MXN billions)	133.1	251.0	274.2	326.6	309.8
Memo:					
Number of accounts, banks (thousands) ²	0.048	0.050	0.051	0.051	0.053
Banks					
Number of institutions	49	52	52	52	53
Number of branches or offices	12,977	13,177	13,361	12,849	13,153
Number of accounts (thousands) ⁴	79,840.4	79,227.0	77,498.1	83,256.0	91,739.6
of which: number of internet/PC-linked accounts					
(thousands)	19,759.9	21,401.4	24,713.0	27,871.4	32,496.9
Value of accounts (MXN billions)	1,796.4	2,018.6	2,276.3	2,584.9	2,972.7
Commercial banks⁴					
Number of institutions	43	46	46	46	47
Number of branches or offices	12,413	12,581	12,698	12,234	12,522
Value of accounts (MXN billions)	1,781.7	1,993.5	2,237.3	2,551.1	2,931.0
Development banks ⁴					
Number of institutions	6	6	6	6	6
Number of branches or offices	564	596	663	615	631
Value of accounts (MXN billions)	14.6	25.2	39.1	33.8	41.7
Branches of foreign banks					
Number of institutions	nap	nap	nap	nap	nap
Number of branches or offices	nap	nap	nap	nap	nap
Value of accounts (MXN billions)	nap	nap	nap	nap	nap
Other institutions offering payment services to r	on-banks				
Number of institutions	113	163	183	192	195
Number of branches or offices	3,744	4,313	4,416	4,650	4,786
Number of accounts (thousands)	6,357.8	7,643.0	8,009.9	8,897.1	9,511.4
Value of accounts (MXN billions)	63.5	78.3	88.5	100.1	116.1
Telegraph and postal office⁵					
Number of institutions	1	1	1	1	1
Number of branches or offices	1,580	1,568	1,571	1,667	1,669
Value of accounts (MXN billions)	nap	nap	nap	nap	nap
Credit Unions ^{4, 6}					
Number of institutions	112	162	182	191	194
Number of branches or offices	2,164	2,745	2,845	2,983	3,117
Value of accounts (MXN billions)	63.5	78.3	88.5	100.1	116.1
Institutions offering payment services to non-ba					
Number of institutions	163	216	236	245	249
Number of branches or offices	16,722	17,491	17,771	17,500	17,940
Number of accounts held by non-banks					
(thousands)	86,198.2	86,870.0	85,508.0	92,976.0	101,251.0
of which: number of internet/PC-linked accounts					
(thousands)	19,759.9	21,411.2	24,710.8	27,871.4	<i>32,496.9</i>
Value of accounts held by non-banks					
(MXN billions)	1,993.0	2,348.0	2,639.0	3,011.6	3,398.6
For the footnotes, see the end of the table.					

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	2012	2013	2014	2015	2016
Memo:					
Electronic money institutions					
Number of institutions	nap	nap	nap	nap	nap
Outstanding value on e-money storages issued by					
e-money institutions (MXN billions)	nap	nap	nap	nap	nap

¹ Cashless payment services are provided only in the central office. ² Banks participating in SPEI. ³ Banks + non-banks participating in SPEI + IMSS, ISSTE, FOVISSTE, TESOFE and PEMEX. ⁴ Source: CNBV reports. ⁵ Source: Telecomm. ⁶ SOFIPOS and SOCAPS.

Table 6
Payment card functions and accepting devices (end of year)

	2012	2013	2014	2015	2016
Cards issued in the country (thousands)					
Cards with a cash function ¹	139,490	152,784	163,197	171,337	168,352
Cards with a debit function	112,685	126,053	134,640	141,700	137,125
Cards with a delayed debit function	nap	nap	nap	nap	nap
Cards with a credit function	25,369	25,887	28,549	29,637	31,227
Cards with an e-money function	nav	nav	nav	nav	nav
Total number of cards (irrespective of the number					
of functions on the card)	139,490	152,784	163,197	171,337	168,352
of which: cards with a combined debit, cash and					
e-money function	0	0	0	0	0
Мето:					
Retailer cards	nav	nav	nav	nav	nav
Terminals located in the country					
ATMs	40,549	40,192	43,012	45,895	48,118
ATMs with a cash withdrawal function	40,549	40,192	43,012	45,895	48,118
ATMs with a credit transfer function	nap	nap	nap	nap	nap
POS terminals	621,628	682,078	765,200	864,744	895,400
EFTPOS terminals	nap	nap	nap	nap	nap
E-money card terminals	nav	nav	nav	nav	nav
e-money card loading/unloading terminals	nav	nav	nav	nav	nav
e-money card payment terminals	nav	nav	nav	nav	nav
¹ The number of credit cards without a cash function is not	significant.				

Table 7
Indicators of the use of payment instruments and terminals by non-banks: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers ¹	991.26	1,057.55	1,090.30	1,135.14	1,183.40
paper-based	nap	nap	nap	nap	nap
non-paper-based	991.26	1,057.55	1,090.30	1,135.14	1,183.40
Direct debits	58.65	62.81	70.27	79.99	92.96
Card payments with cards issued in the country ²	1,516.06	1,759.68	1,973.44	2,314.16	2,572.38
payments by cards with a debit function	930.50	1,116.02	1,296.61	1,588.61	1,698.34
payments by cards with a credit function	585.56	643.67	676.84	725.55	874.04
E-money payment transactions	nav	nav	nav	nav	nav
Cheques ³	377.52	348.28	330.51	311.47	274.89
Other payment instruments	nap	nap	nap	nap	nap
Total number of transactions with payment					
instruments	2,943.49	3,228.32	3,464.52	3,840.77	4,123.62
of which: cross-border transactions sent ⁴	13.32	16.85	16.59	20.51	·
of Which. Cross-porder transactions sent	13.32	10.65	10.59	20.51	nav
Memo:					
Cross-border transactions received	nav	nav	nav	nav	nav
Transactions per type of terminal					
Total transactions at terminals in the country					
Cash transactions	1,438.84	1,488.06	1,605.79	1,598.75	1,765.71
ATM cash withdrawals	1,438.84	1,488.06	1,605.79	1,598.75	1,765.71
ATM cash deposits	nap	nap	nap	nap	nap
POS payment transactions	1,558.17	1,802.84	2,020.65	2,344.96	2,578.18
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav
a) Transactions at terminals in the country by cards	issued in the o	country			
Cash transactions	1,422.18	1,470.81	1,588.85	1,580.77	1,746.56
ATM cash withdrawals	1, <i>4</i> 22.18	1,470.82	1,536.75	1,580.77	1,746.56
ATM cash deposits	nap	nap	nap	nap	nap
POS payment transactions ⁵	1,526.50	1,767.45	1,976.19	2,294.11	2,515.17
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav
b) Transactions at terminals in the country by cards	issued outside	the country			
Cash transactions	16.66	17.25	16.94	17.99	19.15
ATM cash withdrawals	16.66	17.25	16.94	17.99	19.15
ATM cash deposits	nap	nap	nap	nap	nap
POS payment transactions	31.67	35.39	44.46	50.85	63.02
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav
c) Transactions at terminals outside the country by	cards issued in	the country			
Cash transactions	5.17	5.00	5.24	4.71	4.15
ATM cash withdrawals	5.17	5.00	5.24	4.71	4.15
ATM cash deposits	nap	nap	nap	nap	nap
POS payment transactions	52.87	66.05	59.11	77.42	148.95
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav
1 Intrahank transfers + internet transfers to foreign hanks	ı interhank nav	monte to credit	oordo i SDEL	transfore origin	otod by non

¹ Intrabank transfers + internet transfers to foreign banks + interbank payments to credit cards + SPEI transfers originated by non-banks + TEF transfers (except those from Bank of Mexico). ² POS operations + internet intrabank card operations + internet interbank card operations + internet international card operations. ³ Includes cheques in dollars. ⁴ Internet international transfers + internet international card payments. ⁵ POS national transactions + cash-back transactions.

Table 8
Indicators of the use of payment instruments and terminals by non-banks: value of transactions (MXN billions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers	246,884.20	250,596.16	259,506.12	268,357.81	280,873.20
paper-based	nap	nap	nap	nap	nap
non-paper-based	246,884.20	250,596.16	259,506.12	268,357.81	280,873.20
Direct debits	252.84	278.18	296.30	348.82	415.56
Card payments with cards issued in the country	995.66	1,143.60	1,239.86	1,520.85	1,745.09
payments by cards with a debit function	441.09	526.51	605.62	<i>7</i> 23.39	843.08
payments by cards with a credit function	554.57	617.09	634.24	797.46	902.01
E-money payment transactions	nap	nap	nap	nap	nap
Cheques	10,015.55	9,292.80	8,876.91	8,774.23	8,397.10
Other payment instruments	nap	nap	nap	nap	nap
Total value of transactions with payment					
instruments	258,148.24	261,310.74	269,919.17	279,001.71	291,430.95
of which: cross-border transactions sent	732.75	881.41	1,110.93	1,835.29	nav
Memo:					
Cross-border transactions received	nav	nav	nav	nav	nav
Transactions per type of terminal					
Total transactions at terminals in the country Cash transactions	2 204 02	2 444 46	2 711 01	0.064.40	2 224 04
ATM cash withdrawals	2,284.92	2,441.16 2, <i>44</i> 1.16	2,711.91	2,864.18	3,231.84
	2,284.92	· ·	2,711.91	2,864.18	3,231.84
ATM cash deposits	nap	nap 1 156 55	nap	nap 1 415 62	nap 1 65 1 65
POS payment transactions	1,030.47	1,156.55	1,232.96	1,415.63	1,654.65
E-money card loading/unloading transactions	nap	nap	nap	nap	nap
E-money card payment transactions a) Transactions at terminals in the country by card	nap	nap	nap	nap	nap
Cash transactions	2,239.32	2,395.16	2,664.60	2,811.88	3,164.10
ATM cash withdrawals	2,239.32	2,395.16	2,664.60	2,811.88	3,164.10
ATM cash willidawais ATM cash deposits	,	*	•		•
POS payment transactions	<i>nap</i> 943.44	<i>nap</i> 1079.81	<i>nap</i> 1161.69	<i>nap</i> 1332.93	<i>nap</i> 1545.35
E-money card loading/unloading transactions					
,	nap	nap	nap	nap	nap
E-money card payment transactionsb) Transactions at terminals in the country by card	nap	nap	nap	nap	nap
Cash transactions	45.60	45.99	47.31	52.30	67.74
ATM cash withdrawals	45.60	45.99	47.31	52.30	67.74
ATM cash deposits					
POS payment transactions	<i>nap</i> 87.03	nap 76.73	nap 71.27	nap 82.70	<i>nap</i> 109.29
E-money card loading/unloading transactions	nap	nap	nap	nap	nap
E-money card loading/unloading transactions E-money card payment transactions	nap	nap	nap	nap	nap
c) Transactions at terminals outside the country by	•		•	Пар	Παρ
Cash transactions	14.73	13.83	14.54	18.88	18.88
ATM cash withdrawals	14.73	13.83	14.54	18.88	18.88
ATM cash deposits	14.73 nap	nap	14.34 nap	nap	nap
POS payment transactions	79.89	102.02	111.32	83.35	117.93
E-money card loading/unloading transactions	nap	nap	nap	nap	nap
E-money card payment transactions	nap	nap	nap	nap	nap
For footnotes, see Table 7.	Пар	пар	пар	παρ	παρ

Table 9
Participation in selected interbank funds transfer systems (end of year)

	2012	2013	2014	2015	2016
Large-value payment systems					
SPEI					
Number of participants	93	95	107	107	109
Direct participants	93	95	107	107	109
Banks	47	50	51	51	53
Central bank	1	1	1	1	1
Other direct participants	45	44	55	55	55
General government	0	0	0	0	0
Postal institution	1	1	1	1	0
Clearing and settlement organisations ¹	2	2	2	2	2
Other financial institutions	42	41	52	52	53
Other	nap	nap	nap	nap	nap
Retail payment systems					
CECOBAN					
Number of participants	28	29	29	29	35
Direct participants	28	29	29	29	35
Banks	28	29	29	29	35
1 0 0 1 1 1 1 (1 000 1000)					

¹ CLS and Indeval (the CSD and SSS). Sources: Bank of Mexico; CECOBAN.

Table 10
Payments processed by selected interbank funds transfer systems: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
SPEI					
Total transactions sent ¹	171.74	217.58	262.90	334.90	394.99
Concentration ratio in terms of volume (%)	81.2	81.4	82.2	82.6	81.8
Retail payment systems					
CECOBAN					
Total transactions sent ²	149.73	142.65	137.41	130.95	128.45
credit transfers	25.81	26.77	25.90	23.32	<i>25.4</i> 9
direct debits	15.71	17.79	21.01	24.76	29.01
cheques	108.21	98.09	90.50	82.87	73.95
Concentration ratio in terms of volume (%)	83.4	84.3	83.7	82.8	81.8
¹ Operations originated by Indeval (the SSS) are exclud	ed. ² Returns are	excluded.			

Table 11
Payments processed by selected interbank funds transfer systems: value of transactions (MXN billions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
SPEI					
Total transactions sent	100 100 2	207 507 4	222 260 0	245 065 6	264 074 2
rotal transactions sent	199,189.2	207,597.4	223,369.9	245,065.6	261,971.3
Concentration ratio in terms of value (%)	61.3	59.3	58.8	58.9	58.8
Consentiation ratio in terms of value (70)	01.0	00.0	00.0	00.0	00.0
Retail payment systems					
CECOBAN					
Total transactions sent	3,820.0	3,583.1	3,366.5	3,286.7	3,311.5
credit transfers	869.1	823.2	759.0	717.7	814.9
direct debits	58.7	68.8	<i>7</i> 9.8	92.8	110.9
cheques	2,892.2	2,691.1	2,527.8	2,476.2	2,385.7
Concentration ratio in terms of value (%)	81.2	82.0	81.3	80.9	78.9
For footnotes, see Table 10.		•			

Table 12
Participation in SWIFT by domestic institutions (end of year)

	2012	2013	2014	2015	2016
Members	14	14	14	16	16
of which: live	14	14	14	15	16
Sub-members	12	11	10	12	12
of which: live	13	11	10	12	11
Participants	21	21	22	25	28
of which: live	22	21	22	24	25
Total users	47	46	46	53	56
of which: live	49	46	46	51	52
Memo:					
Total SWIFT users	10,279	10,583	10,805	11,094	11,299
members	2,398	2,389	2,379	2,455	2,422
sub-members	3,340	3,343	3,353	3,395	3,367
participants	4,541	4,851	5,073	5,244	5,510
Source: SWIFT.					

Table 13
SWIFT message flows to/from domestic users (thousands, total for the year)

	2012	2013	2014	2015	2016
Total messages sent	14,810	16,983	17,127	21,120	21,306
of which:					
category I	3,534	4,165	4,513	4,767	4,993
category II	1,116	1,134	1,179	1,096	1,320
Total messages received of which:	10,007	11,764	12,426	14,286	15,773
category I	3,470	3,632	3,404	3.913	4,119
category II	1,972	2,113	2,231	2,216	2,253
Domestic traffic	1,238	1,333	1,208	1,628	2,092
Memo:					
Global SWIFT traffic	4,589,109	5,065,668	5,612,724	6,106,644	6,525,800
Source: SWIFT.					

Table 14
Number of participants in exchanges and trading systems (end of year)

	2012	2013	2014	2015	2016
BMV					
Total number of participants	34	31	30	31	31
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	nap	nap	nap	nap	nap
other	34	31	30	31	31
Number of domestic participants	34	31	30	31	31
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	nap	nap	nap	nap	nap
other	34	31	30	31	31
Number of foreign participants	nap	nap	nap	nap	nap
Mexder					
Total number of participants	48	45	68	48	48
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	13	14	26	14	15
other	35	31	42	34	33
Number of domestic participants	39	38	58	39	39
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	13	14	26	14	15
other	26	24	32	25	24
Number of foreign participants	9	7	10	9	9
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	nap	nap	nap	nap	nap
other	9	7	10	9	9
Sources: BMV; Mexder.					

Table 15

Number of listed securities

(end of year)

	2012	2013	2014	2015	2016
BMV					
Total number of listed securities	898	969	958	1,018	951
debt securities	743	807	788	839	807
short-term paper	nav	nav	nav	nap	nav
bonds	nav	nav	nav	nap	nav
equity	155	162	170	179	144
Mexder					
Total number of listed securities	nap	nap	nap	nap	nap
Sources: BMV; Mexder.					

Table 16

Market capitalisation of listed companies

(MXN billions, end of year)

	2012	2013	2014	2015	2016
BMV					
Total market capitalisation/equity	6,818.4	6,889.3	7,078.7	6,953.8	7,267.3
Mexder					
Total market capitalisation/equity	nap	nap	nap	nap	nap
Sources: BMV; Mexder.					

Table 17
Number of executed trades
(thousands, total for the year)

	2012	2013	2014	2015	2016
BMV					
Total number of executed securities trades	19,681.9	34,564.3	38,743.7	48,949.6	72,811.4
debt securities	2.6	3.2	2.8	2.2	1.5
short-term paper	nav	nav	nav	nap	nav
bonds	nav	nav	nav	nap	nav
equity	19,679.3	34,561.1	38,740.9	48,947.3	72,810.0
Total number of executed derivatives trades	nap	nap	nap	nap	nap
Mexder					
Total number of executed securities trades	nap	nap	nap	nap	nap
Total number of executed derivatives trades	42,630.7	27,358.2	29,914.0	17,048.7	19,516.5
financial futures	41,717.2	26,575.2	29,227.3	16,548.6	12,528.6
financial options	913.5	779.9	683.2	439.1	411.9
other financial derivatives	nap	3.1	3.5	61.1	6,576.0
commodity futures	0.0	0.000	0	0	0
Sources: BMV; Mexder.				_	_

Table 18 Value of executed trades (MXN billions, total for the year)

	2012	2013	2014	2015	2016
BMV					
Total value of executed securities trades	2,669.24	2,910.13	2,456.82	2,346.53	2,594.20
debt securities	8.95	2.38	3.41	2.88	0.93
short-term paper	nav	nav	nav	nap	nav
bonds	nav	nav	nav	nap	nav
equity	2,660.29	2,907.76	2,453.41	2,343.65	2,593.27
Total value of executed derivatives trades	nap	nap	nap	nap	nap
Mexder					
Total value of executed securities trades	nap	nap	nap	nap	nap
Total value of executed derivatives trades	4,873.92	3,378.26	3,948.88	2,596.80	3,107.16
financial futures	4,854.68	3,349.04	3,917.24	2,528.40	2,417.52
financial options	19.23	26.12	28.13	53.02	32.04
other financial derivatives	nap	3	3.50	15.38	657.60
commodity futures	0	0	0	0	0
Sources: BMV; Mexder.					

Table 19 Number of clearing members (end of year)

	2012	2013	2014	2015	2016
CCV					
Total number of clearing members	27	27	30	31	31
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	1	1	1	1	1
other	26	26	29	30	30
Number of domestic clearing members	27	27	30	31	31
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	1	1	1	1	1
other	26	26	29	30	30
Number of foreign clearing members	nap	nap	nap	nap	nap
Asigna ¹					
Total number of clearing members	6	6	7	7	7
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	5	5	5	5	5
other	1	1	2	2	2
Number of domestic clearing members	6	6	7	7	7
central bank	nap	nap	nap	nap	nap
central counterparties (CCPs)	nap	nap	nap	nap	nap
banks	5	5	5	5	5
other	1	1	2	2	2
Number of foreign clearing members	nap	nap	nap	nap	nap

¹ Until 2009, the figures indicate the number of trusts acting as clearing members. From 2010 on, the figures represent the number of banks and brokerage houses ("other") that set up the trusts.

Sources: CCV; Asigna.

Table 20 Number of contracts and transactions cleared (thousands, total for the year)

	2012	2013	2014	2015	2016
CCV					
Total number of contracts and transactions cleared	20,867.2	35,755.8	40,005.7	50,370.9	73,888.2
Number of securities transactions cleared	20,867.2	35,755.8	40,005.7	50,370.9	73,888.2
equity	20,867.2	35,755.8	40,005.7	50,370.9	73,888.2
of which: number of repurchase transactions					
cleared	nap	nap	nap	nap	nap
Number of exchange-traded derivatives contracts					
cleared	nap	nap	nap	nap	nap
Number of OTC derivatives contracts cleared	nap	nap	nap	nap	nap
Asigna					
Total number of contracts and transactions					
cleared	42,630.7	27,358.2	29,914.0	17,048.8	20,394.5
Number of securities transactions cleared	nap	nap	nap	nap	nap
Number of exchange-traded derivatives contracts					
cleared	42,630.7	27,358.2	29,914.0	17,048.8	20,394.5
financial futures	41,717.2	26,575.2	29,227.3	16,548.5	12,528.6
financial options	913.5	779.9	683.2	439.2	411.9
other financial derivatives	nap	3	3.5	61.1	7,454.0
Number of OTC derivatives contracts cleared	nap	nap	nap	nap	nap
Sources: CCV; Asigna.					

Table 21
Value of contracts and transactions cleared (MXN billions, total for the year)

	2012	2013	2014	2015	2016
CCV	0.004.0	4.004.0	2.005.0	0.007.0	0.704.0
Total value of contracts and transactions cleared	3,331.3	4,004.6	3,205.3	3,337.3	3,784.9
Value of securities transactions cleared	3,331.3	4,004.6	3,205.3	3,337.3	3,784.9
equity	3,331.3	4,004.6	3,205.3	3,337.3	3,784.9
of which: value of repurchase transactions					
cleared	nap	nap	nap	nap	nap
Value of exchange-traded derivatives contracts					
cleared	nap	nap	nap	nap	nap
Value of OTC derivatives contracts cleared	nap	nap	nap	nap	nap
	·	·	·	·	·
Asigna Total value of contracts and transactions cleared	4,855.1	3,352.8	3,921.2	2,544.2	3,157.6
Total value of contracts and transactions dicared	4,000.1	0,002.0	0,021.2	2,044.2	3,137.0
Value of securities transactions cleared	nap	nap	nap	nap	nap
Value of exchange-traded derivatives contracts					
cleared	4,855.1	3,352.8	3,921.2	2,544.2	3,157.6
financial futures	4,854.7	3,349.1	3,917.1	2,527.5	2,383.6
financial options	0.4	0.6	0.6	1.3	28.6
other financial derivatives	nap	3	3.5	15.4	745.4
Value of OTC derivatives contracts cleared	nap	nap	nap	nap	nap
Sources: CCV; Asigna.					

Table 22 Number of direct participants in CSDs *(end of year)*

	2012	2013	2014	2015	2016
Indeval					
Total number of participants	113	107	111	113	116
central bank	1	1	1	1	1
central counterparties (CCPs)	1	1	1	1	1
central securities depositories	1	1	2	2	4
banks	55	56	54	55	55
other	55	48	53	54	55
Number of domestic participants	109	103	106	107	109
central bank	1	1	1	1	1
central counterparties (CCPs)	1	1	1	1	1
central securities depositories	0	0	1	1	1
banks .	53	54	51	52	52
other	54	47	52	52	54
Number of foreign participants	4	4	5	6	7
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
central securities depositories	1	1	1	1	3
banks .	2	2	3	3	3
other	1	1	1	2	1

Table 23 Number of securities held on accounts at CSDs

(thousands, end of year)

	2012	2013	2014	2015	2016
Indeval					
Total number of securities held	8.750	9.150	9.672	10.342	10.902
debt securities	2.462	2.544	2.607	2.772	2.907
short-term paper	0.663	0.734	0.736	0.803	0.809
bonds	1.799	1.810	1.871	1.969	2.098
equity	6.288	6.606	7.065	7.570	7.995
Source: Indeval.					

Table 24 Value of securities held on accounts at CSDs (MXN billions, end of year)

	2012	2013	2014	2015	2016
Indeval					
Total value of securities held	17,602.5	19,722.7	21,509.8	22,305.4	22,946.8
debt securities	7,199.7	8,257.7	8,991.5	9,593.9	9,776.1
short-term paper	1,290.1	1,601.9	1,587.4	1,492.8	1,491.8
bonds	5,909.6	6,655.8	7,404.1	8,101.1	8,284.3
equity	10,402.7	11,465.0	12,518.4	12,711.5	13,170.6
Source: Indeval.					

Table 25 Number of delivery instructions processed

(thousands, total for the year)

	2012	2013	2014	2015	2016
Indeval					
Total number of delivery instructions	4,774.6	5,348.9	5,217.2	5,520.0	5,801.5
DVP	2,267.7	2,494.5	2,516.9	2,670.1	2,752.3
debt securities	1,734.0	1,836.9	1,825.5	1,955.9	1,942.7
short-term paper	202.0	184.1	161.0	177.2	180.9
bonds	1,531.9	1,652.7	1,664.5	1,778.7	1,761.7
equity	533.7	657.7	691.4	714.2	809.6
free of payment	2,506.9	2,854.4	2,700.3	2,849.9	3,049.2
debt securities	1,272.2	1,455.3	1,316.9	1,378.4	1,449.4
short-term paper	217.9	185.6	169.3	192.2	186.6
bonds	1,054.4	1,269.6	1,147.6	1,186.2	1,262.8
equity	1,234.7	1,399.1	1,383.4	1,471.5	1,599.8
Source: Indeval					

Table 26
Value of delivery instructions processed

(MXN billions, total for the year)

	2012	2013	2014	2015	2016
Indeval ¹					
Total value of delivery instructions	1,216,257.7	1,234,873.8	1,296,911.7	1,293,967.6	1,366,850.2
DVP	801,366.0	797,933.8	841,764.7	835,756.2	884,780.3
debt securities	798,842.9	794,676.5	838,388.3	832,445.0	880,550.1
short-term paper	112,878.1	93,554.6	79,297.7	92,781.6	83,104.9
bonds	685,964.8	701,121.8	759,090.6	739,663.3	797,445.2
equity	2,523.1	3,257.3	3,376.4	3,311.2	4,230.1
free of payment	414,891.7	436,940.0	455,147.0	458,211.5	482,069.9
debt securities	401,298.4	420,703.2	442,358.0	443,165.7	465,513.9
short-term paper	83,498.5	85,413.3	84,887.2	110,198.2	107,905.0
bonds	317,799.9	335,290.0	357,470.8	332,967.5	357,608.9
equity	13,593.3	16,236.8	12,789.0	15,045.8	16,556.1
¹ Market value.			_	_	_
Source: Indeval.					

Table 1
Basic statistical data

	2012	2013	2014	2015	2016
Population (thousands) ¹	16,754	16,802	16,867	16,934	17,031
GDP (EUR billions)	645.2	652.7	663.0	683.5	702.6
GDP per capita (EUR)	38,507	38,850	39,309	40,359	41,257
Consumer price inflation (%) ¹	2.8	2.6	0.3	0.2	0.1
Exchange rate (EUR/USD):					
end of year	0.7579	0.7251	0.8237	0.9185	0.9487
average	0.7788	0.7532	0.7539	0.9019	0.9039
¹ Yearly average.				_	

Table 2 Settlement media used by non-banks

(EUR billions, end of year)

	2012	2013	2014	2015	2016
Notes and coin in circulation outside banks ¹	nap	nap	nap	nap	nap
Value of transferable deposits	338.748	352.432	500.144	492.332	512.743
Narrow money supply (M1) ^{1, 2}	nap	nap	nap	nap	nap
Memo:					
Transferable deposits in foreign currencies	nap	nap	nap	nap	nap
Outstanding value on e-money storage	0.106	0.065	0.037	0	0
on card-based products	0.106	0.065	0.037	0	0
on software- or network-based products	nap	nap	nap	nap	nap

¹ These figures are provided solely at an aggregated euro area level (see Euro area, Table 2). ² Currency in circulation excluding government cash plus transferable deposits in all currencies.

Table 3 Settlement media used by banks

(EUR billions, average for December)

	2012	2013	2014	2015	2016
Transferable balances held at the central bank ¹	112.219	33.275	41.731	115.256	175.712
required reserves	11.084	10.321	10.375	11.723	12.040
free reserves	101.135	22.954	31.356	103.526	163.672
Transferable balances held at other banks ²	42.988	43.733	47.002	72.407	81.042
Memo:					
Credit extended by the central bank:					
intraday	1.195	10.344	11.048	4.891	5.051
overnight ³	0	0	0	0	0
longer-term refinancing operations 4	24.479	8.814	7.804	12.782	15.723

¹ Average for the last required reserve period of the year. ² At end of year. ³ Marginal lending facility. ⁴ Other monetary policy operations vis-à-vis the Eurosystem.

Table 4

Banknotes and coin¹

¹ These figures are provided solely at an aggregated euro area level (see Euro area, Table 4).

Table 5
Institutions offering payment services to non-banks (end of year)

	2012	2013	2014	2015	2016
Central bank					
Number of branches or offices	1	1	1	1	1
Number of accounts (thousands)	0	0	0	0	0
Value of accounts (EUR billions) Memo:	0.009	0	0	0	0
Number of accounts, banks (thousands)	29	27	27	27	27
Banks					
Number of institutions	272	249	215	209	94
Number of branches or offices	2,526	2,228	1,912	1,826	1,732
Number of accounts (thousands)	22,729	23,482	23,343	22,128	22,322
of which: number of internet/PC-linked accounts	17,083	18,135	20,749	19,916	20,260
Value of accounts (EUR billions)	356.24	352.47	500.19	492.38	512.79
Credit institutions legally incorporated in the re	porting count				
Number of institutions	212	186	157	147	37
Number of branches or offices	2,466	2,165	1,854	1,764	1,674
Value of accounts (EUR billions)	354.42	350.67	497.64	489.87	510.18
Branches of euro area-based credit institutions	334.42	330.07	437.04	403.07	310.10
Number of institutions	27	28	26	28	27
Number of institutions Number of branches or offices	27	28	26	28	27
	0.93	0.92	1.30	1.28	1.33
Value of accounts (EUR billions) Branches of EEA-based credit institutions (outs			1.30	1.20	1.33
•		•	47	20	40
Number of institutions	16	19	17	20	19
Number of branches or offices	16	19	17	20	20
Value of accounts (EUR billions)	0.43	0.42	0.60	0.59	0.62
Branches of non-EEA based banks					
Number of institutions	17	16	15	14	11
Number of branches or offices	17	16	15	14	11
Value of accounts (EUR billions)	0.46	0.46	0.65	0.64	0.67
Other institutions offering payment services to no	n-banks ¹				
Number of institutions	14	13	50	54	58
Number of branches or offices	nap	nap	17	17	17
Number of accounts (thousands)	29	27	27	27	27
Value of accounts	nap	nap	nap	nap	nap
Institutions offering payment services to non-ban	ks (total)				
Number of institutions	287	263	266	264	153
Number of branches or offices	2,527	2,229	1,930	1,844	1,750
Number of accounts held by non-banks					
(thousands)	22,787	23,536	23,397	22,182	22,376
of which: number of internet/PC-linked accounts	17,083	18,135	20,749	19,916	20,260
Value of accounts held by non-banks					
(EUR billions)	356.25	352.47	500.19	492.38	512.79
Memo:					
Electronic money institutions					
Number of institutions	3	2	2	2	2
Outstanding value on e-money storages issued by					
e-money institutions	0.01	0.023	0.021	0.027	0.031
Money transfer institutions.					

Table 6
Payment card functions and accepting devices (end of year)

	2012	2013	2014	2015	2016		
Cards issued in the country (thousands)							
Cards with a cash function	30,510.5	30,453.7	31,966.5	32,370.9	32,020.8		
Cards with a debit function	24,662.6	24,493.9	25,577.6	26,150.5	25,724.0		
Cards with a delayed debit function	nav	nav	2,651.3	2,501.5	2,718.0		
Cards with a credit function ¹	5,847.8	5,959.7	3,288.9	2,082.0	2,424.9		
Cards with an e-money function ¹	24,305.9	24,472.9	25,775.5	105.5	25.1		
of which: cards with an e-money function which							
have been loaded at least once	nav	9,376.6	10,372.4	98.0	17.8		
Total number of cards (irrespective of the number							
of functions on the card) ¹	30,510.5	30,453.7	31,966.5	37,974.4	37,448.4		
of which: cards with a combined debit, cash and							
e-money function ²	24,305.9	24,472.9	14,805.9	15,346.3	5,781.7		
Memo:							
Retailer cards	nav	nav	nav	nav	nav		
Terminals located in the country							
ATMs	7,569.0	7,383.0	7,165.0	7,004.0	6,750.0		
ATMs with a cash withdrawal function	7,569.0	7,383.0	7,165.0	7,004.0	6,750.0		
ATMs with a credit transfer function	nav	nav	nav	nav	709		
POS terminals	267,569.0	249,194.0	398,530.0	500,452.0	521,464.0		
of which: EFTPOS terminals	267,569.0	249,194.0	398,530.0	444,859.0	476,839.0		
E-money card terminals	39,439.0	33,402.0	30,721.0	60	107		
e-money card loading/unloading terminals	2,683.0	2,440.0	1,338.0	0	0		
e-money card payment terminals	36,756.0	30,962.0	29,383.0	0	0		
¹ Includes delayed debit function up to 2013. ² Excluding e-purse-only cards.							

Table 7
Indicators of the use of payment instruments and terminals by non-banks: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers ¹	1,623.70	2,013.66	2,043.23	1,970.17	2,111.71
paper-based	88.64	65.51	61.97	47.28	42.92
non-paper-based	1,535.06	1,948.15	1,981.26	1,922.89	2,068.79
Direct debits	1,368.65	1,329.71	1,163.44	1,288.99	1,161.59
Card payments with cards issued in the country	2,642.89	2,886.22	3,168.70	3,533.20	3,901.96
payments by cards with a debit function payments by cards with a credit and delayed	2,530.66	2,765.04	3,037.49	3,392.03	3,743.12
debit function	112.24	121.19	131.21	141.17	158.84
E-money payment transactions	148.04	121.19	76.21	2.39	0.39
by cards with an e-money function	148.04	121.19	76.21	2.39	0.39
through other e-money storages	nav	nav	nav	nav	nav
Cheques	nav	0.18	0.19	0.20	0.15
Other payment instruments	nav	0	0	0	0
Total number of transactions with payment					
instruments	5,783.28	6,350.97	6,451.58	9,173.73	7,565.42
of which: cross-border transactions sent	154.98	188.39	239.00	274.58	322.22
Memo:					
Cross-border transactions received	45.13	48.41	59.09	57.51	65.31
Transactions per type of terminal					
Total transactions at terminals in the country					
Cash transactions	455.59	430.38	407.21	381.94	348.02
ATM cash withdrawals	438.87	414.48	391.84	367.60	331.80
ATM cash deposits	16.71	15.90	15.37	14.34	16.22
POS payment transactions	2,536.99	2,721.92	2,968.31	3,320.95	3,655.06
E-money card loading/unloading transactions	21.82	18.39	11.82	4.44	0.14
E-money card payment transactions	nav	122.10	86.56	276.11	274.11
a) Transactions at terminals in the country by cards		•			
Cash transactions	435.96	411.35	394.44	364.99	344.05
ATM cash withdrawals	419.25	395.45	379.08	350.65	327.83
ATM cash deposits	16.71	15.90	15.37	14.34	16.22
POS payment transactions	2,512.31	2,699.72	2,968.31	3,319.31	3,651.16
E-money card loading/unloading transactions	21.82	18.39	11.82	4.43	0.14
E-money card payment transactions	nav	122.10	86.56	2.38	0.39
b) Transactions at terminals in the country by cards		•			
Cash transactions	19.62	19.02	12.76	16.95	3.97
ATM cash withdrawals	19.62	19.02	12.76	16.95	3.97
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions	24.69	25.88	70.10	3,900.14	4,025.74
E-money card loading/unloading transactions	nav	0	0	0.01	0.00
E-money card payment transactions	nav	nav	nav	273.73	356.17
c) Transactions at terminals outside the country by		•			
Cash transactions	35.90	32.16	36.05	35.03	38.65
ATM cash withdrawals	35.90	32.16	36.05	<i>35.0</i> 3	38.65
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions	130.59	152.59	167.00	192.98	214.98
E-money card loading/unloading transactions	nav	0	0	0	0
E-money card payment transactions	nav	nav	17.00	9.90	0.00

¹ Up to 2012, this series does not include cross-border payments above EUR 1 million, which are assumed to be related to corporate treasury operations. Similarly customer (corporate) payments directly settled in TARGET are excluded. From 2013, these transactions are all included.

Table 8
Indicators of the use of payment instruments and terminals: value of transactions (EUR billions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers ¹ 5,4	437.88	17,187.14	17,373.99	18,800.40	19,128.48
paper-based	155.04	145.77	134.62	362.38	364.77
non-paper-based 5,2	282.85	17,041.37	17,239.37	18,438.01	18,763.02
Direct debits	290.41	277.95	218.73	240.46	227.05
Card payments with cards issued in the country	98.75	103.10	109.50	117.82	126.99
payments by cards with a debit function	87.49	91.76	97.40	104.42	112.54
payments by cards with a credit and delayed					
debit function	11.27	11.34	12.10	13.41	14.44
E-money payment transactions	0.34	0.27	0.17	0.02	0.01
by cards with an e-money function	0.34	0.27	0.17	0.02	0.01
through other e-money storages	nav	nav	nav	nav	nav
Cheques	nav	1.63	1.90	1.99	1.78
Other payment instruments	nav	0	0.00	0.00	0.00
Total value of transactions with payment					
	827.39	17,570.09	17,704.29	19,160.70	19,484.31
·	197.56	620.95	1,273.66	2,242.41	2,235.00
Memo:					
Cross-border transactions received	352.67	1,569.22	3,356.65	2,098.67	2,375.47
Transactions per type of terminal					
Total transactions at terminals in the country					
Cash transactions	69.38	67.68	71.66	71.37	61.16
ATM cash withdrawals	52.52	50.26	48.85	48.34	<i>45.56</i>
ATM cash deposits	16.86	17.41	22.81	23.03	15.60
POS payment transactions	91.97	92.50	96.98	102.33	107.72
E-money card loading/unloading transactions	0.37	0.30	0.21	0.05	0.02
E-money card payment transactions	nav	0.00	0.00	0.00	0.00
a) Transactions at terminals in the country by cards issue	d in the c	country			
Cash transactions	66.06	64.49	69.83	68.81	60.62
ATM cash withdrawals	49.20	47.07	47.02	<i>45.78</i>	45.02
ATM cash deposits	16.86	17.41	22.81	23.03	15.60
POS payment transactions	88.89	92.50	96.98	102.20	107.47
E-money card loading/unloading transactions	0.37	0.30	0.21	0.05	0.02
E-money card payment transactions	nav	0.29	0.20	0.02	0.01
b) Transactions at terminals in the country by cards issue	d outside	the country			
Cash transactions	3.32	3.19	1.83	2.56	0.53
ATM cash withdrawals	3.32	3.19	1.83	2.56	0.53
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions	3.09	3.36	4.40	143.58	136.25
E-money card loading/unloading transactions	nav	0.00	0.00	0.00	0.00
E-money card payment transactions	nav	nav	nav	23.74	28.74
c) Transactions at terminals outside the country by cards	issued in	the country			
Cash transactions	5.44	4.91	5.28	5.14	5.38
ATM cash withdrawals	5.44	4.91	5.28	5.14	5.38
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions	9.87	10.60	9.11	10.32	12.49
E-money card loading/unloading transactions	nav	0	0	0	0
E-money card payment transactions	nav	nav	nav	0.77	0

¹ Up to 2012, this series does not include cross-border payments above EUR 1 million, which are assumed to be related to corporate treasury operations. Similarly customer (corporate) payments directly settled in TARGET are excluded. From 2013, these transactions are all included.

Table 9
Participation in selected interbank funds transfer systems (end of year)

	2012	2013	2014	2015	2016
Large-value payment systems					
TOP (TARGET component)					
Number of participants	107	112	111	105	105
Direct participants	61	66	66	63	66
Banks	55	59	59	55	58
Central bank	1	1	1	1	1
Other direct participants	5	6	6	6	7
General government	2	2	2	2	2
Clearing and settlement organisations	3	4	4	5	5
Other financial institutions	0	0	0	0	0
Indirect participants	46	46	45	42	39
Retail payment systems					
Equens					
Number of participants	64	123	161	162	37
Direct participants	61	99	66	72	27
Banks	60	98	65	71	26
Central bank	1	1	1	1	1
Indirect participants	3	24	95	90	10

Table 10
Payments processed by selected interbank funds transfer systems: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
TOD (TADOFT assured)					
TOP (TARGET component)	0.50	7.00	0.00	5.74	5.00
Credit transfers sent	8.52	7.98	6.38	5.74	5.60
credit transfers sent within the same TARGET	0.45	0.00	4.07	4.50	4.00
component	3.15	2.69	1.97	1.58	1.33
credit transfers sent to another TARGET	5.07	5.00	4.44	4.47	4.07
component	5.37	5.29	4.41	4.17	4.27
Memo:					
Credit transfers received from another TARGET					
component	2.84	2.85	2.63	2.54	2.58
Component	2.04	2.00	2.03	2.54	2.50
Concentration ratio in terms of volume (%)	68.0	68.0	75.0	80.0	81.2
(,,,					
Retail payment systems					
Equens					
Total national transactions sent	2,739.89	2,556.86	1,921.91	1,619.40	1,710.22
Credit transfers	1,097.03	1,039.90	938.37	956.50	1,025.86
paper-based credit transfers	119.94	86.39	2.56	0.00	0.00
non-paper-based credit transfers	977.09	953.51	935.81	956.50	1,025.86
Direct debits	1,169.97	1,154.81	748.83	662.82	683.28
Card payments	276.21	177.30	99.43	0.08	0.08
ATM transactions	196.68	184.84	135.28	0	0
Concentration ratio in terms of values (0/)	00.0	00.0	00.0	00.4	00.5
Concentration ratio in terms of volume (%)	98.0	99.0	98.0	98.4	98.5

Table 11
Payments processed by selected interbank funds transfer systems: value of transactions (EUR billions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
TOP (TARGET component)					
Credit transfers sent credit transfers sent within the same TARGET	105,830.29	69,177.62	58,931.60	60,247.48	69,908.14
component credit transfers sent to another TARGET	82,247.12	47,597.44	40,067.41	42,027.30	50,882.66
component	23,583.17	21,580.18	18,864.19	18,220.18	19,025.49
Memo:					
Credit transfers received from another TARGET component	23,537.25	21,741.01	17,893.09	18,265.54	19,022.54
Concentration ratio in terms of value (%)	76.0	66.0	75.0	70.9	79.6
Retail payment systems					
Equens					
Total national transactions sent	2,131.23	2,015.13	1,584.24	1,513.50	1,630.96
Credit transfers	1,827.08	1,727.42	1,433.52	1,400.02	1,516.12
paper-based credit transfers	61.23	47.95	0.19	0.00	0
non-paper-based credit transfers	1,765.85	1,679.47	1,433.34	1,400.02	1,516.12
Direct debits	274.28	262.23	134.06	113.48	114.84
Card payments	11.26	7.91	4.19	0	0
ATM transactions	18.60	17.57	12.47	0	0
Concentration ratio in terms of value (%)	94.0	93.0	90.0	89.0	91.9

Table 12 Participation in SWIFT by domestic institutions (end of year)

	2012	2013	2014	2015	2016
Members	24	24	23	23	23
of which: live	24	24	23	23	23
Sub-members	42	43	50	50	48
of which: live	41	43	49	47	46
Participants	59	67	77	97	100
of which: live	57	62	71	91	98
Total users	125	134	150	170	171
of which: live	122	129	143	161	167
Мето:					
Total SWIFT users	10,279	10,583	10,805	11,094	11,299
members	2,398	2,389	2,379	2,455	2,422
sub-members	3,340	3,343	3,353	3,395	3,367
participants	4,541	4,851	5,073	5,244	5,510
Source: SWIFT.		_	_		

Table 13
SWIFT message flows to/from domestic users (thousands, total for the year)

	2012	2013	2014	2015	2016
Total messages sent	140,980	142,387	144,594	161,012	160,158
of which:					
category I	22,678	19,008	15,123	13,927	13,192
category II	6,612	5,900	5,517	5,363	<i>5,14</i> 8
Total messages received of which:	186,524	191,247	205,356	215,785	205,412
category I	14,480	13,829	12,290	11,691	11,266
category II	2,861	2,723	2,408	2,320	2,176
Domestic traffic	58,021	62,145	65,350	72,279	67,458
Мето:					
Global SWIFT traffic	4,589,109	5,065,668	5,612,724	6,106,644	6,525,800
Source: SWIFT.		_	_		<u> </u>

Table 14 Number of participants in exchanges and trading systems (end of year)

	2012	2013	2014	2015	2016
Euronext Amsterdam Stock Market					
Total number of participants	nav	nav	nav	nav	nav
Number of domestic participants	nav	nav	nav	nav	nav
Number of foreign participants	nav	nav	nav	nav	nav

Table 15 Number of listed securities (end of year)

	2012	2013	2014	2015	2016
Euronext Amsterdam Stock Market					
Total number of listed securities	10,387	11,359	13,454	16,869	17,575
debt securities	1,386	1,359	1,323	1,272	1,192
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	331	335	314	312	303
other	8,670	9,665	11,817	15,285	16,080

Table 16 Market capitalisation of listed companies (EUR billions, end of year)

	2012	2013	2014	2015	2016
Euronext Amsterdam Stock Market					
Total market capitalisation/equity	493.78	593.60	650.12	666.82	811.72

Table 17

Number of executed trades

(thousands, total for the year)

	2012	2013	2014	2015	2016
Euronext Amsterdam Stock Market					
Total number of executed securities trades	44,656	46,159	47,774	62,691	62,121
debt securities	228	201	239	175	127
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	42,227	43,687	44,998	59,787	59,938
other	2,201	2,271	2,537	2,729	2,056
Total number of executed derivatives trades	12,032	10,135	10,728	11,848	10,532
financial futures	6.3	5.1	5.8	7.3	6.9
_ financial options	5.7	5.1	4.9	4.6	3.6

Table 18

Value of executed trades

(EUR billions, total for the year)

	2012	2013	2014	2015	2016
Euronext Amsterdam Stock Market					
Total value of executed securities trades	364.193	398.758	461.459	586.050	513.434
debt securities	5.531	4.648	5.546	3.532	2.619
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	335.348	365.871	413.603	535.257	476.384
other	23.314	28.239	42.310	47.262	34.431
Total value of executed derivatives trades	1,246.528	1,201.761	1,360.352	1,562.276	1,313.457
financial futures	670.862	656.695	765.153	989.381	873.670
financial options	575.666	545.066	595.199	572.894	439.787

Table 19

Number of clearing members

<u> </u>	2012	2013	2014	2015	2016
EuroCCP N.V. ²					_
Total number of clearing members	51	49	48	45	nav

¹ See France, Table 19. ² As of the December 2013, EMCF N.V. and EuroCCP Ltd. merged and renamed the new combined company into EuroCCP N.V.

Table 20 Number of contracts and transactions cleared (thousands, total for the year)

	2012	2013	2014	2015	2016
EuroCCP N.V. ¹					_
Total number of contracts and transactions					
cleared	816,418	673,350	1,274,114	1,758,822	1,960,011
Number of securities transactions cleared	816,418	673,350	1,274,114	1,758,822	1,960,011
debt securities	nav	0	0	nav	nav
equity	816,393	673,350	1,274,114	1,758,822	1,960,011
other	25	0	0	0	0
EuroCCP N.V. of which, in Belgium ²					
Total number of contracts and transactions					
cleared	nav	nav	nav	nav	nav
Number of securities transactions cleared	nav	nav	nav	nav	nav
EuroCCP N.V. of which, in France ²					
Total number of contracts and transactions					
cleared	nav	nav	nav	nav	nav
2					
EuroCCP N.V. of which, in Germany ²					
Total number of contracts and transactions					
cleared	25	4,040	890	1,198	3,504
Number of securities transactions cleared	25	4,040	890	1,198	3,504
debt securities	nav	0	0	nav	nav
equity	0	4,040	890	1,198	3,504
other	25	0	0	0	0
EuroCCP N.V. of which, in Italy ²					
Total number of contracts and transactions					
cleared	nav	nav	nav	nav	nav
For the feetretee and the second second					
For the footnotes, see the end of the table.					

Table 20 (cont)					
,	2012	2013	2014	2015	2016
EuroCCP N.V. of which, in Netherlands ^{2,4}	2012	2013	2014	2013	2010
Total number of contracts and transactions					
cleared	868	882	845	41	nav
Number of securities transactions cleared	868	882	845	41	nav
debt securities	nav	nav	0	nav	nav
equity	868	882	845	41	nav
other	0	0	0	0	nav
Number of exchange-traded derivatives contracts					
cleared	nav	nav	nav	nav	nav
Number of OTC derivatives contracts cleared	nav	nav	nav	nav	nav
EuroCCP N.V. of which, in Sweden ²					
Total number of contracts and transactions cleared	161,009	140,128	155,179	199,765	214,529
Number of securities transactions cleared	161,009	140,128	155,179	199,765	214,529
debt securities	nav	140,126 nav	155,179	nav	214,529 nav
equity	161,009	140,128	155,179	199,765	214,529
other	0	0	0	0	0
EuroCCP N.V. of which, in Switzerland ² Total number of contracts and transactions					
cleared	nav	nav	nav	nav	nav
EuroCCP N.V. of which, in United Kingdom ² Total number of contracts and transactions					
cleared	650,721	528,024	1,110,573	1,537,594	1,723,652
Number of securities transactions cleared	650,721	528,024	1,110,573	1,537,594	1,723,652
debt securities	nav	nav	0	nav	nav
equity	650,721	528,024	1,110,573	1,537,594	1,723,652
other	0	0	0	0	0
EuroCCP N.V. of which, in United States ²					
Total number of contracts and transactions cleared	nav	nav	6,578	19,855	16,577
ologiog	nav	nav	0,070	10,000	10,077
Number of securities transactions cleared	nav	nav	6,578	19,855	16,577
debt securities	nav	nav	nav	nav	nav
equity	nav	nav	6,578	19,855	16,577
other	nav	nav	0	0	0
EuroCCP N.V. of which, in Other ^{2, 3} Total number of contracts and transactions					
cleared	3,795	276	49	369	1,749
					·
Number of securities transactions cleared	3,795	276	49	369	1,749
debt securities equity	nav 3,795	0 276	0 49	nav 369	nav 1,749
other	3,795 0	0	49 0	0	1,749

¹ As of the December 2013, EMCF N.V. and EuroCCP Ltd. merged and renamed the new combined company into EuroCCP N.V.

² As of 2015, data are reported by the country where the trade was transacted, instead of by the country of origin for the securities in question. Data have been adjusted to this definition back to 2011 inclusive.

³ Includes all jurisdictions that are not CPMI members. ⁴ There are no figures for NL , as EuroCCP is not clearing for any NL trading platform anymore.

Table 21
Value of contracts and transactions cleared (EUR billions, total for the year)

	2012	2013	2014	2015	2016
EuroCCP N.V. ¹					
Total value of contracts and transactions cleared	3,907.7	3,730.9	7,111.6	11,117.5	10,683.7
Value of securities transactions cleared	3,907.7	3,730.9	7,111.6	11,117.5	10,683.7
debt securities	nav	0.0	0	nav	nav
equity	3,907.7	3,730.9	7,111.6	11,117.5	10,683.7
other	0.02	0.0	0	0	0
EuroCCP N.V. of which, in Belgium ²					
Total value of contracts and transactions cleared	nav	nav	nav	nav	nav
Value of securities transactions cleared	nav	nav	nav	nav	nav
EuroCCP N.V. of which, in France ²					
Total value of contracts and transactions cleared	nav	nav	nav	nav	nav
Value of securities transactions cleared	nav	nav	nav	nav	nav
EuroCCP N.V. of which, in Germany ²					
Total value of contracts and transactions cleared	0.02	19.8	4.5	9.2	16.5
Value of securities transactions cleared	0	19.8	4.5	9.2	16.5
debt securities	nav	0.0	0.0	nav	nav
equity	0	19.8	4.5	9.2	16.5
other	0.02	0	0	0	0
EuroCCP N.V. of which, in Italy ²					
Total value of contracts and transactions cleared	nav	nav	nav	nav	nav
Value of securities transactions cleared	nav	nav	nav	nav	nav
For the footnotes, see the end of the table.					

Table 21 (cont)					
	2012	2013	2014	2015	2016
EuroCCP N.V. of which, in Netherlands ^{2,4}					
Total value of contracts and transactions cleared	5.4	4.7	6.6	0.4	nav
Value of securities transactions cleared	5.4	4.7	6.6	0.4	nav
debt securities	nav	nav	0.0	nav	nav
equity	5.4	4.7	6.6	0.4	nav
other	0	0	0	0	nav
Value of exchange-traded derivatives contracts					
cleared	nav	nav	nav	nav	nav
Value of OTC derivatives contracts cleared	nav	nav	nav	nav	nav
EuroCCP N.V. of which, in Sweden ²					
Total value of contracts and transactions cleared	1,048.8	1,011.6	1,148.2	1,433.4	1,323.1
Value of securities transactions cleared	1,048.8	1,011.6	1,148.2	1,433.4	1,323.1
debt securities	nav	nav	0.0	nav	nav
equity	1,048.8	1,011.6	1,148.2	1,433.4	1,323.1
other	0	0	0	0	0
EuroCCP N.V. of which, in Switzerland ²					
Total value of contracts and transactions cleared	nav	nav	nav	nav	nav
Value of securities transactions cleared	nav	nav	nav	nav	nav
EuroCCP N.V. of which, in United Kingdom ²					
Total value of contracts and transactions cleared	2,842.7	2,693.4	5,879.4	9,432.8	9,127.0
Value of securities transactions cleared	2,842.7	2,693.4	5,879.4	9,432.8	9,127.0
debt securities	nav	nav	0.0	nav	nav
equity	2,842.7	2,693.4	5,879.4	9,432.8	9,127.0
other	0	0	0	0	0
EuroCCP N.V. of which, in United States ²					
Total value of contracts and transactions cleared	nav	nav	72.9	240.9	213.0
Value of securities transactions cleared	nav	nav	72.9	240.9	213.0
debt securities	nav	nav	nav	nav	nav
equity	nav	nav	72.9	240.9	213.0
other	nav	nav	0	0	0
EuroCCP N.V. of which, in Other ^{2, 3}					
Total value of contracts and transactions cleared	10.8	1.3	0.1	0.7	4.1
Value of securities transactions cleared	10.8	1.3	0.1	0.7	4.1
debt securities	nav	0.0	0.0	nav	nav
equity	10.8	1.3	0.1	0.7	4.1
other 1 As of the December 2013, EMCE N.V. and EuroCCP Ltd.	0	0	0	0	0

¹ As of the December 2013, EMCF N.V. and EuroCCP Ltd. merged and renamed the new combined company into EuroCCP N.V.

² As of 2015, data are reported by the country where the trade was transacted, instead of by the country of origin for the securities in question. Data have been adjusted to this definition back to 2011 inclusive.

³ Includes all jurisdictions that are not CPMI members. ⁴ There are no figures for NL , as EuroCCP is not clearing for any NL trading platform anymore.

Table 22 Number of direct participants in CSDs *(end of year)*

	2012	2013	2014	2015	2016
Euroclear Netherlands					
Total number of participants	67	69	71	69	69
central bank	1	1	1	1	1
central counterparties (CCPs)	1	1	1	1	1
central securities depositories	2	2	2	2	0
banks	24	29	33	32	34
other	39	36	34	33	33
Number of domestic participants	17	16	17	16	19
central bank	1	1	1	1	1
central counterparties (CCPs)	0	0	0	0	0
central securities depositories	0	0	0	0	0
banks	1	2	2	1	3
other	15	13	14	14	15
Number of foreign participants	50	53	54	53	50
central bank	0	0	0	0	0
central counterparties (CCPs)	1	1	1	1	1
central securities depositories	2	2	2	2	0
banks	23	27	31	31	31
other	24	23	20	19	18

Table 23
Number of securities held on accounts at CSDs (thousands, end of year)

	2012	2013	2014	2015	2016
Euroclear Netherlands					
Total number of securities held	10	12	14	17	18
debt securities	1	1	1	1	1
bonds	1	1	1	1	1
equity	1	1	1	1	1
other ¹	8	10	12	15	16
¹ Since 2007, includes equity-linked instruments.					<u>. </u>

Table 24
Value of securities held on accounts at CSDs (EUR billions, end of year)

	2012	2013	2014	2015	2016
Euroclear Netherlands					
Total value of securities held	873.20	959.30	1,028.02	993.41	1,006.51
debt securities	472.22	481.94	479.41	466.79	460.89
short-term paper	21.07	25.22	22.20	28.66	30.86
bonds	451.14	456.72	<i>4</i> 57.21	438.13	430.04
equity	371.10	432.53	471.01	495.89	534.87
other	29.88	44.83	77.59	30.73	10.75

Table 25
Number of delivery instructions processed (thousands, total for the year)

	2012	2013	2014	2015	2016
Euroclear Netherlands					
Total number of delivery instructions	4,998	5,348	5,707	6,242	5,894
DVP	4,518	4,839	5,121	5,498	5,104
debt securities	218	197	153	108	79
short-term paper	4	3	3	3	2
bonds	214	194	150	105	77
equity	3,344	3,622	3,844	4,092	4,044
other	956	1,020	1,124	1,298	981
free of payment	480	509	586	744	790
debt securities	52	38	35	30	28
short-term paper	1	0	1	0	1
bonds	51	38	34	30	27
equity	249	265	268	279	405
other	179	206	283	435	357

Table 26
Value of delivery instructions processed

	2012	2013	2014	2015	2016
Euroclear Netherlands					
Total value of delivery instructions	4,488.8	4,401.8	4,365.8	4,889.2	4,695.1
DVP	1,732.0	1,504.6	1,429.3	1,490.5	2,026.3
debt securities	274.0	236.9	231.7	163.4	346.3
short-term paper	91.9	114.8	88.6	70.4	97.4
bonds	182.1	122.1	143.1	93.0	248.9
equity	1,430.8	1,247.4	1,162.0	1,284.7	1,658.1
other	27.2	20.3	35.5	42.4	21.8
free of payment	2,756.8	2,897.2	2,936.5	3,398.7	2,668.8
debt securities	846.0	917.3	752.7	673.8	482.4
short-term paper	92.6	115.0	99.1	105.4	84.1
bonds	753.5	802.3	653.5	<i>568.4</i>	398.3
equity	1,875.3	1,951.3	2,149.0	2,633.8	2,177.6
other	35.4	28.6	34.9	91.1	8.8
Details are not available.					

Table 1
Basic statistical data

	2012	2013	2014	2015	2016
Population (thousands) ¹	143,202	143,507	143,820	146,406	146,675
GDP (RUR billions)	66,926.9	71,016.7	79,199.7	83,232.6	86,043.6
GDP per capita (RUR)	467,361	494,866	550,686	568,505	586,628
Consumer price inflation (%) ²	6.6	6.5	11.4	12.9	5.4
Exchange rate (RUR/USD):					
end of year	30.37	32.73	56.26	72.88	60.66
average	31.07	31.82	37.97	60.66	66.90

¹ Yearly average, calculated on the basis of data of the Federal State Statistics Service. ² December on December of the previous year.

Sources: Bank of Russia; Federal State Statistics Service.

Table 2 Settlement media used by non-banks

(RUR billions, end of year)

	2012	2013	2014	2015	2016
Notes and coin in circulation outside banks	6,427.2	6,973.0	7,147.9	7,238.2	7,714.6
Value of transferable deposits	7,323.5	8,551.0	8,217.3	9,336.1	9,927.6
Narrow money supply (M1) ¹ Memo:	13,694.0	15,511.9	15,341.4	16,515.6	17,642.4
Transferable deposits in foreign currencies	nap	nap	nap	nap	nap
Outstanding value on e-money storage	nav	nav	8.522	9.8	12.2

¹ M1 is defined as total cash in circulation (outside banks) and balances in the domestic currency on current and other demand accounts of non-financial organisations, financial institutions (except credit institutions) and households.

Table 3
Settlement media used by banks

(RUR billions, average for December)

	2012	2013	2014	2015	2016
Transferable balances held at the central bank	879.14	1,098.40	1,338.77	1,566.11	2,044.24
required reserves ¹	<i>569.45</i>	794.10	966.90	1,318.66	1,765.64
free reserves	309.69	304.30	371.87	247.45	278.59
Transferable balances held at other banks	225.19	246.01	263.33	242.49	375.27
Memo:					
Credit extended by the central bank:					
intraday ²	274.86	310.46	418.48	259.41	267.56
overnight ³	1.64	0.80	0.74	0.64	0.40
longer refinancing operations (repos) ⁴	2,653.45	4,163.42	7,001.25	3,296.16	625.91

¹ Averaged required reserves (official averaging period was 10 Dec –10 Jan from 2009 to 2014; according to the schedule approved by the Bank of Russia Board of Directors from 2015). ² December daily average value of extended intraday credit. ³ December daily average liabilities for extended overnight credit. ⁴ December daily average liabilities of credit institutions for lombard loans and other credits, as well as liabilities for repo and currency swap transactions and unsecured credits.

Table 4
Banknotes and coin
(RUR billions, end of year)

	2012	2013	2014	2015	2016
Total banknotes and coin issued ^{1, 2}	7,675.39	8,315.02	8,848.22	8,531.11	8,802.00
Total banknotes issued	7,616.21	8,246.58	8,770.50	8,448.36	8,713.09
RUR 5000	4,790.63	5,523.59	6,018.75	5,952.72	6,308.25
RUR 1000	2,230.52	2,163.71	2,184.71	1,990.99	1,936.20
RUR 500	441.36	403.24	403.50	343.93	311.78
RUR 100	115.16	118.48	126.51	124.60	122.73
RUR 50	32.37	32.31	32.20	31.49	29.75
RUR 10	6.15	5.20	4.81	4.60	4.34
RUR 5	0.04	0.04	0.04	0.04	0.04
Total coin issued ² of which:	59.17	68.44	77.72	82.75	88.91
RUR 25	0.26	1.09	2.00	2.00	2.00
RUR 10	32.30	39.17	<i>45.5</i> 6	49.34	53.67
RUR 5	10.34	10.78	11.51	11.91	12.72
RUR 2	5.06	<i>5.4</i> 2	5.84	6.12	6.55
RUR 1	5.87	6.24	6.65	7.00	7. <i>4</i> 2
RUR 0.5	2.80	3.07	3.35	3.54	3.65
RUR 0.1	2.18	2.30	2.44	2.49	2.54
RUR 0.05	0.29	0.29	0.29	0.29	0.29
RUR 0.01	0.07	0.07	0.07	0.07	0.07
Banknotes and coin held by banks ¹	1,248.20	1,342.07	1,700.27	1,292.93	1,087.40
Banknotes and coin in circulation outside banks	6,427.18	6,972.95	7,147.94	7,238.18	7,714.60

¹ Including banknotes and coin in the vaults of the Bank of Russia. ² Excluding commemorative and investment coins.

Table 5
Institutions offering payment services to non-banks (end of year)

	2012	2013	2014	2015	2016
Central bank					
Number of branches or offices ¹	505	439	365	271	239
Number of accounts, (thousands)	77.90	92.65	110.06	108.67	118.01
Value of accounts, all (RUR billions)	2,810.3	2,520.5	2,438.3	2,286.6	2,725.8
Memo:					
Number of accounts, banks (thousands)	2.92	2.69	2.34	1.96	1.58
Banks					
Number of institutions ²	956	923	834	733	623
Number of branches or offices ³	44,990	45,236	43,312	38,393	35,043
Number of accounts (thousands)	670,898	715,014	753,328	788,867	825,189
of which: number of internet/PC-linked accounts ⁴					
(thousands)	30,726	<i>45,003</i>	84,039	139,914	165,947
Value of accounts (RUR billions)	7,331.5	8,483.5	8,156.1	9,320.4	10,171.9
Other institutions offering payment services to no	on-banks: Fe	ederal State U	Jnitary Enter	prise "Russia	an Post"
Number of institutions	1	1	1	1	1
Number of branches or offices	41,556	41,420	41,640	41,022	42,068
Number of accounts	nap	nap	nap	nap	nap
Value of accounts	nap	nap	nap	nap	nap
Institutions offering payment services to non-ban	ks (total)				
Number of institutions	958	925	836	735	625
Number of branches or offices	87,051	87,095	85,317	79,686	77,350
Number of accounts held by non-banks					
(thousands)	670,976	715,107	753,438	788,976	825,307
of which: number of internet/PC-linked accounts 4					
(thousands)	30,726	<i>45,003</i>	84,039	139,914	165,947
Value of accounts held by non-banks					
(RUR billions)	10,141.9	11,004.0	10,594.4	11,607.0	12,897.7
Мето:					
Electronic money institutions					
Number of institutions ⁵	38	82	97	104	99
Outstanding value on e-money storages issued by					
e-money institutions (RUR billions)	nav	nav	8.522	9.8	12.2
¹ Bank of Pussia branches ² Including settlement non	hank aradit in	atitutiona 3 la	adudina branch	on and additio	nal offices of

¹ Bank of Russia branches. ² Including settlement non-bank credit institutions. ³ Including branches and additional offices of credit institutions (branches), other subdivisions of credit institutions (branches). ⁴ Including only those accounts that have been credited at least once during the reporting period. ⁵ In the Russian Federation, only banks are entitled to issue means of payment in the form of electronic money.

Table 6
Payment card functions and accepting devices (end of year)

	2012	2013	2014	2015	2016
Cards issued in the country (thousands)					
Cards with a cash function	239,547.5	248,573.6	278,497.6	286,153.8	315,315.7
Cards with a debit function ¹	169,012.7	188,274.6	195,904.4	214,443.4	224,592.3
Cards with a credit function	22,482.6	29,188.9	31,761.5	29,463.8	30,144.3
Cards with an e-money function ²	48,052.2	31,110.2	50,831.7	42,246.6	60,579.1
of which: cards with an e-money function which					
have been loaded at least once	nav	nav	nav	nav	nav
Total number of cards (irrespective of the number					
of functions on the card)	239,547.5	248,573.6	278,497.6	286,153.8	315,315.7
of which: cards with a combined debit, cash and e-					
money function	nav	nav	nav	nav	nav
Memo:					
Retailer cards	nav	nav	nav	nav	nav
Terminals located in the country					
ATMs	171,909	188,789	222,761	206,852	201,396
ATMs with a cash withdrawal function	131,640	139,951	139,042	130,935	126,711
ATMs with a credit transfer function	164,963	183,559	218,054	203,780	198,545
POS terminals	718,011	965,539	1,288,658	1,489,833	1,777,996
EFTPOS terminals	695,023	953,749	1,280,205	1,481,469	1,761,340
E-money card terminals	nav	nav	nav	nav	nav

¹ Including cards with a delayed debit function. ² Including prepaid cards in compliance with Russian Federation Federal Law No. 161-FZ of June 27, 2011, «On the National Payment System».

Table 7
Indicators of the use of payment instruments and terminals by non-banks: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers ¹	2,689.16	2,833.36	2,840.47	2,772.53	2,760.09
paper-based	1,551.30	905.12	857.31	798.45	746.02
non-paper-based	1,137.86	1,928.25	1,983.16	1,974.08	2,014.06
Direct debits	82.08	84.82	84.63	77.37	92.39
Card payments with cards issued in the country	2,853.91	4,584.48	6,811.16	9,803.47	14,413.55
payments by cards with a debit function ²	2,631.18	4,150.06	6,096.85	8,852.11	13,171.93
payments by cards with a credit function	222.72	434.42	714.31	951.36	1,241.62
E-money payment transactions	225.67	564.38	1,013.58	1,039.99	1,279.38
by cards with an e-money function	225.67	440.97	779.57	567.08	491.22
through other e-money storages	nav	123.41	234.01	472.91	788.16
Cheques	0.001	0.000	0.000	0.000	0.000
Other payment instruments	1,458.50	1,711.52	1,895.38	1,855.81	1,746.95
Other payment instruments	1,430.30	1,711.52	1,095.30	1,000.01	1,740.93
Total number of transactions with payment					
instruments	7,309.32	9,778.55	12,645.22	15,549.17	20,292.35
of which: cross-border transactions sent	nav	nav	nav	nav	nav
Memo:					
Cross-border transactions received	nav	nav	nav	nav	nav
Transactions per type of terminal					
Total transactions at terminals in the country					
Cash transactions	2,843.40	3,167.80	3,289.63	3,331.60	3,408.99
ATM cash withdrawals	2,764.72	3,102.88	3,231.09	3,278.55	3,361.83
ATM cash deposits	2,704.72 nav	3, 102.00 nav	5,251.09 nav	5,270.55 nav	5,50 1.05 nav
POS payment transactions	1,575.53	2,465.15	3,971.02	5,911.28	8,885.36
E-money card loading/unloading transactions	1,575.55 nav	2,403.13 nav	nav	nav	nav
E-money card loading/difficating transactions	nav	nav	nav	nav	nav
a) Transactions at terminals in the country by cards			IIav	IIav	Hav
Cash transactions	2,822.27	3,149.81	3,274.09	3,317.57	3,396.56
ATM cash withdrawals	2,743.71		3,214.09 3,215.74	•	
	•	3,085.00	ŕ	3,264.64	3,349.50
ATM cash deposits	nav 4 5 4 2 4 2	nav	nav	nav 5.070.05	nav
POS payment transactions	1,543.43	2,428.64	3,920.57	5,873.65	8,844.59
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav
b) Transactions at terminals in the country by cards		•	45.54	44.00	40.40
Cash transactions	21.14	17.99	15.54	14.03	12.43
ATM cash withdrawals	21.02	17.88	15.35	13.90	12.33
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions	32.10	36.50	50.45	37.64	40.78
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav
c) Transactions at terminals outside the country by		•			
Cash transactions	21.69	27.68	26.02	15.77	14.69
ATM cash withdrawals	nav	nav	nav	nav	nav
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions	148.84	229.38	323.57	278.26	372.65
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav
¹ Includes postal transactions. ² Includes payments by	cards with delay	yed debit functi	on.		

Table 8
Indicators of the use of payment instruments and terminals by non-banks: value of transactions (RUR billions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers ¹	487,217.7	557,397.8	640,798.7	729,689.6	654,857.2
paper-based	62,592.6	77,724.2	73,438.6	88,612.5	58,587.2
non-paper-based	424,625.1	479,673.6	567,360.1	641,077.1	596,270.1
Direct debits	1,300.8	1,554.8	1,843.4	1,933.4	2,243.0
Card payments with cards issued in the country	5,230.8	8,135.7	12,054.4	16,391.1	23,861.3
payments by cards with a debit function ²	4,806.3	7,412.4	11,018.7	15,201.5	22,388.8
payments by cards with a credit function	424.4	723.4	1,035.8	1,189.5	1,472.5
E-money payment transactions	388.3	590.6	861.7	640.3	687.4
by cards with an e-money function	388.3	488.0	726.6	446.3	458.3
through other e-money storages	nav	102.6	135.1	194.0	229.1
Cheques	0.2	0.1	0.0	0.0	0
Other payment instruments	4,987.5	5,443.9	6,571.1	7,535.0	7,848.3
Other payment instruments	4,907.5	5,445.9	0,371.1	7,555.0	7,040.3
Total value of transactions with payment					
instruments	499,125.2	573,122.9	662,129.4	756,189.2	689,497.3
of which: cross-border transactions sent	nav	nav	nav	nav	nav
Memo:					
Cross-border transactions received	nav	nav	nav	nav	nav
Transactions per type of terminal					
Total transactions at terminals in the country					
Cash transactions	18,017.7	21,362.7	23,803.9	25,136.7	26,891.7
ATM cash withdrawals	15,926.5	19,306.1	21,815.3	23,395.1	25,263.8
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions	2,590.5	3,596.9	5,020.3	6,222.0	8,617.2
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav
a) Transactions at terminals in the country by cards			nav	nav	nav
Cash transactions	17,894.6	21,256.7	23,792.0	25,026.4	26,773.7
ATM cash withdrawals	15,808.0	19,204.1	21,721.1	23,290.7	25,150.2
ATM cash deposits	nav	nav	nav	23,230.7 nav	20, 100.2 nav
POS payment transactions	2,488.5	3,482.0	4,884.7	6,077.7	8,461.8
E-money card loading/unloading transactions	2, 4 00.9 nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav
b) Transactions at terminals in the country by cards				IIav	IIav
Cash transactions	123.1	106.0	100.0	110.3	118.0
ATM cash withdrawals	123.1		94.2	110.3 104.4	
		101.9			113.6
ATM cash deposits	nav	nav	nav 125.0	nav	nav 155.4
POS payment transactions	102.1	114.9	135.6	144.3	155.4
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav
c) Transactions at terminals outside the country by		•	050.4	100.0	000.0
Cash transactions	188.8	236.3	250.1	199.6	203.2
ATM cash withdrawals	nav	nav	nav	nav	nav
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions	570.9	755.0	881.0	794.1	899.8
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav
¹ Includes postal transactions. ² Includes payments by	y cards with a de	elayed debit fur	nction.		

Table 9
Participation in selected interbank funds transfer systems (end of year)

	2012	2013	2014	2015	2016
Large-value payment systems					
BESP system					
Number of participants	2,894	2,776	2,495	2,113	1,741
Direct participants	2,894	2,776	2,495	2,113	1,741
Banks ¹	2,728	2,605	2,320	1,942	1,570
Central bank ²	83	85	87	83	83
Other direct participants	83	86	88	88	88
General government ³	82	85	87	87	87
Postal institution	nap	nap	nap	nap	nap
Clearing and settlement organisations	nav	nav	nav	nav	nav
Other financial institutions	nap	nap	nap	nap	nap
Other ⁴	1	1	1	1	1
NSD					
Number of participants	nap	nav	nav	730	656
Direct participants	nap	nav	nav	730	656
Banks ¹	nap	nav	nav	464	396
Central bank ²	nap	nav	nav	1	1
Other direct participants	nap	nav	nav	265	259
General government	nap	nav	nav	0	0
Postal institution	nap	nav	nav	0	0
Clearing and settlement organisations	nap	nav	nav	0	0
Other financial institutions	nap	nav	nav	208	178
Other	nap	nav	nav	57	81
Large-value and retail payment systems					
VER ⁵					
Number of participants	2,991	2,773	2,426	2,038	1,658
Direct participants	2,991	2,773	2,426	2,038	1,658
Banks ¹	2,906	2,688	2,340	1,956	1,576
Central bank ²	85	85	86	82	82
Other direct participants	nav	nav	nav	nav	nav
Clearing and settlement organisations	nav	nav	nav	nav	nav
MER ⁶					
Number of participants	2,996	2,773	2,426	2,038	1,658
Direct participants	2,996	2,773	2,426	2,038	1,658
Banks ¹	2,910	2,688	2,340	1,956	1,576
Central bank ²	86	85	86	82	82
Other direct participants	nav	nav	nav	nav	nav
Clearing and settlement organisations	nav	nav	nav	nav	nav
Payments using letters of advice					
Number of participants	86	85	86	82	81
Direct participants	86	85	86	82	81
Banks ¹	nap	nap	nap	nap	nap
Central bank ²	86	85	86	82	81

¹ Credit institutions and their branches. Since 2012, includes credit institutions that provide clearing and settlement services for securities market and payment clearing. ² Bank of Russia branches. ³ The Federal Treasury and its regional offices. ⁴ The State Corporation Deposit Insurance Agency. ⁵ The VER systems (systems of intraregional electronic payments) ensure electronic payments in the Bank of Russia payment system (BRPS) regional subsystems. ⁶ The MER system (system of interregional electronic payments) ensures electronic payment interaction between the VER systems of different BRPS regional subsystems bilaterally between two different subsystems on a decentralised basis.

Table 10
Payments processed by selected interbank funds transfer systems: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
BESP system					
Total transactions sent	1.189	2.105	2.926	3.254	3.371
Concentration ratio in terms of volume (%)	18.1	12.9	21.8	22.3	26.1
NSD					
Total transactions sent ¹	nap	nav	nav	0.729	0.702
Concentration ratio in terms of volume (%)	nap	nav	nav	48.51	47.58
Large-value and retail payment systems					
VER					
Total transactions sent	923.36	934.61	919.67	894.83	839.90
Concentration ratio in terms of volume (%)	nap	nap	nap	nap	nap
MER					
Total transactions sent	333.94	404.36	447.95	500.45	592.64
Concentration ratio in terms of volume (%)	nap	nap	nap	nap	nap
Payments using letters of advice					
Total transactions sent	0.51	0.13	0.01	0.00	0.00
Concentration ratio in terms of volume (%)	nap	nap	nap	nap	nap
¹ Including transactions in foreign currency.					

Table 11
Payments processed by selected interbank funds transfer systems: value of transactions (RUR billions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					_
BESP system					
Total transactions sent	447,258.3	504,112.9	475,550.9	535,666.9	560,123.2
Concentration ratio in terms of value (%)	47.4	51.6	41.4	62.0	62.0
NSD					
Total transactions sent ¹	nap	nav	nav	138,269.5	148,975.3
Concentration ratio in terms of value (%)	nap	nav	nav	73.67	71.22
Large-value and retail payment systems					
VER					
Total transactions sent	599,227.8	604,349.4	607,716.8	693,036.8	645,179.4
Concentration ratio in terms of value (%)	nap	nap	nap	nap	nap
MER					
Total transactions sent	103,535.0	116,334.9	121,909.9	127,837.1	134,728.6
Concentration ratio in terms of value (%)	nap	nap	nap	nap	nap
Payments using letters of advice					
Total transactions sent	476.3	96.3	2.3	2.4	2.9
Concentration ratio in terms of value (%)	nap	nap	nap	nap	nap
¹ Including transactions in foreign currency.	-				

Table 12
Participation in SWIFT by domestic institutions (end of year)

	2012	2013	2014	2015	2016
Members	110	109	105	102	96
of which: live	110	108	105	102	95
Sub-members	41	42	39	39	37
of which: live	39	41	38	38	37
Participants	448	466	450	385	320
of which: live	434	453	433	372	306
Total users	599	617	593	526	453
of which: live	583	602	576	512	<i>4</i> 38
Memo:					
Total SWIFT users	10,279	10,583	10,805	11,094	11,299
members	2,398	2,389	2,379	2,455	2,422
sub-members	3,340	3,343	3,353	3,395	3,367
participants	4,541	4,851	5,073	5,244	5,510
Source: SWIFT.					

Table 13
SWIFT message flows to/from domestic users (thousands, total for the year)

	2012	2013	2014	2015	2016
Total messages sent	51,667	73,717	94,016	70,834	83,336
of which:					
category I	28,076	42,544	63,897	43,597	52,900
category II	2,062	2,209	2,316	1,843	1,747
Total messages received	46,883	68,133	88,292	65,698	77,706
of which:					
category I	25,370	39,798	61,444	42,437	51,812
category II	1,765	2,091	2,456	1,955	1,963
Domestic traffic	31,947	51,355	70,428	49,541	59,835
Мето:					
Global SWIFT traffic	4,589,109	5,065,668	5,612,724	6,106,644	6,525,800
Source: SWIFT.					

Table 14
Number of participants in exchanges and trading systems (end of year)

	2012	2013	2014	2015	2016
MICEX SE ¹					
Total number of participants	634	559	512	466	nap
central bank	1	1	1	1	nap
central counterparties (CCPs)	1	1	1	0	nap
banks	354	<i>34</i> 5	324	305	nap
other	278	212	186	160	nap
Number of domestic participants	634	559	512	466	nap
central bank	1	1	1	1	nap
central counterparties (CCPs)	1	1	1	0	nap
banks	354	345	324	305	nap
other	278	212	186	160	nap
Number of foreign participants	0	0	0	0	nap
Moscow Exchange					
Total number of participants	755	733	669	686	660
central bank	1	1	2	3	1
central counterparties (CCPs)	1	1	1	0	0
banks	679	656	599	603	525
other	74	<i>7</i> 5	67	80	134
Number of domestic participants	755	728	662	678	650
central bank	1	1	1	1	1
central counterparties (CCPs)	1	1	1	0	0
banks	679	651	593	597	515
other	74	<i>7</i> 5	67	80	134
Number of foreign participants	0	5	7	8	10
central bank	0	0	1	2	2
banks	0	5	6	6	8

¹ On 19 December 2016, Moscow Exchange Group completed an internal reorganization in which MICEX SE, wholly owned subsidiary of Moscow Exchange, was merged with the parent company.

Table 15

Number of listed securities

(end of year)

	2012	2013	2014	2015	2016
MICEX SE					
Total number of listed securities	1,755	1,882	1,749	1,855	1,867
debt securities	944	1,111	1,151	1,268	1,342
short-term paper	2	0	0	0	0
bonds	942	1,111	1,151	1,268	1,342
equity	811	771	598	587	525
other	0	0	0	0	0

able 16	;
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Market capitalisation of listed companies

(RUR billions, end of year)

	2012	2013	2014	2015	2016
MICEX SE Total market capitalisation/equity	24,657.0	25,323.8	23,155.6	28,769.1	37,822.8

Table 17 Number of executed trades (thousands, total for the year)

	2012	2013	2014	2015	2016
MICEX SE					
Total number of executed securities trades	103,514.08	85,894.47	106,065.46	109,321.57	107,583.23
debt securities	1,161.11	1,422.29	1,234.66	1,152.57	1,699.71
short-term paper	0.12	0.02	0.00	0.00	0
bonds ¹	1,160.99	1,422.27	1,234.66	1,152.57	1,699.71
equity	102,352.97	84,472.18	104,830.80	108,169.00	105,878.38
other	0	0	0	0	5
Total number of executed derivatives trades	nap	nap	nap	nap	nap
financial futures	nap	nap	nap	nap	nap
financial options	nap	nap	nap	nap	nap
other financial derivatives	nap	nap	nap	nap	nap
commodity futures	nap	nap	nap	nap	nap
commodity options	nap	nap	nap	nap	nap
other commodity derivatives	nap	nap	nap	nap	nap
Moscow Exchange					
Total number of executed securities trades	26	0.00	0	0	0
debt securities	26	0.00	0	0	0
bonds ¹	26	0.00	0	0	0
Total number of executed derivatives trades	189,862	146,789.70	183,289.84	321,868.30	349,190.08
financial futures	184,712	139,269.43	175,919.29	301,336.00	305,250.48
financial options	3,304	3,991.86	4,533.39	4,468.02	5,866.28
other financial derivatives	0	291	444.84	1,116.74	1,896.65
commodity futures	1,833	3,218.82	2,379.43	14,934.82	35,960.73
commodity options	13	18.14	12.47	12.74	215.95
other commodity derivatives	0	0	0.43	0.00	0
¹ Including eurobonds in foreign currency.					

Table 18
Value of executed trades

(RUR billions, total for the year)

	2012	2013	2014	2015	2016
MICEX SE					
Total value of executed securities trades	183,761.66	228,818.95	204,063.45	201,546.69	320,118.51
debt securities	135,370.33	181,010.47	149,270.42	148,997.90	253,341.06
short-term paper	1.57	2.99	0.06	0.00	0
bonds ¹	135,368.75	181,007.49	149,270.36	148,997.90	253,341.06
equity	48,391.33	47,808.48	54,793.03	52,548.79	66,453.68
other	0.00	0	0	0	324
Total value of executed derivatives trades	nap	nap	nap	nap	nap
financial futures	nap	nap	nap	nap	nap
financial options	nap	nap	nap	nap	nap
other financial derivatives	nap	nap	nap	nap	nap
commodity futures	nap	nap	nap	nap	nap
commodity options	nap	nap	nap	nap	nap
other commodity derivatives	nap	nap	nap	nap	nap
Moscow Exchange					
Total value of executed securities trades	6,564	0.00	0	0	0
debt securities	6,564	0.00	0	0	0
bonds	6,564	0.00	0	0	0
Total value of executed derivatives trades	49,969	147,328.33	212,077.64	301,218.74	338,073.92
financial futures	45,769	43,105.36	54,638.05	85,847.85	94,254.52
financial options	3,193	4,007.53	5,738.35	3,474.90	5,640.29
other financial derivatives	0	98,723	150,749.58	207,505.39	222,803.00
commodity futures	991	1,482.19	928.39	4,383.23	15,234.19
commodity options	16	9.82	10.97	7.37	141.93
other commodity derivatives	0	0	12.31	0.00	0
¹ Including eurobonds in foreign currency.					

Table 19 Number of clearing members (end of year)

	2012	2013	2014	2015	2016
NCC					
Total number of clearing members	727	825	794	713	655
central bank	1	1	2	3	3
central counterparties (CCPs)	1	1	0	Ō	0
banks	426	540	516	479	418
other	299	283	276	231	234
Number of domestic clearing members	727	820	786	702	642
central bank	1	1	1	1	1
central counterparties (CCPs)	1	1	0	0	0
banks	<i>4</i> 26	535	509	471	408
other	299	283	276	230	233
Number of foreign clearing members	0	5	8	11	13
central bank	0	0	1	2	2
banks	0	5	7	8	10
other	0	0	0	1	1
NSD ¹					
Total number of clearing members	nav	289	333	358	350
central bank	nav	1	1	1	1
central counterparties (CCPs)	nav	0	0	0	0
banks	nav	190	235	256	235
other	nav	98	97	101	114
Number of domestic clearing members	nav	282	326	349	342
central bank	nav	1	1	1	1
central counterparties (CCPs)	nav	0	0	0	0
banks	nav	188	231	249	229
other	nav	93	94	99	112
Number of foreign clearing members	nav	7	7	9	8
central bank	nav	0	0	0	0
central counterparties (CCPs)	nav	0	0	0	0
banks	nav	2	4	7	6
<u>other</u>	nav	5	3	2	2

¹ Has provided clearing services since October 2012.

Table 20 Number of contracts and transactions cleared (thousands, total for the year)

	2012	2013	2014	2015	2016
RTS CC ¹					
Total number of contracts and transactions					
cleared (millions)	990.55	nap	nap	nap	nap
,		•		•	•
Number of securities transactions cleared ²	5,692.03	nap	nap	nap	nap
debt securities	0.000	nap	nap	nap	nap
bonds	0.000	nap	nap	nap	nap
equity ²	5,692.03	nap	nap	nap	nap
other	0,092.03	•	•	•	•
otilei	O	nap	nap	nap	nap
of which: number of repurchase transactions					
cleared	72.50	nap	nap	nap	nap
equity	72.50	nap	nap	nap	nap
oquity	72.00	Пар	пар	Пар	Пар
Number of exchange-traded derivatives contracts					
cleared (millions)	984.86	nap	nap	nap	nap
financial futures	925.53	nap	nap	nap	nap
financial options	38.77	nap	nap	nap	nap
commodity futures	20.31	nap	nap	nap	nap
commodity options	0.25	nap	nap	nap	nap
commodity options	0.20	παρ	παρ	παρ	παρ
Number of OTC derivatives contracts cleared	0	nap	nap	nap	nap
NCC					
Total number of contracts and transactions	174,153.51	232,700.60	289,355.30	431,189.90	456,773.31
	,	- ,	,	- ,	,
Number of securities transactions cleared	97,822.05	85,910.90	106,065.46	109,321.60	107,583.23
debt securities	1,161.11	1,438.72	1,234.66	1,152.57	1,699.71
short-term paper	0.12	0.02	0.00	0.00	0
bonds	865.49	1,057.23	840.23	697.88	1,699.71
government bonds	295.51	381.47	394.43	454.69	836.28
equity	96,660.94	84,472.18	104,830.80	108,169.00	105,878.38
other	0.00	0	0	0	5
	0.00	· ·	•		•
of which: number of repurchase transactions	1,771.71	1,935.43	1,628.80	1,376.96	1,591.15
debt securities	707.35	915.78	693.73	524.36	593.07
short-term paper	0	0	0.002	0.000	0
bonds	506.64	674.39	472.32	308.03	593.07
government bonds	200.71	241.38	221.42	216.32	253.13
equity	1,064.36	1,019.65	935.07	852.60	992.95
other	0.000	0	0	0	5
other .	0.000	O	O	O	O
Number of exchange-traded derivatives contracts	76,331	146,789.70	183,289.84	321,868.30	349,190.08
financial futures	71,472	139,269.43	175,919.29	301,336.00	305,250.48
financial options	3,056	3,991.86	4,533.39	4,468.02	5,866.28
other financial derivatives	0,000	291	444.84	1,116.74	1,896.65
commodity futures	1,783	3,218.82	2,379.43	14,934.82	35,960.73
commodity rations	20	18.14	12.47	12.74	215.95
other commodity derivatives	0	10.14	0.43	0.00	210.90
Sale Commonly derivatives	U	U	0.43	0.00	U
Number of OTC derivatives contracts cleared	0	0	0	0	0
For the footnotes, see the end of the table.	<u> </u>	<u> </u>	<u> </u>	<u> </u>	

Table 20 (cont)					
	2012	2013	2014	2015	2016
NSD					
Total number of contracts and transactions	nav	87	123.61	108.21	119.90
Number of securities transactions cleared	nav	87	123.61	108.21	119.90
debt securities ^{2,3}	nav	1	2.29	2.80	10.44
short-term paper	nav	nav	nav	nav	nav
bonds	nav	0	0.54	2.17	7.83
government bonds	nav	1	1.75	0.63	2.61
equity ³	nav	79	103.67	84.74	97.13
of which: number of repurchase transactions	nav	7	17.65	20.67	12.33
debt securities	nav	nav	nav	nav	nav
equity	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of exchange-traded derivatives contracts	nav	nap	nap	nap	nap
Number of OTC derivatives contracts cleared	nav	nan	nan	nan	nan

Number of OTC derivatives contracts cleared nav nap nap nap nap nap nap 1 Provided clearing services in selected segments of the Moscow Exchange market. Ceased operation as of 1 December 2012. Including transactions in foreign currency. 3 Not including repurchase transactions

Table 21
Value of contracts and transactions cleared (RUR billion, total for the year)

	2012	2013	2014	2015	2016
RTS CC ¹					
Total value of contracts and transactions cleared	48,446.59	nap	nap	nap	nap
Value of securities transactions cleared ²	1,776.43	nap	nap	nap	nap
debt securities	0.00	nap	nap	nap	nap
bonds	0.00	nap	nap	nap	nap
equity ²	1,776.43	nap	nap	nap	nap
of which: value of repurchase transactions					
cleared .	423.09	nap	nap	nap	nap
equity	423.09	nap	nap	nap	nap
Value of exchange-traded derivatives contracts					
cleared	46,670.16	nap	nap	nap	nap
financial futures	42,763.68	nap	nap	nap	nap
financial options	2,979.42	nap	nap	nap	nap
commodity futures	912.37	nap	nap	nap	nap
commodity options	14.69	•	•		
commodity options	14.09	nap	nap	nap	nap
Value of OTC derivatives contracts cleared	0	nap	nap	nap	nap
NCC					
Total value of contracts and transactions cleared	185,283.96	379,106.09	416,141.09	502,765.43	658,192.44
Value of securities transactions cleared	181,985.23	231,777.76	204,063.45	201,546.69	320,118.51
debt securities	135,370.33	183,969.28	149,270.42	148,997.90	253,341.06
short-term paper	1.57	2.99	0.06	0.00	0
bonds	59,768.67	92,042.76	78,908.83	80,281.02	253,341.06
government bonds	75,600.08	91,923.53	70,361.53	68,716.88	122,955.96
equity	46,614.90	47,808.48	54,793.03	52,548.79	66,453.68
other	0.00	0	0	0	324
of which: value of repurchase transactions					
cleared .	160.664.84	207,523.44	183,176.07	180.990.57	296,225.76
debt securities	124,384.61	168,650.62	138,665.89	137,839.38	238,724.99
short-term paper	0	0	0.06	0.00	0
bonds	52,259.68	84,145.46	72,868.42	73,891.81	238,724.99
government bonds	72,124.93	84,504.82	65,797.41	63,947.57	116,287.06
equity	36,280.23	38,872.82	44,510.19	43,151.19	66,453.68
other	0.00	0	0	0	324
Value of exchange-traded derivatives contracts					
cleared	3,299	147,328.33	212,077.64	301,218.74	338,073.92
financial futures	3,006	43,105.36	54,638.05	85,847.85	94,254.52
			•		
financial options	214	4,007.53	5,738.35	3,474.90	5,640.29
other financial derivatives	0	98,723	150,750	207,505.39	222,803.00
commodity futures	79	1,482.19	928.39	4,383.23	15,234.19
commodity options	1	9.82	10.97	7.37	141.93
other commodity derivatives	0	0	12.31	0.00	0
Value of OTC derivatives contracts cleared	0	0	0	0	0
For the footnotes, see the end of the table.					

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Ιa	v		4 I	-	CO	IILJ

	2012	2013	2014	2015	2016
NSD					
Total value of contracts and transactions cleared	nav	28,599	116,681.52	96,197.54	99,301.26
Value of securities transactions cleared	nav	28,599	116,681.52	96,197.54	99,301.26
debt securities ^{2,3}	nav	92	206.90	638.63	2,025.72
short-term paper	nav	nav	nav	nav	nav
bonds	nav	21	99.87	394.03	1,306.73
government bonds	nav	70	107.03	244.61	719.00
equity ³	nav	1,579	1,963.53	1,874.75	2,486.93
of which: value of repurchase transactions					
cleared	nav	26,928	114,511.08	93,684.16	94,788.60
debt securities	nav	nav	nav	nav	nav
equity	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Value of exchange-traded derivatives contracts					
cleared	nav	nap	nap	nap	nap
Value of OTC derivatives contracts cleared	nav	nap	nap	nap	nap

Provided clearing services in selected segments of the Moscow Exchange market. Ceased operation as of
 December 2012. ² Including transactions in foreign currency. ³ Not including repurchase transactions.

Table 22 Number of direct participants in CSDs *(end of year)*

	2012	2013	2014	2015	2016
NSD					
Total number of participants	909	908	896	895	846
central bank	1	1	1	1	1
central counterparties (CCPs)	1	1	0	0	0
central securities depositories	1	6	8	9	9
banks	575	579	576	571	551
other	331	321	311	314	285
Number of domestic participants	901	892	878	876	828
central bank	1	1	1	1	1
central counterparties (CCPs)	1	1	0	0	0
central securities depositories	0	0	0	0	0
banks .	572	576	574	568	549
other	327	314	303	307	278
Number of foreign participants	8	16	18	19	18
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
central securities depositories	1	6	8	9	9
banks ,	3	3	2	3	2
other	4	7	8	7	7
DCC ¹					
Total number of participants	199	115	nap	nap	nap
central bank	0	0	nap	nap	nap
central counterparties (CCPs)	1	0	nap	nap	nap
central securities depositories	0	1	nap	nap	nap
banks	36	30	nap	nap	nap
other	162	84	nap	nap	nap
Number of domestic participants	198	112	nap	nap	nap
central bank	0	0	nap	nap	nap
central counterparties (CCPs)	1	0	nap	nap	nap
central securities depositories	0	1	nap	nap	nap
banks ,	36	30	nap	nap	nap
other	161	81	nap	nap	nap
Number of foreign participants	1	3	nap	nap	nap
central bank	0	0	nap	nap	nap
central counterparties (CCPs)	0	0	nap	nap	nap
central securities depositories	0	0	nap	nap	nap
banks	0	0	nap	nap	nap
other	1	3	nap	nap	nap

Table 23
Number of securities held on accounts at CSDs (thousands, end of year)

	2012	2013	2014	2015	2016
NSD					
Total number of securities held	6.62	6.85	7.81	9.20	11.89
debt securities ¹	2.00	1.87	2.24	2.71	4.82
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity ¹	4.62	4.98	5.57	6.49	7.07
other	0	0	0.003	0.000	0
DCC					
Total number of securities held	1.11	0.51	nap	nap	nap
debt securities	0.02	0.00	nap	nap	nap
bonds	0.02	0.00	nap	nap	nap
equity	1.09	0.51	nap	nap	nap
_ other	0	0.000	nap	nap	nap
¹ Including data in foreign currency.		•			

Table 24
Value of securities held on accounts at CSDs (RUR billions, end of year)

	2012	2013	2014	2015	2016
NSD					
Total value of securities held	13,527.0	23,816.1	27,990.8	35,531.6	40,157.4
debt securities ¹	9,072.3	11,456.7	16,289.9	21,147.7	22,337.5
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity ¹	4,454.7	12,359.4	11,700.3	14,383.9	17,816.0
other	0	0	1	0.00	4
DCC					
Total value of securities held	872.1	4.2	nap	nap	nap
debt securities	1.4	1.4	nap	nap	nap
bonds	1.4	1.4	nap	nap	nap
equity	870.6	2.8	nap	nap	nap
_ other	0	0.0	nap	nap	nap
¹ Including data in foreign currency.	_	_			_

Table 25
Number of delivery instructions processed (thousands, total for the year)

	2012	2013	2014	2015	2016
NSD					
Total number of delivery instructions	2,341.96	2,608.38	2,494.03	2,449.33	2,662.59
DVP	2,134.65	2,275.77	2,198.55	2,204.83	2,397.95
debt securities ¹	648.93	802.64	762.61	805.89	896.11
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity ¹	1,485.72	1,473.13	1,435.93	1,398.95	1,495.27
free of payment	207.32	332.61	295.48	244.50	264.65
debt securities ¹	24.68	45.84	55.15	53.88	55.86
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity ¹	182.64	286.77	240.34	190.62	208.78
other	0	0	0.000	0	0
DCC					
Total number of delivery instructions	113.91	0.38	nap	nap	nap
DVP	58.24	0.00	nap	nap	nap
debt securities	0	0	nap	nap	nap
equity	58.24	0.00	nap	nap	nap
other	0	0	nap	nap	nap
free of payment	55.68	0.38	nap	nap	nap
debt securities	0.13	0.00	nap	nap	nap
bonds	0.13	0.00	nap	nap	nap
equity	55.54	0.38	nap	nap	nap
other	0	0	nap	nap	nap
¹ Including data in foreign currency.					

Table 26
Value of delivery instructions processed (RUR billions, total for the year)

2012 2013 2014 2015 2016 NSD Total value of delivery instructions 134,512.8 170,898.9 203,159.4 254,434.9 325,329.6 DVP 121,302.6 141,922.4 152,560.2 223,215.8 291,675.0 debt securities1 102,881.4 118,291.8 121,428.5 245,656.3 183,008.6 short-term paper nav nav nav nav nav bonds nav nav nav nav nav equity1 18,421.1 23,630.5 31,131.7 40,207.2 45,517.2 free of payment 13,210.2 28,976.5 50,599.1 31,219.1 33,654.7 debt securities¹ 4,307.9 7,083.4 38,246.6 20,136.3 20,338.3 short-term paper nav nav nav nav nav bonds nav nav nav nav nav equity¹ 8,902.3 21,893.1 12,352.5 11,082.8 13,316.4 other 0 0.000 0 0 0 Total value of delivery instructions 3,336.3 69.0 nap nap nap nap DVP 752.5 0.0 nap nap equity 752.5 0.0 nap nap nap other 0 0 nap nap nap 69.0 free of payment 2,583.8 nap nap nap debt securities 0.0 0.0 nap nap nap bonds 0.0 0.0 nap nap nap equity 2,583.8 69.0 nap nap nap other 0 0 nap nap nap

¹ Including data in foreign currency.

Table 1
Basic statistical data

	2012	2013	2014	2015	2016
Population (thousands)	29,195.9	29,380.1	29,997.1	30,890.7	31,787.6
GDP (SAR billions)	2,759.9	2,799.9	2,836.3	2,444.1	2,398.6
GDP per capita (SAR)	94,531	95,300	94,553	79,120	75,456
Consumer price inflation (%)	2.9	3.5	2.7	2.2	3.5
Exchange rate (SAR/USD):					
end of year	3.75	3.75	3.75	3.75	3.75
average	3.75	3.75	3.75	3.75	<i>3.75</i>

Table 2 Settlement media used by non-banks

(SAR billions, end of year)

	2012	2013	2014	2015	2016
Notes and coin in circulation outside banks and					
PostFinance	133.15	143.17	153.78	168.53	170.34
Value of transferable deposits	753.97	857.28	989.17	976.23	974.09
Narrow money supply (M1)	887.12	1,000.45	1,142.95	1,144.76	1,144.44
Memo:					
Transferable deposits in foreign currencies	nav	nav	nav	nav	nav
Outstanding value on e-money storage	nap	nap	nap	nap	nap

Table 3 Settlement media used by banks

(SAR billions, average for December)

	2012	2013	2014	2015	2016
Transferable balances held at the central bank	70.17	81.26	92.35	97.78	97.02
required reserves	70.01	81.09	91.88	97.47	96.73
free reserves	0.16	0.17	0.47	0.32	0.29
Transferable balances held at other banks	0.18	0.12	0.39	1.56	0.08
Memo:					
Credit extended by the central bank:					
intraday	nav	nav	nav	nav	nav
overnight	nav	nav	nav	nav	nav
longer refinancing operations (repos)	nav	nav	nav	nav	nav

Table 4
Banknotes and coin
(SAR millions, end of year)

	2012	2013	2014	2015	2016
Total banknotes and coin issued	152,811.92	166,388.07	180,892.09	197,912.09	199,989.46
Total banknotes issued	152,538.34	166,094.04	180,579.10	197,577.56	199,640.07
SAR 500	122,032.93	133,127.40	144,494.15	160,368.61	162,649.84
SAR 200	602.07	412.78	295.00	215.30	148.96
SAR 100	20,942.05	22,920.37	25,151.46	25,678.17	25,802.34
SAR 50	5,133.08	5,513.44	6,262.88	6,565.20	6,353.64
SAR 20	180.56	155.32	128.41	104.76	90.81
SAR 10	1,691.13	1,861.18	2,019.12	2,219.05	2,178.87
SAR 5	965.69	1,059.14	1,136.56	1,244.52	1,242.62
SAR 1	990.83	1,044.42	1,091.52	1,181.95	1,172.99
Total coin issued	273.58	294.03	313.00	334.54	349.39
of which:					
SAR 1	32.82	33.44	33.58	33.89	34.35
SAR 0.50	130.57	142.93	158.33	175.22	184.22
SAR 0.25	67.00	74.38	77.77	82.07	87.21
SAR 0.20	2.51	2.51	2.51	2.51	2.51
SAR 0.10	32.13	32.19	32.21	32.2 <i>4</i>	32.32
SAR 0.05	8.21	8.24	8.24	8.26	8.32
SAR 0.01	0.36	0.36	0.36	0.36	0.36
Banknotes and coin held by banks	19,666.36	23,219.15	27,115.31	29,383.40	29,648.17
Banknotes and coin in circulation outside banks	133,145.55	143,168.92	153,776.79	168,528.69	170,341.29

Table 5
Institutions offering payment services to non-banks (end of year)

Number of branches or offices		2012	2013	2014	2015	2016
Number of accounts nav nav nav nav nav nav nav nav nav nav Banks Number of institutions¹ 23 24,04 24,04 24,04 24,04 24,04 24,04 24,05 27,74 31 11	Central bank					_
Value of accounts nav nav nav nav nav Banks Number of institutions¹ 23 23 23 23 23 Number of branches or offices 1,696 1,768 1,912 1,989 2,038 Number of accounts (Khousands)² 16,948 21,081 22,085 24,054 27,431 of which: number of intermet/PC-linked accounts (Khousands) 3,570.34 4,773.44 5,778.71 6,624.18 8,167.20 Value of accounts (SAR billions) 1,260.61 1,401.98 1,575.58 1,604.77 1,617.01 Private banks 1 1 1 1,575.58 1,604.77 1,617.01 Private banks 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Number of branches or offices	10	10	10	10	10
Banks Number of institutions of finemety of branches or offices 1,696 1,768 1,912 1,989 2,038 Number of accounts (thousands)² 16,948 21,081 22,085 24,054 27,431 of which: number of internet/PC-linked accounts (thousands) 3,570.34 4,773.44 5,778.71 6,624.18 8,167.20 Value of accounts (SAR billions) 1,260.61 1,401.98 1,575.58 1,604.77 1,617.01 Private banks 1 12	Number of accounts	nav	nav	nav	nav	nav
Number of institutions of frices 1,696 1,768 1,912 1,989 2,038 Number of branches or offices 1,694 21,081 22,085 24,054 27,431 of which: number of internet/PC-linked accounts (thousands) 3,570,34 4,773,44 5,778,71 6,624,18 8,167,20 Value of accounts (SAR billions) 1,260,61 1,401,98 1,575.58 1,604,77 1,617.01 Private banks 1	Value of accounts	nav	nav	nav	nav	nav
Number of branches or offices 1,696 1,768 1,912 1,989 2,038 Number of accounts (thousands)² 16,948 21,081 22,085 24,054 27,431 of which: number of intermet/PC-linked accounts (thousands) 3,570.34 4,773.44 5,778.71 6,624.18 8,167.20 Value of accounts (SAR billions) 1,260.61 1,401.98 1,575.58 1,604.77 1,617.01 Private banks Number of institutions 12	Banks					
Number of accounts (thousands)² 16,948 21,081 22,085 24,054 27,431 of which: number of internet/PC-linked accounts (thousands) 3,570.34 4,773.44 5,778.71 6,624.18 8,167.20 Value of accounts (SAR billions) 1,260.61 1,401.98 1,575.58 1,604.77 1,617.01 Private banks Number of branches or offices 1,684 1,755 1,899 1,976 2,027 Value of accounts (SAR billions) nap nap<	Number of institutions ¹	23	23	23	23	23
of which: number of internet/PC-linked accounts (thousands) 3,570.34 4,773.44 5,778.71 6,624.18 8,167.20 Value of accounts (SAR billions) 1,260.61 1,401.98 1,575.58 1,604.77 1,617.01 Private banks Number of institutions 12	Number of branches or offices	1,696	1,768	1,912	1,989	2,038
of which: number of internet/PC-linked accounts (thousands) 3,570.34 4,773.44 5,778.71 6,624.18 8,167.20 Value of accounts (SAR billions) 1,260.61 1,401.98 1,575.58 1,604.77 1,617.01 Private banks Number of institutions 12	Number of accounts (thousands) ²	16,948	21,081	22,085	24,054	27,431
Value of accounts (SAR billions) Private banks Number of institutions Number of branches or offices 1,684 1,755 1,899 1,976 2,027 Value of accounts (SAR billions) 12 12 12 12 12 12 22 24 22 20 27 Value of accounts (SAR billions) 12 28 29 Value of accounts (SAR billions) 13 29 Number of branches or offices 14 20 15 11 20 11 21 21 21 21 21 21 21 21 21 21 21 21	· · · · · · · · · · · · · · · · · · ·	•	·	,	·	,
Number of institutions 12 12 12 12 12 12 12 12 12 12 12 12 12	(thousands)	3,570.34	4,773.44	5,778.71	6,624.18	8,167.20
Number of institutions 12 12 12 12 12 12 12 12 12 12 12 12 12	Value of accounts (SAR billions)	1,260.61	1,401.98	1,575.58	1,604.77	1,617.01
Number of branches or offices 1,684 1,755 1,899 1,976 2,027 Value of accounts (SAR billions) nap nap nap nap nap nap nap Branches of foreign banks Number of institutions 111 111 11 111 111 111 Number of branches or offices 12 12 12 12 12 12 Value of accounts³ 111 111 111 111 111 111 Other institutions offering payment services to non-banks Number of institutions offering payment services to non-banks Number of institutions offering payment services to non-banks Number of accounts nap						
Number of branches or offices 1,684 1,755 1,899 1,976 2,027 Value of accounts (SAR billions) nap nap nap nap nap nap nap Branches of foreign banks Number of institutions 11 11 11 11 11 11 11 11 11 11 11 11 11	Number of institutions	12	12	12	12	12
Value of accounts (SAR billions) Branches of foreign banks Number of institutions 11 11 11 11 11 11 11 11 Number of branches or offices 12 12 12 12 12 12 Value of accounts³ 11 11 11 11 11 11 11 11 11 12 Other institutions offering payment services to non-banks Number of institutions offering payment services to non-banks Number of institutions offices nap	Number of branches or offices		1,755	1,899	1,976	2,027
Branches of foreign banks Number of institutions 11 11 11 11 11 11 11 Number of branches or offices 12 12 12 12 12 12 Value of accounts³ 11 11 11 11 11 11 11 11 12 Other institutions offering payment services to non-banks Number of institutions Number of branches or offices nap		· ·	·	•	•	
Number of institutions 11 11 11 11 11 11 11 11 11 Number of branches or offices 12 12 12 12 12 12 12 12 12 12 Value of accounts³ 11 11 11 11 11 11 11 11 11 11 11 11 11	,	•	•	·	•	·
Value of accounts ³ 11 11 11 11 11 11 12 Other institutions offering payment services to non-banks Number of institutions nap	_	11	11	11	11	11
Other institutions offering payment services to non-banks Number of institutions Number of institutions Number of institutions Number of paraches or offices Number of accounts Number of accounts Number of accounts Number of accounts Number of institutions Number of institutions Number of institutions Number of branches or offices Number of accounts held by non-banks (thousands) Number of intermet/PC-linked accounts Nap Nap Nap Nap Nap Nap Nap Na	Number of branches or offices	12	12	12	12	12
Number of institutions Nap Nap	Value of accounts ³	11	11	11	11	12
Number of institutions Nap Nap	Other institutions offering payment services to n	on-banks				
Number of accounts			nap	nap	nap	nap
Value of accounts nap nap nap nap nap nap nap nap nap na	Number of branches or offices	nap	nap	nap	nap	nap
Institutions offering payment services to non-banks (total) Number of institutions nap	Number of accounts	nap	nap	nap	nap	nap
Number of institutions nap	Value of accounts	nap	nap	nap	nap	nap
Number of branches or offices Number of accounts held by non-banks (thousands) nap nap nap nap nap nap nap na		nks (total)				
Number of accounts held by non-banks (thousands) nap		nap	nap	nap	nap	nap
(thousands) nap nap nap nap nap nap nap na		nap	nap	nap	nap	nap
of which: number of internet/PC-linked accounts nap nap nap nap nap nap nap nap nap na						
Value of accounts held by non-banks (SAR billions) nap nap nap nap nap nap nap na	(thousands)	nap	nap	nap	nap	nap
(SAR billions) nap nap nap nap nap nap nap na		nap	nap	nap	nap	nap
Memo: Electronic money institutions Number of institutions nap nap nap nap nap Outstanding value on e-money storages issued by e-money institutions nap nap nap nap nap	-					
Electronic money institutions Number of institutions Outstanding value on e-money storages issued by e-money institutions nap nap nap nap nap nap nap n	(SAR billions)	nap	nap	nap	nap	nap
Number of institutions nap nap nap nap nap nap outstanding value on e-money storages issued by e-money institutions nap nap nap nap nap nap nap						
Outstanding value on e-money storages issued by e-money institutions nap nap nap nap nap						
e-money institutions nap nap nap nap		nap	nap	nap	nap	nap
	·					

¹ These represent all banks, including foreign bank branches. ² These represent all accounts maintained by the banks in the form of demand, time and saving, etc. ³ The amounts are included in the total value of accounts.

Table 6
Payment card functions and accepting devices (end of year)

	2012	2013	2014	2015	2016
Cards issued in the country (thousands)					
Cards with a cash function	16,440.3	17,810.7	20,550.3	22,459.3	26,537.3
Cards with a debit function	16,440.3	17,810.7	20,550.3	22,459.3	26,537.3
Cards with a delayed debit function	nap	nap	nap	nap	nap
Cards with a credit function	nav	nav	nav	nav	nav
Cards with an e-money function	nap	nap	nap	nap	nap
of which: cards with an e-money function which					
have been loaded at least once	nap	nap	nap	nap	nap
Total number of cards (irrespective of the number					
of functions on the card)	16,440.3	17,810.7	20,550.3	22,459.3	26,537.3
of which: cards with a combined debit, cash and					
e-money function	16,440.3	17,810.7	20,550.3	22,459.3	26,537.3
Memo:					
Retailer cards	nap	nap	nap	nap	nap
Terminals located in the country					
ATMs	12,712.0	13,883.0	15,516.0	17,223.0	17,887.0
ATMs with a cash withdrawal function	12,712.0	13,883.0	15,516.0	17,223.0	17,887.0
ATMs with a credit transfer function	12,712.0	13,883.0	15,516.0	17,223.0	17,887.0
POS terminals	92,538.0	107,763.0	138,779.0	225,372.0	276,167.0
EFTPOS terminals	92,538.0	107,763.0	138,779.0	225,372.0	276,167.0
E-money card terminals	nap	nap	nap	nap	nap
e-money card loading/unloading terminals	nap	nap	nap	nap	nap
e-money card payment terminals	nap	nap	nap	nap	nap

Table 7
Indicators of the use of payment instruments and terminals by non-banks: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers	5.93	7.21	8.40	11.06	11.93
paper-based	5.93	7.21	8.40	11.06	11.93
non-paper-based	nap	nap	nap	nap	nap
Direct debits	1.18	1.42	1.59	2.30	3.46
Card payments with cards issued in the country	1,570.94	1,600.96	1,856.03	2,190.45	2,447.26
payments by cards with a debit function	1,570.94	1,600.96	1,856.03	2,190.45	2,447.26
payments by cards with a delayed debit function	nap	nap	nap	nap	nap
payments by cards with a credit function	nap	nap	nap	nap	nap
E-money payment transactions	nap	nap	nap	nap	nap
by cards with an e-money function	nap	nap	nap	nap	nap
through other e-money storages	nap	nap	nap	nap	nap
Cheques	7.07	7.13	6.81	6.66	5.46
Other payment instruments	137.38	146.99	154.59	172.35	190.10
Total number of transactions with payment					
instruments	1,715.40	1,755.07	2,017.43	2,369.46	2,642.83
of which: cross-border transactions sent	nap	nap	nap	nap	nap
or milion or occupation transactions com	Пар	παρ	пар	пар	пар
Memo:					
Cross-border transactions received	nap	nap	nap	nap	nap
Transactions per type of terminal					
Total transactions at terminals in the country					
Cash transactions	1,333.00	1,335.64	1,528.99	1,795.54	1,922.69
ATM cash withdrawals	1,333.00	1,335.64	1,528.99	1,795.54	1,922.69
ATM cash deposits	nap	nap	nap	nap	nap
POS payment transactions	237.95	265.32	327.03	394.92	524.57
E-money card loading/unloading transactions	nap	nap	nap	nap	nap
E-money card payment transactions	nap	nap	nap	nap	nap
a) Transactions at terminals in the country by cards	•	•		•	•
Cash transactions	1,323.78	1,327.15	1,519.75	1,785.28	1,912.46
ATM cash withdrawals	1,323.78	1,327.15	1,519.75	1,785.28	1,912.46
ATM cash deposits	nap	nap	nap	nap	nap
POS payment transactions	237.95	294.04	362.56	394.92	524.57
E-money card loading/unloading transactions	nap	nap	nap	nap	nap
E-money card payment transactions	nap	nap	nap	nap	nap
b) Transactions at terminals in the country by cards	issued outside	the country		•	·
Cash transactions	nap	nap	nap	nap	nap
ATM cash withdrawals	2.92	2.86	3.42	3.56	4.56
ATM cash deposits	nap	nap	nap	nap	nap
POS payment transactions	nap	nap	nap	nap	nap
E-money card loading/unloading transactions	nap	nap	nap	nap	nap
E-money card payment transactions	nap	nap	nap	nap	nap
c) Transactions at terminals outside the country by c	ards issued in	the country	•	•	·
Cash transactions	6.30	5.63	5.82	6.70	5.67
ATM cash withdrawals	6.30	5.63	5.82	6.70	5.67
ATM cash deposits	nap	nap	nap	nap	nap
POS payment transactions	nap	nap	nap	nap	, nap
E-money card loading/unloading transactions	nap	nap	nap	nap	nap
E-money card payment transactions	nap	nap	nap	nap	nap

Table 8
Indicators of the use of payment instruments and terminals by non-banks: value of transactions (SAR billions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers	4,046.87	4,570.17	5,178.74	5,332.81	5,463.47
paper-based	4,046.87	4,570.17	5,178.74	5,332.81	5,463.47
non-paper-based	nap	nap	nap	nap	nap
Direct debits	0.47	0.54	0.57	0.63	0.79
Card payments with cards issued in the country	777.70	835.36	931.30	988.33	990.32
payments by cards with a debit function	747.98	802.70	892.27	941.32	936.20
payments by cards with a delayed debit function	nap	nap	nap	nap	nap
payments by cards with a credit function	29.72	32.65	<i>39.0</i> 3	47.00	<i>54.</i> 12
E-money payment transactions	nap	nap	nap	nap	nap
by cards with an e-money function	nap	nap	nap	nap	nap
through other e-money storages	nap	nap	nap	nap	nap
Cheques	837.62	878.89	897.39	757.19	558.08
Other payment instruments	65,419.73	54,659.84	54,459.33	48,865.17	39,716.99
culoi paymont includinonte	00,110110	01,000.01	0 1, 100.00	10,000.11	00,1 10.00
Total value of transactions with payment	74 070 70	00 040 40	04 400 40	55.044.40	40.700.00
instruments	71,078.76	60,940.46	61,462.18	55,944.13	46,729.66
of which: cross-border transactions sent	nap	nap	nap	nap	nap
Memo:					
Cross-border transactions received	nap	nap	nap	nap	nap
Transactions per type of terminal					
Total transactions at terminals in the country					
Cash transactions	625.75	658.38	722.04	768.49	753.45
ATM cash withdrawals	625.75	668.14	731.40	777.20	753.45
ATM cash wandawais ATM cash deposits	nap	пар	пар	nap	100.40 nap
POS payment transactions	122.23	134.19	159.97	172.84	182.75
E-money card loading/unloading transactions	nap	nap	nap	nap	nap
E-money card payment transactions	nap	nap	nap	nap	nap
a) Transactions at terminals in the country by cards			Пар	Пар	Παρ
Cash transactions	619.00	660.68	723.20	768.49	744.35
ATM cash withdrawals	619.00	660.68	723.20	768.49	744.35
ATM cash deposits		nap		700. 4 9 nap	
POS payment transactions	<i>пар</i> 122.23	134.19	<i>nap</i> 159.97	172.84	<i>nap</i> 182.75
E-money card loading/unloading transactions					
E-money card loading transactions	nap nap	nap nap	nap	nap	nap
b) Transactions at terminals in the country by cards	•	•	nap	nap	nap
Cash transactions	3.12	3.13	3.35	3.32	3.43
ATM cash withdrawals	3.12	3.13	3.35	3.32	
ATM cash wundrawais ATM cash deposits					3.43
•	nap	nap	nap	nap	nap
POS payment transactions	nap	nap	nap	nap	nap
E-money card loading/unloading transactions	nap	nap	nap	nap	nap
E-money card payment transactions	nap	nap	nap	nap	nap
c) Transactions at terminals outside the country by		•	4.05	F 20	F 67
Cash transactions	3.63	4.33	4.85	5.39	5.67
ATM cash danceits	3.63	4.33	4.85	5.39	5.67
ATM cash deposits	nap	nap	nap	nap	nap
POS payment transactions	nap	nap	nap	nap	nap
E-money card loading/unloading transactions	nap	nap	nap	nap	nap
E-money card payment transactions	nap	nap	nap	nap	nap

Table 9
Participation in selected interbank funds transfer systems (end of year)

	2012	2013	2014	2015	2016
Large-value payment systems					
SARIE					
Number of participants	23	23	23	23	25
Direct participants	23	23	23	23	25
Banks	22	22	22	22	24
Central bank	1	1	1	1	1
Retail payment systems					
SARIE					
Number of participants	17	17	17	nav	nav
Direct participants	17	17	17	nav	nav
Banks	15	15	15	nav	nav
Central bank	1	1	1	nav	nav
Other direct participants	1	1	1	nav	nav
General government	nap	nap	nap	nap	nap
Postal institution	nap	nap	nap	nap	nap
Clearing and settlement organisations	nap	nap	nap	nap	nap
Other financial institutions	nap	nap	nap	nap	nap
Other	1	1	1	nav	nav

Table 10
Payments processed by selected interbank funds transfer systems: volume of transactions (millions, total for the year)

2012	2013	2014	2015	2016
53.69	56.51	62.95	79.19	89.28
79.0	83.0	78.0	75.0	79.0
	53.69	53.69 56.51	53.69 56.51 62.95	53.69 56.51 62.95 79.19

This represents the percentage of total payments sent by the top banks.

Table 11
Payments processed by selected interbank funds transfer systems: value of transactions (SAR billions, total for the year)

	2012	2013	2014	2015	2016
Large-value and retail payments systems					
SARIE					
Total transactions sent	65,397.6	54,632.3	54,425.8	48,842.4	39,717.0
Concentration ratio in terms of value (%) ¹	76.0	78.0	72.0	74.0	69.0
¹ This represents the percentage of total payments sen	t by the top banks.				

Table 12
Participation in SWIFT by domestic institutions (end of year)

	2012	2013	2014	2015	2016
Members	14	14	14	14	14
of which: live	14	14	14	14	14
Sub-members	16	18	17	17	19
of which: live	15	17	16	17	17
Participants	16	22	26	30	31
of which: live	15	17	22	25	29
Total users	46	54	57	61	64
of which: live	44	48	52	56	60
Memo:					
Total SWIFT users	10,279	10,583	10,805	11,094	11,299
members	2,398	2,389	2,379	2,455	2,422
sub-members	3,340	3,343	3,353	3,395	3,367
participants	4,541	4,851	5,073	5,244	5,510
Source: SWIFT.					

Table 13 SWIFT message flows to/from domestic users (thousands, total for the year)

	2012	2013	2014	2015	2016
Total messages sent	12,532	13,724	17,143	20,355	20,007
of which:					
category I	8,983	9,218	9,683	10,020	9,907
category II	551	517	489	517	470
Total messages received	6,611	8,308	11,974	15,062	15,362
of which:					
category I	1,584	1,765	2,016	2,013	2,282
category II	271	311	357	419	488
Domestic traffic	622	696	832	811	775
Мето:					
Global SWIFT traffic	4,589,109	5,065,668	5,612,724	6,106,644	6,525,800
Source: SWIFT.					

Table 14
Number of participants in exchanges and trading systems (end of year)

	2012	2013	2014	2015	2016
Tadawul					
Total number of participants	62	53	53	53	54
central bank	1	1	1	1	1
central counterparties (CCPs)	0	0	0	nav	nav
banks	21	22	22	22	22
other	40	30	30	30	31
Number of domestic participants	53	36	36	36	36
central bank	1	1	1	1	1
central counterparties (CCPs)	0	0	0	nav	nav
banks	12	13	13	13	13
other	40	22	22	22	23
Number of foreign participants	9	9	9	9	10

Table 15 Number of listed securities (end of year)

2012	2013	2014	2015	2016
169	173	179	180	184
8	7	7	6	5
8	7	7	6	5
158	163	169	171	176
3	3	3	3	3
	169 8 8 158	169 173 8 7 8 7 158 163	169 173 179 8 7 7 8 7 7 158 163 169	169 173 179 180 8 7 7 6 8 7 7 6 158 163 169 171

Table 16					
Market capitalisation of listed companies					
(SAR billions, end of year)					
	2012	2013	2014	2015	2016
Tadawul					
Total market capitalisation/equity	1,400.3	1,752.9	1,812.9	1,579.1	1,682.0

Table 17

Number of executed trades

(millions, total for the year)

	2012	2013	2014	2015	2016
Tadawul					
Total number of executed securities trades	42,106.726	28,968.553	35,762.294	30,447.923	27,275.345
debt securities	0.020	0.007	0.009	0.007	0.004
bonds ¹	0.020	0.007	0.009	0.007	0.004
equity	42,105.048	28,967.694	35,761.091	30,444.203	27,273.685
other	1.658	0.852	1.194	3.713	1.656
Total number of executed derivatives trades	nav	nav	nav	nav	nav
¹ Includes sukuk.					

Table 18

Value of executed trades

(SAR billions, total for the year)

	2012	2013	2014	2015	2016
Tadawul					
Total value of executed securities trades	1,929.846	1,369.892	2,146.827	1,662.934	1,157.997
debt securities	0.446	0.227	0.109	0.453	44.995
bonds	0.446	0.227	0.109	0.453	44.995
equity	1,929.318	1,369.666	2,146.512	1,660.622	1,156.987
other	0.082	6.975	0.206	1.860	1.010
Total value of executed derivatives trades	nav	nav	nav	nav	nav

Table 19

Number of clearing members

(end of year)

	2012	2013	2014	2015	2016
Saudi Arabia clearing house					
Total number of clearing members	22	22	22	22	22
central bank	1	1	1	1	nav
central counterparties (CCPs)	0	0	0	nav	nav
banks	22	22	22	22	22
other	30	30	30	nav	nav
Number of domestic clearing members	12	12	12	12	12
central bank	1	1	1	1	nav
central counterparties (CCPs)	0	0	0	nav	nav
banks	12	12	12	12	12
other	30	30	30	nav	nav
Number of foreign clearing members	10	10	10	10	10

Table 20

Number of contracts and transactions cleared

(thousands, total for the year)

	2012	2013	2014	2015	2016
Saudi Arabia clearing house					
Total number of contracts and transactions					
cleared	42,106.732	28,968.553	35,762	30,448	27,275
Number of securities transactions cleared	42,106.706	28,968.546	35,762	30,448	27,275
debt securities	0.026	0.007	0.009	0.007	0.004
bonds 1	0.000				
	0.026	0.007	0.009	0.007	0.004
equity	42,105.048	28,967.694	35,761	30,444	27,274
other	1.660	0.850	1.190	3.710	1.660
of which: number of repurchase transactions					
cleared	nav	nav	nav	nav	nav
oloul ou	nav	nav	nav	nav	nav
Number of exchange-traded derivatives contracts					
cleared	nap	nap	nap	nap	nap
		·		•	•
Number of OTC derivatives contracts cleared	nap	nap	nap	nap	nap
¹ Includes sukuk.					

Table 21

Value of contracts and transactions cleared

(SAR billions, total for the year)

	2012	2013	2014	2015	2016
Saudi Arabia clearing house					
Total value of contracts and transactions cleared	1,930.021	1,370.189	2,146.935	1,663.387	1,157.997
Value of securities transactions cleared	1,929.481	1,370.189	2,146.935	1,663.387	1,157.997
debt securities	0.540	0.227	0.109	0.453	44.995
bonds	0.540	0.227	0.109	0.453	44.995
equity	1,929.318	1,369.665	2,146.512	1,660.622	1,156.987
other ¹	0.163	0.070	0.206	1.860	1.010
of which: value of repurchase transactions cleared	nav	nav	nav	nav	nav
Value of exchange-traded derivatives contracts cleared	nap	nap	nap	nap	nap
Value of OTC derivatives contracts cleared	nap	nap	nap	nap	nap
¹ Includes ETFs.					

Table 22 Number of direct participants in CSDs (end of year)

	2012	2013	2014	2015	2016
Tadawul					
Total number of participants	54	54	54	54	54
central bank	1	1	1	1	1
central counterparties (CCPs)	0	0	0	0	nav
central securities depositories	1	1	1	1	1
banks	22	22	22	22	22
other	30	30	30	30	30
Number of domestic participants	44	44	44	44	nav
central bank	1	1	1	1	1
central counterparties (CCPs)	0	0	0	0	nav
central securities depositories	1	1	1	1	1
banks .	12	12	12	12	12
other	30	30	30	30	30
Number of foreign participants	10	10	10	10	10

Table 23
Number of securities held on accounts at CSDs (millions, end of year)

	2012	2013	2014	2015	2016
Tadawul					
Total number of securities held	104,146.6	135,755.0	159,906.1	161,536.0	167,130.2
debt securities	61,898.2	92,500.9	103,100.9	110,960.9	115,194.8
bonds ¹	61,898.2	92,500.9	103,100.9	110,960.9	115,194.8
equity	42,243.7	43,252.2	48,805.2	50,575.1	51,935.5
other	4.6	1.9	8,000.0	1.5	1.3
1 Includes sukuk					

Table 24 Value of securities held on accounts at CSDs (SAR billions, end of year)

	2012	2013	2014	2015	2016
Tadawul					
Total value of securities held	1,462.348	1,904.214	1,813.199	1,579.204	1.833
debt securities	61.898	92.500	0.103	0.110	0.115
bonds ¹	61.898	92.500	0.103	0.110	0.115
equity	1,400.342	1,752.860	1,812.890	1,579.059	1.682
other	0.108	58.854	0.206	0.035	0.036
¹ Includes sukuk.					

Table 25

Number of delivery instructions processed

(millions, total for the year)

	2012	2013	2014	2015	2016
Tadawul					
Total number of delivery instructions	42.1067	43.2530	48.8064	30.4477	27.2754
debt securities	0.0000	0.0000	0.0000	0.0000	0.0000
bonds	0.0000	0.0000	0.0000	0.0000	0.0000
equity	42.1050	43.2522	48.8052	30.4440	27.2737
other	0.0017	0.0009	0.0012	0.0037	0.0017

Table 26

Value of delivery instructions processed

(SAR billions, total for the year)

	2012	2013	2014	2015	2016
Tadawul					
Total value of delivery instructions	1,930.02	1,369.96	2,146.83	1,662.93	1,158.45
debt securities	0.54	0.23	0.11	0.45	0.45
bonds	0.54	0.23	0.11	0.45	0.45
equity	1,929.48	1,369.67	2,146.51	1,660.62	1,156.99
other	0.16	0.07	0.21	1.86	1.01

Table 1
Basic statistical data

2012	2013	2014	2015	2016
5,312	5,399	5,470	5,535	5,607
358.50	378.20	388.20	402.50	410.27
67,489	70,050	70,969	72,719	73,171
4.6	2.4	1.0	-0.5	-0.5
1.2221	1.2653	1.3213	1.4139	1.4463
1.2497	1.2513	1.2671	1.3749	1.3811
	5,312 358.50 67,489 4.6	5,312 5,399 358.50 378.20 67,489 70,050 4.6 2.4 1.2221 1.2653	5,312 5,399 5,470 358.50 378.20 388.20 67,489 70,050 70,969 4.6 2.4 1.0 1.2221 1.2653 1.3213	5,312 5,399 5,470 5,535 358.50 378.20 388.20 402.50 67,489 70,050 70,969 72,719 4.6 2.4 1.0 -0.5 1.2221 1.2653 1.3213 1.4139

¹ Mid-year estimates. ² Yearly average.

Table 2 Settlement media used by non-banks

(SGD millions, end of year)

	2012	2013	2014	2015	2016
Notes and coin in circulation outside banks ¹	26,361.3	28,851.6	31,506.9	34,042.3	38,525.0
Value of transferable deposits ²	114,347.8	125,745.7	128,710.8	126,403.5	134,228.5
Narrow money supply (M1) ³	140,709.1	154,597.3	160,217.7	160,445.8	172,753.5
Memo:					
Transferable deposits in foreign currencies	nap	nap	nap	nap	nap
Outstanding value on e-money storage	230.6	253.7	282.5	320.1	341.9
on card-based products	230.6	253.7	282.5	320.1	341.9
on software-based products	nap	nap	nap	nap	nap

¹ Currency in active circulation. ² Demand deposits of private non-bank customers resident in Singapore. ³ Currency in active circulation and demand deposits.

Table 3
Settlement media used by banks

(SGD millions, average for December)¹

	2012	2013	2014	2015	2016
Transferable balances held at the central bank	19,503.3	32,107.0	20,311.0	22,218.5	21,967.4
required reserves	16,058.9	16,583.8	16,868.3	6,515.2	nav
free reserves ²	3,444.4	15,523.2	3,442.7	15,703.3	nav
Transferable balances held at other banks	nap	nap	nap	nap	nap
Memo:					
Credit extended by the central bank:					
intraday	nav	nav	nav	nav	nav
overnight	nav	nav	nav	nav	nav
longer refinancing operations	nap	nap	nap	nap	nap

¹ For institutions' borrowing from the central bank, Sundays and public holidays are excluded. ² The free reserves in 2013 include the additional statutory reserves placed by banks with MAS for one year following the completion of MAS's review on financial benchmarks. These reserves were returned to the banks in 2014.

Table 4
Banknotes and coin¹
(SGD millions, end of year)

	2012	2013	2014	2015	2016
Total banknotes and coin issued	29,113	31,654	34,419	38,432	42,508
Total banknotes issued	28,043	30,540	33,252	37,212	41,234
SGD 10,000	1,914	2,004	1,933	1,691	1,575
SGD 1,000	10,703	12,160	13,7 4 2	15,378	18, 4 67
SGD 500	247	243	240	238	236
SGD 100	2,156	2,679	2,945	3,614	3,898
SGD 50	9,701	9,950	10,705	12,031	12,714
SGD 25	10	10	10	10	10
SGD 20	173	175	175	175	175
SGD 10	1,948	2,071	2,197	2,692	2,719
SGD 5	324	340	359	385	408
SGD 2	<i>7</i> 26	767	807	858	893
SGD 1	140	140	139	139	138
Total coin issued	1,071	1,114	1,167	1,221	1,274
SGD 5	6	6	6	6	6
SGD 1	540	559	584	609	637
SGD 0.50	207	218	232	245	257
SGD 0.20	154	161	171	180	187
SGD 0.10	119	122	127	132	136
SGD 0.05	39	40	42	<i>4</i> 3	44
SGD 0.01	7	7	7	7	7
Banknotes and coin held by banks ²	2,756	2,808	2,917	4,396	3,989
Banknotes and coin in circulation outside banks ³	26,361	28,852	31,507	34,042	38,525

¹ Excludes commemorative and numismatic notes and coin. ² Cash at banks (includes Brunei notes and coin).

³ Currency in active circulation.

Table 5
Institutions offering payment services to non-banks (end of year)

	2012	2013	2014	2015	2016
Central bank					,
Number of branches or offices ¹	1	1	1	1	1
Number of accounts	nav	nav	nav	nav	nav
Value of accounts	nav	nav	nav	nav	nav
Memo:					
Number of accounts, banks ^{2, 3}	123	123	124	126	124
Value of accounts, banks (SGD billions) ²	19.50	32.11	20.31	22.22	21.97
Banks ²					
Number of institutions ³	169	165	163	164	158
Number of branches or offices ³	478	467	464	467	462
Number of accounts	nav	nav	nav	nav	nav
Value of accounts (SGD billions)	518.84	537.58	550.36	560.01	596.61
Commercial banks ²					
Number of institutions ³	123	123	124	126	124
Number of branches or offices ³	432	425	425	429	428
Value of accounts (SGD billions)	518.84	537.58	550.36	560.01	596.61
Merchant banks					
Number of institutions ³	46	42	39	38	34
Number of branches or offices ³	46	42	39	38	34
Value of accounts	nav	nav	nav	nav	nav
Other institutions offering payment services to no	n-banks: Fin	ance compa	nies		
Number of institutions ³	3	3	3	3	3
Number of branches or offices ³	39	39	39	39	39
Number of accounts	nav	nav	nav	nav	nav
Value of accounts (SGD billions) ⁴	12.35	12.40	13.30	14.67	13.60
Institutions offering payment services to non-bank	ks (total)				
Number of institutions ³	173	169	167	168	162
Number of branches or offices ³	518	507	504	507	502
Number of accounts held by non-banks	nav	nav	nav	nav	nav
Value of accounts held by non-banks					
(SGD billions)	531.19	549.98	563.66	574.68	610.22
Memo:					
Electronic money institutions					
Number of institutions ³	4	4	4	4	4
Outstanding value on e-money storages issued by					
e-money institutions (SGD billions)	0.23	0.25	0.28	0.32	0.34
¹ Singapore (main office). The representative offices in New York and London do not offer cashless payment services.					

¹ Singapore (main office). The representative offices in New York and London do not offer cashless payment services. ² Includes local and foreign banks. ³ As at end-March of the years shown. ⁴ Non-bank customer deposits.

Table 6
Payment card functions and accepting devices (end of year)

	2012	2013	2014	2015	2016
Cards issued in the country (thousands)					_
Cards with a cash function ¹	10,585.6	10,907.1	10,741.2	10,279.2	10,614.0
Cards with a debit function ¹	10,585.6	10,907.1	10,741.2	10,279.2	10,614.0
Cards with a delayed debit function	nap	nap	nap	nap	nap
Cards with a credit function ²	7,698.3	9,293.2	9,579.3	9,452.6	9,139.0
Cards with an e-money function	19,820.3	23,091.6	29,381.6	34,711.3	39,817.3
of which: cards with an e-money function which					
have been loaded at least once	nav	nav	nav	nav	nav
Total number of cards (irrespective of the number					
of functions on the card) ³	38,104.2	43,291.9	49,702.1	54,443.0	59,570.3
of which: cards with a combined debit, cash and	, -	-,	-, -	, ,	,
e-money function	nav	nav	nav	nav	nav
Memo:					
Retailer cards	nav	nav	nav	nav	nav
Terminals located in the country					
ATMs	2,721.0	2,727.0	2,739.0	2,810.0	2,742.0
ATMs with a cash withdrawal function	2,721.0	2,727.0	2,739.0	2,810.0	2,742.0
ATMs with a credit transfer function	2,721.0	2,727.0	2,739.0	2,810.0	2,742.0
POS terminals	135,577.0	146,365.0	143,744.0	172,119.0	186,259.0
of which: EFTPOS terminals	135,577.0	146,365.0	143,744.0	172,119.0	186,259.0
E-money card terminals	124,520.0	131,778.0	160,552.0	167,032.0	181,750.0
e-money card loading/unloading terminals	nav	nav	nav	nav	nav
e-money card payment terminals	124,520.0	131,778.0	160,552.0	167,032.0	181,750.0

¹ Based on survey data from selected local and foreign banks. For 2009, ATM figures had better data and some previous double-countings from the banks have been removed. ² Includes main and supplementary cards for credit and charge cards. ³ All cards with a cash function also have a debit function; they are therefore only counted once here.

Table 7
Indicators of the use of payment instruments and terminals by non-banks: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers ^{1, 2}	39.90	42.67	40.64	60.79	72.00
paper-based	nav	nav	nav	nav	nav
non-paper-based	nav	nav	nav	nav	nav
Direct debits ^{1, 2}	56.45	57.13	57.18	57.02	57.70
Card payments with cards issued in the country	235.27	509.29	580.99	612.60	697.80
payments by cards with a debit function	235.27	258.16	293.89	301.93	347.80
payments by cards with a delayed debit function	nav	nav	nav	nav	nav
payments by cards with a credit function	nav	251.13	287.10	310.67	350.00
E-money payment transactions	3,015.14	3,085.32	3,138.13	3,233.00	3,366.32
by cards with an e-money function	3,015.14	3,085.32	3,138.13	3,233.00	3,366.32
through other e-money storages	nav	nav	nav	nav	nav
Cheques ^{1, 3}	74.56	72.23	69.41	65.74	61.92
Other payment instruments	nav	nav	nav	nav	nav
Total number of transactions with payment					
instruments	3,421.32	3,766.65	3,886.35	4,029.16	4,255.73
of which: cross-border transactions sent	nav	nav	nav	nav	nav
Мето:					
Cross-border transactions received	nav	nav	nav	nav	nav
Transactions per type of terminal					
Transactions at terminals in the country by cards iss	ued in the cou	intry			
Cash transactions	219.05	229.67	229.42	229.68	226.28
ATM cash withdrawals	219.05	229.67	229.42	229.68	226.28
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions	nav	nav	nav	nav	nav
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav
1 Page 1 and 1 and 2 1 PO 4 and 2 in 1	L E A O.T. 4		2045	3 111	-41- 0001

¹ Does not include on-us payments. ² IBG transactions and FAST transactions (from 2015 onwards). ³ Includes both SGD and USD cheques.

Table 8
Indicators of the use of payment instruments and terminals by non-banks: value of transactions (SGD billions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers ^{1, 2}	212.97	231.80	243.31	295.74	324.67
paper-based	nav	nav	nav	nav	nav
non-paper-based	nav	nav	nav	nav	nav
Direct debits ^{1, 2}	79.64	85.29	91.62	97.09	101.14
Card payments with cards issued in the country	67.24	73.30	77.76	80.62	85.25
payments by cards with a debit function	28.82	30.78	32.22	32.60	34.70
payments by cards with a delayed debit function	nav	nav	nav	nav	nav
payments by cards with a credit function ³	<i>38.4</i> 2	42.52	45.54	48.02	50.55
E-money payment transactions	2.35	2.44	2.59	2.72	2.80
by cards with an e-money function	2.35	2.44	2.59	2.72	2.80
through other e-money storages	nav	nav	nav	nav	nav
Cheques ^{1, 4}	693.69	724.45	700.60	673.41	636.20
Other payment instruments	nav	nav	nav	nav	nav
Total value of transactions with payment					
instruments	1,055.90	1,117.28	1,115.87	1,149.58	1,150.05
of which: cross-border transactions sent	nav	nav	nav	nav	nav
Memo:					
Cross-border transactions received	nav	nav	nav	nav	nav
Transactions per type of terminal					
Transactions at terminals in the country by cards iss	ued in the cou	intry			
Cash transactions	59.11	64.33	65.22	65.78	64.95
ATM cash withdrawals	59.11	64.33	65.22	65.78	64.95
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions	nav	nav	nav	nav	nav
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav

¹ Does not include on-us payments. ² IBG transactions and FAST transactions (from 2015 onwards). ³ Includes charge cards. Break in data series from 2013 onwards due to use of a different data set. ⁴ Includes both SGD and USD cheques; USD cheques up to 2009 converted at end-year exchange rates. From 2010 onwards, average exchange rates are used.

Table 9
Participation in selected interbank funds transfer systems (end of year)

	2012	2013	2014	2015	2016
Large-value payment systems					
MEPS+(IFT)					
Number of participants	137	140	143	126	130
Direct participants	62	64	64	63	62
Banks	59	60	60	59	58
Central bank	1	1	1	1	1
Other direct participants	2	3	3	3	3
Clearing and settlement organisations	2	3	3	3	3
Indirect participants	75	76	79	63	68
Retail payment systems					
Singapore dollar cheque clearing system					
Number of participants	63	64	63	61	61
Direct participants	34	34	34	34	35
Banks	33	33	33	33	34
Central bank	1	1	1	1	1
Indirect participants	29	30	29	27	26
US dollar cheque clearing system					
Number of participants	48	48	49	48	49
Direct participants	32	32	32	32	33
Banks	32	32	32	32	33
Indirect participants	16	16	17	16	16
IBG clearing system					
Number of participants	44	45	45	45	45
Direct participants	38	39	40	40	39
Banks	38	39	40	40	39
Indirect participants	6	6	5	5	6

Table 10
Payments processed by selected interbank funds transfer systems: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
MEPS+(IFT)					
Total transactions sent	4.730	5.076	5.210	5.321	5.440
Concentration ratio in terms of volume (%)	nav	nav	nav	nav	nav
Retail payment systems					
Singapore dollar cheque clearing system					
Total transactions sent	73.639	71.296	68.472	64.839	61.065
cheques	73.639	71.296	68.472	64.839	61.065
Concentration ratio in terms of volume (%)	88.2	88.2	88.4	88.4	88.4
US dollar cheque clearing system					
Total transactions sent	0.920	0.933	0.935	0.903	0.853
cheques	0.920	0.933	0.935	0.903	0.853
Concentration ratio in terms of volume (%)	76.0	76.2	76.9	77.8	78.6
IBG clearing system					
Total transactions sent	96.345	99.807	97.825	98.966	102.837
credit transfers	39.897	42.674	40.641	41.949	<i>45.155</i>
direct debits	<i>56.448</i>	57.133	57.184	57.017	57.682
Concentration ratio in terms of volume (%)	86.2	85.7	85.0	83.6	83.4

Table 11
Payments processed by selected interbank funds transfer systems: value of transactions (SGD billions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
MEPS+(IFT)					
Total transactions sent	17,684.00	16,633.64	15,239.84	16,050.76	17,208.03
Concentration ratio in terms of value (%)	nav	nav	nav	nav	nav
Retail payment systems					
Singapore dollar cheque clearing system					
Total transactions sent	632.39	659.17	634.12	623.22	589.14
cheques	632.39	659.17	634.12	623.22	589.14
Concentration ratio in terms of value (%)	82.6	82.7	82.5	81.8	82.0
US dollar cheque clearing system ¹					
Total transactions sent	61.31	65.28	66.48	69.01	64.99
cheques	61.31	65.28	66.48	69.01	64.99
Concentration ratio in terms of value (%)	70.9	70.6	70.3	70.8	71.3
IBG clearing system					
Total transactions sent	292.61	317.09	334.93	355.64	371.75
credit transfers	212.97	231.80	243.31	258.57	270.80
direct debits	79.64	85.29	91.62	97.07	100.95
Concentration ratio in terms of value (%)	81.4	80.5	79.4	79.7	79.5

Table 12
Participation in SWIFT by domestic institutions (end of year)

	2012	2013	2014	2015	2016
Members	8	8	8	9	9
of which: live	8	8	8	9	9
Sub-members	146	147	149	148	150
of which: live	147	147	149	148	149
Participants	30	33	42	45	49
of which: live	32	32	39	43	48
Total users	184	188	199	202	208
of which: live	187	187	196	200	206
Memo:					
Total SWIFT users	10,279	10,583	10,805	11,094	11,299
members	2,398	2,389	2,379	2,455	2,422
sub-members	3,340	3,343	3,353	3,395	3,367
participants	4,541	4,851	5,073	5,244	5,510
Source: SWIFT.					

Table 13
SWIFT message flows to/from domestic users (thousands, total for the year)

	2012	2013	2014	2015	2016
Total messages sent	59,817	67,611	75,535	84,624	91,879
of which:					
category I	9,822	10,725	11,282	11,864	12,493
category II	7,606	7,896	8,713	9,085	9,050
Total messages received of which:	60,987	68,000	76,136	86,828	95,996
category I	10,297	11,088	11,588	12,272	12,350
category II	4,814	5,111	5,551	5,650	5,590
Domestic traffic	17,016	20,755	23,373	26,578	28,574
Memo:					
Global SWIFT traffic	4,589,109	5,065,668	5,612,724	6,106,644	6,525,800
Source: SWIFT.					

Table 14 Number of participants in exchanges and trading systems (end of year)

	2012	2013	2014	2015	2016
SGX					
Total number of participants	4,148	3,975	4,421	4,199	3,955
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of domestic participants	nav	nav	nav	nav	nav
Number of foreign participants	nav	nav	nav	nav	nav

Table 15 **Number of listed securities**

(end of year)

	2012	2013	2014	2015	2016
SGX					
Total number of listed securities	2,496	2,775	3,053	3,051	3,034
debt securities	1,317	1,552	1,842	1,930	2,039
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	776	776	775	769	757
other	403	447	436	352	238

Table 10		
Market capita	alisation of listed	companies

(SGD billions, end of year)

	2012	2013	2014	2015	2016
SGX					_
Total market capitalisation/equity	934.54	939.90	997.58	904.77	925.99

Table 17

Number of executed trades

(thousands, total for the year)

	2012	2013	2014	2015	2016
SGX					
Total number of executed securities trades	22,006.81	28,637.39	22,168.87	52,114.19	51,970.92
debt securities	nav	nav	nav	nav	nav
equity	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Total number of executed derivatives trades	80,210.62	112,077.28	120,398.47	184,290.97	172,712.75
financial futures	75,225.51	100,558.06	108,349.66	165,343.14	142,895.82
financial options	4,728.11	10,501.43	7,918.13	5,750.55	6,207.38
other financial derivatives	nav	11.11	678.17	4,202.86	6,285.60
commodity futures	257.00	346.30	489.79	654.85	13,673.33
commodity options	nav	67.185	231.62	1622.07	3,359.45
other commodity derivatives	nav	593.187	2731.10	6,717.51	291.16

Table 18

Value of executed trades

(SGD billions, total for the year)

	2012	2013	2014	2015	2016
SGX					
Total value of executed securities trades	321.55	354.82	265.82	279.98	271.90
debt securities	0.16	0.15	0.11	0.14	0.21
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	314.31	343.20	258.13	272.48	260.69
other	7.07	11.48	7.58	7.36	11.01
Total value of executed derivatives trades	nav	nav	nav	nav	nav

Table 19

Number of clearing members

(end of year)

	2012	2013	2014	2015	2016
CDP					
Total number of clearing members	27	26	26	25	25
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of domestic clearing members	nav	nav	nav	nav	nav
Number of foreign clearing members	nav	nav	nav	nav	nav

Table 20

Number of contracts and transactions cleared

(millions, total for the year)

	2012	2013	2014	2015	2016
CDP					
Total number of contracts and transactions cleared	nav	nav	nav	24.14	21.88
Number of securities transactions cleared	nav	nav	nav	nav	nav
debt securities	nav	nav	nav	nav	nav
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
of which: number of repurchase transactions					
cleared	nav	nav	nav	nav	nav
Number of exchange-traded derivatives contracts					
cleared	nav	nav	nav	nav	nav
Number of OTC derivatives contracts cleared	nav	nav	nav	nav	nav

Table 21

Value of contracts and transactions cleared

(SGD billions, total for the year)

	2012	2013	2014	2015	2016
CDP Total value of contracts and transactions cleared	321.55	354.82	265.82	279.98	271.90
Value of securities transactions cleared	nav	nav	nav	nav	nav
Value of exchange-traded derivatives contracts cleared	nav	nav	nav	nav	nav
Value of OTC derivatives contracts cleared	nav	nav	nav	nav	nav

Table 22 Number of direct participants in CSDs (end of year)

	2012	2013	2014	2015	2016
MEPS+(SGS)					
Total number of participants	62	64	64	63	62
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
central securities depositories	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of domestic participants	nav	nav	nav	nav	nav
Number of foreign participants	nav	nav	nav	nav	nav
DCSS ¹					
Total number of participants	42	45	47	50	53
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
central securities depositories	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of domestic participants	nav	nav	nav	nav	nav
Number of foreign participants	nav	nav	nav	nav	nav
CDP					
Total number of participants	27	25	26	26	26
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
central securities depositories	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of domestic participants	nav	nav	nav	nav	nav
Number of foreign participants	nav	nav	nav	nav	nav
DCSS does not perform custody services but only	y settlement functions.				

Table 24

Value of securities held on accounts at CSDs

(SGD billions, end of year)

	2012	2013	2014	2015	2016
MEPS+(SGS)					
Total value of securities held	nav	nav	nav	nav	nav
DCSS ¹					
Total value of securities held	nav	nav	nav	nav	nav
CDP					
Total value of securities held	1,596.54	1,827.41	2,066.31	2,088.35	2,212.23
debt securities	662.00	887.52	1,068.74	1,183.58	1,286.23
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	934.54	939.90	997.58	904.77	925.99
other	nav	nav	nav	nav	nav
¹ DCSS does not perform custody services	but only settlement fur	ctions.			

Table 25

Number of delivery instructions processed

(thousands, total for the year)

	2012	2013	2014	2015	2016
MEPS+(SGS)					
Total number of delivery instructions	90.00	101.75	98.24	114.98	122.56
DVP	nav	nav	nav	nav	nav
free of payment	nav	nav	nav	nav	nav
DCSS ¹					
Total number of delivery instructions	5,233.61	4,980.00	5,933.00	6,276.36	6,653.98
DVP	nav	nav	nav	nav	nav
free of payment	nav	nav	nav	nav	nav
CDP					
Total number of delivery instructions	5,233.61	4,980.00	5,933.00	6,276.36	6,653.98
DVP	nav	nav	nav	nav	nav
free of payment	nav	nav	nav	nav	nav
¹ DCSS does not perform custody services bu	t only settlement fur	nctions.			

Table 26

Value of delivery instructions processed

(SGD billions, total for the year)

	2012	2013	2014	2015	2016
MEPS+(SGS)					
Total value of delivery instructions	1,395.00	1,485.80	1,411.53	1,289.89	1,386.00
DVP	nav	nav	nav	nav	nav
free of payment	nav	nav	nav	nav	nav
DCSS ¹					
Total value of delivery instructions	nav	nav	nav	nav	nav
DVP	nav	nav	nav	nav	nav
free of payment	nav	nav	nav	nav	nav
CDP					
Total value of delivery instructions	321.55	354.82	265.82	279.98	271.90
DVP	nav	nav	nav	nav	nav
free of payment	nav	nav	nav	nav	nav
¹ DCSS does not perform custody services bu	t only settlement fun	ctions.			

Table 1
Basic statistical data

	2012	2013	2014	2015	2016
Population (thousands)	52,231	52,873	53,548	54,263	55,021
GDP (ZAR billions)	3,253.9	3,539.8	3,807.7	4,049.8	4,338.9
GDP per capita (ZAR)	62,297	66,949	71,108	74,632	78,858
Consumer price inflation (%)	5.7	5.4	5.3	5.3	6.7
Exchange rate (ZAR/USD):					
end of year	8.4980	10.5000	11.5790	15.5740	13.6800
average	8.2100	9.6500	10.8440	12.7510	14.7090

Table 2 Settlement media used by non-banks

(ZAR billions, end of year)

	2012	2013	2014	2015	2016
Notes and coin in circulation outside banks	81.04	87.01	94.19	101.05	107.57
Value of transferable deposits	562.03	629.26	678.80	738.22	801.93
Other	391.96	415.76	468.28	589.23	697.41
Narrow money supply (M1)	1,035.04	1,132.04	1,241.27	1,428.51	1,606.91
Memo:					
Transferable deposits in foreign currencies	3.88	4.97	7.53	11.28	11.14
Outstanding value on e-money storage	nap	nap	nap	nap	nap

Table 3
Settlement media used by banks

(ZAR billions, end of year except as noted)

	2012	2013	2014	2015	2016
Transferable balances held at the central bank ¹	61.19	66.60	72.51	81.98	90.32
required reserves ²	63.78	69.31	<i>75.55</i>	83.31	90.89
free reserves ³	-2.59	-2.72	-3.05	-1.34	-0.58
Transferable balances held at other banks	86.70	103.40	96.12	105.19	111.73
Memo:					
Credit extended by the central bank:					
overnight ⁴	-0.75	-7.51	-0.83	<i>-2.4</i> 5	-0.13
longer refinancing operations (repos) ⁵	24.60	25.20	38.90	50.00	56.00

Actual cash reserve requirements. ² Statutory cash reserve requirement applicable. ³ South Africa allows cash reserve averaging. Free reserves is therefore calculated as the difference between actual and statutory cash reserves. A negative figure implies that banks utilised their cash reserve balances to square off their end of day positions. A positive figure implies that banks deposited surplus reserves on their cash reserve accounts to square off their end of day positions. ⁴ Includes the Bank's standing facilities and/or supplementary tenders on the last working day of December. ⁵ The outstanding main refinancing repo (7 days) provided to banks as on the last working day of December.

Table 4
Banknotes and coin
(ZAR millions, end of year)

	2012	2013	2014	2015	2016
Total banknotes and coin issued ¹	157,813.0	119,149.0	134,993.0	95,797.9	98,525.0
Total banknotes issued	157,500.0	118,970.0	134,718.0	95,465.9	98,326.0
ZAR 200	34,786.0	27,663.0	38,971.0	31,038.8	31,746.0
ZAR 100	98,860.0	72,651.0	75,852.0	46,834.0	47,792.0
ZAR 50	15,147.0	11,498.0	12,394.0	10,727.6	11,347.0
ZAR 20	5,927.0	4,840.0	5,218.0	4,626.5	4,921.0
ZAR 10	2,780.0	2,318.0	2,283.0	2,239.0	2,520.0
Total coin issued	313.0	179.0	275.0	332.0	199.0
of which:					
ZAR 5	99.0	74.0	109.0	120.0	43.0
ZAR 2	67.0	46.0	78.0	85.0	47.0
ZAR 1	51.0	12.0	50.0	47.0	41.0
ZAR 0.50	24.0	6.0	14.0	20.0	13.0
ZAR 0.20	11.0	9.0	20.0	17.0	21.0
ZAR 0.10	19.0	32.0	4.0	43.0	34.0
ZAR 0.05	42 .0	0.0	0	0	nav
Banknotes and coin held by banks ²	31,127.0	32,042.8	37,140.3	36,938.3	41,620.7
Banknotes and coin in circulation outside banks ²	81,042.2	87,013.9	94,193.2	101,052.6	107,573.3

¹ Represents new currency issued during the year by the central bank. ² Banknotes and coin in circulation are extracted from the Statement of Assets and Liabilities and represent the outstanding balance of notes and coin issued in total by the central bank, taking into account damaged items withdrawn, etc.

Table 5
Institutions offering payment services to non-banks (end of year)

	2012	2013	2014	2015	2016
Central bank					
Number of branches or offices	7	7	7	7	7
Number of accounts (thousands)	0.228	0.230	0.247	0.251	0.251
Value of accounts (ZAR billions)	71.20	78.55	73.67	77.35	77.35
Memo:					
Number of accounts, banks (thousands)	0.052	0.054	0.058	0.058	0.058
Banks					
Number of institutions	31	32	33	34	34
Number of branches or offices	3,706	3,697	4,169	4,044	4,044
Number of accounts	nav	nav	nav	nav	nav
of which: number of internet/PC-linked accounts					
(thousands)	nav	nav	nav	nav	nav
Value of accounts (ZAR billions)	2,598.3	2,786.4	3,002.1	3,297.8	3,297.8
Institutions offering payment services to non-bank	ks (total)				
Number of institutions	32	33	34	35	35
Number of branches or offices	3,713	3,704	4,176	4,051	4,051
Number of accounts held by non-banks ¹	0.228	0.230	0.247	0.251	0.251
of which: number of internet/PC-linked accounts					
(thousands)	nav	nav	nav	nav	nav
Value of accounts held by non-banks					
(ZAR billions)	2,669.5	2,864.9	3,075.8	3,375.1	3,375.1
Мето:					
Electronic money institutions					
Number of institutions	nap	nav	nav	nav	nav
Outstanding value on e-money storages issued by	•				
e-money institutions (ZAR billions)					
1, , , , , , , , , , , , , , , , , , ,		21.1.1			

¹ Includes only accounts at the central bank; those held at banks are not available.

Table 6
Payment card functions and accepting devices (end of year)

	2012	2013	2014	2015	2016
Cards issued in the country (thousands)					
Total number of cards (irrespective of the number					
of functions on the card)	71,530	86,918	87,064	77,462	50,935
Terminals located in the country					
ATMs	22,901	26,133	27,774	28,906	29,643
ATMs with a cash withdrawal function	22,901	26,133	27,774	28,906	29,643
ATMs with a credit transfer function	nav	nav	nav	nav	nav
POS terminals	254,368	308,824	393,883	394,309	402,670
EFTPOS terminals	254,368	308,824	393,883	394,309	402,670
E-money card terminals	nap	nap	nap	nap	nap

Table 7
Indicators of the use of payment instruments and terminals by non-banks: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers	653.34	664.62	695.32	738.31	770.03
paper-based	nap	nap	nap	nap	nap
non-paper-based	nap	nap	nap	nap	nap
Direct debits	707.16	766.07	785.97	782.91	822.77
Card payments with cards issued in the country	1,365.46	1,616.00	1,927.92	2,260.32	2,765.83
E-money payment transactions	nap	nap	nap	nap	nap
Cheques	42.17	30.93	22.86	16.89	12.19
Transactions per type of terminal					
Total transactions at terminals in the country					
Cash transactions	1,083.12	1,100.23	1,160.10	1,257.52	1,273.76
ATM cash withdrawals	1,052.12	1,052.73	1,093.97	1,168.92	1,165.43
ATM cash deposits	31.00	47.50	66.13	88.60	108.33
POS payment transactions	1,042.31	1,195.82	1,242.60	1,442.99	1,598.59
E-money card loading/unloading transactions	nap	nap	nap	nap	nap
E-money card payment transactions	nap	nap	nap	nap	nap
a) Transactions at terminals in the country by cards	s issued in the	country			
Cash transactions	1,083.12	1,100.23	1,160.10	1,257.52	1,273.76
ATM cash withdrawals	1,052.12	1,052.73	1,093.97	1,168.92	1,165.43
ATM cash deposits	31.00	47.50	66.13	88.60	108.33
POS payment transactions	1,042.31	1,195.82	1,242.60	1,442.99	1,598.59
E-money card loading/unloading transactions	nap	nap	nap	nap	nap
E-money card payment transactions	nap	nap	nap	nap	nap
b) Transactions at terminals in the country by cards	s issued outsid	e the country			
Cash transactions	nav	nav	nav	nav	nav
POS payment transactions	nav	nav	nav	nav	nav
E-money card loading/unloading transactions	nap	nap	nap	nap	nap
E-money card payment transactions	nap	nap	nap	nap	nap
c) Transactions at terminals outside the country by	cards issued in	n the country			
Cash transactions ¹	9.69	10.39	13.82	21.34	30.30
ATM cash withdrawals	nav	nav	nav	nav	nav
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions	nav	nav	nav	nav	nav
E-money card loading/unloading transactions	nap	nap	nap	nap	nap
E-money card payment transactions	nap	nap	nap	nap	nap

¹ A new reporting system was implemented on 19 August 2013. Cash transactions include cash and ATM withdrawals, as well as POS transactions. A breakdown is not available.

Table 8
Indicators of the use of payment instruments and terminals by non-banks: value of transactions (ZAR billions, total for the year)

2012	2013	2014	2015	2016
17,202.5	20,338.3	22,035.1	23,846.2	25,676.5
nap	nap	nap	nap	nap
nap	nap	nap	nap	nap
1,247.9	1,319.4	1,248.3	1,297.3	1,397.7
522.3	624.2	752.0	882.0	973.1
nap	nap	nap	nap	nap
851.0	500.3	383.4	294.0	221.5
599.4	844.6	921.1	1,041.0	1,114.4
533.4	770.8	835.6	921.5	959.7
66.0	73.8	85.5	119.6	154.7
379.9	440.4	496.2	572.4	637.9
nap	nap	nap	nap	nap
nap	nap	nap	nap	nap
ued in the o	country	·	•	
599.4	844.6	921.1	1041.0	1114.4
533.4	770.8	835.6	921.5	959.7
66.0	73.8	85.5	119.6	154.7
379.9	440.4	496.2	572.4	637.9
nap	nap	nap	nap	nap
nap	nap	nap	nap	nap
ued outside	e the country			
nav	6.0	16.8	11.2	11.4
nav	6.0	16.8	11.2	11.4
nav	nav	nav	nav	nav
nav	14.8	51.0	43.8	48.4
nap	nap	nap	nap	nap
nap	nap	nap	nap	nap
ds issued ir	the country			
14.9	18.1	25.3	32.4	36.3
nav	nav	nav	nav	nav
nav	nav	nav	nav	nav
nav	nav	nav	nav	nav
nap	nap	nap	nap	nap
nap	nap	nap	nap	nap
•	nap nap 1,247.9 522.3 nap 851.0 599.4 533.4 66.0 379.9 nap nap sued in the of 599.4 533.4 66.0 379.9 nap nap sued outside nav	nap nap nap nap 1,247.9 1,319.4 522.3 624.2 nap nap 851.0 500.3 599.4 844.6 533.4 770.8 66.0 73.8 379.9 440.4 nap nap nap nap sued in the country 599.4 844.6 533.4 770.8 66.0 73.8 379.9 440.4 nap nap nap nap nap nav 6.0 nav 6.0 nav nav nav nav nav nav nap nap nap nap nap nap nav nav nav nav <td< td=""><td>nap nap nap nap nap nap 1,247.9 1,319.4 1,248.3 522.3 624.2 752.0 nap nap nap 851.0 500.3 383.4 599.4 844.6 921.1 533.4 770.8 835.6 66.0 73.8 85.5 379.9 440.4 496.2 nap nap nap nap nap nap sued in the country 599.4 844.6 921.1 533.4 770.8 835.6 66.0 73.8 85.5 379.9 440.4 496.2 nap nap nap nap nap nap sued outside the country nap nap nav nav nav nav nav nav nap nap nap nap nap nap nap</td><td>nap nap nap nap nap nap nap nap 1,247.9 1,319.4 1,248.3 1,297.3 522.3 624.2 752.0 882.0 nap nap nap nap 851.0 500.3 383.4 294.0 599.4 844.6 921.1 1,041.0 533.4 770.8 835.6 921.5 66.0 73.8 85.5 119.6 379.9 440.4 496.2 572.4 nap nap nap nap nap nap nap nap sued in the country 599.4 844.6 921.1 1041.0 533.4 770.8 835.6 921.5 66.0 73.8 85.5 119.6 379.9 440.4 496.2 572.4 nap nap nap nap nap nap nap nap sued outside the country <</td></td<>	nap nap nap nap nap nap 1,247.9 1,319.4 1,248.3 522.3 624.2 752.0 nap nap nap 851.0 500.3 383.4 599.4 844.6 921.1 533.4 770.8 835.6 66.0 73.8 85.5 379.9 440.4 496.2 nap nap nap nap nap nap sued in the country 599.4 844.6 921.1 533.4 770.8 835.6 66.0 73.8 85.5 379.9 440.4 496.2 nap nap nap nap nap nap sued outside the country nap nap nav nav nav nav nav nav nap nap nap nap nap nap nap	nap nap nap nap nap nap nap nap 1,247.9 1,319.4 1,248.3 1,297.3 522.3 624.2 752.0 882.0 nap nap nap nap 851.0 500.3 383.4 294.0 599.4 844.6 921.1 1,041.0 533.4 770.8 835.6 921.5 66.0 73.8 85.5 119.6 379.9 440.4 496.2 572.4 nap nap nap nap nap nap nap nap sued in the country 599.4 844.6 921.1 1041.0 533.4 770.8 835.6 921.5 66.0 73.8 85.5 119.6 379.9 440.4 496.2 572.4 nap nap nap nap nap nap nap nap sued outside the country <

¹ A new reporting system was implemented on 19 August 2013. Cash transactions include cash and ATM withdrawals, as well as POS transactions. A breakdown is not available.

Table 9
Participation in selected interbank funds transfer systems (end of year)

	2012	2013	2014	2015	2016
SAMOS - large					
Number of participants	23	25	28	31	31
Direct participants	23	25	28	31	31
Banks	21	22	25	28	28
Central bank	1	1	1	1	1
Other direct participants	1	2	2	2	2
Clearing and settlement organisations ¹	1	2	2	2	2
Indirect participants	nav	nav	nav	nav	nav
SAMOS - retail					
Number of participants	24	26	28	29	31
Direct participants	22	23	25	29	29
Banks	21	22	24	28	28
Central bank	1	1	1	1	1
Indirect participants ²	2	3	3	2	2

¹ The SADC Integrated Regional Electronic Settlement System (SIRESS), implemented in July 2013, is an electronic settlement system that is hosted and operated by the South African Reserve Bank. SIRESS is used to settle regional transactions among banks within the Southern African Development Community (SADC) countries and is meant to replace current correspondent banking arrangements for settlement of cross-border transactions within the region. ² Indirect participants include institutions that can clear their payment instructions in their own name. Their transactions are settled (on their behalf) by a settlement participant under a "sponsored settlement agreement".

Table 10
Payments processed by selected interbank funds transfer systems: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
SAMOS - large					
Total transactions sent ¹	5.017	5.796	6.424	7.035	7.520
Concentration ratio in terms of volume (%)	92.4	92.6	91.2	90.8	90.3
Retail payment systems					
SAMOS - retail ²					
Total transactions sent	0.308	0.326	0.345	0.386	0.425
credit transfers	0.105	0.119	0.129	0.148	0.170
direct debits	0.104	0.109	0.118	0.130	0.136
card payments	0.044	0.045	0.046	0.052	0.060
ATM transactions	0.038	0.037	0.037	0.040	0.043
e-money transactions	nap	nap	nap	nap	nap
cheques	0.017	0.017	0.016	0.016	0.015
other payment instruments ³	0.000	0.000	0	0	nav
Concentration ratio in terms of volume (%)	59.8	59.3	59.3	58.8	57.0

¹ Figures have been amended to include settlement instructions that were processed by the SARB for participants who were unable to submit their instructions within the required timelines. The values for these settlement instructions were previously excluded from the final figures. ² Volumes of transactions in retail payment streams are settled in batches. Thus, volumes recorded by the system represent the number of batches and not actual transactions settled. ³ The ZAPS (high-value interbank credit transfer system) payment stream was discontinued in 2012.

Table 11
Payments processed by selected interbank funds transfer systems: value of transactions (ZAR billions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
SAMOS - large					
Total transactions sent	83,302.3	87,896.7	105,320.3	117,159.3	131,441.9
Concentration ratio in terms of value (%)	85.5	80.2	73.8	72.8	74.9
Retail payment systems					
SAMOS - retail					
Total transactions sent ¹	7,966.7	8,735.2	9,386.4	10,119.9	10,824.1
credit transfers	6,131.0	6,876.1	7,507.5	8,123.5	8,666.7
direct debits	747.5	807.7	750.3	775.3	814.1
card payments	481.6	643.0	768.7	891.1	1,036.9
ATM transactions	117.4	132.3	147.4	167.9	183.4
e-money transactions	nap	nap	nap	nap	nap
cheques	489.2	276.1	212.4	162.1	122.9
other payment instruments ²	0.0	0.0	0	0	0
Concentration ratio in terms of value (%)	94.8	93.7	92.9	92.3	92.7

¹ Figures have been amended to include settlement instructions that were processed by the SARB for participants who were unable to submit their instructions within the required timelines. The values for these settlement instructions were previously excluded from the final figures. ² The ZAPS payment stream was discontinued in 2012 (ZAPS - high value interbank credit transfer system).

Table 12
Participation in SWIFT by domestic institutions (end of year)

	2012	2013	2014	2015	2016
Members	10	10	10	10	10
of which: live	10	10	10	10	10
Sub-members	26	26	26	26	26
of which: live	25	26	26	26	26
Participants	87	92	92	93	95
of which: live	85	91	89	92	95
Total users	123	128	128	129	131
of which: live	120	127	125	128	131
Memo:					
Total SWIFT users	10,279	10,583	10,805	11,094	11,299
members	2,398	2,389	2,379	2,455	2,422
sub-members	3,340	3,343	3,353	3,395	3,367
participants	4,541	4,851	5,073	5,244	5,510

Table 13 SWIFT message flows to/from domestic users

(thousands, total for the year)

	2012	2013	2014	2015	2016
Total messages sent	72,795	84,856	92,225	100,473	111,620
of which:					
category I	7,243	7,703	8,612	9,226	9,742
category II	2,477	2,606	2,830	2,922	2,981
Total messages received of which:	65,550	76,389	82,490	90,004	101,172
category I	7,657	8,431	9,435	10,082	10,616
category II	2,722	2,991	3,357	3,500	3,611
Domestic traffic	45,083	53,633	56,851	61,566	68,598
Мето:					
Global SWIFT traffic	4,589,109	5,065,668	5,612,724	6,106,644	6,525,800
Source: SWIFT.					

Table 14 Number of participants in exchanges and trading systems (end of year)

	2012	2013	2014	2015	2016
Johannesburg Stock Exchange					
Total number of participants	nav	nav	nav	nav	nav

Table 15 Number of listed securities (end of year)

2012	2013	2014	2015	2016
2,324	2,420	2,486	2,547	2,482
1,452	1,539	1,650	1,732	1,666
1,452	1,539	1,650	1,732	1,666
872	881	836	815	816
	2,324 1,452 1,452	2,324 2,420 1,452 1,539 1,452 1,539	2,324 2,420 2,486 1,452 1,539 1,650 1,452 1,539 1,650	2,324 2,420 2,486 2,547 1,452 1,539 1,650 1,732 1,452 1,539 1,650 1,732

Table 16 Market capitalisation of listed companies

(ZAR billions, end of year)

	2012	2013	2014	2015	2016
Johannesburg Stock Exchange					
Total market capitalisation/equity	8,383.6	10,626.2	11,505.0	11,727.6	13,580.6

Table 17
Number of executed trades
(thousands, total for the year)

	2012	2013	2014	2015	2016
Johannesburg Stock Exchange					
Total number of executed securities trades	27,332.37	39,387.25	46,684.09	62,351.43	71,641.06
debt securities	397.75	423.18	385.92	457.18	461.30
bonds	397.75	<i>4</i> 23.18	385.92	<i>4</i> 57.18	461.30
equity	26,934.62	38,964.07	46,298.17	61,894.25	71,179.76
Total number of executed derivatives trades	2,404.09	3,010.90	3,496.63	3,908.46	4,000.37
financial futures	2,055.74	2,682.90	3,167.06	3,526.15	3,591.02
financial options	23.37	22.73	20.81	19.92	22.26
other financial derivatives	nav	nav	nav	nav	nav
commodity futures	286.46	274.90	277.39	319.40	343.27
commodity options	38.52	30.38	31.37	43.00	43.82
other commodity derivatives	nav	nav	nav	nav	nav

Table 18
Value of executed trades
(ZAR billions, total for the year)

	2012	2013	2014	2015	2016
Johannesburg Stock Exchange					
Total value of executed securities trades	26,390.96	24,598.48	22,833.96	27,755.32	33,548.34
debt securities	22,959.38	20,616.86	18,783.91	22,739.89	27,655.57
bonds	22,959.38	20,616.86	18,783.91	22,739.89	27,655.57
equity	3,431.58	3,981.62	4,050.04	5,015.42	5,892.77
Total value of executed derivatives trades	4,735.60	5,552.26	6,472.54	7,396.26	7,898.84
financial futures	4,186.00	5,029.00	5,958.00	6,618.89	6,894.00
financial options	39.00	33.00	24.00	28.00	47.00
other financial derivatives	nav	nav	nav	nav	nav
commodity futures	505.15	486.90	487.82	736.98	943.31
commodity options	<i>5.4</i> 5	3.36	2.72	12.38	14.53
other commodity derivatives	nav	nav	nav	nav	nav

Table 22 Number of direct participants in CSDs (end of year)

	2012	2013	2014	2015	2016
SAFIRES					
Total number of participants	43	45	48	50	52
central bank	1	1	1	1	1
central counterparties (CCPs)	0	0	0	0	0
central securities depositories	1	1	1	1	1
banks	8	8	8	8	8
other	33	35	38	40	42
Number of domestic participants	43	45	48	50	52
central bank	1	1	1	1	1
central counterparties (CCPs)	0	0	0	0	0
central securities depositories	1	1	1	1	1
banks	8	8	8	8	8
other	33	35	38	40	42

Table 23

Number of securities held on accounts at CSDs

(thousands, end of year)

	2012	2013	2014	2015	2016
SAFIRES					
Total number of securities held	4.546	5.785	8.636	8.970	9.022
debt securities	3.623	4.829	7.649	8.035	7.996
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	0.923	0.956	0.987	0.935	1.026

Table 24

Value of securities held on accounts at CSDs

(ZAR billions, end of year)

	2012	2013	2014	2015	2016
SAFIRES					
Total value of securities held	8,002.0	9,254.5	10,000.7	10,168.7	10,884.4
debt securities	2,082.0	2,395.0	2,659.5	2,986.1	3,330.3
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	5,920.0	6,859.5	7,341.3	7,182.6	7,554.2

Table 25

Number of delivery instructions processed

(thousands, total for the year)

	2012	2013	2014	2015	2016
SAFIRES					
Total number of delivery instructions	6,240.14	6,600.86	7,125.09	7,980.09	8,255.37
DVP	4,573.35	5,171.92	5,536.66	6,201.06	6,123.50
debt securities	498.72	537.96	547.83	613.57	621.16
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	4,074.63	4,633.97	4,988.83	5,587.48	5,502.34
free of payment	1,666.79	1,428.94	1,588.43	1,779.04	2,131.87
debt securities ¹	2.51	5.43	5.62	6.30	6.27
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	1,664.29	1,423.51	1,582.81	1,772.74	2,125.60
¹ The Free of Payment functionality was implemen	nted in August 2009.				_

Table 26

Value of delivery instructions processed

(ZAR billions, total for the year)

	2012	2013	2014	2015	2016
SAFIRES					
Total value of delivery instructions	32,805	29,999	29,639	33,172	37,747
DVP	32,805	29,999	29,639	33,172	37,747
debt securities	29,484	26,103	24,846	27,804	31,223
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	3,322	3,896	4,794	5,369	6,525
free of payment	nav	nav	nav	nav	nav

Table 1
Basic statistical data

	2012	2013	2014	2015	2016
Population (thousands)	9,521	9,603	9,702	9,851	9,995
GDP (SEK billions)	3,684.8	3,769.9	3,936.8	4,199.9	4,404.9
GDP per capita (SEK)	387,018	392,576	405,776	426,338	440,707
Consumer price inflation (%)	0.9	0.0	-0.2	0.0	1.0
Exchange rate (SEK/USD):					
end of year	6.5045	6.4238	7.7366	8.4408	9.0622
average	6.7772	6.51 4 9	6.8636	8.4347	8.5611

Table 2
Settlement media used by non-banks

(SEK billions, end of year)

	2012	2013	2014	2015	2016
Notes and coin in circulation outside banks	88.0	82.5	81.1	71.5	60.7
Value of transferable deposits	1,586.3	1,746.4	1,933.8	2,221.1	2,422.5
Other	18.2	16.1	10.9	0.3	0.0
Narrow money supply (M1)	1,692.5	1,844.9	2,025.8	2,292.9	2,483.2
Memo:					
Transferable deposits in foreign currencies	99.1	103.5	127.8	130.7	148.3
Outstanding value on e-money storage	nav	nav	nav	nav	nav
on card-based products	nav	nav	nav	nav	nav
on software- or network-based products	nav	nav	nav	nav	nav

Table 3
Settlement media used by banks

(SEK billions, end of year)

	2012	2013	2014	2015	2016
Transferable balances held at the central bank	26.15	21.67	14.80	70.92	144.34
required reserves	nap	nap	nap	nap	nap
free reserves	26.15	21.67	14.80	70.92	144.34
Transferable balances held at other banks	197,348.00	230,429.00	224,578.00	235,994.00	232,903.00
Memo:					
Credit extended by the central bank:	0.00	0.00	0.03	0.00	0.00
intraday	nav	nav	nav	nav	nav
overnight	nav	nav	0.03	0.00	0.00
longer-term refinancing operations	nav	nav	nav	nav	nav

Table 4
Banknotes and coin

(SEK billions, end of year)

	2012	2013	2014	2015	2016
Total banknotes and coin issued	96.44	85.70	83.22	73.45	62.39
Total banknotes issued	91.06	80.29	77.89	68.19	57.54
SEK 1,000	21.38	9.71	6.16	4.20	3.30
SEK 500	56.65	57.38	57.20	49.79	37.94
SEK 200	nap	nap	nap	0.93	6.51
SEK 100	9.37	9.51	9.22	8.05	5.17
SEK 50	1.24	1.24	1.09	1.11	0.99
SEK 20	1.74	1.74	1.74	1.85	1.03
SEK 10	nap	nap	nap	nap	nap
SEK 5	nap	nap	nap	nap	nap
Invalid banknotes	0.67	0.72	2.47	2.26	2.59
Total coin issued	5.39	5.41	5.34	5.26	4.86
SEK 10	2.56	2.57	2.51	2.49	2.32
SEK 5	1.32	1.34	1.34	1.31	1.19
SEK 2	0.01	0.01	0.01	0.01	0.06
SEK 1	1.38	1.39	1.40	1.39	1.25
SEK 0.50	0	nap	0	nap	nap
Commemorative coins	0.12	0.10	0.08	0.06	0.04
Banknotes and coin held by banks	8.44	3.25	2.13	1.91	1.67
Banknotes and coin in circulation outside banks	88.00	82.45	81.09	71.54	60.72

Table 5
Institutions offering payment services to non-banks (end of year)

	2012	2013	2014	2015	2016
Central bank ¹					
Number of branches or offices	1	1	1	1	1
Number of accounts	nap	nap	nav	nav	nav
Value of accounts	nap	nap	nav	nav	nav
Banks					
Number of institutions	117	118	117	116	117
Number of branches or offices	1,839	1,822	1,774	1,644	1,514
Number of accounts	nav	nav	nav	nav	nav
Value of accounts (SEK billions)	2,949.9	3,154.8	3,450.3	3,562.0	3,927.0
Commercial banks					
Number of institutions	39	40	41	40	41
Number of branches or offices	1,665	1,655	1,629	1,499	1,370
Value of accounts (SEK billions)	2,571.2	2,755.7	2,995.7	3,115.1	3,543.5
Savings banks					
Number of institutions	49	49	48	47	47
Number of branches or offices	174	167	145	145	144
Value of accounts (SEK billions)	140.8	146.6	136.6	149.5	164.9
Branches of foreign banks					
Number of institutions	29	29	28	29	29
Number of branches or offices	nav	nav	nav	nav	nav
Value of accounts (SEK billions)	237.9	252.4	318.0	297.4	374.8
Other institutions offering payment services to no	n-banks: po	stal institutio	on		
Number of institutions	nav	nav	nav	nav	nav
Number of branches or offices	nav	nav	nav	nav	nav
Number of accounts	nav	nav	nav	nav	nav
Value of accounts	nav	nav	nav	nav	nav
Institutions offering payment services to non-bank	ks (total)				
Number of institutions	117	118	117	116	117
Number of branches or offices	1,839	1,822	1,774	1,644	1,514
Number of accounts held by non-banks	nav	nav	nav	nav	nav
Value of accounts held by non-banks					
(SEK billions)	2,949.9	3,154.8	3,450.3	nav	3,927.0
Memo:					
Electronic money institutions				_	
Number of institutions	nap	nap	nap	5	5
Outstanding value on e-money storages issued by					
e-money institutions	nap	nap	nap	nav	nav
¹ The central bank does not offer payment services to non-b	oanks.				

Table 6
Payment card functions and accepting devices (end of year)

	2012	2013	2014	2015	2016
Cards issued in the country (thousands)					
Cards with a cash function	12,034	12,600	13,262	11,008	17,399
Cards with a debit function	10,594	10,741	11,320	10,430	10,569
Cards with a delayed debit function	709	688	702	859	767
Cards with a credit function	10,793	10,539	10,078	9,747	9,583
Cards with an e-money function	nap	nap	nap	122	131
of which: cards with an e-money function which					
have been loaded at least once	nap	nap	nap	122	131
Total number of cards (irrespective of the number					
of functions on the card)	22,096	21,968	22,100	21,035	20,919
of which: cards with a combined debit, cash and					
e-money function	nav	nav	nav	nav	nav
Memo:					
Retailer cards	nav	nav	nav	nav	nav
Retailer Cards	Ilav	liav	liav	IIav	Ilav
Terminals located in the country					
ATMs	3,416	3,237	3,231	3,285	2,850
ATMs with a cash withdrawal function	3,416	3,237	3,231	3,285	2,850
ATMs with a credit transfer function	0	0	nav	0	0
POS terminals	198,388	195,709	196,985	183,818	257,874
of which: EFTPOS terminals	nav	nav	nav	nav	nav
E-money card terminals	nap	nap	nap	nap	nap

Table 7
Indicators of the use of payment instruments and terminals by non-banks: volume of transactions (millions, total for the year)

Transactions per type of payment instrument 859.0 894.0 957.0 1,074.0 1,303.0 paper-based 70.0 67.0 69.0 58.0 59.0 paper-based 78.9 827.0 888.0 1,016.0 1,244.0 Direct debits 297.0 312.0 323.0 279.5 301.0 Card payments with cards issued in the country 2,190.0 2,388.0 2,619.9 2,945.0 3,166.0 payments by cards with a debit function 43.0 42.6 44.7 61.0 610.0 payments by cards with a debit function 43.0 42.6 44.7 61.0 651.0 E-money payment transactions nap nap nap nap 3.5 6.6 by cards with a roredif function nap nap nap 0.0 0 0 Cheques 0.2 0.1 0.0 0 0 0 0 Chery payment instruments 3,346.2 3,604.1 3,900.0 4,202.1 4,776.7		2012	2013	2014	2015	2016
Paper-based 70,0 67,0 69,0 68,0 79,0 70,0	Transactions per type of payment instrument					
Direct debits	Credit transfers	859.0	894.0	957.0	1,074.0	1,303.0
Direct debits 297.0 312.0 323.0 279.5 301.0 Card payments with cards issued in the country payments by cards with a debit function payments by cards with a debit function d.8.0 1,810.0 1,986.8 2,169.5 2,343.0 2,604.0 payments by cards with a debity debit function payments by cards with a credit function 43.0 42.6 44.7 61.0 61.0 E-money payment transactions by cards with a credit function nap nap nap nap nap nap 3.5 6.6 though other e-money storages nap nap nap nap nap 0.0 0 0 Cheques 0.2 0.1 0.0 0.1 0.1 0.1 Other payment instruments 3,346.2 3,604.1 3,900.0 4,202.1 4,776.7 of which: cross-border transactions sent nav nav nav nav nav Memo: Cross-border transactions sent ana nav	paper-based	70.0	67.0	69.0	58.0	59.0
Direct debits 297.0 312.0 323.0 279.5 301.0 Card payments with cards issued in the country payments by cards with a debit function payments by cards with a debit function d.8.0 1,810.0 1,986.8 2,169.5 2,343.0 2,604.0 payments by cards with a debity debit function payments by cards with a credit function 43.0 42.6 44.7 61.0 61.0 E-money payment transactions by cards with a credit function nap nap nap nap nap nap 3.5 6.6 though other e-money storages nap nap nap nap nap 0.0 0 0 Cheques 0.2 0.1 0.0 0.1 0.1 0.1 Other payment instruments 3,346.2 3,604.1 3,900.0 4,202.1 4,776.7 of which: cross-border transactions sent nav nav nav nav nav Memo: Cross-border transactions sent ana nav	non-paper-based	789.0	827.0	888.0	1,016.0	1,244.0
payments by cards with a debit function 1,810.0 1,986.8 2,169.5 2,343.0 2,604.0 payments by cards with a delayed debit function 337.0 368.7 405.8 441.0 501.0 E-money payment transactions nap nap nap nap 3.5 6.6 by cards with an e-money function nap nap nap nap nap 0.0 0	Direct debits	297.0	312.0	323.0	279.5	301.0
Payments by cards with a delayed debit function 43.0 42.6 44.7 61.0 501.0	Card payments with cards issued in the country	2,190.0	2,398.0	2,619.9	2,845.0	3,166.0
Payments by cards with a credit function 337.0 368.7 405.8 441.0 501.0	payments by cards with a debit function	1,810.0	1,986.8	2,169.5	2,343.0	2,604.0
Payments by cards with a credit function 337.0 368.7 405.8 441.0 501.0	payments by cards with a delayed debit function	43.0	42.6	44.7	61.0	61.0
E-money payment transactions nap	payments by cards with a credit function	337.0	368.7	405.8	441.0	501.0
by cards with an e-money function nap nap nap nap 0.0 0 Cheques 0.2 0.1 0.0 0.1 0.1 Other payment instruments 0 0 0 0 0 Total number of transactions with payment instruments 3,346.2 3,604.1 3,900.0 4,202.1 4,776.7 of which: cross-border transactions sent nav nav nav nav nav nav Memo: Cross-border transactions seceived nav n		nap	nap	nap	3.5	6.6
through other e-money storages nap (0.2) nap (0.1) 0.0 0.0 Cheques 0.2 0.1 0.0 0.0 0 Other payment instruments 0.0 0.0 0 0 Total number of transactions with payment instruments 3,346.2 3,604.1 3,900.0 4,202.1 4,776.7 of which: cross-border transactions sent nav nav nav nav nav Memo: Cross-border transactions received nav nav nav nav nav Transactions per type of terminal Total transactions at terminals in the country 207.0 229.0 216.0 154.0 144.4 ATM cash withdrawals 207.0 229.0 216.0 154.0 139.0 ATM cash deposits 0 0 0 nav 5 POS payment transactions 1,979.0 2,239.0 2,370.0 2,501.0 2,807.0 E-money card bading/unloading transactions nap nap nap nap nap nap <td< td=""><td></td><td></td><td></td><td>•</td><td>3.5</td><td>6.6</td></td<>				•	3.5	6.6
Cheques 0.2 0.1 0.0 0.1 0.1 Other payment instruments 0 0 0 0 0 0 Total number of transactions with payment instruments of which: cross-border transactions sent 3,346.2 3,604.1 3,900.0 4,202.1 4,776.7 of which: cross-border transactions sent nav <				-		
Total number of transactions with payment instruments of which: cross-border transactions sent of which: cross-border transactions received of the which is cross-border transactions of the which is cross-border transactions at terminals in the country Cash transactions at terminals in the country of the which is cross-border transactions of the country by cards issued in the country of the which is cross-border transactions of the country by cards issued outside the country of the which is cross-border transactions of the country by cards issued outside the country of the which is cross-border transactions of the which is cross-border transactions of the which is cross-border transactions of the country by cards issued outside the country of the which is cross-border transactions of the country by cards issued in the country of the which is cross-border transactions of the country of the which is cross-border transactions of the country of the which is cross-border transactions of the country o	, ,		-	•		
Total number of transactions with payment instruments 3,346.2 3,604.1 3,900.0 4,202.1 4,776.7 of which: cross-border transactions sent nav	·					
instruments 3,346.2 3,604.1 3,900.0 4,202.1 4,776.7 of which: cross-border transactions sent nav nav nav nav nav Memo: Cross-border transactions received nav nav nav nav Transactions per type of terminal Total transactions at terminals in the country 207.0 229.0 216.0 154.0 144.4 ATM cash withdrawals 207.0 229.0 216.0 154.0 139.0 ATM cash deposits 0 0 0 nav 5 POS payment transactions 1,979.0 2,239.0 2,370.0 2,807.0 E-money card loading/unloading transactions nap		_	-	-	_	_
of which: cross-border transactions sent nav	• •					
Memo: Cross-border transactions received nav 1,970 2,29.0 216.0 154.0 144.4 ATM cash withdrawals 207.0 229.0 216.0 154.0 144.4 ATM cash withdrawals 207.0 229.0 216.0 154.0 144.4 ATM cash deposits 0 0 0 nav 5 6.6 a) Transactions at terminals in the country by cards issued in the country card in the		3,346.2	3,604.1	3,900.0	4,202.1	4,776.7
Cross-border transactions received nav nav nav nav Transactions per type of terminal Total transactions at terminals in the country 207.0 229.0 216.0 154.0 144.4 ATM cash withdrawals 207.0 229.0 216.0 154.0 139.0 ATM cash withdrawals 207.0 229.0 216.0 154.0 139.0 ATM cash deposits 0 0 0 0 nav 5 POS payment transactions 1,979.0 2,239.0 2,370.0 2,501.0 2,807.0 E-money card loading/unloading transactions nap	of which: cross-border transactions sent	nav	nav	nav	nav	nav
Cross-border transactions received nav nav nav nav Transactions per type of terminal Total transactions at terminals in the country 207.0 229.0 216.0 154.0 144.4 ATM cash withdrawals 207.0 229.0 216.0 154.0 139.0 ATM cash withdrawals 207.0 229.0 216.0 154.0 139.0 ATM cash deposits 0 0 0 0 nav 5 POS payment transactions 1,979.0 2,239.0 2,370.0 2,501.0 2,807.0 E-money card loading/unloading transactions nap	Мето:					
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Total transactions at terminals in the country 207.0 229.0 216.0 154.0 144.4 ATM cash withdrawals 207.0 229.0 216.0 154.0 139.0 ATM cash deposits 0 0 0 nav 5 POS payment transactions 1,979.0 2,239.0 2,370.0 2,501.0 2,807.0 E-money card loading/unloading transactions nap						
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ATM cash withdrawals 207.0 229.0 216.0 154.0 139.0 ATM cash deposits 0 0 0 nav 5 POS payment transactions 1,979.0 2,239.0 2,370.0 2,501.0 2,807.0 E-money card loading/unloading transactions nap nap nap nap nap nap 3.5 6.6 a) Transactions at terminals in the country by cards issued in the country 202.0 225.0 214.0 151.0 141.4 ATM cash withdrawals 202.0 225.0 214.0 151.0 141.4 ATM cash deposits 20 225.0 214.0 151.0 141.4 ATM cash deposits 0 0 0 nav 5 POS payment transactions 1,885.0 2,139.0 2,271.0 2,387.0 2,641.0 E-money card loading/unloading transactions nap nap nap nap nap nap nap nap nap nav 6.6 b) Transactions at terminals in the country by cards i	•					
ATM cash deposits 0 0 0 nav 5 POS payment transactions 1,979.0 2,239.0 2,370.0 2,501.0 2,807.0 E-money card loading/unloading transactions nap 141.4 141.4 ATM cash withdrawals 202.0 225.0 214.0 151.0 141.4 ATM cash deposits 0 0 0 nap						
POS payment transactions 1,979.0 2,239.0 2,370.0 2,501.0 2,807.0 E-money card loading/unloading transactions nap		207.0	229.0	216.0	154.0	139.0
E-money card loading/unloading transactions nap	·	0	0	0	nav	_
E-money card payment transactions nap nap nap 3.5 6.6 a) Transactions at terminals in the country by cards issued in the country 202.0 225.0 214.0 151.0 141.4 ATM cash withdrawals 202.0 225.0 214.0 151.0 136.0 ATM cash deposits 0 0 0 nav 5 POS payment transactions 1,885.0 2,139.0 2,271.0 2,387.0 2,641.0 E-money card loading/unloading transactions nap na nap nap nap	POS payment transactions	1,979.0	2,239.0	2,370.0	2,501.0	2,807.0
a) Transactions at terminals in the country by cards issued in the country Cash transactions 202.0 225.0 214.0 151.0 141.4 ATM cash withdrawals 202.0 225.0 214.0 151.0 136.0 ATM cash deposits 0 0 0 0 0 nav 5 POS payment transactions 1,885.0 2,139.0 2,271.0 2,387.0 2,641.0 E-money card loading/unloading transactions nap nap nap nap nap nav nav 6.6 b) Transactions at terminals in the country by cards issued outside the country Cash transactions 4 terminals in the country by cards issued outside the country Cash transactions 5.0 4.0 2.0 3.2 3.0 ATM cash withdrawals 5.0 4.0 2.0 3.2 3.0 ATM cash deposits 0 0 0 0 0 nav nav POS payment transactions 94.0 101.0 99.0 114.0 166.0 E-money card loading/unloading transactions nap nap nap nap nav nav E-money card payment transactions nap nap nap nap nav nav C3 Transactions at terminals outside the country by cards issued in the country Cash transactions 8.0 7.0 4.0 12.3 12.9 ATM cash withdrawals 8.0 7.0 4.0 12.3 12.9 ATM cash withdrawals 8.0 7.0 4.0 12.3 12.9 ATM cash deposits 0 0 0 0 nav nav POS payment transactions 70.0 88.0 53.0 166.0 191.0 E-money card loading/unloading transactions nap nap nap nay nav	E-money card loading/unloading transactions	nap	nap	nap	nav	nav
Cash transactions 202.0 225.0 214.0 151.0 141.4 ATM cash withdrawals 202.0 225.0 214.0 151.0 136.0 ATM cash deposits 0 0 0 nav 5 POS payment transactions 1,885.0 2,139.0 2,271.0 2,387.0 2,641.0 E-money card loading/unloading transactions nap	E-money card payment transactions	nap	nap	nap	3.5	6.6
ATM cash withdrawals 202.0 225.0 214.0 151.0 136.0 ATM cash deposits 0 0 0 nav 5 POS payment transactions 1,885.0 2,139.0 2,271.0 2,387.0 2,641.0 E-money card loading/unloading transactions nap nap<	a) Transactions at terminals in the country by cards	issued in the c	ountry			
ATM cash deposits 0 0 0 nav 5 POS payment transactions 1,885.0 2,139.0 2,271.0 2,387.0 2,641.0 E-money card loading/unloading transactions nap	Cash transactions	202.0	225.0		151.0	141.4
POS payment transactions 1,885.0 2,139.0 2,271.0 2,387.0 2,641.0 E-money card loading/unloading transactions nap	ATM cash withdrawals	202.0	225.0	214.0	151.0	136.0
E-money card loading/unloading transactions nap	ATM cash deposits	0	0	0		5
E-money card payment transactions nap nap nap nap nap nav 6.6 b) Transactions at terminals in the country by cards issued outside the country Cash transactions 5.0 4.0 2.0 3.2 3.0 ATM cash withdrawals 5.0 4.0 2.0 3.2 3.0 ATM cash deposits 0 0 0 0 nav nav POS payment transactions 94.0 101.0 99.0 114.0 166.0 E-money card loading/unloading transactions nap nap nap nap nav nav E-money card payment transactions nap nap nap nap nav nav c) Transactions at terminals outside the country by cards issued in the country Cash transactions 8.0 7.0 4.0 12.3 12.9 ATM cash withdrawals 8.0 7.0 4.0 12.3 12.9 ATM cash deposits 0 0 0 0 0 nav nav POS payment transactions 70.0 88.0 53.0 166.0 191.0 E-money card loading/unloading transactions nap nap nap nap nav nav	POS payment transactions	1,885.0	2,139.0	2,271.0	2,387.0	2,641.0
b) Transactions at terminals in the country by cards issued outside the country Cash transactions 5.0 4.0 2.0 3.2 3.0 ATM cash withdrawals 5.0 4.0 2.0 3.2 3.0 ATM cash deposits 0 0 0 0 nav nav POS payment transactions 94.0 101.0 99.0 114.0 166.0 E-money card loading/unloading transactions nap nap nap nav nav E-money card payment transactions nap nap nap nav nav C) Transactions at terminals outside the country by cards issued in the country Cash transactions 8.0 7.0 4.0 12.3 12.9 ATM cash withdrawals 8.0 7.0 4.0 12.3 12.9 ATM cash deposits 0 0 0 0 nav nav POS payment transactions 70.0 88.0 53.0 166.0 191.0 E-money card loading/unloading transactions nap nap nap nay nav	E-money card loading/unloading transactions	nap	nap	nap	nav	nav
Cash transactions 5.0 4.0 2.0 3.2 3.0 ATM cash withdrawals 5.0 4.0 2.0 3.2 3.0 ATM cash deposits 0 0 0 0 nav nav POS payment transactions 94.0 101.0 99.0 114.0 166.0 E-money card loading/unloading transactions nap nav nav c) Transactions at terminals outside the country by cards issued in the country To an	E-money card payment transactions	nap	nap	nap	nav	6.6
ATM cash withdrawals 5.0 4.0 2.0 3.2 3.0 ATM cash deposits 0 0 0 0 nav nav POS payment transactions 94.0 101.0 99.0 114.0 166.0 E-money card loading/unloading transactions nap nap </td <td>b) Transactions at terminals in the country by cards</td> <td>issued outside</td> <td>the country</td> <td></td> <td></td> <td></td>	b) Transactions at terminals in the country by cards	issued outside	the country			
ATM cash deposits000navnavPOS payment transactions94.0101.099.0114.0166.0E-money card loading/unloading transactionsnapnapnapnapnapnavnavE-money card payment transactionsnapnapnapnapnapnavnavC) Transactions at terminals outside the country by cards issued in the countryCash transactions8.07.04.012.312.9ATM cash withdrawals8.07.04.012.312.9ATM cash deposits000navnavPOS payment transactions70.088.053.0166.0191.0E-money card loading/unloading transactionsnapnapnapnapnavnav	Cash transactions	5.0	4.0	2.0	3.2	3.0
POS payment transactions 94.0 101.0 99.0 114.0 166.0 E-money card loading/unloading transactions nap nap nap nap nap nav nav E-money card payment transactions nap nap nap nap nap nav nav c) Transactions at terminals outside the country by cards issued in the country Cash transactions 8.0 7.0 4.0 12.3 12.9 ATM cash withdrawals 8.0 7.0 4.0 12.3 12.9 ATM cash deposits 0 0 0 nav nav POS payment transactions 70.0 88.0 53.0 166.0 191.0 E-money card loading/unloading transactions nap nap nap nav nav	ATM cash withdrawals	5.0	4.0	2.0	3.2	3.0
E-money card loading/unloading transactions nap nap nap nap nap nap nap nav nav E-money card payment transactions nap nap nap nap nap nap nav nav nav c) Transactions at terminals outside the country by cards issued in the country Cash transactions 8.0 7.0 4.0 12.3 12.9 ATM cash withdrawals 8.0 7.0 4.0 12.3 12.9 ATM cash deposits 0 0 0 0 nav nav POS payment transactions 70.0 88.0 53.0 166.0 191.0 E-money card loading/unloading transactions nap nap nap nap nav nav	ATM cash deposits	0	0	0	nav	nav
E-money card payment transactions nap nap nap nap nav nav c) Transactions at terminals outside the country by cards issued in the country Cash transactions 8.0 7.0 4.0 12.3 12.9 ATM cash withdrawals 8.0 7.0 4.0 12.3 12.9 ATM cash deposits 0 0 0 0 nav nav POS payment transactions 70.0 88.0 53.0 166.0 191.0 E-money card loading/unloading transactions nap nap nap nap nav	POS payment transactions	94.0	101.0	99.0	114.0	166.0
E-money card payment transactions nap nap nap nap nav nav c) Transactions at terminals outside the country by cards issued in the country Cash transactions 8.0 7.0 4.0 12.3 12.9 ATM cash withdrawals 8.0 7.0 4.0 12.3 12.9 ATM cash deposits 0 0 0 0 nav nav POS payment transactions 70.0 88.0 53.0 166.0 191.0 E-money card loading/unloading transactions nap nap nap nap nav	E-money card loading/unloading transactions	nap	nap	nap	nav	nav
c) Transactions at terminals outside the country by cards issued in the country Cash transactions 8.0 7.0 4.0 12.3 12.9 ATM cash withdrawals 8.0 7.0 4.0 12.3 12.9 ATM cash deposits 0 0 0 nav nav POS payment transactions 70.0 88.0 53.0 166.0 191.0 E-money card loading/unloading transactions nap nap nap nav nav	E-money card payment transactions	nap	nap	nap	nav	nav
ATM cash withdrawals8.07.04.012.312.9ATM cash deposits000navnavPOS payment transactions70.088.053.0166.0191.0E-money card loading/unloading transactionsnapnapnapnavnav	c) Transactions at terminals outside the country by c	cards issued in	the country			
ATM cash deposits 0 0 0 nav nav POS payment transactions 70.0 88.0 53.0 166.0 191.0 E-money card loading/unloading transactions nap nap nap nav nav	Cash transactions	8.0	7.0	4.0	12.3	12.9
ATM cash deposits000navnavPOS payment transactions70.088.053.0166.0191.0E-money card loading/unloading transactionsnapnapnapnapnavnav	ATM cash withdrawals	8.0	7.0	4.0	12.3	12.9
POS payment transactions 70.0 88.0 53.0 166.0 191.0 E-money card loading/unloading transactions nap nap nap nav nav						
E-money card loading/unloading transactions nap nap nap nav nav	· · · · · · · · · · · · · · · · · · ·	70.0	88.0	53.0		
	· ·					
	· · · · · · · · · · · · · · · · · · ·		-			

Table 8
Indicators of the use of payment instruments and terminals by non-banks: value of transactions (SEK billions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers	13,646.00	14,175.00	14,769.00	13,042.44	14,561.30
paper-based	175.00	151.00	142.00	227.87	179.94
non-paper-based	13,471.00	14,024.00	14,627.00	12,814.57	14,381.36
Direct debits	545.00	553.00	558.00	477.74	508.06
Card payments with cards issued in the country	849.00	899.99	980.59	916.34	1,003.06
payments by cards with a debit function	617.00	657.79	718.98	668.62	731.70
payments by cards with a delayed debit function	33.00	<i>35.4</i> 8	36.20	40.82	40.93
payments by cards with a credit function	199.00	206.71	225.42	206.90	230.44
E-money payment transactions	nap	nap	nap	0.00	0.008
by cards with an e-money function	nap	nap	nap	0.00	0.008
through other e-money storages	nap	nap	nap	0.00	0
Cheques	40.30	12.60	6.40	4.45	3.68
Other payment instruments	0	0	0	0	0
. ,					
Total value of transactions with payment					
instruments	15,080.30	15,640.59	16,313.99	14,440.97	16,076.11
of which: cross-border transactions sent	nav	nav	nav	nav	nav
Memo:					
Cross-border transactions received	nav	nav	nav	nav	nav
Towns of the second sec					
Transactions per type of terminal					
Total transactions at terminals in the country	400 = 4	242.4	00==4	4=0.00	
Cash transactions	182.51	218.47	207.74	153.26	115.84
ATM cash withdrawals	182.51	218.47	207.74	153.26	110.16
ATM cash deposits	0	0	0	nav	5.68
POS payment transactions	626.38	665.89	690.34	747.05	997.25
E-money card loading/unloading transactions	nap	nap	nap	nav	nav
E-money card payment transactions	nap	nap	nap	nav	nav
a) Transactions at terminals in the country by cards					
Cash transactions	176.18	206.42	195.68	149.77	113.67
ATM cash withdrawals	176.18	206.42	195.68	149.77	107.98
ATM cash deposits	0	0	0	nap	5.68
POS payment transactions	580.56	620.78	645.23	686.24	916.90
E-money card loading/unloading transactions	nap	nap	nap	nav	nav
E-money card payment transactions	nap	nap	nap	nav	0.0
b) Transactions at terminals in the country by cards		•	40.00	0.40	0.40
Cash transactions	6.33	12.06	12.06	3.49	2.18
ATM cash withdrawals	6.33	12.06	12.06	3. 4 9	2.18
ATM cash deposits	0	0	0	nap	nap
POS payment transactions	45.82	45.11	45.11	60.81	80.35
E-money card loading/unloading transactions	nap	nap	nap	nav	nav
E-money card payment transactions	nap	nap	nap	nav	nav
c) Transactions at terminals outside the country by		•			
Cash transactions	11.01	7.90	11.51	17.55	19.30
ATM cash withdrawals	11.01	7.90	11.51	17.55	19.30
ATM cash deposits	0	0	0	nap	nap
POS payment transactions	27.76	31.90	31.99	76.38	88.77
E-money card loading/unloading transactions	nap	nap	nap	nav	nav
E-money card payment transactions	nap	nap	nap	nav	nav

Table 9
Participation in selected interbank funds transfer systems (end of year)

	2012	2013	2014	2015	2016
Large-value payment systems					
RIX					
Number of participants	25	27	30	29	29
Direct participants	25	27	30	29	29
Banks	18	19	22	21	23
Central bank	1	1	1	1	1
Other direct participants	6	7	7	7	5
General government	0	0	0	1	1
Clearing and settlement organisations	4	5	5	6	4
Retail payment systems					
Bankgirot, BGC					
Number of participants	21	21	21	22	23
Direct participants	21	21	21	22	23
Banks	21	21	21	21	22
Dataclearing					
Number of participants	21	21	21	29	31
Direct participants	21	21	21	29	31
Banks	21	21	21	28	30

Table 10
Payments processed by selected interbank funds transfer systems: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
RIX					
Total national transactions sent	3.62	3.81	4.06	4.36	4.54
credit transfers	3.62	3.81	4.06	4.36	4.54
Concentration ratio in terms of volume (%)	89.00	86.49	88.50	88.08	87.84
Retail payment systems					
Bankgirot, BGC					
Total national transactions sent	808.00	850.00	903.00	1,173.27	1,303.93
credit transfers	561.00	590.00	634.00	893.73	1,002.93
direct debits	247.00	260.00	269.00	279.54	301.00
Concentration ratio in terms of volume	nap	nap	nap	nap	nap
Dataclearing					
Total national transactions sent	135.00	140.70	144.70	145.59	144.25
credit transfers	135.00	140.70	144.70	145.59	144.25
Concentration ratio in terms of volume	nap	nap	nap	nap	nap

Table 11
Payments processed by selected interbank funds transfer systems: value of transactions (SEK billions, except as noted, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
RIX					
Total national transactions sent	124,454.0	111,986.0	117,537.0	133,635.0	158,662.0
credit transfers	124,454.0	111,986.0	117,537.0	133,635.0	158,662.0
Concentration ratio in terms of value (%)	79.6	74.0	74.2	81.9	80.0
Retail payment systems					
Bankgirot, BGC					
Total national transactions sent	8,667.0	9,044.0	9,394.0	13,281.2	14,049.3
credit transfers	8,205.0	8,573.0	8,915.0	12,803.5	13,541.2
direct debits	462.0	471.0	479.0	477.7	508.1
Concentration ratio in terms of value	nap	nap	nap	nap	nap
Dataclearing					
Total national transactions sent	2,694.0	2,720.0	2,938.0	3,234.3	3,302.4
credit transfers	2,694.0	2,720.0	2,938.0	3,234.3	3,302.4
Concentration ratio in terms of value	nap	nap	nap	nap	nap

Table 12
Participation in SWIFT by domestic institutions (end of year)

	2012	2013	2014	2015	2016
Members	7	9	9	9	9
of which: live	7	9	9	9	9
Sub-members	11	9	9	9	9
of which: live	11	9	9	9	9
Participants	22	24	29	35	36
of which: live	20	21	23	28	30
Total users	40	42	47	53	54
of which: live	38	39	41	46	48
Memo:					
Total SWIFT users	10,279	10,583	10,805	11,094	11,299
members	2,398	2,389	2,379	2,455	2,422
sub-members	3,340	3,343	3,353	3,395	3,367
participants	4,541	4,851	5,073	5,244	5,510
Source: SWIFT.					

Table 13
SWIFT message flows to/from domestic users (thousands, total for the year)

	2012	2013	2014	2015	2016
Total messages sent	71,076	70,969	77,158	77,145	86,869
of which:	,	•	•	•	•
category I	8,6 4 2	9,013	9,319	9,626	10,315
category II	4,247	4,238	4,403	4,698	4,915
Total messages received	51,392	52,784	56,545	61,481	69,387
of which:	9,763	10,045	10,432	10,980	11,453
category I	•	,	*	*	-
category II	5,061	5,085	5,166	5,490	5,727
Domestic traffic	9,231	7,384	8,353	10,051	12,124
Memo:					
Global SWIFT traffic	4,589,109	5,065,668	5,612,724	6,106,644	6,525,800
Source: SWIFT.	·				

Table 14
Number of participants in exchanges and trading systems (end of year)

	2012	2013	2014	2015	2016
NASDAQ OMX Stockholm					
Total number of participants	173	192	192	186	171
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of domestic participants	38	36	36	37	30
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of foreign participants	135	156	156	149	141
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav

Table 15 Number of listed securities (end of year)

	2012	2013	2014	2015	2016
NASDAQ OMX Stockholm					
Total number of listed companies	6,227	8,822	8,456	11,407	13,055
debt securities	3,121	4,306	5,123	5,779	6,007
bonds	3,121	4,306	5,123	5,779	6,007
equity	258	256	236	288	300
other	2,848	4,260	3,097	5,340	6,748

Table 16

Market capitalisation of listed companies

(SEK billions, total for the year)

	2012	2013	2014	2015	2016
NASDAQ OMX Stockholm					
Total market capitalisation/equity	3,916	4,826	5,323	5,770	6,141

Table 17

Number of executed trades

(thousands, total for the year)

	2012	2013	2014	2015	2016
NASDAQ OMX Stockholm					
Total number of executed securities trades	50,846	46,606	51,097	65,178	71,787
debt securities	113	136	124	142	213
bonds	113	136	124	142	213
equity	50,424	46,268	50,789	64,688	68,966
other	309	202	184	348	2,609
Total number of executed derivatives trades	10,056	9,789	11,463	18,115	18,729
financial futures	8,879	8,760	10,211	16,493	17,341
financial options	1,177	1,029	1,252	1,623	1,388

Table 18

Value of executed trades

(SEK billions, total for the year)

	2012	2013	2014	2015	2016
NASDAQ OMX Stockholm					
Total value of executed securities trades	2,915.0	3,073.6	3,414.6	4,295.9	4,091.7
debt securities	nav	nav	nav	nav	nav
equity	2,892.3	3,058.9	3,402.0	4,270.4	3,932.8
other	22.7	14.7	12.6	25.5	158.9
Total value of executed derivatives trades	3,599.7	4,016.8	4,697.2	6,252.6	5,748.0
financial futures	3,573.1	3,984.9	4,670.4	6,220.1	5,720.8
financial options	26.5	31.9	nav	32.4	27.2

Table 19
Number of clearing members
(end of year)

	2012	2013	2014	2015	2016
SE Nasdaq OMXDM					
Total number of clearing members	47	46	48	47	47
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of domestic clearing members	17	17	17	16	19
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of foreign clearing members	30	29	31	31	28
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav

Table 20 Number of contracts and transactions cleared (thousands, total for the year)

	2012	2013	2014	2015	2016
SE Nasdaq OMXDM					
Total number of contracts and transactions cleared	104,914	98,380	92,328	107,766	97,799
Number of securities transactions cleared	nap	nap	nap	7884.763	7,942
of which: number of repurchase transactions					
•	2002	4 60E	4 2 4 2	7 005	7.042
cleared	3602	4,635	4,342	7,885	7,942
Number of exchange-traded derivatives contracts					
cleared	71,753	69,976	73,794	83,215	78,152
financial futures	34,622	34,513	<i>35,459</i>	44,246	45,956
financial options	37,131	<i>35,4</i> 63	38,335	38,969	32,196
other financial derivatives	nav	nav	nav	nav	nav
commodity futures	nav	nav	nav	nav	nav
commodity options	nav	nav	nav	nav	nav
other commodity derivatives	nav	nav	nav	nav	nav
Number of OTC derivatives contracts cleared	33,161	28,404	18,534	16,666	11,705
financial futures	32,419	27,406	18,285	16,614	11,685
financial options	742	998	249	53	20
other financial derivatives	nav	nav	nav	nav	nav
commodity futures	nav	nav	nav	nav	nav
commodity options	nav	nav	nav	nav	nav
other commodity derivatives	nav	nav	nav	nav	nav

Table 21
Value of contracts and transactions cleared (SEK billions, total for the year)

	2012	2013	2014	2015	2016
SE Nasdaq OMXDM					
Total value of contracts and transactions cleared	40,289.7	36,810.3	26,998.6	30,994.1	25,806.0
Value of securities transactions cleared	nap	nap	nap	nap	nap
of which: value of repurchase transactions					
cleared	nav	nav	nav	nav	nav
Value of exchange-traded derivatives contracts					
cleared	3,599.7	4,016.8	4,697.2	6,252.6	5,749.3
financial futures	3,573.1	3,984.9	4,670.4	6,220.1	5,722.1
financial options	26.5	31.9	26.8	32.4	27.2
other financial derivatives	nav	nav	nav	nav	nav
commodity futures	nav	nav	nav	nav	nav
commodity options	nav	nav	nav	nav	nav
other commodity derivatives	nav	nav	nav	nav	nav
Value of OTC derivatives contracts cleared	36690.0	32793.5	22301.4	24741.5	20056.7

Table 22 Number of direct participants in CSDs (end of year)

	2012	2013	2014	2015	2016
Euroclear Sweden					
Total number of participants	53	53	52	49	46
central bank	1	1	1	1	1
central counterparties (CCPs)	4	4	3	4	4
central securities depositories	1	1	1	1	1
banks .	24	26	19	15	22
other	23	21	28	28	18
Number of domestic participants	39	41	40	36	29
central bank	1	1	1	1	1
central counterparties (CCPs)	1	1	1	1	1
central securities depositories	0	0	0	0	0
banks .	21	20	15	11	15
other	16	19	23	23	12
Number of foreign participants	14	12	12	13	17
central bank	0	0	0	0	0
central counterparties (CCPs)	3	3	2	3	3
central securities depositories	1	1	1	1	1
banks .	4	6	4	4	7
other	6	2	5	5	6

Table 24
Value of securities held on accounts at CSDs (SEK billions, end of year)

2012 2013 2014 2015 2016 **Euroclear Sweden** Total value of securities held 10,342.0 11,387.0 9,070.4 11,882.8 13,295.5 debt securities 2,828.0 3,047.0 3,429.8 3,645.4 3,147.0 250.0 454.7 short-term paper 270.0 269.0 427.0 bonds 2,558.0 2,797.0 2,878.0 3,002.8 3,190.7 equity 4,534.0 5,371.0 5,677.4 6,087.0 7,177.6 other 2,980.0 2,969.0 246.0 2,366.0 2,472.5

Table 25
Number of delivery instructions processed (millions, total for the year)

	2012	2013	2014	2015	2016
Euroclear Sweden					
Total number of delivery instructions	11.384	12.572	14.111	13.282	13.870
DVP	9.77	11.076	12.449	11.470	11.819
debt securities	0.419	0.427	0.405	0.406	0.350
short-term paper	0.028	0.022	0.022	0.018	0.021
bonds	0.391	0.405	0.383	0.388	0.329
equity	8.358	9.72	10.732	8.994	9.434
other	0.993	0.929	1.312	2.070	2.035
free of payment	1.614	1.496	1.662	1.812	2.051
debt securities	0.171	0.149	0.149	0.147	0.160
short-term paper	0.013	0.009	0.01	0.007	0.007
bonds	0.158	0.14	0.139	0.140	0.153
equity	1.382	1.3	1.456	1.566	1.784
other	0.061	0.047	0.057	0.099	0.107

Table 26
Value of delivery instructions processed (SEK billions, total for the year)

	2012	2013	2014	2015	2016
Euroclear Sweden					
Total value of delivery instructions	93,580.4	92,946.0	85,305.0	92,982.0	96,320.0
DVP	78,481.1	75,667.8	67,418.0	74,619.0	75,295.6
debt securities	71,737.5	68,072.9	58,951.0	64,109.0	64,938.8
short-term paper	2,455.1	2,872.1	3,446.0	2,252.0	4,626.1
bonds	69,282.4	65,200.8	55,505.0	61,857.0	60,312.7
equity	6,692.1	7,537.8	8,396.0	10,382.0	10,255.2
other	51.5	57.1	71.0	128.0	101.6
free of payment	15,099.3	17,278.2	17,887.0	18,363.0	21,024.4
debt securities	7,839.2	9,326.1	10,977.0	11,559.0	10,466.8
short-term paper	534.8	1,339.9	2,068.0	1,310.0	2,751.2
bonds	7,304.3	7,986.2	8,909.0	10,249.0	7,715.6
equity	4,254.7	5,056.0	5,585.0	6,440.0	8,191.5
other	3,005.5	2,896.1	1,325.0	364.0	2,366.1

Table 1
Basic statistical data

	2012	2013	2014	2015	2016
Population (thousands) ¹	7,996.9	8,089.4	8,188.7	8,282.4	8,373.3
GDP (CHF billions)	626.41	638.18	649.72	653.74	658.98
GDP per capita (CHF)	78,333	78,891	79,344	78,931	78,700
Consumer price inflation (%)	-0.7	-0.2	0.0	-1.1	-0.4
Exchange rate (CHF/USD):					
end of year	0.9150	0.8901	0.9904	0.9952	1.0188
average	0.9387	0.9273	0.9155	0.9629	0.9853

¹ Yearly average.

Table 2 Settlement media used by non-banks

(CHF billions, end of year)

	2012	2013	2014	2015	2016
Notes and coin in circulation outside banks	56.93	60.48	62.69	68.58	73.63
Value of transferable deposits ¹	334.86	339.26	328.88	332.90	377.55
Other	145.13	154.69	175.64	157.81	141.92
Narrow money supply (M1)	536.92	554.43	567.21	559.30	593.11
Memo:					
Transferable deposits in foreign currencies	80.43	96.20	107.43	96.42	101.59
Outstanding value on e-money storage ²	0.016	0.012	0.560	0.540	0.510
on card-based products ²	0.016	0.012	0.560	0.540	0.510
on software- or network-based products	nap	nap	nap	nap	nap

¹ Sight deposits. ² In 2014, the reporting population and the survey approach for e-money were adjusted, so that some data may not be directly comparable with those of previous years.

Table 3
Settlement media used by banks

(CHF billions, average for December)¹

	2012	2013	2014	2015	2016
Transferable balances held at the central bank ²	284.99	319.33	332.41	403.26	465.09
required reserves	nap	nap	nap	nap	nap
free reserves	nap	nap	nap	nap	nap
Transferable balances held at other banks	96.91	94.82	79.22	69.59	82.52
Memo:					
Credit extended by the central bank:					
intraday ³	2.25	1.86	1.55	1.63	1.06
overnight	nav	nav	nav	nav	nav
longer refinancing operations (repos) ⁴	9.423	0.000	0.001	0.000	0.009

¹ Except for transferable balances held at other banks, which are at end of year. ² Includes only sight deposits that are held by banks at the central bank and that are eligible as minimum reserves. Excludes sight deposits at the central bank held by institutions that are not obliged to hold minimum reserves. Banks have to meet minimum reserve requirements, for which vault cash in CHF (banknotes and coin) and all their sight deposits at the central bank are allowable. Therefore, the distinction between required and free reserves is not meaningful. ³ Average daily utilisation of the intraday facility. ⁴ Average level outstanding at the end of the day. Includes repo transactions up to one year (including overnight repos).

Table 4
Banknotes and coin
(CHF millions, end of year)

	2012	2013	2014	2015	2016
Total banknotes and coin issued	64,703.93	68,720.85	70,606.56	75,943.33	81,179.00
Total banknotes issued	61,801.38	65,766.36	67,595.81	72,881.89	78,084.37
CHF 1,000	<i>37,420.80</i>	40,033.91	40,536.11	<i>45,213.28</i>	48,259.10
CHF 500 ¹	115.40	111.77	108.38	104.79	102.61
CHF 200	8,839.88	9,526.92	10,152.68	10, 4 28.91	11,432.52
CHF 100	10,635.83	11,210.02	11,750.49	12,076.75	12,938.52
CHF 50	2,427.37	2,488.30	2,587.63	2,582.60	2,851.00
CHF 20	1,643.58	1,666.39	1,714.86	1,721.76	1,734.99
CHF 10	718.63	729.17	745.76	753.93	765.75
Total coin issued ²	2,902.56	2,954.49	3,010.75	3,061.44	3,094.62
of which:					
CHF 5	942.84	959.22	976.84	990.84	1,000.60
CHF 2	658.35	671.39	686.36	699.46	708.73
CHF 1	439.90	447.46	<i>4</i> 57.33	466.16	471.55
CHF 0.50	390.34	397.96	406.07	414.17	418.85
CHF 0.20	202.06	205.65	208.64	212.77	215.04
CHF 0.10	107.24	109.27	111.02	112.48	113.55
CHF 0.05	51.39	53.86	<i>55.5</i> 2	<i>57.44</i>	58.90
CHF 0.01	2.41	2.41	2.41	2.41	2.41
Banknotes and coin held by banks	7,770.50	8,240.83	7,919.80	7,362.00	7,547.01
Banknotes and coin in circulation outside banks	56,933.43	60,480.02	62,686.76	68,581.30	73,631.99

¹ The CHF 500 banknotes were recalled as of 1 May 2000 and are thus no longer legal tender. However, they can be exchanged at the Swiss National Bank at full nominal value for 20 years from this recall date, ie until 30 April 2020. ² Including commemorative coins in CHF 10, 20, 50, 100, 250 denominations.

Table 5
Institutions offering payment services to non-banks (end of year)

Central bank Number of branches or offices 8 8 8 8 8 8 Number of accounts, all (thousands) 2 0.490 0.468 0.462 0.449 0.428 0.490 0.468 0.462 0.449 0.428 0.490 0.468 0.462 0.449 0.428 0.490 0.468 0.462 0.449 0.428 0.490 0.468 0.462 0.469 0.428 0.490 0.468 0.462 0.467.71 528.71 0.467.71 528.71 0.467.71 0.428 0.462 0.467.71 0.428 0.462 0.469 0.468 0.462 0.467.71 0.428 0.462		2012	2013	2014	2015	2016
Number of accounts, all (CHF billions)³ 0.490 0.468 0.462 0.449 0.428 Value of accounts, all (CHF billions)³ 368.44 362.54 386.27 467.71 528.71 Banks Number of institutions 297 283 275 266 261 Number of branches or offices 2.587 2.579 2.548 2.469 2.333 Number of accounts (CHF billions)⁴ 264.27 332.19 321.32 325.90 370.59 All banks except private banks and branches of foreign banks Winder of institutions 264.27 332.19 321.32 325.90 370.59 Number of institutions 256 245 241 233 229 Number of branches or offices 2,522 2,525 2,499 2,423 2,338 Number of branches or offices 13 11 7 7 6 Number of branches or offices 27 19 10 10 10 Value of accounts (CHF billions) 13.01 14.81 1.91 <t< td=""><td>Central bank</td><td></td><td></td><td></td><td></td><td>_</td></t<>	Central bank					_
Value of accounts, all (CHF billions)³ 368.44 362.54 386.27 467.71 528.71 Banks Number of institutions 2.97 2.83 2.75 2.66 261 Number of branches or offices 2.587 2.579 2.548 2.469 2.333 Number of accounts (CHF billions)⁴ 264.27 332.19 321.32 325.90 370.59 All banks except private banks and branches of foreign banks 256 245 241 233 229 Number of branches or offices 2.522 2.525 2.499 2.423 2,338 Value of accounts (CHF billions) 249.51 315.28 317.54 321.34 365.85 Private banks 13 11 7 7 6 Number of institutions 13 11 7 7 6 Number of branches or offices 27 19 10 10 10 Value of accounts (CHF billions) 13.01 14.81 1.91 1.66 1.69	Number of branches or offices ¹	8	8	8	8	8
Number of institutions 297 283 275 266 261 Number of branches or offices 2,587 2,579 2,548 2,469 2,383 Number of accounts (CHF billions)	Number of accounts, all (thousands) ²	0.490	0.468	0.462	0.449	0.428
Number of institutions 297 283 275 266 261 Number of branches or offices 2,587 2,579 2,548 2,469 2,383 Number of accounts (CHF billions) ⁴ 264.27 332.19 321.32 325.90 370.59 All banks except private banks and branches of foreign banks: Number of institutions 256 245 241 233 229 Number of branches or offices 2,522 2,525 2,499 2,423 2,338 Value of accounts (CHF billions) 249.51 315.28 317.54 321.34 365.85 Private banks 2,522 2,525 2,499 2,423 2,338 Value of accounts (CHF billions) 13 11 7 7 6 Number of branches or offices 27 19 10 10 10 Value of accounts (CHF billions) 13.01 14.81 1.91 1.66 1.69 Branches of foreign banks 28 27 27 26 26 26 Number of br	Value of accounts, all (CHF billions) ³	368.44	362.54	386.27	467.71	528.71
Number of branches or offices 2,587 2,579 2,548 2,469 2,383 Number of accounts nav	Banks					
Number of accounts (CHF billions) ⁴ 264.27 332.19 321.32 325.90 370.59 All banks except private banks and branches of foreign banks: Number of institutions 256 245 241 233 229 Number of branches or offices 2,522 2,525 2,499 2,423 2,338 Value of accounts (CHF billions) 249.51 315.28 317.54 321.34 365.85 Private banks 13 11 7 7 6 Number of institutions 13 11 7 7 6 Number of branches or offices 27 19 10 10 10 Value of accounts (CHF billions) 13.01 14.81 1.91 1.66 1.69 Branches of foreign banks 1	Number of institutions	297	283	275	266	261
Value of accounts (CHF billions) ⁴ 264.27 332.19 321.32 325.90 370.59 All banks except private banks and branches of foreign banks: Value of institutions 256 245 241 233 229 Number of branches or offices 2,522 2,525 2,499 2,423 2,338 Value of accounts (CHF billions) 249.51 315.28 317.54 321.34 365.85 Private banks 3 317.52 317.54 321.34 365.85 Private banks 1 1 7 7 6 Number of institutions 13 11 7 7 6 Number of branches or offices 27 19 10 10 10 Value of accounts (CHF billions) 13.01 14.81 1.91 1.66 1.69 Branches of foreign banks 28 27 27 26 26 Number of branches or offices 38 35 39 36 35 Value of accounts (CHF billions) 1 nap	Number of branches or offices	2,587	2,579	2,548	2,469	2,383
Number of institutions 256 245 241 233 229 Number of branches or offices 2,522 2,525 2,499 2,423 2,338 Value of accounts (CHF billions) 249.51 315.28 317.54 321.34 365.85 Private banks 13 11 7 7 6 Number of institutions 13 11 7 7 6 Number of branches or offices 27 19 10 10 10 10 Value of accounts (CHF billions) 13.01 14.81 1.91 1.66 1.69 Branches of foreign banks 28 27 27 26 26 Number of institutions 28 27 27 26 26 Number of branches or offices 38 35 39 36 35 Value of accounts (CHF billions) 1.75 2.10 1.87 2.90 3.04 Other institutions offering payment services to non-banks 1 nap nap nap nap Number of institutions 1 nap nap nap nap nap Number of branches or offices 2,226 nap nap nap nap Number of accounts (thousands) 4,549 nap nap nap nap Value of accounts (CHF billions) 99.16 nap nap nap nap Number of institutions 299 284 276 267 262 Number of branches or offices 4,821 2,587 2,556 2,477 2,391 Number of branches or offices 4,821 2,587 2,556 2,477 2,391 Number of accounts held by non-banks nav nav nav nav nav Value of accounts held by non-banks nav nav nav nav Value of accounts held by non-banks nav nav nav nav CHF billions 731.87 694.73 707.59 793.61 899.30 Memo: Electronic money institutions 1 1 nav nav nav Outstanding value on e-money storages issued by 10 10 10 Value of institutions 1 1 nav nav nav Outstanding value on e-money storages issued by 10 10 Outstanding value on e-money storages issued by 10 10 Outstanding value on e-money storages issued by 10 10 Outstanding value on e-money storages issued by 10 10 Outstanding value on e-money storages issued by 10 10 Outstanding value on e-money storages issued by	Number of accounts	nav	nav	nav	nav	nav
Number of institutions 256 245 241 233 229 Number of branches or offices 2,522 2,525 2,499 2,423 2,338 Value of accounts (CHF billions) 249.51 315.28 317.54 321.34 365.85 Private banks 8 317.54 321.34 365.85 Number of institutions 13 11 7 7 6 Number of branches or offices 27 19 10 10 10 Value of accounts (CHF billions) 13.01 14.81 1.91 1.66 16.9 Branches of foreign banks 1 1.481 1.91 1.06 1.0 Number of institutions 28 27 27 26 26 Number of branches or offices 38 35 39 36 35 Value of accounts (CHF billions) 1.75 2.10 1.87 2.90 3.04 Other institutions offering payment services to non-banks for institutions (thousands) 4,549 nap nap	Value of accounts (CHF billions) ⁴	264.27	332.19	321.32	325.90	370.59
Number of branches or offices 2,522 2,525 2,499 2,423 2,338 Value of accounts (CHF billions) 249.51 315.28 317.54 321.34 365.85 Private banks Number of institutions 13 11 7 7 6 Number of branches or offices 27 19 10 10 10 Value of accounts (CHF billions) 13.01 14.81 1.91 1.66 1.69 Branches of foreign banks Number of institutions 28 27 27 26 26 Number of branches or offices 38 35 39 36 35 Value of accounts (CHF billions) 1.75 2.10 1.87 2.90 3.04 Other institutions offering payment services to non-banks ⁵ Number of institutions offices ⁶ 2,226 nap nap nap nap Number of accounts (CHF billions) ⁷ 99.16 nap nap nap nap Number of institutions 299<	All banks except private banks and branches of	foreign bank	(S			
Value of accounts (CHF billions) 249.51 315.28 317.54 321.34 365.85 Private banks Number of institutions 13 11 7 7 6 Number of branches or offices 27 19 10 10 10 Value of accounts (CHF billions) 13.01 14.81 1.91 1.66 1.69 Branches of foreign banks 28 27 27 26 26 Number of institutions or offices 38 35 39 36 35 Value of accounts (CHF billions) 1.75 2.10 1.87 2.90 3.04 Other institutions offering payment services to non-banks ⁵ Number of institutions 1 nap	Number of institutions	256	245	241	233	229
Private banks Number of institutions 13 11 7 7 6 Number of branches or offices 27 19 10 10 10 Value of accounts (CHF billions) 13.01 14.81 1.91 1.66 1.69 Branches of foreign banks Number of institutions 28 27 27 26 26 Number of branches or offices 38 35 39 36 35 Value of accounts (CHF billions) 1.75 2.10 1.87 2.90 3.04 Other institutions offering payment services to non-banks* Number of institutions 1 nap nap <t< td=""><td>Number of branches or offices</td><td>2,522</td><td>2,525</td><td>2,499</td><td>2,423</td><td>2,338</td></t<>	Number of branches or offices	2,522	2,525	2,499	2,423	2,338
Number of institutions 13 11 7 7 6 Number of branches or offices 27 19 10 10 10 Value of accounts (CHF billions) 13.01 14.81 1.91 1.66 1.69 Branches of foreign banks Number of institutions 28 27 27 26 26 Number of branches or offices 38 35 39 36 35 Value of accounts (CHF billions) 1.75 2.10 1.87 2.90 3.04 Other institutions offering payment services to non-banks* Number of institutions offering payment services to non-banks* 1 nap	· · · · · · · · · · · · · · · · · · ·	249.51	315.28	317.54	321.34	365.85
Number of branches or offices 27 19 10 10 10 Value of accounts (CHF billions) 13.01 14.81 1.91 1.66 1.69 Branches of foreign banks 8 Number of institutions 28 27 27 26 26 Number of branches or offices 38 35 39 36 35 Value of accounts (CHF billions) 1.75 2.10 1.87 2.90 3.04 Other institutions offering payment services to non-banks* Number of branches or offices ⁶ 2,226 nap nap nap nap Number of accounts (thousands) 4,549 nap nap nap nap Value of accounts (CHF billions) ⁷ 99.16 nap nap nap nap Number of branches or offices ⁶ 4,821 2,587 2,556 2,477 2,391 Number of branches or offices ⁶ 4,821 2,587 2,556 2,477 2,391 Number of accounts held by non-banks 731.87 <	Private banks					
Value of accounts (CHF billions) Branches of foreign banks Number of institutions Rumber of institutions Number of institutions Value of accounts (CHF billions) Number of branches or offices Number of institutions offering payment services to non-banks Number of institutions Number of institutions Number of branches or offices Number of branches or offices Number of accounts (thousands) Number of accounts (CHF billions) Number of accounts (CHF billions) Number of institutions Number of institutions Number of institutions Number of institutions Number of accounts (CHF billions) Number of accounts held by non-banks Number of institutions Number of institution	Number of institutions	13	11	7	7	6
Branches of foreign banks Number of institutions 28 27 27 26 26 Number of branches or offices 38 35 39 36 35 Value of accounts (CHF billions) 1.75 2.10 1.87 2.90 3.04 Other institutions offering payment services to non-banks Number of institutions 1 nap nap nap nap nap Number of branches or offices 2,226 nap nap nap nap nap Number of accounts (thousands) 4,549 nap nap nap nap nap Number of accounts (CHF billions) 1 nap nap nap nap Number of accounts (CHF billions) 1 nap nap nap nap nap Number of accounts (thousands) 1 (2,226 nap nap nap nap nap nap Number of accounts (CHF billions) 1 (2,226 nap nap nap nap nap nap Number of accounts (CHF billions) 1 (2,226 nap nap nap nap nap nap Number of accounts (CHF billions) 1 (2,226 nap nap nap nap nap nap nap Number of accounts (CHF billions) 1 (2,226 nap nap nap nap nap nap nap nap nap Number of accounts held by non-banks (total) Number of institutions 1 (2,587 2,556 2,477 2,391) Number of accounts held by non-banks nav nav nav nav nav nav nav nav Nalue of accounts held by non-banks (CHF billions) 1 (2,587 2,556 2,477 2,391) Number of accounts held by non-banks (CHF billions) 1 (3,187 694.73 707.59 793.61 899.30) Memo: Electronic money institutions Number of institutions 1 1 nav nav nav nav nav Outstanding value on e-money storages issued by	Number of branches or offices	27	19	10	10	10
Number of institutions 28 27 27 26 26 26 Number of branches or offices 38 35 39 36 35 Value of accounts (CHF billions) 1.75 2.10 1.87 2.90 3.04 Other institutions offering payment services to non-banks Number of institutions of branches or offices 2,226 nap nap nap nap nap nap nap Number of accounts (thousands) 4,549 nap	Value of accounts (CHF billions)	13.01	14.81	1.91	1.66	1.69
Number of branches or offices 38 35 39 36 35 Value of accounts (CHF billions) 1.75 2.10 1.87 2.90 3.04 Other institutions offering payment services to non-banks Number of institutions 1 nap						
Value of accounts (CHF billions) 1.75 2.10 1.87 2.90 3.04 Other institutions offering payment services to non-banks Number of institutions 1 nap						
Other institutions offering payment services to non-banks ⁵ Number of institutions 1 nap nap nap nap nap Number of branches or offices ⁶ 2,226 nap nap nap nap nap Number of accounts (thousands) 4,549 nap nap nap nap nap Value of accounts (CHF billions) ⁷ 99.16 nap nap nap nap nap Number of institutions offering payment services to non-banks (total) Number of institutions 299 284 276 267 262 Number of branches or offices ⁶ 4,821 2,587 2,556 2,477 2,391 Number of accounts held by non-banks nav nav nav nav nav nav Value of accounts held by non-banks (CHF billions) 731.87 694.73 707.59 793.61 899.30 Memo: Electronic money institutions Number of institutions 1 1 nav nav nav Outstanding value on e-money storages issued by						
Number of institutions 1 nap nap nap nap nap nap Number of branches or offices ⁶ 2,226 nap nap nap nap nap nap Number of accounts (thousands) 4,549 nap nap nap nap nap nap Nap Naber of accounts (CHF billions) ⁷ 99.16 nap	Value of accounts (CHF billions)	1.75	2.10	1.87	2.90	3.04
Number of institutions 1 nap nap nap nap nap nap Number of branches or offices ⁶ 2,226 nap nap nap nap nap nap Number of accounts (thousands) 4,549 nap nap nap nap nap nap Nap Naber of accounts (CHF billions) ⁷ 99.16 nap	Other institutions offering payment services to no	n-banks ⁵				
Number of accounts (thousands) Value of accounts (CHF billions) ⁷ 99.16 nap nap nap nap nap nap nap nap nap na			nap	nap	nap	nap
Number of accounts (thousands) 4,549 nap N	Number of branches or offices ⁶	2,226	nap	nap	nap	nap
Value of accounts (CHF billions) ⁷ 99.16 nap nap nap nap nap nap nap na	Number of accounts (thousands)		•	-	nap	-
Number of institutions 299 284 276 267 262 Number of branches or offices ⁶ 4,821 2,587 2,556 2,477 2,391 Number of accounts held by non-banks nav N	``		•	•		nap
Number of institutions 299 284 276 267 262 Number of branches or offices ⁶ 4,821 2,587 2,556 2,477 2,391 Number of accounts held by non-banks nav N	Institutions offering payment services to non-bank	ks (total)				
Number of accounts held by non-banks Value of accounts held by non-banks (CHF billions) 731.87 694.73 707.59 793.61 899.30 Memo: Electronic money institutions Number of institutions Outstanding value on e-money storages issued by			284	276	267	262
Number of accounts held by non-banks Value of accounts held by non-banks (CHF billions) 731.87 694.73 707.59 793.61 899.30 Memo: Electronic money institutions Number of institutions Outstanding value on e-money storages issued by	Number of branches or offices ⁶	4,821	2,587	2,556	2,477	2,391
Value of accounts held by non-banks (CHF billions) 731.87 694.73 707.59 793.61 899.30 Memo: Electronic money institutions Number of institutions 1 1 nav nav nav Outstanding value on e-money storages issued by		•	•	•	· ·	•
(CHF billions) 731.87 694.73 707.59 793.61 899.30 Memo: Electronic money institutions Number of institutions 1 1 nav nav nav Outstanding value on e-money storages issued by	· ·					
Electronic money institutions Number of institutions 1 1 nav nav Outstanding value on e-money storages issued by	•	731.87	694.73	707.59	793.61	899.30
Number of institutions 1 1 nav nav nav Outstanding value on e-money storages issued by	Memo:					
Outstanding value on e-money storages issued by	Electronic money institutions					
	Number of institutions	1	1	nav	nav	nav
e-money institutions (CHF billions) ⁸ 0.016 0.012 0.560 0.540 0.510	Outstanding value on e-money storages issued by					
	e-money institutions (CHF billions) ⁸	0.016	0.012	0.560	0.540	0.510

¹ The Swiss National Bank (SNB) has two head offices (Berne and Zurich) and six representative offices (Basel, Geneva, Lausanne, Lucerne, Lugano and St Gallen). ² Number of sight deposits of banks and non-banks held at the SNB. ³ Not included in the figure for M1 in Table 2. ⁴ This value is less than that included in the figure for transferable deposits in Table 2 due to differences in the way the figures are compiled. ⁵ PostFinance until 2012. Since mid-2013, PostFinance has held a banking license. As of 2013, data relating to PostFinance are reported under "Banks". ⁶ Up to 2012, this figure included post offices and agencies of Swiss Post that offered payment services on behalf of PostFinance. ⁷ Yearly average. ⁸ In 2014, the reporting population and the survey approach for e-money were adjusted, so that it is difficult to compare some of the data to those of previous years.

Table 6
Payment card functions and accepting devices¹
(end of year)

	2012	2013	2014	2015	2016
Cards issued in the country (thousands) ²					
Cards with a cash function ³	14,622.8	15,238.0	nav	nav	nav
Cards with a debit function	8,865.0	9,109.0	9,809.2	10,061.9	10,488.0
Cards with a credit function ⁴	5,766.1	6,146.7	6,008.1	6,192.1	6,346.0
Cards with an e-money function ^{1, 5}	1,532.7	223.0	2,133.5	2,272.1	2,402.4
of which: cards with an e-money function which					
have been loaded at least once	nav	nav	nav	nav	nav
Total number of cards (irrespective of the number					
of functions on the card) ⁶	14,688.3	15,299.6	17,950.8	18,526.0	19,236.3
of which: cards with a combined debit, cash and					
e-money function ⁷	1,475.5	179.1	nav	nav	nav
Мето:					
Retailer cards	nav	nav	nav	nav	nav
Terminals located in the country					
ATMs	6,759	6,820	6,813	6,966	7,019
ATMs with a cash withdrawal function	6,759	6,820	6,813	6,966	7,019
ATMs with a credit transfer function	nav	nav	nav	nav	nav
POS terminals	170,074	166,589	243,219	250,578	272,091
EFTPOS terminals	170,074	166,589	243,219	250,578	272,091
E-money card terminals ⁷	20,560	20,515	nav	nav	nav
e-money card loading/unloading terminals ⁷	6,759	6,820	nav	nav	nav
e-money card payment terminals ⁷	13,801	13,695	nav	nav	nav

¹ Between November 2014 and December 2014, the reporting population and the survey approach for debit cards, credit cards, e-money, ATMs, POS terminals and e-money card terminals were adjusted, so that some data of 2014 may not be directly comparable with those of previous years. ² The number of payment cards issued and active (ie not blocked or cancelled). ³ As of 2014, data are no longer collected, as most cards reported under debit cards, credit cards and e-money cards can be used for cash withdrawals. ⁴ Includes delayed debit cards/charge cards. ⁵ As of 2014 includes prepaid cards with multiple uses; also prepaid cards by international card schemes. ⁶ The number of credit, debit and e-money functions on cards issued in the country. ⁷ As of 2014 data are no longer collected.

Table 7
Indicators of the use of payment instruments and terminals by non-banks: volume of transactions¹
(millions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers ²	928.00	950.31	961.28	976.01	973.92
paper-based	291.5	280.24	264.95	251.62	235.40
non-paper-based	636.5	670.07	696.34	<i>724.39</i>	738.52
Direct debits ²	55.39	56.76	57.70	58.52	59.70
Card payments with cards issued in the country ³	651.31	701.11	778.47	965.35	1,082.13
payments by cards with a debit function ³	435.57	460.88	508.76	668.90	<i>737.4</i> 8
payments by cards with a credit function ⁴	215.74	240.23	269.71	296.45	344.65
E-money payment transactions ⁵	2.80	1.37	nav	22.50	30.30
by cards with an e-money function	2.80	1.37	nav	22.50	30.30
through other e-money storages	nap	nap	nap	nap	nav
Cheques ⁶	0.27	0.21	nav	nav	nav
Total number of transactions with payment					
instruments ³	1,637.77	1,709.76	1,797.45	2,022.38	2,146.05
of which: cross-border transactions sent	nav	nav	nav	nav	nav
Memo:					
Cross-border transactions received	nav	nav	nav	nav	nav
Transactions per type of terminal					
Total transactions at terminals in the country					
Cash transactions	128.20	130.36	131.47	136.61	134.74
ATM cash withdrawals	128.20	130.36	131.47	136.61	134.74
ATM cash deposits	nap	nap	nap	nap	nap
POS payment transactions ^{3, 7}	587.00	626.02	694.20	864.08	970.18
E-money card loading/unloading transactions	0.19	0.09	nav	2.79	3.89
E-money card payment transactions ⁵	2.80	1.37	nav	7.39	11.22
a) Transactions at terminals in the country by cards	issued in the o	country			
Cash transactions	122.36	124.54	125.64	130.99	129.31
ATM cash withdrawals	122.36	124.54	125.64	130.99	129.31
ATM cash deposits	nap	nap	nap	nap	nap
POS payment transactions ^{3, 7}	537.56	571.95	636.03	812.61	909.38
E-money card loading/unloading transactions	0.19	0.09	nav	2.79	3.89
E-money card payment transactions ⁵	2.80	1.37	nav	6.78	9.91
For the footnotes, see the end of the table.					

Table 7	(1
Table /	CONT

	2012	2013	2014	2015	2016
b) Transactions at terminals in the country by cards	issued outside	the country			
Cash transactions	5.83	5.82	5.83	5.63	5.43
ATM cash withdrawals	5.83	5.82	5.83	5.63	<i>5.4</i> 3
ATM cash deposits	nap	nap	nap	nap	nap
POS payment transactions ^{3, 7}	49.44	54.08	58.17	51.46	60.81
E-money card loading/unloading transactions	nap	nap	nap	nap	nap
E-money card payment transactions ⁵	nap	nap	nav	0.6	1.31
c) Transactions at terminals outside the country by c	ards issued in	the country			
Cash transactions	15.85	16.63	17.13	18.91	18.42
ATM cash withdrawals	15.85	16.63	17.13	18.91	18. 4 2
ATM cash deposits	nap	nap	nap	nap	nap
POS payment transactions	113.74	129.17	142.43	152.74	172.75
E-money card loading/unloading transactions	nap	nap	nap	nap	nap
E-money card payment transactions ⁵	nap	nap	nav	15.7	20.39

¹ Between November 2014 and December 2014, the reporting population and the survey approach for debit cards, credit cards and e-money cards were adjusted, so that some data of 2014 may not be directly comparable with those of previous years. ² Due to the change in the survey concept and reporting population for credit transfers and direct debits in Switzerland, data as of 2012 do not fully compare with those of previous years. ³ Debit card data reported in Red Book publications of 2013 and earlier included transactions where debit cards were used to authorise credit transfers. In 2014, data were retrospectively adjusted back to 2005 to include only debit card payments for goods and services. ⁴ Includes delayed debit cards/charge cards. ⁵ As of 2015, includes transactions of prepaid cards with multiple uses; also prepaid cards by international card schemes. ⁶ As of 2014, data on cheques are no longer collected, since this payment instrument has declined significantly in importance. ⁷ Includes debit and credit card payments performed at any kind of point of sale also in card-not-present situations (eg e-commerce).

Table 8
Indicators of the use of payment instruments and terminals by non-banks: value of transactions¹
(CHF billions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers ²	3,973.65	3,950.72	4,003.37	4,653.24	4,250.79
paper-based ³	650.6	585.74	566.74	892.16	503.23
non-paper-based	3,323.0	3,364.98	3,436.64	3,761.08	3,747.55
Direct debits ²	82.57	85.41	85.05	81.83	81.04
Card payments with cards issued in the country ⁴	64.12	67.04	70.59	79.16	82.81
payments by cards with a debit function ⁴	33.29	34.34	36.08	44.31	45.99
payments by cards with a credit function ⁵	30.83	32.70	34.51	34.85	36.82
E-money payment transactions ⁶	0.01	0.01	nav	1.54	1.93
by cards with an e-money function	0.01	0.01	nav	1.54	1.93
through other e-money storages	nap	nap	nap	nap	nap
Cheques ⁷	1.15	0.93	nav	nav	nav
Total value of transactions with payment					
instruments ⁴	4,121.50	4,104.11	4,159.01	4,815.77	4,416.57
of which: cross-border transactions sent	nav	nav	nav	nav	nav
Memo:					
Cross-border transactions received	nav	nav	nav	nav	nav
Transactions per type of terminal					
Total transactions at terminals in the country					
Cash transactions	27.39	27.78	28.07	30.64	30.27
ATM cash withdrawals	27.39	27.78	28.07	30.64	30.27
ATM cash deposits	nap	nap	nap	nap	nap
POS payment transactions ^{4, 8}	54.92	56.92	59.63	68.30	71.09
E-money card loading/unloading transactions	0.01	0.01	nav	2.02	2.15
E-money card payment transactions ⁶	0.01	0.01	nav	0.52	0.72
a) Transactions at terminals in the country by cards	issued in the o	country			
Cash transactions	26.13	26.54	26.83	29.47	29.13
ATM cash withdrawals	26.13	26.54	26.83	29.47	29.13
ATM cash deposits	nap	nap	nap	nap	nap
POS payment transactions4 ^{, 8}	47.50	48.94	51.33	59.89	62.50
E-money card loading/unloading transactions	0.01	0.01	nav	2.02	2.15
E-money card payment transactions ⁶	0.01	0.01	nav	0.42	0.53
For the footnotes, see the end of the table.					

	2012	2013	2014	2015	2016
b) Transactions at terminals in the country by cards is	ssued outside t	he country			
Cash transactions	1.25	1.24	1.24	1.17	1.15
ATM cash withdrawals	1.25	1.24	1.24	1.17	1.15
ATM cash deposits	nap	nap	nap	nap	nap
POS payment transactions ^{4, 8}	7.41	7.98	8.33	8.42	8.60
E-money card loading/unloading transactions	nap	nap	nap	nap	nap
E-money card payment transactions ⁶	nap	nap	nav	0.10	0.19
c) Transactions at terminals outside the country by ca	ards issued in t	he country			
Cash transactions	4.25	4.45	4.47	4.93	4.74
ATM cash withdrawals	4.25	4.45	4.47	4.93	4.74
ATM cash deposits	nap	nap	nap	nap	nap
POS payment transactions	16.61	18.10	19.26	19.27	20.32
E-money card loading/unloading transactions	nap	nap	nap	nap	nap
E-money card payment transactions ⁶	nap	nap	nav	1.12	1.40

¹ Between November 2014 and December 2014, the reporting population and the survey approach for debit cards, credit cards and e-money cards were adjusted, so that some data of 2015 may not be directly comparable with those of previous years. ² Due to the change in the survey concept and reporting population for credit transfers and direct debits in Switzerland, data as of 2012 do not fully compare with those of previous years. ³ Deviation in 2015 value is due to substantial one-time bank payments that were exceptionally initiated in paper form by institutional investors. ⁴ Debit card data reported in Red Book publications of 2013 and earlier included transactions where debit cards were used to authorise credit transfers. In 2014 data was retrospectively adjusted back to 2005 to include only debit card payments for goods and services. ⁵ Includes delayed debit cards/charge cards. ⁶ As of 2015, includes transactions of prepaid cards with multiple uses; also prepaid cards by international card schemes. ⁷ As of 2014, data on cheques are no longer collected, since this payment instrument has declined significantly in importance. ⁸ Includes debit and credit card payments performed at any kind of point of sale also in card-not-present environments (eg e-commerce).

Table 9
Participation in selected interbank funds transfer systems (end of year)

	2012	2013	2014	2015	2016
Swiss Interbank Clearing (SIC)					
Number of participants ¹	378	368	358	350	337
Direct participants	378	368	358	350	337
Banks	358	348	339	332	315
Central bank	1	1	1	1	1
Other direct participants	19	19	18	17	21
General government	1	1	1	1	1
Postal institution ²	1	0	0	0	0
Clearing and settlement organisations	3	3	3	4	7
Other financial institutions	0	0	0	0	0
Other ³	14	15	14	12	13

¹ Payment systems, central counterparties and central securities depositories with a banking licence are reported in the category "Clearing and settlement organisations" and not under the category "Banks". ² PostFinance until 2012. Since mid-2013, PostFinance has held a banking license. As of 2013, data relating to PostFinance are reported under "Banks". ³ From 2010, includes insurance companies. The revised access policy grants insurance companies direct access to SIC as of January 2010 provided they meet the required criteria.

Table 10
Payments processed by selected interbank funds transfer systems: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Large-value and retail payment systems					
Swiss Interbank Clearing (SIC) of which:	410.18	419.95	428.82	440.82	448.28
payments on data carrier or file transfer	nap	nap	nap	nap	nap
cheques	nap	nap	nap	nap	nap
Concentration ratio in terms of volume (%)	62.3	61.8	61.8	61.5	61.9

Table 11
Payments processed by selected interbank funds transfer systems: value of transactions (CHF billions, total for the year)

	2012	2013	2014	2015	2016
Large-value and retail payment systems					
Swiss Interbank Clearing (SIC) of which:	30,243.6	31,945.1	29,752.1	38,889.3	38,961.6
payments on data carrier or file transfer	nap	nap	nap	nap	nap
cheques	nap	nap	nap	nap	nap
Concentration ratio in terms of value (%)	66.6	64.1	66.1	64.2	66.0

Table 12
Participation in SWIFT by domestic institutions (end of year)

	2012	2013	2014	2015	2016
Members	95	95	93	97	94
of which: live	95	95	93	97	93
Sub-members	76	71	71	72	67
of which: live	75	70	70	71	66
Participants	166	179	188	180	194
of which: live	156	169	177	174	182
Total users	337	345	352	349	355
of which: live	326	334	340	342	341
Memo:					
Total SWIFT users	10,279	10,583	10,805	11,094	11,299
members	2,398	2,389	2,379	2,455	2,422
sub-members	3,340	3,343	3,353	3,395	3,367
participants	4,541	4,851	5,073	5,244	5,510
Source: SWIFT.					

Table 13
SWIFT message flows to/from domestic users (thousands, total for the year)

	2012	2013	2014	2015	2016
Total messages sent	132,781	148,514	164,167	167,089	167,540
of which:					
category I	19,643	19,631	20,987	24,240	24,491
category II	7,058	7,153	7,042	7,461	6,691
Total messages received of which:	162,436	186,090	209,742	219,688	232,609
category I	14,338	14.707	14,973	15,949	18,483
<u> </u>	,	, -	,	,	•
category II	5,270	5,677	5,996	5,929	6,071
Domestic traffic	34,255	38,566	43,598	44,135	40,646
Memo:					
Global SWIFT traffic	4,589,109	5,065,668	5,612,724	6,106,644	6,525,800
Source: SWIFT.					

Table 14
Number of participants in exchanges and trading systems (end of year)

	2012	2013	2014	2015	2016
SIX Swiss Exchange					
Total number of participants	119	108	107	105	108
banks ¹	119	108	107	105	108
Number of domestic participants ²	57	53	52	52	50
banks ¹	57	53	52	52	50
Number of foreign participants	62	55	55	53	58
banks ¹	62	55	55	53	58

¹ Includes banks and securities dealers. ² Participants are considered domestic if the legal entity is incorporated in Switzerland and regulated by FINMA (Swiss Financial Market Supervisory Authority).

Table 15 Number of listed securities

(end of year)

2012	2013	2014	2015	2016
35,186	37,373	34,941	35,081	32,188
1,629	1,672	1,756	1,788	1,789
1,629	1,672	1,756	1,788	1,789
283	288	289	278	273
33,274	35,413	32,896	33,015	30,126
	35,186 1,629 <i>1,629</i> 283	35,186 37,373 1,629 1,672 1,629 1,672 283 288	35,186 37,373 34,941 1,629 1,672 1,756 1,629 1,672 1,756 283 288 289	35,186 37,373 34,941 35,081 1,629 1,672 1,756 1,788 1,629 1,672 1,756 1,788 283 288 289 278

¹ Some of the securities listed at SIX Swiss Exchange are traded on Scoach Switzerland.

Table 16 Market capitalisation of listed companies

(CHF billions, end of year)

	2012	2013	2014	2015	2016
SIX Swiss Exchange					
Total market capitalisation/equity ¹	1,129.1	1,370.3	1,485.9	1,505.3	1,429.3
1 Market capitalisation encompasses all listed Swis	es domostic oquitios no	froe fleet woid	nting	-	

¹ Market capitalisation encompasses all listed Swiss domestic equities, no free float weighting.

Table 17

Number of executed trades

(thousands, total for the year)

	2012	2013	2014	2015	2016
SIX Swiss Exchange					
Total number of executed securities trades	30,655.5	33,629.6	38,025.6	50,677.0	46,918.6
debt securities	563.7	525.0	526.4	489.7	401.8
bonds	563.7	525.0	526.4	489.7	401.8
equity	29,110.9	31,919.2	36,366.1	48,854.3	45,299.2
other	980.9	1,185.4	1,133.1	1,333.0	1,217.6
Total number of executed derivatives trades	894.1	862.2	806.7	866.3	666.8
financial futures	0	0	0	0	0
financial options	0	0	0	0	0
other financial derivatives	894.1	862.2	806.7	866.3	666.8

Table 18

Value of executed trades

(CHF billions, total for the year)

	2012	2013	2014	2015	2016
SIX Swiss Exchange					
Total value of executed securities trades	860.69	974.11	1,121.32	1,345.60	1,262.92
debt securities	187.07	166.78	178.94	188.25	153.18
bonds	187.07	166.78	178.94	188.25	153.18
equity	590.72	709.74	844.83	1,052.99	997.40
other	82.89	97.59	97.56	104.37	112.35
Total value of executed derivatives trades	31.89	30.33	26.83	26.90	16.37
financial futures	0	0	0	0	0
financial options	0	0	0	0	0
other financial derivatives	31.89	30.33	26.83	26.90	16.37

Table 19

Number of clearing members

(end of year)

	2012	2013	2014	2015	2016
SIX x-clear ¹					
Total number of clearing members ²	70	70	68	66	84
banks	70	70	68	66	84
Number of domestic clearing members ¹	52	50	49	49	47
banks	52	50	49	49	47
Number of foreign clearing members	18	20	19	17	37
banks	18	20	19	17	37

¹ Clearing members are considered domestic if the legal entity is incorporated in Switzerland and regulated by the FINMA (Swiss Financial Market Supervisory Authority). ² Does not include interoperable CCPs.

Table 20

Number of contracts and transactions cleared

(thousands, total for the year)

	2012	2013	2014	2015	2016
SIX x-clear ^{1, 2}					
Total number of contracts and transactions					
cleared	183,046	241,643	315,362	399,493	429,755
Number of securities transactions cleared	183,046	241,643	315,362	399,357	419,964
debt securities	877	832	841	778	625
bonds	877	832	841	778	625
equity	182,169	240,811	314,521	398,569	419,334
other ³	0	0	0	11	4
of which: number of repurchase transactions					
cleared	0	0	0	0	0
Number of exchange-traded derivatives contracts					
cleared	0	0	0	nav	7,188
Number of OTC derivatives contracts cleared	0	0	0	nav	2,603

¹ Transactions cleared between SIX x-clear and a co-CCP are counted once and SIX x-clear only trades are counted twice. ² Due to legal integration of Oslo Clearing ASA into SIX x-clear, as of 1 May 2015 includes data of Oslo Clearing ASA (since then called SIX x-clear Norwegian Branch). ³ Includes clearing of securities lending and borrowing transactions.

Table 21
Value of contracts and transactions cleared

(CHF billions, total for the year)

	2012	2013	2014	2015	2016
SIX x-clear ^{1, 2}					
Total value of contracts and transactions cleared	1,954.0	2,302.2	2,879.1	3,328.1	3,245.3
Value of securities transactions cleared	1,954.0	2,302.2	2,879.1	3,328.1	3,227.2
debt securities	145.2	127.2	133.9	129.1	98.2
bonds	145.2	127.2	133.9	129.1	98.2
equity	1,808.8	2,175.0	2,745.2	3,198.9	3,128.1
other ³	0	0	0	nav	8.0
of which: value of repurchase transactions cleared	0	0	0	0	0
Value of exchange-traded derivatives contracts cleared	0	0	0	nav	18
Value of OTC derivatives contracts cleared	0	0	0	nav	0.5

¹ Transactions cleared between SIX x-clear and LCH.Clearnet Ltd are counted at half the amount. Transactions cleared between SIX x-clear and a co-CCP are counted once and SIX x-clear only trades are counted twice. ² Due to legal integration of Oslo Clearing ASA into SIX x-clear, as of 1 May 2015 includes data of Oslo Clearing ASA (since then called SIX x-clear Norwegian Branch). ³ Includes clearing of securities lending and borrowing transactions.

Table 22 Number of direct participants in CSDs *(end of year)*

	2012	2013	2014	2015	2016
SIX SIS					
Total number of participants	375	367	354	342	327
central bank	nav	nav	nav	nav	nav
central counterparties (CCPs)	nav	nav	nav	nav	nav
central securities depositories	nav	nav	nav	nav	nav
banks	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Number of domestic participants	nav	nav	nav	nav	nav
Number of foreign participants	nav	nav	nav	nav	nav

Table 23 Number of securities held on accounts at CSDs (thousands, end of year)

	2012	2013	2014	2015	2016
SIX SIS					_
Total number of securities held	254.20	285.46	296.35	325.56	336.76
debt securities	nav	nav	nav	nav	nav
equity	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Swiss and Principality of Liechtenstein ISIN					
Total number of securities held	61.75	65.48	70.69	79.91	86.55
debt securities	nav	nav	nav	nav	nav
equity	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Non-Swiss or Principality of Liechtenstein ISIN					
Total number of securities held	189.72	219.99	225.66	245.65	250.21
debt securities	nav	nav	nav	nav	nav
equity	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav

Table 24
Value of securities held on accounts at CSDs

(CHF billions, end of year)

	2012	2013	2014	2015	2016
SIX SIS					
Total value of securities held	2,687.5	2,892.3	3,203.4	3,135.9	3,147.3
debt securities	nav	nav	nav	nav	nav
equity	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Swiss and Principality of Liechtenstein ISIN					
Total value of securities held	2,011.1	2,185.3	2,412.4	2,351.1	2,287.4
debt securities	nav	nav	nav	nav	nav
equity	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Non-Swiss or Principality of Liechtenstein ISIN					
Total value of securities held	676.4	707.0	791.0	784.8	859.9
debt securities	nav	nav	nav	nav	nav
equity	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav

Table 25 Number of delivery instructions processed

(thousands, total for the year)

	2012	2013	2014	2015	2016
SIX SIS					
Total number of delivery instructions ¹	49,817	53,486	55,068	66,919	58,424
DVP	nav	nav	nav	nav	nav
free of payment	nav	nav	nav	nav	nav
Settlement in SIX SIS					
Total number of delivery instructions ^{1, 2}	41,148	42,953	42,789	53,107	44,693
DVP	nav	nav	nav	nav	nav
free of payment	nav	nav	nav	nav	nav
Settlement outside SIX SIS					
Total number of delivery instructions ³	8,670	10,533	12,279	13,812	13,730
DVP	nav	nav	nav	nav	nav
free of payment	nav	nav	nav	nav	nav

¹ Gross before netting; excludes delivery instructions related to transfers between the accounts of the same participant. ² Delivery instructions settled at SIX SIS. ³ Delivery instructions settled at foreign custodian/(I)CSD; gross before netting.

Table 26 Value of delivery instructions processed

(CHF billions, total for the year)

	2012	2013	2014	2015	2016
SIX SIS					
Total value of delivery instructions ¹	5,383.5	3,886.3	4,123.9	6,430.6	5,572.3
DVP	nav	nav	nav	nav	nav
free of payment	nav	nav	nav	nav	nav
¹ Based on settlement values in SIC.					_

Table 1 Basic statistical data

	2012	2013	2014	2015	2016
Population (thousands)	75,627	76,668	77,696	78,741	79,815
GDP (TRY billions)	1,569.7	1,809.7	2,044.5	2,337.5	2,590.5
GDP per capita (TRY)	20,755	23,605	26,314	29,686	32,457
Consumer price inflation (%)	6.2	7.4	8.2	8.8	8.5
Exchange rate (TRY/USD):					
end of year	1.7830	2.1340	2.3190	2.9080	3.5320
average	1.7930	1.9010	2.1880	2.7200	3.0210

Table 2 Settlement media used by non-banks

(TRY billions, end of year)

	2012	2013	2014	2015	2016
Notes and coin in circulation outside banks	54.57	67.76	77.42	94.46	111.76
Value of transferable deposits	0.13	0.16	0.18	0.22	0.27
Other	125.24	161.46	180.69	216.96	270.69
Narrow money supply (M1)	179.94	229.38	258.29	311.65	382.72
Memo:					
Transferable deposits in foreign currencies	0.05	0.06	0.07	0.09	0.11
Outstanding value on e-money storage	nav	nav	nav	nav	nav

Table 3 Settlement media used by banks

(TRY billions, average for December)

	2012	2013	2014	2015	2016
Transferable balances held at the central bank	24.889	30.026	35.022	42.062	73.642
required reserves	23.760	29.490	34.446	38.958	70.359
free reserves	1.130	0.535	0.576	3.104	3.283
Transferable balances held at other banks	33.141	40.667	45.290	58.958	61.537
Memo:					
Credit extended by the central bank:					
intraday	0.011	0.034	0.026	0.018	0.238
overnight	-1.792	27.964	3.952	37.172	55.315
longer refinancing operations (repos)	22.266	7.705	37.696	56.391	42.955

Table 4
Banknotes and coin

(TRY millions, end of year)

	2012	2013	2014	2015	2016
Total banknotes and coin issued ¹	61,664.81	76,105.50	86,619.78	104,857.55	125,046.54
Total banknotes issued	60,525.48	74,814.59	85,118.22	103,042.64	122,959.91
TRY 200	14,279.02	18,584.78	22,455.70	28,742.04	33,345.12
TRY 100	29,495.56	37,680.02	43,517.85	53,102.83	66,253.61
TRY 50	11,108.89	12,312.72	12,623.80	14,042.31	15,900.10
TRY 20	3,311.88	3,705.92	3,837.11	4,231.19	4,416.69
TRY 10	1,522.26	1,631.29	1,732.70	1,895.48	2,010.46
TRY 5	754.91	846.99	898.26	976.04	1,024.77
other denominations ²	52.97	52.87	52.82	52.75	9.17
Total coin issued	1,139.33	1,290.91	1,501.56	1,814.91	2,086.63
of which:					
TRY 1	720.90	809.15	934.15	1,146.86	1,330.68
TRY 0.50	181.77	204.50	237.99	274.51	307.00
TRY 0.25	115.70	135.56	162.24	196.64	222.91
TRY 0.10	82.99	96.35	113.30	133.49	151.65
TRY 0.05	37.34	44.20	52.57	61.70	72.30
TRY 0.01	0.63	1.16	1.31	1.71	2.09
Banknotes and coin held by banks	7,099.04	8,349.60	9,199.64	10,392.92	13,284.18
Banknotes and coin in circulation outside banks ¹ 54,565.77 67,755.89 77,420.14 94,464.6					
¹ By December 31, 2015, the redemption period of E-7 E	mission Group b	anknotes is en	ded and they l	ost their values	. ² Other

Table 5
Institutions offering payment services to non-banks (end of year)

	2012	2013	2014	2015	2016
Central bank					
Number of branches or offices	21	21	21	21	21
Number of accounts, all	nav	nav	nav	nav	nav
Value of accounts, all (TRY billions) ¹	6.62	14.07	13.86	22.68	12.70
Banks					
Number of institutions	49	49	51	52	52
Number of branches or offices	11,063	11,987	12,213	12,273	11,738
Number of accounts (thousands)	143,107.0	154,433.0	161,093.0	168,459.0	184,371.0
of which: number of internet/PC-linked accounts					
(thousands)	11,321.0	13,133.0	14,953.0	18,233.0	21,186.0
Value of accounts (TRY billions)	818.21	1,004.81	1,123.04	1,325.06	1,544.35
Public banks		•	•	,	,
Number of institutions	3	3	3	3	3
Number of branches or offices	3,079	3,397	3,500	3,681	3,702
Value of accounts (TRY billions)	266.18	324.02	348.72	418.54	497.12
Private banks					
Number of institutions	22	23	24	24	24
Number of branches or offices	7,087	7,561	7,673	7,461	7,029
Value of accounts (TRY billions)	502.82	618.30	708.15	829.22	963.12
Investment Banks	002.02	0.0.00		0_0	000
Number of institutions	13	13	13	13	13
Number of branches or offices	42	40	41	42	41
Value of accounts (TRY billions)	nav	nav	nav	nav	nav
SDIF-controlled Banks					
Number of institutions	1	1	1	1	1
Number of branches or offices	1	1	1	1	1
Value of accounts (TRY billions)	0.01	0.01	0.02	0.85	0.44
Participation Banks	0.01	0.01	0.02	0.00	0.11
Number of institutions	4	4	4	5	5
Number of branches or offices	829	966	990	1,080	957
Value of accounts (TRY billions)	48.20	61.50	65.41	74.36	81.51
Branches of foreign banks	40.20	01.00	00.41	74.50	01.51
Number of institutions	6	5	6	6	6
Number of branches or offices	25	22	8	8	8
Value of accounts (TRY billions)	1.00	0.98	0.75	2.09	2.16
value of accounte (11(1 sillione)	1.00	0.00	0.70	2.00	2.10
Other institutions offering payment services to	non-banks ²				
Number of institutions	1	1	1	1	1
Number of branches or offices	4,501	4,522	4,482	4,515	4,331
Number of accounts (thousands)	3,434.5	3,959.7	4,727.6	5,147.5	5,754.2
Value of accounts (TRY billions)	2	2	2	3	3
For the footnotes, see the end of the table.					

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	2012	2013	2014	2015	2016
Institutions offering payment services to non-ba	nks (total)				
Number of institutions	51	51	53	54	54
Number of branches or offices	15,585	16,530	16,716	16,809	16,090
Number of accounts held by non-banks					
(thousands)	146,541.5	158,392.7	165,820.6	173,606.5	190,125.3
of which: number of internet/PC-linked accounts					
(thousands)	11,321.0	13,133.0	14,953.0	18,233.0	21,186.2
Value of accounts held by non-banks					
(TRY billions)	826.52	1,021.31	1,138.79	1,350.37	1,560.10
Memo:					
Electronic money institutions					
Number of institutions	nav	nav	nav	nav	nav
Outstanding value on e-money storages issued by					
e-money institutions	nav	nav	nav	nav	nav

¹ Data as revised by the CBRT: public sector TRY deposits plus other TRY deposits shown in liabilities of the balance sheet. ² PTT, Turkish postal organisation.

Table 6
Payment card functions and accepting devices (end of year)

	2012	2013	2014	2015	2016
Cards issued in the country (thousands)					
Cards with a cash function	138,936	150,245	156,027	164,302	170,671
Cards with a debit function	91,263	95,447	96,329	98,977	100,654
Cards with a credit function	54,342	56,835	57,006	58,215	58,795
Cards with an e-money function	nav	4,718	9,184	13,406	16,357
Total number of cards (irrespective of the number					
of functions on the card)	145,605	157,000	162,519	170,599	175,807
of which: cards with a combined debit, cash and					
e-money function	nav	nav	nav	nav	nav
Мето:					
Retailer cards	nav	nav	nav	nav	nav
Terminals located in the country					
ATMs	36,334	42,011	45,576	48,277	48,421
ATMs with a cash withdrawal function	36,334	<i>4</i> 2,011	<i>45,57</i> 6	48,277	48,421
ATMs with a credit transfer function	36,334	<i>4</i> 2,011	<i>45,576</i>	48,277	48,421
POS terminals ¹	2,134,444	2,293,695	2,365,047	2,493,117	2,349,541
EFTPOS terminals	2,131,745	2,292,659	2,365,047	2,493,117	2,349,541
E-money card terminals	nav	nav	nav	nav	nav

¹ As of 2015, POS terminals have been started to be replaced by POS functioned cash registers. But, the total number of POS terminals are estimated numbers since 2015, because the number of cash registers are calculated approximately. These devices serve as both cash registers and POS terminals. A single device can run the POS applications of up to eight banks.

Table 7
Indicators of the use of payment instruments and terminals by non-banks: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers ¹	14.93	229.53	266.61	315.24	374.80
paper-based	nav	nav	nav	nav	nav
non-paper-based	nav	nav	nav	nav	nav
Direct debits	nap	nap	nap	nap	nap
Card payments with cards issued in the country	2,864.61	3,172.22	3,384.12	3,760.13	4,165.96
payments by cards with a debit function	437.36	532.12	644.71	812.17	1,027.61
payments by cards with a credit function	2,427.25	2,640.09	2,739.41	2,947.97	3,138.35
E-money payment transactions	nav	42.03	74.98	67.59	58.66
Cheques	18.48	17.19	17.39	16.93	15.42
Other payment instruments	nap	nap	nap	nap	nap
Total number of transactions with payment					
instruments	2,898.02	3,460.97	3,743.10	4,159.89	4,614.84
of which: cross-border transactions sent	nav	nav	nav	nav	nav
Memo:					
Cross-border transactions received	nav	nav	nav	nav	nav
Transactions per type of terminal					
Total transactions at terminals in the country					
Cash transactions	970.89	1,036.41	1,108.97	1,193.82	1,290.46
ATM cash withdrawals	970.89	1,036.41	1,108.97	1,193.82	1,286.52
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions	2,851.68	3,192.70	3,440.27	3,810.26	4,188.45
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav
a) Transactions at terminals in the country by cards	issued in the	country			
Cash transactions	957.11	1,021.07	1,091.51	1,174.14	1,269.61
ATM cash withdrawals	957.11	1,021.07	1,091.51	1,174.14	1,269.61
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions	2,829.33	3,165.54	3,403.65	3,766.43	4,148.96
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav
b) Transactions at terminals in the country by cards	issued outside	the country			
Cash transactions	13.78	15.34	17.46	19.68	16.91
ATM cash withdrawals	13.78	15.34	17.46	19.68	16.91
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions	22.35	27.16	36.62	43.82	39.49
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav
c) Transactions at terminals outside the country by	cards issued ir	the country			
Cash transactions	3.61	3.78	3.50	3.86	3.93
ATM cash withdrawals	3.61	3.78	3.50	3.86	3.93
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions	35.28	48.71	55.45	61.29	75.66
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav

¹ Credit transfer data were partly available in 2012, since consumer payments and banking payments were performed by a single Electronic Fund Transfer System (EFT) in Turkey until December 2012. As of this date EFT has been separated into a retail payment system for consumer payments and a large value payment system for banking payments. In this context, credit transfer data include yearly retail payments data in EFT system since 2013, while credit transfer data of 2012 include only retail payments in EFT system within December 2012.

Table 8
Indicators of the use of payment instruments and terminals by non-banks: value of transactions (TRY billions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers ¹	382.64	5,689.87	6,629.89	7,603.13	11,296.62
paper-based	nav	nav	nav	nav	nav
non-paper-based	nav	nav	nav	nav	nav
Direct debits	nap	nap	nap	nap	nap
Card payments with cards issued in the country	346.09	408.43	458.59	525.15	585.97
payments by cards with a debit function	16.34	21.86	28.75	36.77	49.46
payments by cards with a credit function	329.75	386.57	429.84	<i>4</i> 88.37	536.50
E-money payment transactions	nav	0.30	0.64	0.76	0.85
Cheques	316.76	349.85	403.92	442.74	453.95
Other payment instruments	nap	nap	nap	nap	nap
Total value of transactions with payment					
instruments	1,045.49	6,448.46	7,493.03	8,571.77	12,337.39
of which: cross-border transactions sent	nav	nav	nav	nav	nav
Memo:					
Cross-border transactions received	nav	nav	nav	nav	nav
Transactions per type of terminal					
Total transactions at terminals in the country					
Cash transactions	330.80	384.48	441.52	509.67	603.99
ATM cash withdrawals	330.80	384.48	441.52	509.67	602.26
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions	349.80	413.30	466.70	533.90	588.95
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav
a) Transactions at terminals in the country by cards	issued in the o	country			
Cash transactions	325.13	377.74	432.07	499.69	593.58
ATM cash withdrawals	325.13	377.74	432.07	499.69	593.58
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions	340.09	401.14	450.12	514.56	573.22
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav
b) Transactions at terminals in the country by cards	issued outside	the country			
Cash transactions	5.66	6.74	9.44	9.98	8.68
ATM cash withdrawals	5.66	6.74	9.44	9.98	8.68
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions	9.71	12.17	16.59	19.34	15.73
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav
c) Transactions at terminals outside the country by	cards issued in	the country			
Cash transactions	1.15	1.27	1.27	1.52	1.73
ATM cash withdrawals	1.15	1.27	1.27	1.52	1.73
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions	6.00	7.59	9.10	11.35	13.60
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav

¹ Credit transfer data were partly available in 2012, since consumer payments and banking payments were performed by a single Electronic Fund Transfer System (EFT) in Turkey until December 2012. As of this date EFT has been separated into a retail payment system for consumer payments and a large value payment system for banking payments. In this context, credit transfer data include yearly retail payments data in EFT system since 2013, while credit transfer data of 2012 include only retail payments in EFT system within December 2012.

Table 9
Participation in selected interbank funds transfer systems (end of year)

	2012	2013	2014	2015	2016
Large-value payment systems					
EFT ¹					
Number of participants	48	49	49	52	52
Direct participants	48	49	49	52	52
Banks	47	48	48	51	51
Central bank	1	1	1	1	1
Indirect participants	nap	nap	nap	nap	nap
Retail payment systems					
EFT ¹					
Number of participants	48	49	49	52	52
Direct participants	48	49	49	52	52
Banks	47	48	48	51	51
Central bank	1	1	1	1	1
Indirect participants	nap	nap	nap	nap	nap
Garanti Payment Systems					
Number of participants	9	9	10	10	10
Direct participants	9	9	10	10	10
Banks	9	9	10	10	10
Interbank Card Center					
Number of participants	28	28	28	29	30
Direct participants	28	28	28	29	30
Banks	27	27	27	28	29
Other direct participants	1	1	1	1	1
Other	1	1	1	1	1
Interbank Clearing House ²					
Number of participants	41	41	41	42	43
Direct participants	41	41	41	42	43
Banks	40	40	40	41	42
Central bank	1	1	1	1	1

¹ EFT (Electronic Funds Transfer) system is the RTGS system operated by the CBRT. It encompasses both a customer payment system and a banking payment system. These two systems were separated in December 2012. ² Interbank Clearing House is responsible for cheque clearing in Turkey.

Table 10
Payments processed by selected interbank funds transfer systems: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
EFT ¹					
Total transactions sent	182.18	2.95	2.85	2.92	2.50
Concentration ratio in terms of volume (%)	55.5	66.3	61.6	60.7	57.5
Retail payment systems					
EFT ¹					
Total transactions sent ²	14.93	229.53	266.61	315.24	374.80
credit transfers	14.93	229.53	266.61	315.24	374.80
Concentration ratio in terms of volume (%)	nav	55.2	54.0	54.6	54.8
Garanti Payment Systems					
Total transactions sent	57.45	70.13	84.24	97.25	105.45
card payments	57.45	70.13	84.24	97.25	105.45
Concentration ratio in terms of volume (%)	95.7	94.9	95.1	95.7	96.2
Interbank Card Center					
Total transactions sent	1,459.10	1,653.99	1,838.85	2,053.97	2,274.04
card payments	1,427.31	1,622.81	1,806.62	2,018.43	2,235.60
ATM transactions	31.80	31.18	32.23	35.54	38.44
Concentration ratio in terms of volume (%)	61.8	60.4	61.2	61.2	62.6
Interbank Clearing House ³					
Total transactions sent	18.48	17.19	17.39	16.93	15.42
cheques	18.48	17.19	17.39	16.93	15. 4 2
Concentration ratio in terms of volume (%)	52.9	51.4	49.3	49.8	50.4

¹ EFT (Electronic Funds Transfer) system is the RTGS system operated by the CBRT. It encompasses both a customer payment system and a banking payment system. These two systems were separated in December 2012. ² Retail payments data were partly available in 2012, since consumer payments and banking payments were performed by a single Electronic Fund Transfer System (EFT) in Turkey until December 2012. As of this date EFT has been separated into a retail payment system for consumer payments and a large value payment system for banking payments. In this context, retail payments data include yearly retail payments data in EFT system since 2013, while retail payments data of 2012 include only retail payments in EFT system within December 2012. ³ Interbank Clearing House is responsible for cheque clearing in Turkey.

Table 11
Payments processed by selected interbank funds transfer systems: value of transactions (TRY billions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
EFT ¹					
Total transactions sent	32,703.353	34 556 322	40 072 549	42,729.618	45,057.670
Total transactions cont	02,700.000	01,000.022	10,072.010	12,720.010	10,007.07
Concentration ratio in terms of value (%)	56.3	45.6	44.7	44.5	42.1
Retail payment systems					
EFT ¹					
Total transactions sent ²	382.642	5,689.873	6,629.891	7,603.130	11,296.624
credit transfers	382.642	5,689.873	6,629.891	7,603.130	11,296.624
Concentration ratio in terms of value (%)	nav	36.9	37.7	38.1	37.7
Garanti Payment Systems					
Total transactions sent	8.503	13.204	17.167	20.761	23.520
card payments	8.503	13.204	17.167	20.761	23.520
Concentration ratio in terms of value (%)	95.5	95.0	93.8	94.8	95.6
Interbank Card Center					
Total transactions sent	168.792	188.966	218.625	242.414	263.726
card payments	162.291	182.510	211.528	234.184	254.009
ATM transactions	6.501	6.456	7.096	8.230	9.717
Concentration ratio in terms of value (%)	65.6	63.3	62.6	62.1	61.7
Interbank Clearing House ³					
Total transactions sent	316.760	349.853	403.915	442.739	453.950
cheques	316.760	349.853	403.915	442.739	453.950
Concentration ratio in terms of value (%)	47.8	48.3	49.1	49.7	53.2

¹ EFT (Electronic Funds Transfer) system is the RTGS system operated by the CBRT. It encompasses both a customer payment system and a banking payment system. These two systems were separated in December 2012. ² Retail payments data were partly available in 2012, since consumer payments and banking payments were performed by a single Electronic Fund Transfer System (EFT) in Turkey until December 2012. As of this date EFT has been separated into a retail payment system for consumer payments and a large value payment system for banking payments. In this context, retail payments data include yearly retail payments data in EFT system since 2013, while retail payments data of 2012 include only retail payments in EFT system within December 2012. ³Interbank Clearing House is responsible for cheque clearing in Turkey.

Table 12
Participation in SWIFT by domestic institutions (end of year)

29 29 17 16	29 29 18 17	30 30 17 16	30 <i>30</i> 18	29 30 17
17 16	18	17	18	
16				17
	17	16		
4.4			17	17
11	11	11	12	16
11	11	11	12	14
57	58	58	60	62
56	57	57	59	61
,279	10,583	10,805	11,094	11,299
,398	2,389	2,379	2, <i>4</i> 55	2,422
,340	3,343	3,353	3,395	3,367
,541	4,851	5,073	5,244	5,510
3	56 0,279 2,398 3,340 4,541	0,279 10,583 2,398 2,389 3,340 3,343	0,279 10,583 10,805 2,398 2,389 2,379 3,340 3,343 3,353	0,279 10,583 10,805 11,094 2,398 2,389 2,379 2,455 3,340 3,343 3,353 3,395

Table 13
SWIFT message flows to/from domestic users (thousands, total for the year)

	2012	2013	2014	2015	2016
Total messages sent	26,631	31,779	37,698	44,838	49,997
of which:					
category I	5,668	6,120	6,724	7,103	7,482
category II	2,725	2,867	3,098	3,312	3,258
Total messages received of which:	22,587	26,083	28,836	32,804	35,301
category I	7,509	8,133	8,708	9,109	9,493
category II	2,377	2,878	3,382	3,362	3,021
Domestic traffic	4,066	4,975	5,487	6,618	7,942
Memo:					
Global SWIFT traffic	4,589,109	5,065,668	5,612,724	6,106,644	6,525,800
Source: SWIFT.					

Table 14
Number of participants in exchanges and trading systems (end of year)

	2012	2013	2014	2015	2016
Borsa İstanbul ¹					
Total number of participants	140	213	214	211	209
central bank	1	1	1	1	1
central counterparties (CCPs)	0	0	1	1	1
banks	40	44	44	44	<i>4</i> 5
other	99	168	168	165	162
Number of domestic participants	140	213	214	211	209
central bank	1	1	1	1	1
central counterparties (CCPs)	0	0	1	1	1
banks	40	44	44	44	45
other	99	168	168	165	162
Number of foreign participants	0	0	0	0	0
Turkish Derivatives Exchange ¹					
Total number of participants	101	nap	nap	nap	nap
central bank	0	nap	nap	nap	nap
central counterparties (CCPs) ²	1	nap	nap	nap	nap
banks	18	nap	nap	nap	nap
other	83	nap	nap	nap	nap
Number of domestic participants	101	nap	nap	nap	nap
central bank	0	nap	nap	nap	nap
central counterparties (CCPs) ²	1	nap	nap	nap	nap
banks ,	18	nap	nap	nap	nap
other	83	nap	nap	nap	nap
Number of foreign participants	0	nap	nap	nap	nap

¹ Istanbul Stock Exchange merged with Turkish Derivatives Exchange and changed its name to Borsa İstanbul in April 2013. ² Number of central counterparties is not included in total number of participants.

Table 15
Number of listed securities (end of year)

	2012	2013	2014	2015	2016
Borsa İstanbul ¹					
Total number of listed securities	1,142	2,090	2,481	2,620	3,759
debt securities	717	906	1,008	1,100	1,092
short-term paper	109	341	213	209	257
bonds	608	565	<i>7</i> 95	891	835
equity ²	422	438	437	428	414
other ³	3	746	1,036	1,092	2,253
Turkish Derivatives Exchange ¹					
Total number of listed securities	15	nap	nap	nap	nap
debt securities	0	nap	nap	nap	nap
equity	0	nap	nap	nap	nap
other ⁴	15	nap	nap	nap	nap

¹ Istanbul Stock Exchange merged with Turkish Derivatives Exchange and changed its name to Borsa İstanbul in April 2013. ² Includes Emerging Companies Market and Free Trade Platform. ³ Sukuks, futures and options. ⁴ Futures contracts, number of underlying assets.

Table 16

Market capitalisation of listed companies

(TRY billions, end of year)

	2012	2013	2014	2015	2016
Borsa İstanbul ¹					
Total market capitalisation/equity ²	552.90	505.91	627.37	554.88	614.07
Turkish Dariyatiyaa Eyahanna ¹					
Turkish Derivatives Exchange ¹					
Total market capitalisation/equity	nap	nap	nap	nap	nap

¹ Istanbul Stock Exchange merged with Turkish Derivatives Exchange and changed its name to Borsa Istanbul in April 2013. ² Includes Emerging Companies Market and Free Trade Platform.

Table 17

Number of executed trades

(thousands, total for the year)

	2012	2013	2014	2015	2016
Borsa İstanbul ¹					
Total number of executed securities trades	80,081.09	80,582.89	83,883.22	97,537.85	110,305.38
debt securities	272.64	283.16	240.71	234.04	259.12
short-term paper	5.47	6.15	5.01	4.79	6.06
bonds ²	267.17	277.02	235.70	229.24	253.05
equity ³	79,808.34	80,298.29	83,639.56	97,300.11	110,038.31
other ⁴	0.11	1.44	2.95	3.70	7.95
Total number of executed derivatives trades	0.47	6,633.34	7,717.30	9,285.59	9,874.79
financial futures	0.32	6,471.43	7,612.69	9,157.57	9,546
financial options	0.14	1.98	3.51	26.34	54.07
commodity futures	0	160	101.10	101.68	274.99
Turkish Derivatives Exchange ¹					
Total number of executed securities trades	nap	nap	nap	nap	nap
Total number of executed derivatives trades	62,474.46	nap	nap	nap	nap
financial futures	61,077.39	nap	nap	nap	nap
commodity futures	1,397.07	nap	nap	nap	nap

¹ Istanbul Stock Exchange merged with Turkish Derivatives Exchange and changed its name to Borsa Istanbul in April 2013. ² Includes foreign capital market instruments. ³ Includes Emerging Companies Market and Free Trade Platform.

⁴ Sukuks.

Table 18
Value of executed trades
(TRY billions, total for the year)

	2012	2013	2014	2015	2016
Borsa İstanbul ¹					
Total value of executed securities trades	981.15	1,221.21	1,193.15	1,276.26	1,367.54
debt securities	357.79	403.68	319.08	249.05	350.09
short-term paper	5.03	5.16	4.69	<i>5.4</i> 5	8.29
bonds ²	352.76	398.52	314.40	243.60	341.80
equity ³	623.33	816.86	872.93	1,025.87	1,013.56
other ⁴	0.035	0.67	1.13	1.34	3.89
Total value of executed derivatives trades	0.007	416.61	435.72	575.01	607.23
financial futures	0.005	411.74	432.74	565.68	572.08
financial options	0.002	0.12	1.11	7.56	27.08
commodity futures	0	5	1.87	1.76	8.06
Turkish Derivatives Exchange ¹					
Total value of executed securities trades	nap	nap	nap	nap	nap
Total value of executed derivatives trades	403.93	nap	nap	nap	nap
financial futures	399.40	nap	nap	nap	nap
commodity futures	4.54	nap	nap	nap	nap

¹ Istanbul Stock Exchange merged with Turkish Derivatives Exchange and changed its name to Borsa Istanbul in April 2013. ² Includes foreign capital market instruments. ³ Includes Emerging Companies Market and Free Trade Platform. ⁴ Sukuks.

Table 19
Number of clearing members
(end of year)

2012	2013	2014	2015	2016
125	123	121	118	124
1	1	1	1	1
0	0	0	0	0
40	41	<i>4</i> 3	43	44
84	81	77	74	79
125	123	121	118	124
1	1	1	1	1
0	0	0	0	0
40	41	43	<i>4</i> 3	44
84	81	77	74	79
0	0	0	0	0
	125 1 0 40 84 125 1 0 40 84	125 123 1 1 0 0 40 41 84 81 125 123 1 1 0 0 40 41 84 81	125 123 121 1 1 1 1 0 0 0 0 40 41 43 84 81 77 125 123 121 1 1 1 1 0 0 0 0 40 41 43 84 81 77	125 123 121 118 1 1 1 1 1 0 0 0 0 0 40 41 43 43 84 81 77 74 125 123 121 118 1 1 1 1 0 0 0 0 40 41 43 43 84 81 77 74

Table 20 Number of contracts and transactions cleared (thousands, total for the year)

	2012	2013	2014	2015	2016
Takasbank					
Total number of contracts and transactions					
cleared	156,080.3	132,673.6	143,615.5	187,842.2	212,435.4
Number of securities transactions cleared	80,191.0	79,852.8	85,015.3	98,975.6	111,837.5
debt securities ¹	1,326.2	1,308.1	1,375.7	1,675.5	1,799.1
bonds	8.7	12.5	13.9	14.0	19.7
government bonds	1,317.5	1,295.6	1,361.8	1,661.5	1,779.4
equity	78,864.8	78,544.7	83,639.6	97,300.1	110,038.3
other ²	nav	nav	nav	nav	nav
of which: number of repurchase transactions					
cleared ³	1,065.2	1,039.4	1,149.2	1,456.9	1,473.6
debt securities	1,065.2	1,039.4	1,149.2	1,456.9	1,473.6
bonds	0.0	0.2	0.7	1.7	3.8
government bonds	1,065.2	1,039.2	1,148.5	1,455.2	1,469.8
Number of exchange-traded derivatives contracts					
cleared ⁴	75,889.3	52,820.8	58,600.3	88,866.6	100,597.9
financial futures	74,484.4	51,039.1	56,899.3	85,018.5	89,726.7
financial options ⁵	7.8	54.4	208.9	2,437.4	5,479.5
commodity futures	1,396.1	1,727.2	1,492.0	1,404.6	5,142.3
commodity options	nap	nap	nap	nap	nap
other commodity derivatives ⁶	0.9	0.1	0.0	6.1	249.5
Sales commonly derivatives	0.0	0.1	0.0	0. 1	240.0
Number of OTC derivatives contracts cleared	nap	nap	nap	nap	nap

¹ The value of outright transactions cleared also comprises of Treasury and Corporate Lease Certificates (Sukuk) since October 2012. ² The value of exchange-traded funds is counted within "equities"; the number of exchange-traded fund contracts cannot be separated from the number of equities contracts for the time being. ³ Repo contracts comprises of government bonds and corporate securities (since 17 December 2010). ⁴ Borsa Istanbul Futures and Options Market became operational as of 21 December 2012. ⁵ The number of BIST30, USD/TRY and stock options. ⁶ The number of electricity futures. Since the primary dealers started to operate in 2015, as of that date the number has increased dramatically.

Table 21
Value of contracts and transactions cleared (TRY billions, total for the year)

	2012	2013	2014	2015	2016
Takasbank					
Total value of contracts and transactions cleared	7,412.082	7,731.678	8,579.023	11,444.354	12,888.722
Value of securities transactions cleared	7,008.134	7,318.931	8,148.927	10,882.737	12,318.584
debt securities ¹	6,386.155	6,504.272	7,275.996	9,856.863	11,305.022
bonds	5.417	8.171	11.982	11.905	19.586
government bonds	6,380.738	6,496.102	7,264.013	9,844.958	11,285.435
equity	621.979	814.659	872.931	1,025.874	1,013.562
other ²	nav	nav	nav	nav	nav
of which: value of repurchase transactions					
cleared ³	6,042.741	6,117.842	6,972.226	9,625.836	10,858.842
debt securities	6,042.741	6,117.842	6,972.226	9,625.836	10,858.842
bonds	0.002	0.510	3.952	5.201	8.667
government bonds	6,042.738	6,117.332	6,968.275	9,620.634	10,850.176
Value of exchange-traded derivatives contracts					
cleared ⁴	403.948	412.746	430.096	561.617	570.138
financial futures	399.407	408.041	428.252	559.775	562.060
financial options ⁵	0.00	0.003	0.019	0.162	0.467
commodity futures	4.524	4.702	1.825	1.405	5.133
other commodity derivatives ⁶	0.013	0.001	0.000	0.275	2.478
Value of OTC derivatives contracts cleared	nap	nap	nap	nap	nap

¹ The value of outright transactions cleared also comprises of Treasury and Corporate Lease Certificates (Sukuk) since October 2012. ² The value of exchange-traded funds is counted within "equities"; the number of exchange-traded fund contracts cannot be separated from the number of equities contracts for the time being. ³ Repo contracts comprises of government bonds and corporate securities (since 17 December 2010). ⁴ Borsa Istanbul Futures and Options Market became operational as of 21 December 2012. ⁵ The value of BIST30, USD/TRY and stock options. ⁶ The value of electricity futures. Since the primary dealers started to operate in 2015, as of that date the value has increased dramatically.

Table 22 Number of direct participants in CSDs *(end of year)*

	2012	2013	2014	2015	2016
Takasbank					
Total number of participants ¹	1051	1048	1015	1022	1122
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
central securities depositories	0	0	0	0	0
banks	59	58	<i>5</i> 8	53	53
other	992	990	957	969	1069
Number of domestic participants	1049	1046	1013	1021	1122
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
central securities depositories	0	0	0	0	0
banks .	57	56	56	52	53
other ²	992	990	957	969	1069
Number of foreign participants ³	2	2	2	1	0
banks	2	2	2	1	0
For the footnotes, see the end of the table.					

Table 22 (cont)					
	2012	2013	2014	2015	2016
Central Securities Depository					
Total number of participants	601	657	672	678	695
central bank	0	0	0	0	nav
central counterparties (CCPs)	0	0	0	0	nav
central securities depositories ⁴	1	1	1	1	1
banks	46	46	46	<i>4</i> 5	44
other	554	610	625	632	650
Number of domestic participants	596	652	667	674	691
central bank	0	0	0	0	nav
central counterparties (CCPs)	0	0	0	0	nav
central securities depositories 4	1	1	1	1	1
banks .	43	43	43	<i>4</i> 3	42
other	552	608	623	630	<i>64</i> 8
Number of foreign participants	5	5	5	4	4
central bank	0	0	0	0	nav
central counterparties (CCPs)	0	0	0	0	nav
central securities depositories	0	0	0	0	nav
banks	3	3	3	2	2
other	2	2	2	2	2
ESTS ⁵					
Total number of participants	49	50	50	53	53
central bank	1	1	1	1	1
central securities depositories	1	1	1	1	1
banks	47	48	48	51	51
Number of domestic participants	49	50	50	53	53
central bank	1	1	1	1	1
central securities depositories	1	1	1	1	1
banks	47	48	48	51	51

¹ Takasbank is the official custodian for non-fungible stocks, private pension fund unit shares on a beneficial owner basis, and collective investment schemes' portfolio assets. ² Direct participants utilising CSD services of Takasbank include mutual funds, private pension funds, brokerage houses, banks, portfolio management companies, mutual trusts, institutional investors, realestate investment trusts, private pension fund companies, exchange-traded funds, insurance companies, participation banks, venture capital trusts and asset finance funds. ³ Takasbank provides local custody services to foreign banks. ⁴ Takasbank acts as the cash settlement agent. ⁵ ESTS is the Electronic Securities Transfer System operated by the CBRT.

0

0

0

Number of foreign participants

nav

Table 23
Number of securities held on accounts at CSDs (thousands, end of year)

	2012	2013	2014	2015	2016
Takasbank					
Total number of securities held ¹	0.78	0.77	0.74	0.70	0.77
debt securities	nap	nap	nap	nap	nap
equity ²	0.03	0.03	0.03	0.03	0.03
other ³	0.75	0.74	0.71	0.67	0.74
Central Securities Depository					
Total number of securities held	1.779	1.955	2.342	2.530	2.771
debt securities ⁴	0.301	0.411	0.563	0.601	0.672
short-term paper	0.099	0.118	0.200	0.219	0.313
bonds	0.202	0.293	0.363	0.382	0.359
equity	0.749	0.784	0.801	0.790	0.788
other ⁵	0.729	0.760	0.978	1.139	1.311
ESTS ⁶					
Total number of securities held	0.055	0.053	0.057	0.056	0.073
debt securities	0.055	0.053	0.057	0.056	0.073
short-term paper	0.001	0.003	0.007	0.008	0.004
bonds	0.054	0.050	0.050	0.048	0.069
equity	nap	nap	nap	nap	nap
other	nap	nap	nap	nap	nap

¹ Takasbank is the official custodian for non-fungible stocks, private pension fund unit shares on a beneficial owner basis, and collective investment scheme portfolio assets. ² Number of non-fungible stocks. ³ Comprises of the number of private pension funds and collective investment schemes (investment funds) on ISIN basis. ⁴ Asset-backed securities and asset-covered securities held in Central Securities Depository since 2011, government debt securities held in Central Securities Depository since 2012, sukuk held in Central Securities Depository since 2012. ⁵ Other securities are mutual funds, exchange-traded funds, warrants and certificates. ⁶ ESTS is the Electronic Securities Transfer System operated by the CBRT.

Table 24
Value of securities held on accounts at CSDs (TRY millions, end of year)

	2012	2013	2014	2015	2016
Takasbank					
Total value of securities held ¹	50,432.0	57,249.0	73,619.0	86,554.0	105,299.0
debt securities	nap	nap	nap	nap	nap
equity ²	0.0	0	0	0	0
other ³	50,432.0	57,249.0	73,619.0	86,554.0	105,299.0
Central Securities Depository					
Total value of securities held	781,700.2	758,753.3	914,761.5	836,683.6	915,953.1
debt securities ⁴	193,631.7	216,588.1	238,016.4	234,150.8	246,098.2
short-term paper	18,669.7	22,992.7	27,361.0	29,374.4	33,422.1
bonds	174,962.0	193,595.5	210,655.4	204,776.5	212,676.1
equity	557,430.9	511,097.9	640,643.3	563,590.8	624,674.7
other ⁵	30,637.5	31,067.3	36,101.8	38,942.1	45,180.1
ESTS ⁶					
Total value of securities held	379,405.31	389,752.64	401,345.95	457,778.47	452,087.08
debt securities	379,405.31	389,752.64	401,345.95	457,778.47	452,087.08
short-term paper	1,624	4,637.11	6,615.41	6,363.08	330.88
bonds	377,780.83	385,115.53	394,730.54	451,415.38	451,756.20
equity	nap	nap	nap	nap	nap
other	nap	nap	nap	nap	nap

¹ Takasbank is the official custodian for non-fungible stocks, private pension fund unit shares on a beneficial owner basis, and collective investment scheme portfolio assets. ² Non-fungible stocks at market value. As of 31 December 2012, all listed non-fungible stocks at Takasbank vaults are dematerialised and began to be monitored in book-entry form at Central Securities Depository. As of that date, only delisted non-fungible stocks which do not have any defined market value are still held at Takasbank vaults. ^{3 Comprises of t}he market value of private pension funds and collective investment schemes' (investment funds) portfolio assets. ⁴ Asset-backed securities and asset-covered securities held in Central Securities Depository since 2011, government debt securities held in Central Securities Depository since 2012. ⁵ Other securities are mutual funds, exchange-traded funds, warrants and certificates. ⁶ ESTS is the Electronic Securities Transfer System operated by the CBRT.

Table 25
Number of delivery instructions processed (thousands, total for the year)

	2012	2013	2014	2015	2016
Takasbank					
Total number of delivery instructions ¹	106,349.8	180,875.7	245,929.6	296,064.1	323,417.0
DVP	770.7	900.6	892.4	959.1	990.8
debt securities	244.5	276.3	260.1	266.8	232.0
short-term paper	nap	nap	nap	nap	nap
bonds ²	244.5	276.3	260.1	266.8	232.0
equity ³	526.2	624.3	632.3	692.4	758.8
free of payment	105,579.1	179,975.2	245,037.2	295,105.0	322,426.3
debt securities	nap	nap	nap	nap	nap
equity ⁴	79.1	35.2	0.0	0.4	0.8
other ⁵	105,500.0	179,940.0	245,037.2	295,104.6	322,425.5
Central Securities Depository					
Total number of delivery instructions	2,860.562	3,558.822	3,453.679	3,190.995	2,924.978
DVP	577.865	688.867	707.567	843.195	909.022
debt securities ⁶	1.274	2.090	3.070	3.479	2.801
short-term paper	0.099	0.200	0.412	0.552	0.436
bonds	1.175	1.890	2.658	2.927	2.365
equity	538.720	644.305	648.248	765.980	820.716
other ⁷	37.871	42.472	56.249	73.736	85.505
free of payment	2,282.697	2,869.955	2,746.112	2,347.800	2,015.956
debt securities ⁶	1,059.074	1,204.147	953.372	973.521	866.859
short-term paper	856.520	945.555	704.665	720.778	601.756
bonds	202.554	258.592	248.707	252.743	265.103
equity	1,176.158	1,611.479	1,704.848	1,265.919	1,061.865
other ⁷	47.465	54.329	87.892	108.360	87.232
ESTS ⁸					
Total number of delivery instructions	184.142	269.997	260.221	284.930	282.863
DVP	77.013	94.752	92.554	113.484	99.516
debt securities	77.013	94.752	92.554	113.484	99.516
short-term paper	0.021	1.038	<i>3.480</i>	<i>5.4</i> 80	6.012
bonds	76.992	93.714	89.074	108.004	93.504
free of payment	107.129	175.245	167.667	171.446	183.347
debt securities	107.129	175.245	167.667	171.446	183.347
short-term paper	0.079	0.633	1.348	1.970	3.589
bonds	107.050	174.612	166.319	169.476	179.758

¹ Takasbank is the official custodian for non-fungible stocks, private pension fund unit shares on a beneficial owner basis, and collective investment scheme portfolio assets. ² Domestic debt securities (T-bills and government bonds). ³ Number of equities delivery instructions processed through Takasbank bilateral settlement (RTGS DvP) systems. ⁴ Number of non-fungible stock delivery instructions processed. ⁵ Number of private pension fund delivery instructions processed. ⁶ Asset-backed securities and asset-covered securities held in Central Securities Depository since 2011, Government debt securities held in Central Securities Depository since 2012. ⁷ Other securities are mutual funds, exchange-traded funds, warrants and certificates. ⁸ ESTS is the Electronic Securities Transfer System operated by the CBRT.

Table 26
Value of delivery instructions processed (TRY billions, total for the year)

2013 2012 2014 2015 2016 Takasbank Total value of delivery instructions¹ 4,940.85 5,667.28 5,698.91 5,825.39 5,681.36 4,940.76 5,667.28 5,698.91 5,825.37 5,681.36 DVP 5,606.44 debt securities 5,554.18 5,494.80 5,562.34 4,872.20 bonds² 4,872.20 5,554.18 5,494.80 5,562.34 5,606.44 equity³ 68.56 113.10 204.11 263.03 74.92 free of payment 0.09 0.00 0.00 0.01 0.00 debt securities nap nap nap nap nap equity4 0.09 0.00 0.00 0.01 0.00 other⁵ nav nav nav nav nav **Central Securities Depository** 2,194.93 Total value of delivery instructions 1,774.03 2,473.50 2,105.62 2,024.86 DVP 255.93 388.38 416.77 487.89 458.36 debt securities⁶ 2.66 3.35 4.56 2.31 2.33 short-term paper 0.88 0.92 0.54 1.01 0.90 bonds 1.78 2.43 3.54 1.41 1.80 equity 248.60 380.72 406.92 481.07 452.26 other7 4.67 4.31 5.30 4.50 3.77 free of payment 1,518.10 2,085.11 1,688.85 1,536.97 1,736.57 debt securities⁶ 1,374.76 1,252.39 1,751.28 1,174.01 1,471.97 short-term paper 105.00 145.54 146.00 143.88 141.30 bonds 1,147.38 1,605.74 1,228.76 1,030.13 1,330.67 equity 264.28 330.85 308.04 352.94 261.37 other' 2.98 6.05 10.02 3.23 1.43 ESTS⁸ Total value of delivery instructions 7,557.55 10,336.29 9,299.77 11,206.41 12,381.83 DVP 3,613.95 5,326.31 5,141.82 6,361.59 5,656.84 debt securities 3,613.95 5,326.31 5,141.82 6,361.59 5,656.84 262.53 291.04 344.57 short-term paper 1.82 65.43 3,612.13 5.260.88 4.879.29 6.070.55 5.312.27 bonds free of payment 3,943.59 5,009.98 4,157.95 4,844.82 6,724.99 3,943.59 5,009.98 4,157.95 4,844.82 6,724.99 debt securities short-term paper 0.16 0.77 5.71 45.01 66.50

3,943.44

5,009.21

4,152.24

4,799.81

6,658.49

bonds

¹ Takasbank is the official custodian for non-fungible stocks, private pension fund unit shares on a beneficial owner basis, and collective investment scheme portfolio assets. ² Nominal value of domestic debt securities (T-bills and government bonds) delivery instructions. ³ Nominal value of equities delivery instructions processed through Takasbank bilateral settlement (RTGS DvP) systems. ⁴ Nominal value of non-fungible stock delivery instructions processed. ⁵ Nominal value of private pension fund delivery instructions processed. ⁶ Asset-backed securities and asset-covered securities held in Central Securities Depository since 2011, government debt securities held in Central Securities Depository since 2012, sukuk held in Central Securities Depository since 2012. ⁷ Other securities are mutual funds, exchange-traded funds, warrants and certificates. ⁸ ESTS is the Electronic Securities Transfer System operated by the CBRT.

¹ Yearly average.

Table 1
Basic statistical data

2012	2013	2014	2015	2016
63,705	64,106	64,597	65,110	65,648
1,685.2	1,752.6	1,837.1	1,888.7	1,950.0
26,454	27,338	28,439	29,008	29,703
2.8	2.6	1.5	0.1	0.6
0.6185	0.6045	0.6416	0.6742	0.8122
0.6313	0.6397	0.6074	0.6543	0.7409
	63,705 1,685.2 26,454 2.8 0.6185	63,705 64,106 1,685.2 1,752.6 26,454 27,338 2.8 2.6 0.6185 0.6045	63,705 64,106 64,597 1,685.2 1,752.6 1,837.1 26,454 27,338 28,439 2.8 2.6 1.5 0.6185 0.6045 0.6416	63,705 64,106 64,597 65,110 1,685.2 1,752.6 1,837.1 1,888.7 26,454 27,338 28,439 29,008 2.8 2.6 1.5 0.1 0.6185 0.6045 0.6416 0.6742

Table 2
Settlement media used by non-banks

(GBP billions, end of year)

	2012	2013	2014	2015	2016
Notes and coin in circulation outside banks	55.70	55.99	65.54	66.37	68.58
Value of transferable deposits	1,283.74	1,352.82	1,437.64	1,522.13	1,565.43
Narrow money supply (M2) ¹	1,341.55	1,413.30	1,501.47	1,589.96	1,639.61
Memo: Transferable deposits in foreign currencies	252.56	247.05	234.72	157.23	185.79
,				137.23	
Outstanding value on e-money storage ²	nav	nav	nav	nav	nav

¹ Does not equal the sum of the two previous items. M2 consists of private sector holdings of notes and coin plus retail deposits. The latter include non-interest bearing deposits as well as deposits placed at advertised interest rates.

Table 3 Settlement media used by banks

(GBP billions, average of last reserve maintenance period)

	2012	2013	2014	2015	2016
Transferable balances held at the central bank	221.19	305.87	306.17	313.06	361.27
required reserves ¹	2.38	4.08	4.10	4.14	4.42
free reserves	218.81	301.80	302.07	308.92	356.84
Transferable balances held at other banks ²	654.23	730.24	458.37	474.22	490.93
Memo:					
Credit extended by the central bank: ³					
intraday	30.46	nav	nav	nav	nav
overnight	nav	nav	nav	nav	nav
longer-term refinancing operations 4	5.35	0.01	0.76	nav	nav

¹ On 1 June 1998 a statutory scheme came into effect whereby both banks and building societies with average eligible liabilities of GBP 400 million or more are required to hold non-interest bearing deposits with the Bank of England of 0.15% of their eligible liabilities in excess of GBP 500 million. ² Includes some time deposits. ³ Banks borrow from the Bank of England mainly through intraday and two-week repo transactions in gilts, Treasury bills and eligible euro securities. Funds obtained in this way may be used for payment purposes. ⁴ Although largely longer-term, also includes some overnight refinancing operations; a disaggregation is not possible.

² There is no fully operational electronic money scheme currently in place.

Table 4
Banknotes and coin
(GBP billions, end of year)

	2012	2013	2014	2015	2016
Total banknotes and coin issued ^{1, 2}	60.400	62.082	65.808	69.499	76.171
Total banknotes issued ²	56.490	58.071	61.605	65.120	71.576
GBP 50	10.313	11.223	11.732	12.983	15.618
GBP 20	36.552	37.626	40.282	42.116	45.161
GBP 10	7.992	7.597	7.908	8.304	8.827
GBP 5	1.633	1.625	1.683	1.718	1.971
Total coin issued ³	3.910	4.011	4.203	4.379	4.595
GBP 2	0.786	0.832	0.895	0.957	1.010
GBP 1	1.528	1.553	1.617	1.671	1.798
GBP 0.50	0.460	0.474	0.498	0.526	0.542
GBP 0.20	0.541	0.553	0.580	0.601	0.622
GBP 0.10	0.160	0.163	0.167	0.171	0.172
GBP 0.05	0.191	0.192	0.199	0.204	0.205
GBP 0.02	0.132	0.131	0.133	0.134	0.133
GBP 0.01	0.113	0.113	0.114	0.114	0.113
Banknotes and coin held by banks	5.486	4.587	6.822	5.208	7.589
Banknotes and coin in circulation outside banks	55.700	55.986	65.540	66.367	68.581
¹ Average of Wednesdays in December. ² Bank of Engla	and banknotes or	nly. ³ Estimate	ed as at 31 Dec	cember.	

Table 5
Institutions offering payment services to non-banks (end of year)

	2012	2013	2014	2015	2016
Central bank					
Number of branches or offices ¹	1	1	1	1	nav
Number of accounts (thousands)	4.959	4.920	4.469	4.455	nav
Value of accounts (GBP billions)	70.163	78.063	58.103	60.432	nav
Memo:					
Number of accounts, all (thousands)	4.993	4.954	4.494	4.479	nav
Banks					
Number of institutions	361	358	359	358	nav
Number of branches or offices ²	nav	nav	nav	nav	nav
Number of accounts (thousands) ^{2, 3}	nav	nav	nav	nav	nav
of which: number of internet/PC-linked accounts					
(thousands) ⁴	nav	nav	nav	nav	nav
Value of accounts (GBP billions)	3,210.2	3,280.8	3,345.0	3,349.0	nav
Branches of domestic banks					
Number of institutions	203	203	200	201	nav
Number of branches or offices	nav	nav	nav	nav	nav
Value of accounts (GBP billions)	2,370.7	2,456.4	2,517.9	2,570.7	nav
Branches of foreign banks					
Number of institutions	158	155	159	157	nav
Number of branches or offices	nav	nav	nav	nav	nav
Value of accounts (GBP billions)	839.5	824.4	827.1	778.3	nav
Other institutions offering payment services to no	on-banks: Po	stal institutio	on ⁵		
Number of institutions	1	nav	nav	nav	nav
Number of branches or offices	11,500	nav	nav	nav	nav
Number of accounts	105,000	nav	nav	nav	nav
Value of accounts (GBP billions)	0.520	nav	nav	nav	nav
Institutions offering payment services to non-ban	ıks (total)				
Number of institutions ⁶	363	359	360	359	nav
Number of branches or offices ²	nav	nav	nav	nav	nav
Number of accounts held by non-banks	nav	nav	nav	Tiav	1144
(thousands) ^{2, 3}	nav	nav	nav	nav	nav
of which: number of internet/PC-linked accounts					1141
(thousands) ⁴	nav	nav	nav	nav	nav
Value of accounts held by non-banks					
(GBP billions)	3,280.9	3,358.8	3,403.1	3,409.4	nav
Memo:					
Electronic money institutions ⁷					
Number of institutions	nav	nav	nav	nav	nav
Outstanding value on e-money storages issued by					
e-money institutions	nav	nav	nav	nav	nav
¹ The central bank also has two outlets for note issue at	nd 12 regional	agencies for e	conomic intelli	gence gathering	nurnosas

¹ The central bank also has two outlets for note issue and 12 regional agencies for economic intelligence gathering purposes.
² Estimated figures. ³ Includes private sector ordinary share and deposit accounts with UK building societies and shares and deposits below GBP 50,000 from corporate bodies, placed with building societies. ⁴ Number of accounts associated with internet services (credit transfers, payment of bills, etc carried out via the internet). ⁵ National Savings and Investments (NS&I) Easy Access Accounts only. ⁶ Revised data: the previous issue involved double-counting. ⁷ There is no fully operational electronic money scheme currently in place.

Table 6
Payment card functions and accepting devices (thousands, end of year)

	2013	2014	2015	2016
68,993	175,593	178,869	175,630	174,257
88,553	95,689	95,663	98,804	99,632
2,324	2,262	2,150	nav	nav
56,443	55,362	56,927	58,973	58,559
nav	nav	nav	nav	nav
68,993	175,593	178,869	175,630	174,257
•		•		·
nav	nav	nav	nav	nav
nav	nav	nav	nav	nav
66.1	68.0	69.4	70.3	70.0
66.1	68.0	69.4	70.3	70.0
8.7	8.3	8.6	8.4	7.8
1,639.3	1,653.9	1,701.9	1,958.4	2,157.1
nav	nav	nav	nav	nav
nav	nav	nav	nav	nav
	56,443 nav 68,993 nav nav 66.1 66.1 8.7 1,639.3 nav	68,993 175,593 88,553 95,689 2,324 2,262 56,443 55,362 nav nav 68,993 175,593 nav nav 66.1 68.0 66.1 68.0 8.7 8.3 1,639.3 1,653.9 nav nav nav nav	68,993 175,593 178,869 88,553 95,689 95,663 2,324 2,262 2,150 56,443 55,362 56,927 nav nav nav 68,993 175,593 178,869 nav nav nav 66.1 68.0 69.4 66.1 68.0 69.4 8.7 8.3 8.6 1,639.3 1,653.9 1,701.9 nav nav nav nav nav nav	68,993 175,593 178,869 175,630 88,553 95,689 95,663 98,804 2,324 2,262 2,150 nav 56,443 55,362 56,927 58,973 nav nav nav nav nav 68,993 175,593 178,869 175,630 nav nav nav nav nav 66.1 68.0 69.4 70.3 66.1 68.0 69.4 70.3 8.7 8.3 8.6 8.4 1,639.3 1,653.9 1,701.9 1,958.4 nav nav nav nav nav nav nav nav nav nav nav nav nav nav nav

¹ Includes data for cards with a "credit and charge" facility. ² MasterCard and Visa only. ³ Excludes any standalone e-money cards and retailer cards. ⁴ Estimate of total number of POS terminals in the United Kingdom. Most accept both credit and debit cards. ⁵ All major e-money trials in the United Kingdom finished by end-2000.

Table 7
Indicators of the use of payment instruments and terminals by non-banks: volume of transactions¹
(millions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument					
Credit transfers ²	3,693.1	3,871.1	3,939.7	4,051.8	4,233.3
paper-based	352.1	331.1	286.7	243.8	214.3
non-paper-based	3,341.0	3,540.0	3,653.0	3,808.0	4,019.0
Direct debits	3,416.7	3,524.9	3,672.0	3,908.3	4,071.9
Card payments with cards issued in the country	10,546.0	11,608.0	13,010.0	14,601.0	16,371.0
payments by cards with a debit function ³	8,155.0	9,040.0	10,227.0	11,544.0	13,298.0
payments by cards with a delayed debit function	368.0	374.0	381.0	370.0	168.0
payments by cards with a credit function ^{3, 4}	2,023.0	2,194.0	2,402.0	2,687.0	2,905.0
E-money payment transactions	nav	nav	nav	nav	nav
Cheques ⁵	848.0	718.0	644.0	558.0	477.0
Other payment instruments	nap	nap	nap	nap	nav
Total number of transactions with payment					
Total number of transactions with payment	40.500.0	40.700.0	04 005 7	00 440 4	05.454.0
instruments ²	18,503.8	19,722.0	21,265.7	23,119.1	25,154.0
of which: cross-border transactions sent	693.0	941.0	1,493.0	1,937.0	2,057.0
Мето:					
Cross-border transactions received	nav	nav	nav	nav	nav
Transactions per type of terminal					
Total transactions at terminals in the country					
Cash transactions ⁶	2,915.0	2,899.0	2,830.0	2,797.0	2,733.0
ATM cash withdrawals	2,915.0	2,899.0	2,830.0	2,797.0	2,733.0
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions ⁷	10,292.0	10,864.0	12,082.0	12,662.0	14,312.0
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav
a) Transactions at terminals in the country by cards			1141		1161
Cash transactions ⁶	2,915.0	2,899.0	2,830.0	2,818.0	nav
ATM cash withdrawals	2,915.0	2,899.0	2,830.0	2,818.0	nav
ATM cash deposits	nav	nav	nav	nav	nav
POS payment transactions ⁷	9,853.0	10,668.0	11,518.0	12,662.0	13,578.6
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav
b) Transactions at terminals in the country by cards			nav	nav	nav
Cash transactions	nav	nav	nav	nav	nav
POS payment transactions ⁷	439.0	196.0	564.0	nav	733.5
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav
c) Transactions at terminals outside the country by c			nav	nav	nav
Cash transactions ⁶	1.0	1.0	0.0	0	0
ATM cash withdrawals	1.0	1.0	0.0	0 0	0
ATM cash withdrawais ATM cash deposits	nav	nav	nav	nav	•
					nav 2.057.0
POS payment transactions ⁷	639.0	891.0	1,442.0	1,878.0	2,057.0
E-money card loading/unloading transactions	nav	nav	nav	nav	nav
E-money card payment transactions	nav	nav	nav	nav	nav

¹ This table contains all customer transactions. It also, for a number of instruments, includes banks' own account transactions where these cannot be identified separately (see further footnotes). Includes Northern Ireland (estimated) and Scotland; also includes some data and/or estimates of inter-branch and in-house processed items. ² Includes interbank payments settled in CHAPS; also includes inter-branch paper credit transfers plus some in-house automated transactions (including some transactions on banks' own accounts). ³ Customer transactions only. ⁴ Does not include data for cards with a "credit and charge" facility. These data are included in the "cards with a delayed debit function" category. ⁵ Includes inter-branch cheques and estimates of in-house processed cheques; also includes some own account items. ⁶ Includes all ATM transactions; a further breakdown is not available. ⁷ Data are for payment cards only.

Table 8
Indicators of the use of payment instruments and terminals by non-banks: value of transactions¹
(GBP billions, total for the year)

Transactions per type of payment instrument		2012	2013	2014	2015	2016
paper-based 178.38 177.28 161.21 160.15 436.00 non-paper-based 74.881.82 73.377.37 71.356.29 71.785.00 815.380.00 Direct debits 1.075.51 1.115.07 1.167.27 1.245.40 1.262.28 Card payments with a debit function apyments by cards with a debit function apyments by cards with a delayed debit function apyment by cards with a delayed debit function apyment transactions 36.98 40.104 439.17 491.91 71.47.2 payments by cards with a debit function apyment transactions 34.02 33.14 32.57 29.30 18.08 payments by cards with a debit function apyment transactions with a debit function apyment transactions and transactions and appears a	Transactions per type of payment instrument					
non-paper-based 74,881.82 73,377.37 71,356.29 71,786.99 81,538.00 Direct debits 1,075.51 1,115.07 1,167.27 1,245.40 1,262.24 Card payments with cards issued in the country payments by cards with a debit function 3.45.98 401.04 439.17 491.91 714.72 payments by cards with a debit function 3.4 120.08 126.56 134.47 145.68 154.36 E-money payment transactions nav nav <td>Credit transfers²</td> <td>75,060.20</td> <td>73,549.65</td> <td>71,517.51</td> <td>71,946.15</td> <td>81,974.00</td>	Credit transfers ²	75,060.20	73,549.65	71,517.51	71,946.15	81,974.00
Direct debits 1,075.51 1,115.07 1,167.27 1,245.40 1,262.24 Card payments with cards issued in the country payments by cards with a debit function payments by cards with a debit function 3.66.98 401.04 439.17 491.91 714.72 payments by cards with a debit function 3.66.98 401.04 439.17 491.91 714.72 payments by cards with a debit function 3.4.02 33.14 32.57 29.30 18.08 payments by cards with a debit function 3.4.02 33.14 32.57 29.30 18.08 154.36 E-money payment transactions with payment instruments nav 73.858.44 74.485.51 74.485.51 of which: cross-border transactions sent 77.502.17 75.958.82 73.984.54 73.858.44 74.485.51 of which: cross-border transactions sent 77.502.17 75.958.82 73.984.54 73.858.44 74.485.51 of which: cross-border transactions sent 77.502.17 75.958.82 73.984.54 73.858.44 74.485.51 of washing with a debit functio	paper-based	178.38	172.28	161.21	160.15	436.00
Card payments with cards issued in the country 511.08 560.73 606.21 657.19 887.16 payments by cards with a debit function 34.02 33.14 32.57 29.30 18.08 payments by cards with a delayed debit function 34.02 33.14 32.57 29.30 18.08 payments by cards with a credit function 34.02 33.14 32.57 29.30 18.08 payments by cards with a credit function 34.02 33.14 32.57 29.30 18.08 payment transactions nav	non-paper-based		73,377.37	71,356.29	71,785.99	81,538.00
payments by cards with a delait function 3 356,98 401,04 439,17 491,91 714.72 payments by cards with a delayed debit function 3.4 32.02 33.14 32.57 29.30 18.08 E-money payment transactions nav 120.08 126.56 134.47 145.68 154.36 E-money payment transactions nav 73,858.44 74,485.51 73,858.44 74,485.51 7	Direct debits				•	•
Payments by cards with a delayed debit function 34.02 33.14 32.57 29.30 18.08 payments by cards with a credit function 31.02 120.08 126.56 134.47 145.68 154.36 154.36 154.36 154.00 162.	Card payments with cards issued in the country	511.08	560.73	606.21	657.19	887.16
Payments by cards with a credit function 120.08 126.56 134.47 145.68 154.36	payments by cards with a debit function ³	356.98	401.04	439.17	491.91	714.72
E-money payment transactions nav nav nav nav Cheques ⁵ 855.39 733.38 693.56 624.00 624.00 Other payment instruments 855.39 733.38 693.56 624.00 624.00 Total value of transactions with payment instruments ² 77,502.17 75,958.82 73,984.54 73,858.44 74,485.51 of which: cross-border transactions sent 34.32 40.45 55.92 70.89 nav Memo: Cross-border transactions received nav		34.02	<i>33.14</i>	32.57	29.30	18.08
Cheques ⁵ 855.39 733.38 693.56 624.00 624.00 Other payment instruments nap nap nap nap nap Total value of transactions with payment instruments ² 77,502.17 75,958.82 73,984.54 73,858.44 74,485.51 of which: cross-border transactions sent 34.32 40.45 55.92 70.89 nav Memo: Cross-border transactions sent av. 40.45 55.92 70.89 nav Transactions per type of terminal Total transactions at terminals in the country Cash transactions at terminals in the country 193.61 191.83 189.36 194.31 188.26 ATM cash withdrawals 193.61 191.83 189.36 194.31 188.26 ATM cash deposits nav	payments by cards with a credit function ^{3, 4}	120.08	126.56	134.47	1 <i>4</i> 5.68	154.36
Other payment instruments nap nap nap nap Total value of transactions with payment instruments² 77,502.17 75,958.82 73,984.54 73,858.44 74,485.51 of which: cross-border transactions sent 34.32 40.45 55.92 70.89 nav Memo: Cross-border transactions received nav nav <td< td=""><td>E-money payment transactions</td><td>nav</td><td>nav</td><td>nav</td><td>nav</td><td>nav</td></td<>	E-money payment transactions	nav	nav	nav	nav	nav
Total value of transactions with payment instruments² 77,502.17 75,958.82 73,984.54 73,858.44 74,485.51 of which: cross-border transactions sent 34.32 40.45 55.92 70.89 nav Memo: Cross-border transactions received nav nav nav nav nav nav nav nav nav nav	Cheques ⁵	855.39	733.38	693.56	624.00	624.00
instruments² 77,502.17 75,958.82 73,984.54 73,858.44 74,485.51 of which: cross-border transactions sent 34.32 40.45 55.92 70.89 nav Memo: Cross-border transactions received nav nav <t< td=""><td></td><td>nap</td><td>nap</td><td>nap</td><td>nap</td><td>nav</td></t<>		nap	nap	nap	nap	nav
instruments² 77,502.17 75,958.82 73,984.54 73,858.44 74,485.51 of which: cross-border transactions sent 34.32 40.45 55.92 70.89 nav Memo: Cross-border transactions received nav nav nav nav nav Transactions per type of terminal Total transactions & terminals in the country Stantansactions & Table of the stantansactions at terminals in the country 193.61 191.83 189.36 194.31 188.26 ATM cash withdrawals 193.61 191.83 189.36 194.31 188.26 ATM cash deposits nav nav nav nav nav nav POS payment transactions at terminals in the country by cards issued in the country cash transactions at terminals in the country by cards issued in the country 193.61 191.83 189.36 194.31 188.26 ATM cash deposits nav	Total value of transactions with payment					
of which: cross-border transactions sent 34.32 40.45 55.92 70.89 nav Memo: Cross-border transactions received nav		77 502 17	75 058 82	73 084 54	73 858 44	7/ /85 51
		·	-	•	•	•
Cross-border transactions received nav nav nav nav Transactions per type of terminal Total transactions at terminals in the country Cash transactions 6 193.61 191.83 189.36 194.31 188.26 ATM cash withdrawals 193.61 191.83 189.36 194.31 188.26 ATM cash deposits nav	or whom. Globa border transactions done	01.02	10.10	00.02	70.00	nav
Transactions per type of terminal Total transactions at terminals in the country Cash transactions 193.61 191.83 189.36 194.31 188.26 ATM cash withdrawals 193.61 191.83 189.36 194.31 188.26 ATM cash deposits nav nav nav nav nav nav nav nav nav nav	Memo:					
Total transactions at terminals in the country $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Cross-border transactions received	nav	nav	nav	nav	nav
Cash transactions ⁶ 193.61 191.83 189.36 194.31 188.26 ATM cash withdrawals 193.61 191.83 189.36 194.31 188.26 ATM cash deposits nav nav nav nav nav nav nav POS payment transactions ⁷ 507.58 534.02 574.85 nav 640.66 E-money card loading/unloading transactions nav	Transactions per type of terminal					
Cash transactions ⁶ 193.61 191.83 189.36 194.31 188.26 ATM cash withdrawals 193.61 191.83 189.36 194.31 188.26 ATM cash deposits nav nav nav nav nav nav nav POS payment transactions ⁷ 507.58 534.02 574.85 nav 640.66 E-money card loading/unloading transactions nav						
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		193.61	191.83	189.36	194.31	188.26
POS payment transactions To 507.58 534.02 574.85 nav 640.66 E-money card loading/unloading transactions nav nav nav nav nav nav nav nav nav nav	ATM cash withdrawals	193.61	191.83	189.36	194.31	188.26
POS payment transactions To 507.58 534.02 574.85 nav 640.66 E-money card loading/unloading transactions nav nav nav nav nav nav nav nav nav nav	ATM cash deposits					
E-money card loading/unloading transactions nav nav nav nav nav nav nav nav a) Transactions at terminals in the country by cards issued in the country Cash transactions at terminals in the country by cards issued in the country Cash transactions at terminals in the country by cards issued in the country Cash transactions at terminals in the country by cards issued in the country Cash transactions at terminals in the country by cards issued outside the country POS payment transactions nav nav nav nav nav nav nav nav nav nav		507.58	534.02	574.85	nav	640.66
E-money card payment transactions nav nav nav nav nav nav a) Transactions at terminals in the country by cards issued in the country Cash transactions ⁶ 193.61 191.83 189.36 194.31 188.26 ATM cash withdrawals 193.61 191.83 189.36 194.31 188.26 ATM cash deposits nav nav nav nav nav nav nav nav nav nav		nav	nav	nav	nav	nav
a) Transactions at terminals in the country by cards issued in the country $ \begin{array}{ccccccccccccccccccccccccccccccccccc$	•	nav	nav	nav	nav	nav
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		issued in the	country			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Cash transactions ⁶	193.61	191.83	189.36	194.31	188.26
POS payment transactions	ATM cash withdrawals			189.36	194.31	
POS payment transactions	ATM cash deposits		nav		nav	nav
E-money card loading/unloading transactions nav nav nav nav nav nav nav nav nav nav	·	476.84	520.37	550.39	596.05	640.66
E-money card payment transactions nav nav nav nav nav nav nav nav nav nav	• •					
b) Transactions at terminals in the country by cards issued outside the country Cash transactions nav nav nav nav nav nav nav n	, ,					
Cash transactionsnavnavnavnavnavPOS payment transactions 7 30.74 13.65 24.46 navnavE-money card loading/unloading transactionsnavnavnavnavnavE-money card payment transactionsnavnavnavnavnavC) Transactions at terminals outside the country by cards issued in the countryCash transactions 6 0.08 0.08 0.10 0.04 0.04 ATM cash withdrawals 0.08 0.08 0.10 0.04 0.04 ATM cash depositsnavnavnavnavnavnavPOS payment transactions 7 34.32 40.45 55.92 64.36 68.27 E-money card loading/unloading transactionsnavnavnavnavnavnav		issued outsid	e the country			
E-money card loading/unloading transactions nav na	,		-	nav	nav	nav
E-money card loading/unloading transactions nav na	POS payment transactions ⁷	30.74	13.65	24.46	nav	nav
E-money card payment transactions nav						
c) Transactions at terminals outside the country by cards issued in the country Cash transactions 6 0.08 0.08 0.10 0.04 0.04 ATM cash withdrawals 0.08 0.08 0.10 0.04 0.04 ATM cash deposits nav nav nav nav nav nav POS payment transactions 7 34.32 40.45 55.92 64.36 68.27 E-money card loading/unloading transactions nav nav nav nav nav	•					
Cash transactions 6 0.080.080.000.100.040.04ATM cash withdrawals0.080.080.100.040.04ATM cash depositsnavnavnavnavnavnavPOS payment transactions 7 34.3240.4555.9264.3668.27E-money card loading/unloading transactionsnavnavnavnavnavnav		cards issued i	n the country			
ATM cash withdrawals 0.08 0.08 0.10 0.04 0.04 ATM cash deposits nav	· · · · · · · · · · · · · · · · · · ·		-	0.10	0.04	0.04
ATM cash deposits nav nav nav nav nav nav nav POS payment transactions 34.32 40.45 55.92 64.36 68.27 E-money card loading/unloading transactions nav nav nav nav nav						
POS payment transactions ⁷ 34.32 40.45 55.92 64.36 68.27 E-money card loading/unloading transactions nav nav nav nav nav						
E-money card loading/unloading transactions nav nav nav nav nav						
	· ·					
	E-money card payment transactions					

¹ This table contains all customer transactions. It also, for a number of instruments, includes banks' own account transactions where these cannot be identified separately (see further footnotes). Includes Northern Ireland (estimated) and Scotland; also includes some data and/or estimates of inter-branch and in-house processed items. ² Includes interbank payments settled in CHAPS; also includes inter-branch paper credit transfers plus some in-house automated transactions (including some transactions on banks' own accounts). ³ Customer transactions only. ⁴ Does not include data for cards with a "credit and charge" facility. These data are included in the "cards with a delayed debit function" category. ⁵ Includes inter-branch cheques and estimates of in-house processed cheques; this will also include some own account items. ⁶ Includes all ATM transactions; a further breakdown is not available. ⁷ Data are for payment cards only.

Table 9
Participation in selected interbank funds transfer systems (end of year)

	2012	2013	2014	2015	2016
Large-value payment systems					
CHAPS Sterling					
Number of participants	nav	nav	nav	nav	nav
Direct participants	19	20	21	22	24
Banks	17	18	19	20	22
Central bank	1	1	1	1	1
Other direct participants	1	1	1	1	1
Clearing and settlement organisations	1	1	1	1	1
Indirect participants	nav	nav	nav	nav	nav
Retail payment systems					
Cheque and Credit Clearing					
Number of participants	nav	nav	nav	nav	nav
Direct participants	11	11	11	11	11
Banks	10	10	10	10	10
Central bank	1	1	1	1	1
Other direct participants	0	0	0	0	0
Indirect participants	nav	nav	nav	nav	nav
BACS					
Number of participants ¹	63,416	63,016	nav	nav	nav
Direct participants	16	16	16	16	16
Banks	15	15	15	15	15
Central bank	1	1	1	1	1
Other direct participants	0	0	0	0	0
Indirect participants ¹	63,400	63,000	nav	nav	nav
Faster Payments Service					
Number of participants	nav	nav	nav	nav	nav
Direct participants	10	10	10	10	12
Banks	10	10	10	10	12
Central bank	0	0	0	0	0
Other direct participants	0	0	0	0	0
Indirect participants	nav	nav	nav	nav	nav
¹ Approximation; precise data for the number of indirect	participants are no	ot available.			

Table 10
Payments processed by selected interbank funds transfer systems: volume of transactions¹ (millions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
CHAPS Sterling					
Credit transfers	33.94	34.98	36.52	37.55	38.96
Concentration ratio in terms of volume (%) ²	73.0	73.0	72.0	71.0	66.9
Retail payment systems					
Cheque and Credit Clearing ³					
Total national transactions sent	667.42	587.26	518.46	444.69	377.47
credit transfers	54.25	47.37	40.96	28.30	21.81
cheques	613.17	539.89	477.50	416.30	355.66
Concentration ratio in terms of volume (%) ²	79.0	79.0	80.0	81.2	nav
BACS					
Total national transactions sent	5,616.39	5,695.03	5,841.23	6,080.04	6,218.75
credit transfers	2,199.74	2,170.12	2,169.24	2,171.70	2,146.84
direct debits	3,416.65	3,524.91	3,672.00	3,908.35	4,071.91
Concentration ratio in terms of volume (%) ²	81.0	81.0	81.0	81.0	87.7
Faster Payments Service					
Total national transactions sent	811.1	967.63	1,100.93	1,247.04	1,426.09
credit transfers	811.1	967.63	1,100.93	1,247.04	1,426.09
Concentration ratio in terms of volume (%)	88.0	88.0	88.0	89.0	93.7

¹ The table contains both customer and banks' own account transactions. Includes both domestic and cross-border (TARGET) payments; excludes inter-branch items and inward cross-border payments. ² Market share of the five largest participants in each payment system, based on the total volume of transactions. ³ Includes Northern Ireland (estimated) and Scotland.

Table 11
Payments processed by selected interbank funds transfer systems: value of transactions¹
(GBP billions except as noted, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems					
CHAPS Sterling					
Credit transfers	71,716.9	70,138.9	67,959.5	68,411.2	75,573.6
Concentration ratio in terms of value (%) ²	67.0	65.0	63.0	63.0	nav
Retail payment systems					
Cheque and Credit Clearing ³					
Total national transactions sent	646.0	576.1	537.3	493.8	435.6
credit transfers	27.5	24.6	23.0	18.6	19.1
cheques	618.5	551.5	514.2	474.0	416.5
Concentration ratio in terms of value (%) ²	83.0	81.0	82.0	81.7	nav
BACS					
Total national transactions sent	4,112.2	4,218.6	4,420.5	4,590.2	4,776.5
credit transfers	3,036.7	3,103.6	3,253.3	3,374.8	3,514.3
direct debits	1,075.5	1,115.1	1,167.3	1,215.4	1,262.2
Concentration ratio in terms of value	nav	nav	nav	nav	nav
Faster Payments Service					
Total national transactions sent	618	771.4	903.8	1,040.7	1,189.0
credit transfers	618	771.4	903.8	1,040.7	1,189.0
Concentration ratio in terms of value	87	87.0	88.0	88.0	nav

¹ The table contains both customer and banks' own account transactions. Includes both domestic and cross-border (TARGET) payments; excludes inter-branch items and inward cross-border payments. ² Market share of the five largest participants in each payment system, based on the total value of transactions. ³ Includes Northern Ireland (estimated) and Scotland.

Table 12
Participation in SWIFT by domestic institutions (end of year)

	2012	2013	2014	2015	2016
Members	98	98	90	96	95
of which: live	93	92	88	94	93
Sub-members	244	243	241	245	246
of which: live	238	237	234	237	240
Participants	309	341	374	411	437
of which: live	240	258	282	307	338
Total users	651	682	705	752	778
of which: live	571	587	604	638	671
Мето:					
Total SWIFT users	10,279	10,583	10,805	11,094	11,299
members	2,398	2,389	2,379	2,455	2,422
sub-members	3,340	3,343	3,353	3,395	3,367
participants	4,541	4,851	5,073	5,244	5,510
Source: SWIFT.					

Table 13
SWIFT message flows to/from domestic users (thousands, total for the year)

	2012	2013	2014	2015	2016
Total messages sent	843,572	971,080	1,060,926	1,147,340	1,199,563
of which:					
category I	105,099	123,366	128,191	140,465	154,273
category II	52,133	57,582	58,721	59,676	64,600
Total messages received of which:	1,058,961	1,184,486	1,335,903	1,458,947	1,555,573
category I	94,997	112,528	117,891	126,434	139,701
category II	36,928	41,509	42,395	43,294	44,265
Domestic traffic	256,485	290,697	314,167	338,399	353,311
Мето:					
Global SWIFT traffic	4,589,109	5,065,668	5,612,724	6,106,644	6,525,800
Source: SWIFT.					

Table 19
Number of clearing members
(end of year)

	2012	2013	2014	2015	2016
LCH.Clearnet Ltd ¹					
Total number of clearing members	171	165	161	154	158
central bank central counterparties (CCPs)	0 4	0 4	<i>0</i> 3	0 2	0 2
banks	92	95	105	102	105
other	75	66	53	50	51
Number of domestic clearing members	61	59	50	49	49
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	21	21	23	23	23
other	40	38	27	26	26
Number of foreign clearing members	110	106	111	105	109
central bank	0	0	0	0	0
central counterparties (CCPs)	4	4	3	2	2
banks	71	74	82	79	82
other	35	28	26	24	25
ICE Clear Europe					
Total number of clearing members	nav	81	80	79	81
central bank	nav	0	0	0	0
central counterparties (CCPs)	nav	0	0	0	0
banks	nav	25	25	24	27
other	nav	56	55	55	54
Number of domestic clearing members	nav	38	38	29	34
central bank	nav	0	0	0	0
central counterparties (CCPs)	nav	0	0	0	0
banks	nav	15	15	8	15
other	nav	23	23	21	19
Number of foreign clearing members	nav	43	42	44	47
central bank	nav	0	0	0	0
central counterparties (CCPs)	nav	0	0	0	0
banks	nav	10	10	10	12
other	nav	33	32	34	35
LME Clear Limited					
Total number of clearing members	nav	nav	42	42	44
central bank	nav	nav	0	0	0
central counterparties (CCPs)	nav	nav	0	0	0
banks	nav	nav	4	4	5
other	nav	nav	38	38	39
Number of domestic clearing members	nav	nav	34	34	35
central bank	nav	nav	0	0	0
central counterparties (CCPs)	nav	nav	0	0	0
banks	nav	nav	2	2	3
other	nav	nav	32	32	32
Number of foreign clearing members	nav	nav	8	8	9
central bank	nav	nav	0	0	0
central counterparties (CCPs)	nav	nav	0	0	0
banks	nav	nav	2	2	2
other	nav	nav	6	6	7
For the footnotes, see the end of the table.					

Table 19 (cont)					
	2012	2013	2014	2015	2016
CME Clearing Europe Limited					
Total number of clearing members	nav	nav	18	19	17
central bank	nav	nav	0	0	0
central counterparties (CCPs)	nav	nav	0	0	0
banks	nav	nav	13	8	10
other	nav	nav	5	11	7
Number of domestic clearing members	nav	nav	16	15	14
central bank	nav	nav	0	0	0
central counterparties (CCPs)	nav	nav	0	0	0
banks	nav	nav	11	4	7
other	nav	nav	5	11	7
Number of foreign clearing members	nav	nav	2	3	3
central bank	nav	nav	0	0	0
central counterparties (CCPs)	nav	nav	0	0	0
banks	nav	nav	2	0	0
other	nav	nav	0	3	3
¹ Formerly the London Clearing House.		_	_	_	

Table 20 Number of contracts and transactions cleared (millions, total for the year)

	2012	2013	2014	2015	2016
LCH.Clearnet Ltd					
Total number of contracts and transactions	4.4= 000	400 0 40		000 440	
cleared ¹	445.900	496.942	668.930	620.442	938.486
Number of securities transactions cleared	299.976	337.421	516.348	615.478	928.818
debt securities	2.980	3.168	3.307	nav	3.332
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	184.138	173.494	513.041	615.478	925.486
of which: number of repurchase transactions					
cleared	2.980	3.168	3.201	3.235	3.240
debt securities	2.980	3.168	3.201	3.235	3.240
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
Number of exchange-traded derivatives contracts					
cleared ²	144.417	157.425	154.111	1.672	5.437
financial futures	143.315	155.561	nav	0.063	2.168
financial options	0	0	nav	nav	3
other financial derivatives	0	0	nav	nav	0.000
commodity futures	1.102	1.864	nav	1.609	0.484
commodity options	0	0	nav	nav	0
Number of OTC derivatives contracts cleared	1.507	2.096	3.553	3.292	4.231
financial futures	0	0	0	nav	0
financial options	0	0	0	nav	0
other financial derivatives ³	0.839	1.175	2.666	3.292	4.231
commodity futures	0.622	0.846	0.815	nav	0.000
commodity options	0.046	0.075	0.072	nav	0.000
LCH.Clearnet SA					
Total number of contracts and transactions					
cleared	1.165	1.114	1.063	1.032	1.052
Number of securities transactions cleared	1.165	1.114	1.063	1.032	1.052
debt securities	1.165	1.114	1.063	1.032	1.052
short-term paper	0.124	0.121	0.116	0.104	0.131
bonds	1.041	0.994	0.947	0.928	0.921
equity	nap	nap	nap	nap	nap
of which: number of repurchase transactions					
cleared	0.955	0.936	0.879	0.876	0.946
debt securities	0.955	0.936	0.879	0.876	0.946
short-term paper	0.111	0.109	0.101	0.091	0.116
bonds	0.844	0.827	0.778	0.786	0.830
Number of exchange-traded derivatives contracts					
cleared	nap	nap	nap	nap	nap
Number of OTC derivatives contracts cleared	nap	nap	nap	nap	nap
For the footnotes, see the end of the table.				-	

Table 20 (cont)					
	2012	2013	2014	2015	2016
ICE Clear Europe Total number of contracts and transactions cleared	nav	1,328.23	1,325.226	1,136.877	1,201.956
Number of securities transactions cleared	nav	0.00	0	0	0
of which: number of repurchase transactions cleared	nav	0.00	0	0	nav
Number of exchange-traded derivatives contracts cleared	nav	1,328.09	1,325.039	1,136.690	1,201.769
Number of OTC derivatives contracts cleared financial futures financial options	nav nav nav	0.14 0.00 0.00	0.187 <i>0</i> <i>0</i>	0.187 <i>0</i> <i>0</i>	0.187 <i>0</i> <i>0</i>
other financial derivatives	nav	0.14	0.187	0.187	0.187
LME Clear Limited ⁴ Total number of contracts and transactions cleared	nav	nav	99.21	342.098	313.064
Number of securities transactions cleared	nav	nav	0.00	0	0
of which: number of repurchase transactions cleared	nav	nav	0.00	0	0
Number of exchange-traded derivatives contracts cleared	nav	nav	99.21	342.098	313.064
Number of OTC derivatives contracts cleared	nav	nav	0.00	0	0
CME Clearing Europe Limited Total number of contracts and transactions cleared	nav	nav	0.30	0.754	1.511
Number of securities transactions cleared	nav	nav	0.000	0	2
of which: number of repurchase transactions cleared	nav	nav	0.00	nav	nav
Number of exchange-traded derivatives contracts cleared	nav	nav	0.29	0.754	1.511
Number of OTC derivatives contracts cleared commodity futures commodity options	nav nav nav	nav nav nav	0.02 0.00 0.00	nav nav nav	nav nav nav
other commodity derivatives	nav	nav	0.02	nav	nav

¹ LCH Ltd has seen an increase in clearing business through 2015 and 2016, on the one hand because in 2016 a new listed rates exchange went live clearing with LCH and on the other hand because exchange clearing of OTC derivatives become mandatory as of June 2016. ² Decrease in 2015 value reflects removal of LME trades following 2014 takeover and migration of Nodal trades to CFTC from G822 October 2015. ³ These data relate to SwapClear. ⁴ 2014 relates to 71 days while 2015 relates to 253 days.

Table 21
Value of contracts and transactions cleared (billions, total for the year)

	2012	2013	2014	2015	2016
LCH.Clearnet Ltd (GBP)					
Total value of contracts and transactions cleared ¹	nav	nav	nav	nav	582,671.4
Value of securities transactions cleared	nav	nav	63,529.8	102,987.6	64,057.3
debt securities	nav	nav	63,527.4	102,987.6	63,131.8
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
equity	nav	nav	2.4	nav	925.5
of which: value of repurchase transactions					
cleared	68,200.8	67,299.4	62,972.8	57,558.7	63,131.7
debt securities	68,200.8	67,299.4	62,972.8	57,558.7	63,131.7
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav
Value of exchange-traded derivatives contracts					
cleared	nav	nav	nav	nav	946.6
financial futures	nav	nav	nav	nav	939.8
financial options	nav	nav	nav	nav	4.4
commodity futures	nav	nav	nav	nav	2.4
commodity options	nav	nav	nav	nav	0.0
other commodity derivatives	nav	nav	nav	nav	0.0
Value of OTC derivatives contracts cleared	nav	nav	nav	353,252.5	517,667.5
financial futures	nav	nav	nav	nav	0
financial options	nav	nav	nav	nav	0
other financial derivatives	nav	nav	nav	353,252.5	517,667.5
commodity futures	nav	nav	nav	nav	0.0
commodity options	nav	nav	nav	nav	0.0
LCH.Clearnet SA (EUR)					
Total value of contracts and transactions cleared	24,097.5	25,271.1	20,451.2	20,044.7	21,696.6
Value of securities transactions cleared	24,097.5	25,271.1	20,451.2	20,044.7	21,696.6
debt securities	24,097.5	25,271.1	20,451.2	20,044.7	21,696.6
short-term paper	2,022.7	2,264.0	1,703.6	1,650.1	2,000.9
bonds	22,074.8	23,007.1	18,747.7	18,394.5	19,695.7
of which: value of repurchase transactions					
cleared	23,580.3	24,775.9	19,797.3	19,518.8	21,243.9
debt securities	23,580.3	24,775.9	19,797.3	19,518.8	21,243.9
short-term paper	1,962.5	2,177.6	1,580.6	1,527.4	1,878.9
bonds	21,617.8	22,598.3	18,216.8	17,991.4	19,365.0
Value of exchange-traded derivatives contracts					
cleared	nap	nap	nap	nap	nap
Value of OTC derivatives contracts cleared	nap	nap	nap	nap	nap
For the footnotes, see the end of the table.					

Table 21 (cont)					
	2012	2013	2014	2015	2016
ICE Clear Europe		<u> </u>			
Total value of contracts and transactions cleared	nav	84,363.5	79,258.4	62,837.0	75,873.3
Value of securities transactions cleared	nav	0.0	0	0	0
of which: value of repurchase transactions					
cleared	nav	0.0	0	0	0
Value of exchange-traded derivatives contracts					
cleared	nav	82,368.4	77,185.0	60,800.4	74,072.8
financial futures	nav	65,706.7	53,690.2	47,943.1	<i>59,928.4</i>
financial options	nav	13.4	35.5	39.1	44.3
commodity futures	nav	16,628.7	23,416.3	12,784.0	14,060.4
commodity options	nav	19.6	42.9	34.2	39.7
Value of OTC derivatives contracts cleared	nav	1,995.2	2,073.4	2,036.6	1,800.5
financial futures	nav	0.0	0	0	0
financial options	nav	0.0	0	0	0
other financial derivatives	nav	1,995.2	2,073.4	2,036.6	1,800.5
LME Clear Limited					
Total value of contracts and transactions cleared ¹	nav	nav	6,273.5	17,970.5	0.0
Value of securities transactions cleared	nav	nav	0.0	0	0
of which: value of repurchase transactions					
cleared	nav	nav	0.0	0	0
Value of exchange-traded derivatives contracts					
cleared	nav	nav	6,273.5	17,970.5	17,871.4
commodity futures	nav	nav	6,268.7	17,950.1	17,853.1
commodity options	nav	nav	4.8	20.5	18.3
Value of OTC derivatives contracts cleared	nav	nav	0.0	0	0
CME Clearing Europe Limited					
Total value of contracts and transactions cleared	nav	nav	25.5	47.1	109.3
Value of securities transactions cleared	nav	nav	0.0	0	109
of which: value of repurchase transactions					
cleared	nav	nav	0.0	nav	nav
Value of exchange-traded derivatives contracts					
cleared	nav	nav	24.2	47.1	109.3
financial futures	nav	nav	24.0	45.2	104.0
commodity futures	nav	nav	0.2	1.9	5.3
commodity options	nav	nav	0.0	0	0
Value of OTC derivatives contracts cleared	nav	nav	1.3	nav	nav
financial futures	nav	nav	0.0	nav	nav
financial options	nav	nav	0.0	nav	nav
other financial derivatives	nav	nav	0.9	nav	nav
commodity futures	nav	nav	0.0	nav	nav
commodity options	nav	nav	0.0	nav	nav
other commodity derivatives	nav	nav	0.3	nav	nav

¹ LCH Ltd has seen an increase in clearing business through 2015 and 2016, on the one hand because in 2016 a new listed rates exchange went live clearing with LCH and on the other hand because exchange clearing of OTC derivatives become mandatory as of June 2016.

Table 22

Number of direct participants in CSDs

(end of year)

	2012	2013	2014	2015	2016
CREST ¹ Total number of participants	32,388	26,643	23,648	23,648	17,050
Number of domestic participants	nav	nav	nav	nav	nav
Number of foreign participants	nav	nav	nav	nav	nav
¹ Owned and operated by Euroclear UK and Ireland.					

Table 23 Number of securities held on accounts at CSDs

(end of year)

8 12,042	14,173	14,173	14,173
v nav	nav	nav	nav
v nav	nav	nav	nav
v nav	nav	nav	nav
a	nav nav	av nav nav av nav nav	av nav nav nav av nav nav nav

Table 24 Value of securities held on accounts at CSDs

(GBP billions, end of year)

	2012	2013	2014	2015	2016
CREST ¹					
Total value of securities held	3,684.7	4,246.1	4,432.8	6,215.3	4,975.4
debt securities	1,719.2	1,858.7	2,106.4	2,969.2	2,452.5
short-term paper	173.7	296.4	309.0	2,451.3	372.9
bonds	1,545.5	1,562.3	1,797.4	517.9	2,079.6
equity	1,965.4	2,387.3	2,326.4	3,246.1	2,522.9
¹ Owned and operated by Euroclear UK and Ireland					

Table 25 Number of delivery instructions processed

(thousands, total for the year)

	2012	2013	2014	2015	2016
CREST ¹					
Total number of delivery instructions	47,866.0	56,850.3	57,669.4	59,886.0	59,828.9
DVP	42,260.9	44,859.6	46,097.7	46,098.0	47,598.4
debt securities	3,319.1	5,589.8	5,148.4	5,148.0	5,841.1
short-term paper	90.4	174.0	164.8	165.0	142.3
bonds	3,228.7	5,415.8	4,983.6	4,983.0	5,698.8
equity	38,941.7	39,269.8	40,949.3	40,950.0	41,757.3
free of payment	5,605.1	11,990.7	11,571.7	13,788.0	12,230.5
debt securities	446.3	2,524.6	2,544.4	4,928.0	3,427.5
short-term paper	11.8	65.9	64.1	64.0	76.5
bonds	434.5	2,458.7	2,480.4	2,464.0	3,351.0
equity	5,158.9	9,466.1	9,027.3	8,860.0	8,803.0
other	0	0	0	nav	7
¹ Owned and operated by Euroclear UK and Ireland	d.				

Table 26
Value of delivery instructions processed

(GBP billions, total for the year)

	2012	2013	2014	2015	2016
CREST ¹					
Total value of delivery instructions	116,126.0	279,639.3	229,456.8	268,758.3	194,297.6
DVP	102,746.6	217,851.7	176,607.6	203,663.8	140,112.6
debt securities	93,785.1	210,707.9	168,120.2	192,736.2	131,772.9
short-term paper	3,245.1	11,478.0	8,688.3	184,219.4	3,569.3
bonds	90,539.9	199,229.9	159,431.9	8,516.8	128,203.6
equity	8,961.6	7,143.8	8,487.4	10,927.6	8,339.7
free of payment	13,379.4	61,787.6	52,849.2	65,094.5	54,185.0
debt securities	12,188.6	57,038.9	46,793.1	57,740.2	48,964.0
short-term paper	421.7	3,729.1	3,520.9	4,014.5	1,358.0
bonds	11,766.9	53,309.8	43,272.2	53,725.7	47,606.0
equity	1,190.8	4,748.6	6,056.1	7,354.2	5,220.9
¹ Owned and operated by Euroclear UK and Ireland.	_		_		

Table 1
Basic statistical data

	2012	2013	2014	2015	2016
Population (thousands) ¹	313,998	316,205	318,564	320,897	323,128
GDP (USD billions) ²	16,155.3	16,691.5	17,427.6	18,120.7	18,624.5
GDP per capita (USD)	51,450	52,787	54,707	56,469	57,638
Consumer price inflation (%) ³	2.0	1.2	1.5	-0.1	1.0

¹ Data estimated as of 1 July each year. Does not include armed forces overseas. Figures from 2012 to 2015 have been revised to reflect updated estimates. ² Annual data reflecting National Income and Product Account revisions as of 27 July 2012. ³ Average annual inflation rate. Data stated for all urban consumers (C-CPI-U). Figures from 2012 to 2015 have been revised to reflect updated estimates.

Sources: US Department of Commerce, Bureau of the Census and Bureau of Economic Analysis; US Department of Labor, Bureau of Labor Statistics.

Table 2 Settlement media used by non-banks

(USD billions, average for December)

	2012	2013	2014	2015	2016
Notes and coin in circulation outside banks ¹	1,090.00	1,159.80	1,254.10	1,340.40	1,422.40
Value of transferable deposits ²	1,413.20	1,547.70	1,731.40	1,794.40	1,954.10
Other ³	-42.50	-46.80	-52.60	-51.40	-49.80
Narrow money supply (M1) ⁴	2,460.70	2,660.70	2,932.90	3,083.40	3,326.70
Memo:					
Transferable deposits in foreign currencies ⁵	6.34	8.67	23.32	9.75	16.30
Outstanding value on e-money storage	nav	nav	nav	nav	nav

¹ Currency in circulation less amount held by the US Treasury, Federal Reserve Banks and depository institutions. ² Transferable deposits consist of demand deposits and other chequable deposits. ³ Non-bank traveller's cheques. ⁴ Composition of M1 = currency and coin + traveller's cheques + demand deposits + other chequable deposits. ⁵ Average for the week beginning on the third Tuesday in December and ending the following Monday. Source: Federal Reserve.

Table 3
Settlement media used by banks

(USD billions, average of last reserve maintenance period)

	2012	2013	2014	2015	2016
Transferable balances held at the central bank	1,510.351	2,491.008	2,579.475	2,205.229	1,888.367
required reserves ¹	57.672	69.011	84.766	89.889	109.347
free reserves ²	1,452.679	2,421.997	2,494.709	2,115.340	1,779.020
Transferable balances held at other banks ³ <i>Memo:</i>	38.029	32.528	31.648	36.329	nav
Credit extended by the central bank:4					
intraday					
peak ⁵	19.107	5.219	3.92 <i>4</i>	5.208	<i>5.4</i> 83
average ⁶	2.937	0.879	0.661	1.257	1.430
overnight ⁷	0.042	0.084	0.104	0.106	0.039
longer refinancing operations ⁸	0.698	0.098	0.000	0	0

¹ Required reserves less applied vault cash plus weekly average required clearing balances. ² In 2013 the Federal Reserve changed the way it measures free reserves. ³ Transaction account deposits of commercial banks and other depository institutions in the United States as of 31 December. These transferable balances do not include other immediately available funds, such as federal funds sold and securities purchased under agreements to resell (RPs), which at year-end 2012 through 2013 amounted to USD 324.5 and 346.4 billion respectively. ⁴ The Federal Reserve also enters into repurchase agreements (not shown), but these are not for the purpose of providing funds to banks for settlement. ⁵ Average of peak daylight overdrafts during the reporting period. The peak daylight overdraft for a given day is the greatest value reached by the concurrent sum of daylight overdrafts for all institutions. ⁶ Average of average daylight overdrafts during the reporting period. The average per-minute daylight overdraft for a given day is the sum of the average per-minute daylight overdrafts for all institutions on that day. ⁷ Discount window borrowing from the Federal Reserve as indicated in statistical release H.3 "Aggregate Reserves of Depository Institutions and the Monetary Base". ⁸ Term auction credit plus other borrowings from the Federal Reserve less discount window borrowing from the Federal Reserve as indicated in statistical release H.3 "Aggregate Reserves of Depository Institutions and the Monetary Base".

Source: Federal Reserve.

Table 4
Banknotes and coin
(USD billions, end of year)

	2012	2013	2014	2015	2016
Total banknotes and coin issued	1,169.13	1,241.16	1,342.88	1,424.93	1,509.34
Total banknotes issued	1,127.10	1,198.35	1,299.14	1,379.96	1,463.36
USD 100	863.07	924.71	1,014.50	1,082.24	1,154.77
USD 50	72.52	<i>74.4</i> 8	76.93	79.81	83.49
USD 20	148.95	155.00	162.17	171.28	177.24
USD 10	17.75	18.46	18.89	18.95	19.24
USD 5	12.22	12.70	13.12	13.71	14.22
USD 1	10.30	10.61	11.04	11.39	11.74
other	2.30	2.40	2.49	2.58	2.66
Total coin issued	42.03	42.82	43.74	44.97	45.97
USD 1	<i>4.</i> 93	5.02	5.08	5.17	5.24
fractional coins	37.10	37.80	38.66	39.79	40.74
Banknotes and coin held by banks	79.13	81.36	88.78	84.53	86.94
Banknotes and coin in circulation outside banks	1,090.00	1,159.80	1,254.10	1,340.40	1,422.40
Sources: Federal Reserve; US Treasury.					

Table 5
Institutions offering payment services to non-banks (end of year)

	2012	2013	2014	2015	2016
Central bank ¹					
Number of branches or offices ²	36	36	36	36	36
Number of accounts	nav	nav	nav	nav	nav
Value of accounts	nav	nav	nav	nav	nav
Banks ³					
Number of institutions	14,267	13,722	13,129	12,537	12,025
Number of branches or offices ⁴	117,007	116,012	114,542	111,956	112,244
Number of accounts	nav	nav	nav	nav	nav
Value of transaction accounts (USD billions) ⁵	1,755.40	1,911.11	2,101.87	2,172.31	2,317.48
Commercial banks					
Number of institutions	6,036	5,814	5,573	5,309	5,084
Number of branches or offices ⁴	87,518	86,844	85,865	84,239	84,502
Value of transaction accounts (USD billions)	1,482.88	1,608.02	1,738.24	1,784.82	1,915.92
Savings institutions ⁶					
Number of institutions	1,045	996	932	870	826
Number of branches or offices ⁴	8,963	8,609	8,078	7,133	7,104
Value of transaction accounts (USD billions)	102.52	96.28	96.01	96.82	102.93
Credit unions					
Number of institutions	6,956	6,685	6,401	6,142	5,906
Number of branches or offices ⁴	20,526	20,559	20,599	20,584	20,638
Value of transaction accounts (USD billions)	113.07	120.55	133.16	152.49	156.23
Branches of foreign banks ⁷					
Number of institutions	230	227	223	216	209
Number of branches or offices	nav	nav	nav	nav	nav
Value of transaction accounts (USD billions) ⁸	56.94	86.26	134.47	138.19	142.40

¹ The Federal Reserve System is the central bank of the United States. It is composed of a central, governmental agency – the Board of Governors – in Washington DC and 12 regional Federal Reserve Banks located in Atlanta, Boston, Chicago, Cleveland, Dallas, Kansas City, Minneapolis, New York, Philadelphia, Richmond, St Louis and San Francisco.

² Includes the 12 Reserve Bank head offices. Some branches no longer provide payment services. A small number of additional regional offices provide cheque or cash services to depository institutions. ³ Banks in this table include depository institutions, which are similar in nature to deposit-taking institutions. ⁴ Does not include head offices. ⁵ Includes the sum of deposits of individuals, partnerships and corporations; deposits of the US government, deposits of states and political subdivisions in the United States; deposits of commercial banks in the United States; deposits of other depository institutions in the United States; deposits of banks in foreign countries; deposits of foreign governments and official institutions (including foreign central banks) and certified and official cheques. Note that this definition differs from that of transferable deposits reported in Table 2. ⁶ Includes state and federal savings banks, savings and loan associations and cooperative and industrial banks. ⁷ US branches and agencies of foreign banks. ⁸ Includes credit balances as well as total transaction accounts. Sources: Federal Reserve; US Treasury.

Table 6
Payment card functions and accepting devices (end of year)

	2012	2013	2014	2015	2016
Cards issued in the country (millions) ¹					
Cards with a cash function ²	827.4	845.1	869.9	913.3	nav
Cards with a debit function	290.8	296.0	301.6	307.3	nav
Cards with a credit function	905.6	917.4	945.1	998.1	nav
of which: retailer cards ³	369.0	368.3	376.8	392.1	nav
Cards with an e-money function	nav	nav	nav	nav	nav
Total number of cards (irrespective of the number					
of functions on the card)	nav	nav	nav	nav	nav
Terminals located in the country (thousands)					
ATMs	nav	nav	nav	nav	nav
ATMs with a cash withdrawal function	nav	nav	nav	nav	nav
ATMs with a credit transfer function	nav	nav	nav	nav	nav
POS terminals	nav	nav	nav	nav	nav
of which: EFTPOS terminals	nav	nav	nav	nav	nav
E-money card terminals	nav	nav	nav	nav	nav

¹ A card with multiple functions may appear in several categories; therefore, it is not meaningful to add the figures.

1 Includes credit and debit cards with a cash function. These cards generally can only be used with the retailers' own proprietary networks.

Sources: HSN Consultants Inc, Oxnard, CA.

Table 7
Indicators of the use of payment instruments and terminals by non-banks: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument ¹					
Credit transfers	8,493.6	9,026.5	9,463.8	10,020.6	10,555.3
paper-based	nap	nap	nap	nap	nap
non-paper-based (ACH) ²	8,493.6	9,026.5	9,463.8	10,020.6	10,555.3
Direct debits (ACH) ²	12,821.7	13,574.6	14,389.5	15,472.4	16,292.2
Card payments ³	77,938.6	84,220.5	90,113.0	97,666.2	nav
payments by cards with a debit function 4	51,717.2	56,020.8	59,539.3	64,268.2	nav
payments by cards with a credit function ⁵ of which: payments by retailer cards with a	26,221.4	28,199.7	30,573.7	33,398.0	nav
credit function	2,424.8	2,458.3	2,510.8	2,621.9	nav
E-money payment transactions	nav	nav	nav	nav	nav
Cheques ⁶	19,745.6	18,943.5	18,175.5	17,300.0	16,476.5
Memo:					
ATM transactions	nav	nav	nav	nav	nav
of which: ATM cash withdrawals ⁷	5,804.4	5,789.0	5,773.6	5,758.3	5,742.9

¹ Includes payments by banks for their own account. ² Includes an estimate of the number of on-us payments. Values for 2012–15 were revised to reflect a change in Federal Reserve's methodology for estimating on-us transactions.³ Payments made in the United States using cards issued inside and outside the United States. ⁴ Excludes cash back. Studies conducted by the Federal Reserve estimated that the number of debit card payments amounted to 47,266 million in 2012 and 59,614 million in 2015. The figures in the table differ from the Federal Reserve estimates, but are provided to allow a consistent time series. ⁵ Excludes cash advances. Total of Visa, MasterCard, Discover, American Express, Diners Club and retailer cards. Studies conducted by the Federal Reserve estimated that the number of credit card payments amounted to 24,400 million in 2012 and 31,018 million in 2015. The figures in the table differ from the Federal Reserve estimates, but are provided to allow a consistent time series. ⁶ Annualised number of paid cheques including commercial cheques, US Treasury cheques and postal money orders. Studies conducted by the Federal Reserve estimated the number of paid cheques in 2012 and 2015; figures for other years are derived from those estimates.⁷ A study conducted by the Federal Reserve estimated that the number of on-us ATM withdrawals, meaning they involved only one depository institution, amounted to approximately 68% of the number of ATM cash withdrawals in 2012. Sources: Federal Reserve; *The Nilson Report* (HSN Consultants Inc); National Automated Clearing House Association.

Table 8
Indicators of the use of payment instruments and terminals by non-banks: value of transactions (USD billions, total for the year)

	2012	2013	2014	2015	2016
Transactions per type of payment instrument ¹					
Credit transfers	69,404.2	74,297.9	79,059.9	83,057.5	87,415.8
paper-based	nap	nap	nap	nap	nap
non-paper-based (ACH) ²	69,404.2	74,297.9	79,059.9	83,057.5	87,415.8
Direct debits (ACH)	61,793.4	63,225.0	75,363.1	63,812.6	67,381.3
Card payments ³	4,417.6	4,762.0	5,156.6	5,527.1	nav
payments by cards with a debit function 4	1,975.8	2,130.7	2,279.7	2,444.8	nav
payments by cards with a credit function ⁵ of which: payments by retailer cards with a	2,441.8	2,631.4	2,876.9	3,082.3	nav
credit function	216.0	232.3	245.4	249.9	nav
E-money payment transactions ⁶	nav	nav	nav	nav	nav
Cheques	27,826.9	27,663.0	27,499.1	27,335.2	27,171.4
Memo:					
ATM transactions	nav	nav	nav	nav	nav
of which: ATM cash withdrawals ⁷	687.0	692.9	698.7	704.6	710.4

¹ Includes payments by banks for their own account. ² Values for 2012–15 were revised to reflect a change in Federal Reserve's methodology for estimating on-us transactions. ³ Payments made in the United States using cards issued inside and outside the United States. ⁴ Excludes cash- back. Studies conducted by the Federal Reserve estimated that the value of debit card payments was USD 1,872 billion in 2012 and USD 2,292 billion in 2015. The figures in the table differ from the Federal Reserve estimates, but are provided to allow a consistent time series. ⁵ Excludes cash advances. Total of Visa, MasterCard, Discover, American Express, Diners Club and retailer cards. Studies conducted by the Federal Reserve estimated that the value of credit card payments was USD 2,269 billion in 2012 and USD 2,803 billion in 2015. The figures in the table differ from the Federal Reserve estimates, but are provided to allow a consistent time series. ⁶ Annualised value of paid cheques including commercial cheques, US Treasury cheques and postal money orders. Studies conducted by the Federal Reserve estimated the value of paid cheques in 2012 and 2015; figures for other years are derived from those estimates. ⁷ A study conducted by the Federal Reserve estimated the value of on-us ATM withdrawals, meaning they involved only one depository institution, amounted to approximately 71% of the value of ATM cash withdrawals in 2012..

Sources: Federal Reserve; The Nilson Report (HSN Consultants Inc); National Automated Clearing House Association.

Table 9
Participation in selected interbank funds transfer systems (end of year)

	2012	2013	2014	2015	2016
Large-value payment systems					
CHIPS Number of participants	52	50	49	49	48
Fedwire Number of participants ¹	7,143	6,930	7,866	6,820	6,430

¹ The total number of active participants rolled up to the master account level for the Federal Reserve's Fedwire Funds Service. Sources: Clearing House Interbank Payments System; Federal Reserve.

Table 10
Payments processed by selected interbank funds transfer systems: volume of transactions (millions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems ¹					
CHIPS ²	97.1	103.1	109.4	110.4	110.8
Fedwire ³	131.6	134.2	135.0	142.8	148.1
Cheque clearings ⁴					
Private clearing houses and direct exchanges ⁵	7,279.1	7,521.0	7,368.3	7,148.4	6,876.6
Federal Reserve	6,851.0	6,171.0	5,899.0	5,604.0	5,387.0
Automated clearing houses (ACH)					
Private ⁶	7,818.3	8,070.4	8,304.1	8,694.4	9,148.7
Debit transfers	4,893.2	5,031.3	5,190.0	5,434.6	5,685.0
Credit transfers	2,925.1	3,039.1	3,114.1	3,259.8	3,463.7
Federal Reserve ⁷	8,932.2	9,481.4	9,994.0	10,618.7	11,180.0
Debit transfers	4,896.6	5,166.6	<i>5,44</i> 9.5	5,827.6	6,174.1
Credit transfers	4,035.6	4,314.8	4,544.6	4,791.1	5,006.0
Memo:					
On-us wire ⁸	58.8	61.0	62.8	65.0	66.5
On-us cheques ⁴	5,615.5	5,251.5	4,908.1	4,547.6	4,212.9
On-us ACH ^{6, 9}	3,679.9	3,867.6	4,055.3	4,243.1	4,430.8
Debit transfers	2,066.5	2,170.1	2,273.6	2,377.2	2,480.7
Credit transfers	1,613.4	1,697.5	1,781.7	1,865.9	1,950.1

¹ Number of originations; data do not include non-value messages. ² CHIPS, the Clearing House Interbank Payments System, is owned by The Clearing House. ³ Fedwire is operated by the Federal Reserve. ⁴ Studies conducted by the Federal Reserve estimated the number of cheques paid in 2009 and 2012. The number of on-us cheques for those years was also estimated. Total paid cheques = Federal Reserve + private clearing houses and direct exchanges + on-us. Figures for other years are derived from those estimates. ⁵ Calculated as total cheque volume less Federal Reserve cheque clearings and estimated on-us cheques. ⁶ Number originated using private automated clearing house (ACH) operators. Includes transfers sent by private ACH operators to the Federal Reserve for transmission to the receiving depository institution. These transfers, expressed in millions, amounted to in 3,219.1 in 2012, 3,234.8 in 2013, 3,240.3 in 2014, 3,338.0 in 2015, and 3,475.1 in 2016.

Sources: Clearing House Interbank Payments System; Federal Reserve; National Automated Clearing House Association.

⁷ Number originated on FedACH. Includes transfers sent by the Federal Reserve to private ACH for transmission to the receiving depository institution. These transfers, expressed in 1,124.7 in 2012, 1,249.6 in 2013, 1,308.0 in 2014, 1,431.8 in 2015, and 1,562.0 in 2016. ⁸ A study conducted by the Federal Reserve estimated that the value of on-us wire payments (processed by only one depository institution) was 58.8 million in 2012. Figures for subsequent years are derived from that estimate. Total Large-value Payments = Fedwire + CHIPS + On-us wire. ⁹ A study conducted by the Federal Reserve estimated that the number of on-us ACH payments (processed by only one depository institution) was 3,680.0 million in 2012 and 4,243.1 million in 2015. Figures for other years are derived from these estimates. Total ACH = private + Federal Reserve + on-us ACH.

Table 11
Payments processed by selected interbank funds transfer systems: value of transactions (USD billions, total for the year)

	2012	2013	2014	2015	2016
Large-value payment systems ¹					
CHIPS ²	364,818.6	379,984.8	390,695.2	375,862.3	364,331.3
Fedwire ³	599,200.6	713,310.4	884,551.9	834,630.4	766,961.5
Cheque clearings ⁴					
Private clearing houses and direct exchanges ⁵	9,708.8	10,075.9	10,093.2	10,253.5	10,423.2
Federal Reserve	8,346.6	8,136.9	8,276.9	8,274.0	8,261.6
Automated clearing houses (ACH)					
Private ⁶	17,306.0	18,744.4	20,030.2	20,850.5	21,719.2
Debit transfers	5,794.5	6,283.0	6,617.4	6,805.3	7,076.3
Credit transfers	11,511.5	12,461.4	13,412.8	14,045.2	14,643.0
Federal Reserve ⁷	19,573.1	19,953.9	19,993.4	20,789.0	22,058.5
Debit transfers	8,441.3	8,328.2	7,877.7	8,057.6	8,565.7
Credit transfers	11,131.8	11,625.7	12,115.6	12,731.4	13,492.8
Memo:					
On-us wire ⁸	152,280.8	172,701.8	201,443.7	191,214.8	178,704.1
On-us cheques ⁴	9,771.4	9,450.2	9,129.0	8,807.7	8,486.5
On-us ACH ^{6, 9}	92,136.3	95,978.4	99,820.4	105,230.7	107,504.6
Debit transfers	38,215.3	38,776.4	39,337.6	39,898.8	40,460.0
Credit transfers	53,921.0	57,201.9	60,482.8	63,763.7	67,044.6

¹ Number of originations. ² CHIPS, the Clearing House Interbank Payments Systems, is owned by The Clearing House. ³ Fedwire is operated by the Federal Reserve. ⁴ Studies conducted by the Federal Reserve estimated the value of cheques paid in 2009 and 2012. The value of on-us cheques for those years was also estimated. Figures for other years are derived from those estimates. Total paid cheques = Federal Reserve + private clearing houses and direct exchanges + on-us. ⁵ Calculated as total cheque value less value of Federal Reserve cheque clearing and value of on-us cheques. ⁶ Value originated using private conducted by the Federal (ACH) operators. Includes transfers sent by private ACH to the Federal Reserve for transmission to the receiving depository institution. These transfers, expressed in USD billions, amounted to 4,411.7 in 2012, 4,531.4 in 2013, 4,586.3 in 2014, 4,921.4 in 2015, and 5,011.1 in 2016.

Sources: Clearing House Interbank Payments System; Federal Reserve; National Automated Clearing House Association.

⁷ Value originated on FedACH. Includes transfers sent by the Federal Reserve to private ACH for transmission to the receiving depository institution. These transfers, expressed in USD billions, amounted to 3,127.6 in 2012, 3,295.1 in 2013, 3,167.6 in 2014, 3,408.1 in 2015 and 3,640.0 in 2016.

⁸ A study conducted by the Federal Reserve estimated that the value of on-us wire payments (processed by only one depository institution) was USD 152,300 billion in 2012. Figures for subsequent years are derived from that estimate. Total large-value payments = Fedwire + CHIPS + on-us wire.

⁹ A study conducted by the Federal Reserve estimated that the value of on-us ACH payments was USD 92,136 billion in 2012 105,230 billion in 2015; figures for other years are derived from that estimate. Values for 2012–15 were revised to reflect a change in methodology of how the study estimates on-us transactions. Total ACH = Private + Federal Reserve + On-us ACH.

Table 12
Participation in SWIFT by domestic institutions (end of year)

	2012	2013	2014	2015	2016
Members	119	118	115	129	127
of which: live	118	118	116	129	126
Sub-members	277	272	272	268	255
of which: live	272	261	263	259	243
Participants	459	529	592	676	755
of which: live	428	495	545	638	711
Total users	855	919	979	1073	1137
of which: live	818	874	924	1026	1080
Мето:					
Total SWIFT users	10,279	10,583	10,805	11,094	11,299
members	2,398	2,389	2,379	2,455	2,422
sub-members	3,340	3,343	3,353	3,395	3,367
participants	4,541	4,851	5,073	5,244	5,510
Source: SWIFT.					

Table 13
SWIFT message flows to/from domestic users (thousands, total for the year)

	2012	2013	2014	2015	2016
Total messages sent	816,912	908,699	1,002,676	1,103,326	1,195,421
of which:					
category I	127,669	135,965	146,720	155,864	164,489
category II	41,384	46,550	52,677	56,663	60,689
Total messages received of which:	948,429	1,065,767	1,197,903	1,327,734	1,448,874
category I	124,850	133,121	144,054	151,093	158,852
category II	70,824	75,057	79,241	83,462	91,311
Domestic traffic	349,040	388,017	434,439	492,676	544,465
Мето:					
Global SWIFT traffic	4,589,109	5,065,668	5,612,724	6,106,644	6,525,800
Source: SWIFT.					

Table 14
Number of participants in exchanges and trading systems (end of year)

	2012	2013	2014	2015	2016
	2012	2013	2014	2013	2010
New York Stock Exchange					
Total number of participants	nav	nav	nav	nav	nav
Nasdag					
Total number of participants	nav	nov	nov	nov	no.
rotal number of participants	Ilav	nav	nav	nav	nav
American Stock Evolungs					
American Stock Exchange					
Total number of participants	nav	nav	nav	nav	nav
Source: NYSE Euronext.					

Table 15					
Number of listed securities ¹					
(end of year)					
	2012	2013	2014	2015	2016
New York Stock Exchange ^{2, 3}					
Total number of listed securities	nav	nav	nav	nav	nav
debt securities	nav	nav	nav	nav	nav
equity ²	nav	nav	nav	nav	nav
Nasdaq ³					
Total number of listed securities	2,735	2,804	3,007	3,130	3,212
debt securities	nap	nap	nap	nap	nap
equity	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
American Stock Exchange					
Total number of listed securities	nav	nav	nav	nav	nav
debt securities	nap	nap	nap	nap	nap
equity	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav

¹ The primary securities exchanges in the United States are the New York Stock Exchange, the Nasdaq Stock Market (Nasdaq), the American Stock Exchange, the Boston Stock Exchange, the Chicago Stock Exchange, the Pacific Stock Exchange and the Philadelphia Stock Exchange. ² The New York Stock Exchange is part of a public company that does not report the total number of stocks issued. The number of issuers amounted to 4,532 in 2011, 4,493 in 2012, 4,500 in 2013, 3,077 in 2014 and 3,067 in 2015. ³ Over-the-counter market.

Sources: The Nasdaq Stock Market, Inc.

Table 16

Market capitalisation of listed companies

(USD billions, end of year)

	2012	2013	2014	2015	2016
New York Stock Exchange	44.005.0	17.010.0	10.051.1	47.700.0	10.570.4
Total market capitalisation/equity	14,085.9	17,949.9	19,351.4	17,786.8	19,573.1
Nasdaq					
Total market capitalisation/equity	4,582.4	6,085.0	6,979.2	7,280.8	7,779.1
American Stock Exchange					
Total market capitalisation/equity	nav	nav	nav	nav	nav
Source: Federal Reserve.					

Table 17

Number of executed trades

(thousands, total for the year)

	2012	2013	2014	2015	2016
New York Stock Exchange ¹					
Total number of executed securities trades	1,386,248	1,202,085	1,552,992	1,765,710	1,866,884
debt securities	nav	nav	nav	nav	nav
equity	1,386,248	1,202,085	1,552,992	1,765,710	1,866,884
other	nav	nav	nav	nav	nav
Total number of executed derivatives trades	nav	nav	nav	nav	nav
Nasdaq					
Total number of executed securities trades	1,933,148	1,893,880	2,412,417	2,512,786	2,590,906
debt securities	nap	nap	nap	nap	nap
equity	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Total number of executed derivatives trades	nav	nav	nav	nav	nav
American Stock Exchange ¹					
Total number of executed securities trades	nav	nav	nav	nav	nav
Total number of executed derivatives trades	nav	nav	nav	nav	nav

¹ NYSE Euronext owns the American Stock Exchange. Figures for the American Stock Exchange (NYSE AMEX) equity trades are included with other NYSE figures.

Sources: NYSE Euronext; The Nasdaq Stock Market, Inc.

Table 18

Value of executed trades

(USD billions, total for the year)

	2012	2013	2014	2015	2016
New York Stock Exchange ¹					_
Total value of executed securities trades	13,505.000	13,775.990	15,938.900	17,536.220	17,375.230
debt securities ²	nav	nav	nav	nav	nav
equity	13,505.000	13,775.990	15,938.900	17,536.220	17,375.230
other	nav	nav	nav	nav	nav
Total value of executed derivatives trades	nav	nav	nav	nav	nav
Nasdaq					
Total value of executed securities trades	13,655.050	14,489.376	17,778.971	18,941.010	18,092.271
debt securities	nap	nap	nap	nap	nap
equity	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Total value of executed derivatives trades	nav	nav	nav	nav	nav
American Stock Exchange ¹					
Total value of executed securities trades	nav	nav	nav	nav	nav
Total value of executed derivatives trades	nav	nav	nav	nav	nav

¹ NYSE Euronext owns the American Stock Exchange. Figures for American Stock Exchange (NYSE AMEX) equity trades are included with other NYSE figures. ²Par (face) value of bonds traded.

Sources: NYSE Euronext; The Nasdaq Stock Market, Inc.

Table 19
Number of clearing members
(end of year)

	2012	2013	2014	2015	2016
National Securities Clearing Corporation ¹					
Total number of clearing members	181	173	170	161	156
central bank	0	0	0	0	0
central counterparties (CCPs) banks	0 11	0 11	0 11	0 11	0 12
other	170	162	159	150	12 144
oure	170	102	109	730	177
Number of domestic clearing members	179	171	168	159	154
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	11	11	11	11	12
other	168	160	157	148	142
Number of foreign clearing members	2	2	2	2	2
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	0	0	0	0	0
other	2	2	2	2	2
Fixed Income Clearing Corporation ¹					
Total number of clearing members	178	161	184	270	265
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	42	37	46	62	60
other	136	124	138	208	205
Number of domestic clearing members	176	158	161	240	237
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	42	36	25	38	38
other	134	122	136	202	199
Number of foreign clearing members	2	3	23	30	28
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	0	1	21	24	22
other	2	2	2	6	6
a) Government Securities Division					
Total number of clearing members	104	85	106	119	114
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	31	23	32	38	38
other	73	62	74	81	76
Number of domestic clearing members	104	84	86	98	93
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	31	22	12	17	17
other	73	62	74	81	76
Number of foreign clearing members	0	1	20	21	21
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	0	1	20	21	21
other	0	0	0	0	0
For the footnotes, see the end of the table.					

Table 19	(cont)
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	2012	2013	2014	2015	2016
b) Mortgage-Backed Securities Division					
Total number of clearing members	74	76	78	151	151
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	11	14	14	24	22
other	63	62	64	127	129
Number of domestic clearing members	72	74	75	142	144
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	11	14	13	21	21
other	61	60	62	121	123
Number of foreign clearing members	2	2	3	9	7
central bank	0	0	0	0	0
central counterparties (CCPs)	0	0	0	0	0
banks	0	0	1	3	1
other	2	2	2	6	6

¹ Subsidiary of Depository Trust & Clearing Corporation (DTCC).

Source: Depository Trust & Clearing Corporation.

Table 20

Number of contracts and transactions cleared

(millions, total for the year)

	2012	2013	2014	2015	2016
National Securities Clearing Corporation ^{1, 2} Total number of contracts and transactions cleared	17,263.0	17,723.0	20,240.0	22,395.0	25,680.0
Fixed Income Clearing Corporation ¹ Total number of contracts and transactions cleared	39.1	40.2	40.7	44.0	44.2
a) Government Securities Division ³ Total number of contracts and transactions cleared	34.9	36.4	37.0	40.1	40.4
b) Mortgage-Backed Securities Division Total number of contracts and transactions cleared	4.2	3.8	3.7	3.9	3.8

¹ Subsidiary of Depository Trust & Clearing Corporation (DTCC). ² Includes equities, corporate and municipal debt, American Depository Receipts, exchange-traded funds, unit investment trusts, mutual funds, insurance products and other securities. ³ Includes Treasury bills, bonds, notes, zero coupon securities, government agency securities and inflation-indexed securities. Source: Depository Trust & Clearing Corporation.

Table 21
Value of contracts and transactions cleared (USD billions, total for the year)

	2012	2013	2014	2015	2016
National Securities Clearing Corporation ^{1, 2}					
Total value of contracts and transactions cleared	185,670	207,220	232,155	243,304 na	av
Fixed Income Cleaning Comparation 1					
Fixed Income Clearing Corporation ¹					
Total value of contracts and transactions cleared	1,219,100	1,155,200	1,073,492	985,248	991,379
a) Carramana Carramitica Division 3					
a) Government Securities Division ³					
Total value of contracts and transactions cleared	1,116,200	1,076,500	1,008,396	917,068	916,977
b) Mortgage-Backed Securities Division					
Total value of contracts and transactions cleared	102.900	78.700	65,096	68.180	74,402
Total value of contracts and transactions cleared	102,900	70,700	05,090	00,100	14,402

¹ Subsidiary of Depository Trust & Clearing Corporation DTCC. ² Includes equities, corporate and municipal debt, American Depository Receipts, exchange-traded funds, unit investment trusts, mutual funds, insurance products and other securities. ³ Includes Treasury bills, bonds, notes, zero coupon securities, government agency securities and inflation-indexed securities. Source: Depository Trust & Clearing Corporation.

Table 22 Number of direct participants in CSDs (end of year)

	2012	2013	2014	2015	2016
Depository Trust Company ¹					
Total number of participants	375	353	338	338	319
central bank	12	12	12	12	12
central counterparties (CCPs)	2	2	0	0	0
central securities depositories	12	11	13	13	14
banks	90	89	91	91	86
other	259	239	222	222	207
Number of domestic participants	358	336	311	311	292
central bank	12	12	12	12	12
central counterparties (CCPs)	1	1	0	0	0
central securities depositories	0	0	0	0	0
banks	89	86	79	79	76
other	256	237	220	220	204
Number of foreign participants	17	17	27	27	27
central bank	0	0	0	0	0
central counterparties (CCPs)	1	1	0	0	0
central securities depositories	12	12	13	13	14
banks	1	1	12	12	10
other	3	3	2	2	3
Federal Reserve ²					
Total number of participants ³	2,139	2,084	2,012	1,839	1,918

¹ Subsidiary of Depository Trust & Clearing Corporation (DTCC). ² Number of depository institutions that used the Federal Reserve's Fedwire Securities Service in the respective years. Other Fedwire participants not included in this calculation are: the US Treasury and any entity specifically authorised by federal statute to use the Reserve Banks as fiscal agents or depositories; entities designated by the Secretary of the Treasury and foreign central banks, foreign monetary authorities, foreign governments and certain international organisations. ³ The total number of institutions with access to the Fedwire Securities Service. Previously, only the number of active participants was reported. Values for previous years reflect this revision.

Sources: Depository Trust & Clearing Corporation; Federal Reserve.

Table 23
Number of securities held on accounts at CSDs (thousands, end of year)

	2012	2013	2014	2015	2016
Depository Trust Company					
Total number of securities held	1,354.0	1,326.0	1,300.0	1,341.0	1,348.0
debt securities	nav	nav	nav	nav	nav
equity	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Federal Reserve ¹					
Total number of securities held	1,217.6	1,225.9	1,231.5	1,243.6	nav
debt securities	1,217.6	1,225.9	1,231.5	1,243.6	nav
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav

¹ US Treasury and agency securities held in custody at the Federal Reserve's Fedwire Securities Service. Sources: Depository Trust & Clearing Corporation; Federal Reserve.

Table 24
Value of securities held on accounts at CSDs (USD billions, end of year)

	2012	2013	2014	2015	2016
Depository Trust Company					
Total value of securities held	37,200.0	42,907.5	46,436.6	45,361.4	48,225.2
debt securities	nav	nav	nav	nav	nav
equity	nav	nav	nav	nav	nav
other	nav	nav	nav	nav	nav
Federal Reserve ¹					
Total value of securities held	63,196.0	65,726.0	67,914.9	70,489.7	74,039.8
debt securities	63,196.0	65,726.0	67,914.9	70,489.7	74,039.8
short-term paper	nav	nav	nav	nav	nav
bonds	nav	nav	nav	nav	nav

¹ US Treasury and agency securities held in custody at the Federal Reserve's Fedwire Securities Service. Sources: Depository Trust & Clearing Corporation; Federal Reserve.

Table 25 Number of delivery instructions processed

(millions, total for the year)

	2012	2013	2014	2015	2016
Depository Trust Company					
Total number of delivery instructions	299.30	319.50	323.00	345.20	356.00
Federal Reserve ¹					
Total number of delivery instructions	18.23	19.04	17.04	17.46	16.57

¹ US Treasury and agency securities transfers processed through the Federal Reserve's Fedwire Securities Service. Data exclude reversals (ie securities sent in error and returned to sender).

Sources: Depository Trust & Clearing Corporation; Federal Reserve.

Table 26

Value of delivery instructions processed

(USD billions, total for the year)

	2012	2013	2014	2015	2016
Depository Trust Company Total value of delivery instructions	110,300	106,400	113,700	112,300	111,100
Federal Reserve ¹	·	·	·	·	·
Total value of delivery instructions	284,402	295,186	287,104	295,756	286,672

¹ US Treasury and agency securities transfers processed through the Federal Reserve's Fedwire Securities Service. Data exclude reversals (ie securities sent in error and returned to sender).

Sources: Depository Trust & Clearing Corporation; Federal Reserve.

Comparative tables

Table 1
Basic statistical data

		GDP	(USD billion	s) ¹		Population (millions, yearly average)				
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	1,567	1,497	1,443	1,220	1,258	22.8	23.2	23.6	23.9	24.3
Belgium	498	520	532	455	466	11.1	11.1	11.2	11.3	11.3
Brazil	2,463	2,468	2,454	1,797	1,799	199.5	201.0	202.8	204.5	206.1
Canada	1,840	1,872	1,811	1,558	1,563	34.5	34.9	35.3	35.7	36.0
China	8,226	9,185	10,361	10,866	11,203	1,350.7	1,360.7	1,367.8	1,374.6	1,382.7
France	2,680	2,809	2,851	2,433	2,464	65.2	65.6	66.1	66.4	66.6
Germany	3,541	3,752	3,890	3,375	3,478	80.4	80.6	81.0	81.7	82.5
Hong Kong SAR	263	276	291	309	321	7.2	7.2	7.3	7.3	7.4
India	1,860	1,922	2,046	2,117	2,259	1,217.0	1,233.0	1,267.0	1,283.0	1,299.0
Italy	2,071	2,130	2,151	1,824	1,850	59.9	60.2	60.4	60.4	60.3
Japan	6,206	5,155	4,855	4,379	4,943	127.6	127.4	127.2	127.1	126.9
Korea	1,222	1,305	1,411	1,382	1,411	50.0	50.2	50.4	50.6	50.8
Mexico	1,187	1,262	1,298	1,143	1,047	116.3	117.6	119.0	120.3	121.6
Netherlands	828	867	879	758	777	16.8	16.8	16.9	16.9	17.0
Russia	2,154	2,232	2,086	1,372	1,286	143.2	143.5	143.8	146.4	146.7
Saudi Arabia	736	747	756	652	640	29.2	29.4	30.0	30.9	31.8
Singapore	287	302	306	293	297	5.3	5.4	5.5	5.5	5.6
South Africa	396	367	351	318	295	52.2	52.9	53.5	54.3	55.0
Sweden	544	579	574	498	515	9.5	9.6	9.7	9.9	10.0
Switzerland	667	688	710	679	669	8.0	8.1	8.2	8.3	8.4
Turkey	875	952	934	859	858	75.6	76.7	77.7	78.7	79.8
United Kingdom	2,670	2,739	3,025	2,887	2,632	63.7	64.1	64.6	65.1	65.6
United States	16,155	16,692	17,428	18,121	18,624	314.0	316.2	318.6	320.9	323.1
CPMI ²	58,937	60,318	62,442	59,293	60,657	4,059.7	4,095.5	4,147.5	4,183.7	4,218.6

Table 1 (cont)

		GDP pe	er capita (U	ISD) ¹		CPI inflation (per cent, yearly average)				
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	68,728	64,567	61,291	51,044	51,880	2.2	2.7	1.7	1.7	1.5
Belgium	45,009	46,832	47,647	40,368	41,198	2.6	1.2	0.5	0.6	1.8
Brazil	12,345	12,275	12,104	8,791	8,730	5.8	5.9	6.4	10.7	6.3
Canada	53,283	53,594	51,240	43,638	43,384	1.5	0.9	1.9	1.1	1.4
China	6,090	6,750	7,575	7,904	8,102	2.6	2.6	2.0	1.0	1.0
France	41,072	42,845	43,143	36,646	36,979	2.2	1.0	0.6	0.1	0.3
Germany	44,034	46,526	48,029	41,313	42,166	2.1	1.6	0.8	0.1	0.4
Hong Kong SAR	36,621	38,230	40,183	42,324	43,499	4.1	4.3	4.4	3.0	2.4
India	1,529	1,559	1,615	1,650	1,739	12.0	8.9	9.3	10.9	6.3
Italy	34,581	35,372	35,587	30,185	30,671	3.3	1.2	0.2	0.1	-0.1
Japan	48,640	40,455	38,154	34,451	38,940	-0.1	0.3	2.8	0.8	-0.1
Korea	24,445	25,993	27,982	27,310	27,774	2.2	1.3	1.3	0.7	1.0
Mexico	10,205	10,731	10,906	9,506	8,615	4.1	3.8	4.0	2.7	2.8
Netherlands	49,442	51,577	52,138	44,750	45,644	2.8	2.6	0.3	0.2	0.1
Russia	15,044	15,551	14,504	9,372	8,769	6.6	6.5	11.4	12.9	5.4
Saudi Arabia	25,208	25,413	25,214	21,099	20,122	2.9	3.5	2.7	2.2	3.5
Singapore	54,004	55,982	56,009	52,890	52,981	4.6	2.4	1.0	-0.5	-0.5
South Africa	7,588	6,938	6,557	5,853	5,361	5.7	5.4	5.3	5.3	6.7
Sweden	57,106	60,258	59,120	50,546	51,478	0.9	0.0	-0.2	0.0	1.0
Switzerland	83,449	85,078	86,663	81,976	79,877	-0.7	-0.2	0.0	-1.1	-0.4
Turkey	11,576	12,417	12,026	10,914	10,744	6.2	7.4	8.2	8.8	8.5
United Kingdom	41,905	42,734	46,824	44,334	40,090	2.8	2.6	1.5	0.1	0.6
United States	51,450	52,787	54,707	56,469	57,638	2.0	1.2	1.5	-0.1	1.0
CPMI ²	14,517	14,728	15,055	14,173	14,378	2.7	2.3	2.5	1.6	1.4

Table 1 (cont)

	Exchar	nge rate vis	-à-vis USD	(yearly ave	erage)	Exchange rate vis-à-vis USD (end of year)					
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	
Australia	0.9622	1.0416	1.1123	1.3396	1.3452	0.9630	1.1176	1.2192	1.3687	1.3820	
Belgium	0.7788	0.7532	0.7539	0.9019	0.9039	0.7579	0.7251	0.8237	0.9185	0.9487	
Brazil	1.9550	2.1605	2.3547	3.3387	3.4833	2.0435	2.3426	2.6562	3.9048	3.2591	
Canada	0.9996	1.0299	1.1045	1.2787	1.3248	0.9949	1.0636	1.1601	1.3840	1.3427	
China	6.3130	6.1930	6.1430	6.2280	6.6420	6.2860	6.0970	6.1190	6.4940	6.9370	
France	0.7788	0.7532	0.7539	0.9019	0.9039	0.7579	0.7251	0.8237	0.9185	0.9487	
Germany	0.7788	0.7532	0.7539	0.9019	0.9039	0.7579	0.7251	0.8237	0.9185	0.9487	
Hong Kong SAR	7.7571	7.7566	7.7545	7.7524	7.7625	7.7510	7.7540	7.7580	7.7500	7.7560	
India	53.49	58.65	61.02	64.13	67.21	54.78	61.90	63.33	66.33	67.95	
Italy	0.7788	0.7532	0.7539	0.9019	0.9039	0.7579	0.7251	0.8237	0.9185	0.9487	
Japan	79.75	97.62	105.82	121.08	108.65	86.11	104.94	119.62	120.39	117.07	
Korea	1,126.88	1,095.04	1,053.22	1,131.49	1,160.50	1,071.10	1,055.30	1,099.20	1,172.00	1,208.50	
Mexico	13.17	12.77	13.30	15.85	18.66	13.01	13.08	14.72	17.21	20.66	
Netherlands	0.7788	0.7532	0.7539	0.9019	0.9039	0.7579	0.7251	0.8237	0.9185	0.9487	
Russia	31.07	31.82	37.97	60.66	66.90	30.37	32.73	56.26	72.88	60.66	
Saudi Arabia	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75	
Singapore	1.2497	1.2513	1.2671	1.3749	1.3811	1.2221	1.2653	1.3213	1.4139	1.4463	
South Africa	8.2100	9.6500	10.8440	12.7510	14.7090	8.4980	10.5000	11.5790	15.5740	13.6800	
Sweden	6.7772	6.5149	6.8636	8.4347	8.5611	6.5045	6.4238	7.7366	8.4408	9.0622	
Switzerland	0.9387	0.9273	0.9155	0.9629	0.9853	0.9150	0.8901	0.9904	0.9952	1.0188	
Turkey	1.7930	1.9010	2.1880	2.7200	3.0210	1.7830	2.1340	2.3190	2.9080	3.5320	
United Kingdom	0.6313	0.6397	0.6074	0.6543	0.7409	0.6185	0.6045	0.6416	0.6742	0.8122	
United States	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap	
CPMI	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap	

Please refer to the individual country tables for a detailed explanation.

¹ Converted at yearly average exchange rates. ² Sum or average excluding those countries for which data are not available.

Table 2
Banknotes and coin in circulation (end of year)

		Total va	lue (USD b	illions) ¹		Value per inhabitant (USD) ¹				
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	64.78	59.54	57.82	55.28	57.71	2,841.7	2,567.4	2,454.9	2,313.4	2,379.0
Belgium	nap	nap	nap	nap	nap	nav	nav	nav	nav	nav
Brazil	91.72	87.23	83.25	57.75	71.23	459.8	433.9	410.6	282.4	345.6
Canada	69.59	67.92	65.28	58.78	64.40	2,014.9	1,944.2	1,847.4	1,646.5	1,787.0
China	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
France	nap	nap	nap	nap	nap	nav	nav	nav	nav	nav
Germany	nap	nap	nap	nap	nap	nav	nav	nav	nav	nav
Hong Kong SAR	38.95	43.88	45.57	47.98	54.16	5,432.0	6,084.7	6,282.6	6,563.5	7,341.3
India	215.42	210.14	228.68	250.80	196.49	177.0	170.4	180.5	195.5	151.3
Italy	nap	nap	nap	nap	nap	nav	nav	nav	nav	nav
Japan	1,059.47	903.08	817.07	856.55	915.72	8,303.5	7,087.8	6,421.6	6,739.4	7,214.2
Korea	50.62	59.94	68.07	73.92	80.48	1,012.4	1,193.5	1,350.0	1,460.3	1,584.1
Mexico	64.98	70.19	72.22	72.02	68.71	558.8	596.6	607.0	598.8	565.2
Netherlands	nap	nap	nap	nap	nap	nav	nav	nav	nav	nav
Russia	252.71	254.06	157.28	117.05	145.11	1,764.7	1,770.3	1,093.6	799.5	989.3
Saudi Arabia	40.75	44.37	48.24	52.78	53.33	1,395.7	1,510.2	1,608.1	1,708.5	1,677.7
Singapore	23.82	25.02	26.05	27.18	29.39	4,484.6	4,633.7	4,762.3	4,910.9	5,241.8
South Africa	18.57	11.35	11.66	6.15	7.20	355.5	214.6	217.7	113.4	130.9
Sweden	14.72	13.23	10.76	8.59	nav	1,546.5	1,377.6	1,108.8	872.2	nav
Switzerland	70.71	77.21	71.29	76.31	79.68	8,842.8	9,544.1	8,706.1	9,213.5	9,516.0
Turkey	34.58	35.66	37.35	36.06	35.40	457.3	465.2	480.7	457.9	443.6
United Kingdom	97.65	102.70	102.57	103.09	93.78	1,532.8	1,602.0	1,587.9	1,583.3	1,428.5
United States	1,169.13	1,241.16	1,342.88	1,424.93	1,509.34	3,723.4	3,925.2	4,215.4	4,440.4	4,671.0
Euro area	1,237.83	1,354.86	1,267.29	1,210.42	1,217.91	3,677.8	4,017.0	3,749.2	3,570.4	3,579.1
CPMI excl euro										
area ²	3,378.19	3,306.67	3,246.05	3,325.21	3,462.13	1,364.6	1,322.4	1,275.9	1,292.7	1,337.7
CPMI incl euro										
area ²	4,616.02	4,661.53	4,513.34	4,535.63	4,680.03	1,641.4	1,642.7	1,566.0	1,557.9	1,598.2

Table 2 (cont)

		Value as a	percentage	e of GDP		Value as a percentage of narrow money				
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	4.14	4.27	4.39	4.63	4.71	24.84	24.39	24.31	23.53	23.28
Belgium	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
Brazil	3.89	3.83	3.83	3.76	3.70	57.66	59.31	62.90	67.43	66.74
Canada	3.76	3.75	3.79	4.08	4.17	10.48	10.03	9.85	9.78	9.49
China	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
France	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
Germany	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
Hong Kong SAR	14.82	15.91	15.64	15.50	16.86	32.79	34.01	31.66	29.67	29.40
India	11.86	11.54	11.60	12.25	8.79	65.09	65.37	66.18	67.67	66.75
Italy	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
Japan	18.43	18.83	19.03	19.45	19.96	16.28	16.01	15.82	15.99	15.29
Korea	3.94	4.42	5.03	5.54	5.94	11.54	12.27	12.77	12.23	12.23
Mexico	5.41	5.69	6.16	6.84	7.27	37.08	36.51	36.92	36.97	36.66
Netherlands	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
Russia	11.47	11.71	11.17	10.25	10.23	56.05	53.60	57.68	51.65	49.89
Saudi Arabia	5.54	5.94	6.38	8.10	8.34	17.23	16.63	15.83	17.29	17.47
Singapore	8.12	8.37	8.87	9.55	10.36	20.69	20.48	21.48	23.95	24.61
South Africa	4.85	3.37	3.55	2.37	2.27	15.25	10.53	10.88	6.71	6.13
Sweden	2.60	2.25	2.11	1.73	nav	5.66	4.61	4.11	3.17	nav
Switzerland	10.33	10.77	10.87	11.62	12.32	12.05	12.39	12.45	13.58	13.69
Turkey	3.93	4.21	4.24	4.49	4.83	34.27	33.18	33.54	33.65	32.67
United Kingdom	3.58	3.54	3.58	3.68	3.91	4.50	4.39	4.38	4.37	4.65
United States	7.24	7.44	7.71	7.86	8.10	47.51	46.65	45.79	46.21	45.37
Euro area	9.54	9.89	10.28	10.59	10.73	18.21	18.11	17.49	16.77	15.96
CPMI excl euro										
area ²	8.22	8.05	7.77	8.40	8.68	22.29	22.30	22.48	22.58	22.75
CPMI incl euro										
area ²	8.59	8.59	8.17	8.85	9.03	21.03	20.89	20.81	20.66	20.48

Please refer to the individual country tables for a detailed explanation.

¹Converted at end-of-year exchange rates. ² Sum or average excluding those countries for which data are not available.

Table 3
Transferable deposits held by banks
(average for December or average of last reserve maintenance period)¹

		Transferable balances held at the central bank										
		Total va	lue (USD b	illions) ²			Value as a	percentage	of GDP			
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016		
Australia	2.39	21.31	19.17	18.55	18.13	0.15	1.53	1.46	1.55	1.48		
Belgium	11.62	11.14	8.44	13.93	19.19	2.27	2.06	1.74	3.12	4.32		
Brazil	27.01	20.14	17.54	9.71	12.80	1.15	0.88	0.81	0.63	0.67		
Canada	0.06	0.18	0.15	0.51	0.37	0.00	0.01	0.01	0.04	0.02		
China	3,040.83	3,368.36	3,703.17	3,274.73	3,457.79	36.81	36.10	35.60	31.43	32.23		
France	100.17	59.45	44.21	113.97	181.35	3.64	2.04	1.69	4.77	7.73		
Germany	282.78	118.71	109.58	244.32	458.16	7.77	3.05	3.08	7.37	13.82		
Hong Kong SAR ³	33.01	21.16	30.83	50.50	33.47	12.56	7.67	10.58	16.32	10.42		
India	58.54	69.42	73.51	75.66	80.07	3.22	3.81	3.73	3.70	3.58		
Italy	50.17	32.30	20.45	21.86	45.28	2.36	1.46	1.04	1.22	2.57		
Japan	497.96	922.50	1,355.24	1,915.19	2,541.58	8.66	19.24	31.56	43.49	55.40		
Korea	36.68	39.45	41.25	43.64	46.18	2.85	2.91	3.05	3.27	3.41		
Mexico	21.48	21.36	21.82	15.45	10.45	1.79	1.73	1.86	1.47	1.11		
Netherlands	148.06	45.89	50.67	125.48	185.22	17.39	5.10	6.29	16.86	25.01		
Russia	28.95	33.56	23.80	21.49	33.70	1.31	1.55	1.69	1.88	2.38		
Saudi Arabia	18.71	21.67	24.63	26.08	25.87	2.54	2.90	3.26	4.00	4.04		
Singapore	15.96	25.38	15.37	15.72	15.19	5.44	8.49	5.23	5.52	5.35		
South Africa	7.20	6.34	6.26	5.26	6.60	1.88	1.88	1.90	2.02	2.08		
Sweden ³	4.02	3.37	1.91	8.40	15.93	0.71	0.57	0.38	1.69	3.28		
Switzerland	311.46	358.76	335.63	405.20	456.51	45.49	50.04	51.16	61.69	70.58		
Turkey	13.96	14.07	15.10	14.46	20.85	1.59	1.66	1.71	1.80	2.84		
United Kingdom	357.60	505.97	477.22	464.36	444.79	13.13	17.45	16.67	16.57	18.53		
United States	1,510.35	2,491.01	2,579.48	2,205.23	1,888.37	9.35	14.92	14.80	12.17	10.14		
CPMI ⁴	6,578.97	8,211.50	8,975.42	9,089.68	9,997.86	11.16	13.61	14.37	15.33	16.48		

Table 3 (cont)

		Transferable balances held at other banks											
		Total va	lue (USD bi	illions) ²			Value as a	percentage	of GDP				
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016			
Australia	nap	nap	nap	nap	nap	nav	nap	nap	nap	nap			
Belgium	90.16	83.82	49.19	42.01	43.80	17.63	15.52	10.11	9.41	9.86			
Brazil	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap			
Canada	1.90	1.90	1.63	1.78	1.98	0.10	0.10	0.09	0.12	0.13			
China	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav			
France ⁵	147.01	116.75	140.06	149.35	137.50	5.34	4.00	5.37	6.25	5.86			
Germany	157.26	129.20	151.19	136.92	174.04	4.32	3.31	4.25	4.13	5.25			
Hong Kong SAR	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap			
India	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav			
Italy ³	30.30	30.84	25.80	23.18	22.92	1.42	1.39	1.31	1.29	1.30			
Japan ⁶	68.81	87.36	73.20	73.81	232.82	1.08	1.69	1.56	1.67	4.39			
Korea	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap			
Mexico	1.03	0.95	0.72	0.62	1.01	0.09	0.08	0.06	0.06	0.11			
Netherlands ³	56.72	60.31	57.07	78.83	85.43	6.66	6.70	7.09	10.59	11.53			
Russia	7.41	7.52	4.68	3.33	6.19	0.34	0.35	0.33	0.29	0.44			
Saudi Arabia	0.05	0.03	0.10	0.41	0.02	0.01	0.00	0.01	0.06	0.00			
Singapore	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap			
South Africa	10.20	9.85	8.30	6.75	8.17	2.66	2.92	2.52	2.60	2.58			
Sweden ³	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav			
Switzerland ³	105.91	106.53	79.99	69.93	81.00	15.47	14.86	12.19	10.64	12.52			
Turkey	18.59	19.06	19.53	20.27	17.42	2.11	2.25	2.22	2.52	2.38			
United Kingdom	1,057.69	1,207.97	714.47	703.41	604.43	38.82	41.67	24.95	25.11	25.18			
United States ³	38.03	32.53	31.65	36.33	nav	0.24	0.19	0.18	0.20	nav			
CPMI ⁴	1,791.08	1,894.61	1,357.57	1,346.94	1,416.73	4.21	4.43	3.12	3.30	6.17			

Please refer to the individual country tables for a detailed explanation.

¹ Except as noted. ² Converted at end-of-year exchange rates, except as noted. ³ End of year. ⁴ Sum or average excluding those countries for which data are not available. ⁵ Average of fourth quarter. ⁶ Balances at end-September, converted at end-September exchange rates.

Table 4
Institutions offering payment services to non-banks
(end of year)¹

	Number of institutions										
		To	tal numbei	r		Number per million inhabitants					
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	
Australia	168	166	162	155	150	7.4	7.2	6.9	6.5	6.2	
Belgium	105	105	105	101	94	9.5	9.5	9.4	9.0	8.3	
Brazil ²	109,082	115,803	110,023	104,427	94,581	546.8	576.0	542.6	510.8	459.0	
Canada	882	829	804	763	707	25.5	23.7	22.8	21.4	19.6	
China	3,748	3,950	4,090	4,263	4,400	2.8	2.9	3.0	3.1	3.2	
France	641	625	498	498	498	9.8	9.5	7.5	7.5	7.5	
Germany	1,918	1,893	1,857	1,828	1,756	23.8	23.5	22.9	22.4	21.3	
Hong Kong SAR	200	201	203	199	195	27.9	27.9	28.0	27.2	26.4	
India	1,761	1,742	1,732	1,728	1,715	1.4	1.4	1.4	1.3	1.3	
Italy	760	737	704	697	652	12.7	12.2	11.6	11.5	10.8	
Japan	1,492	1,467	1,418	1,379	1,363	11.7	11.5	11.1	10.9	10.7	
Korea	3,837	3,809	3,734	3,665	3,641	76.7	75.8	74.1	72.4	71.7	
Mexico	163	216	236	245	249	1.4	1.8	2.0	2.0	2.0	
Netherlands	287	263	266	264	153	17.1	15.7	15.8	15.6	9.0	
Russia	958	925	836	735	625	6.7	6.4	5.8	5.0	4.3	
Saudi Arabia	nap	nap	nap	nap	nap	nav	nav	nav	nav	nav	
Singapore	173	169	167	168	162	32.6	31.3	30.5	30.4	28.9	
South Africa	32	33	34	35	35	0.6	0.6	0.6	0.6	0.6	
Sweden	117	118	117	116	117	12.3	12.3	12.1	11.8	11.7	
Switzerland	299	284	276	267	262	37.4	35.1	33.7	32.2	31.3	
Turkey	51	51	53	54	54	0.7	0.7	0.7	0.7	0.7	
United Kingdom	363	359	360	359	nav	5.7	5.6	5.6	5.5	nav	
United States	14,267	13,722	13,129	12,537	12,025	45.4	43.4	41.2	39.1	37.2	
CPMI ³	141,304	147,467	140,804	134,483	123,434	35.1	36.3	34.2	32.4	30.0	

Table 4 (cont)

	Number of branches or offices										
		To	tal numbe	r		Number per million inhabitants					
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	
Australia	6,504	6,415	6,361	6,220	5,903	285.3	276.6	270.1	260.3	243.4	
Belgium	5,166	5,086	8,431	7,985	8,131	467.3	458.0	755.7	708.6	718.2	
Brazil ²	179,302	185,567	179,014	171,799	161,526	898.8	923.1	882.8	840.3	783.8	
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
China	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
France	38,026	37,863	37,621	37,182	36,673	582.9	577.5	569.4	560.1	550.4	
Germany	38,173	38,062	37,197	34,216	32,215	474.6	472.0	459.3	418.9	390.5	
Hong Kong SAR	1,604	1,585	1,578	1,526	1,484	223.7	219.8	217.6	208.8	201.2	
India	122,109	128,210	136,984	144,184	148,649	100.3	104.0	108.1	112.4	114.4	
Italy	46,603	44,753	43,847	43,214	41,667	778.0	743.1	725.4	715.0	690.7	
Japan	54,502	54,316	54,050	53,845	nav	427.2	426.3	424.8	423.7	nav	
Korea	19,019	18,721	18,091	17,828	17,572	380.3	372.8	358.8	352.2	345.9	
Mexico	16,722	17,491	17,771	17,500	17,940	143.8	148.7	149.4	145.5	147.6	
Netherlands	2,527	2,229	1,930	1,844	1,750	150.8	132.7	114.4	108.9	102.8	
Russia	87,051	87,095	85,317	79,686	77,350	607.9	606.9	593.2	544.3	527.4	
Saudi Arabia	nap	nap	nap	nap	nap	nav	nav	nav	nav	nav	
Singapore	518	507	504	507	502	97.5	93.9	92.1	91.6	89.5	
South Africa	3,713	3,704	4,176	4,051	4,051	71.1	70.1	78.0	74.7	73.6	
Sweden	1,839	1,822	1,774	1,644	1,514	193.2	189.7	182.8	166.9	151.5	
Switzerland	4,821	2,587	2,556	2,477	2,391	602.9	319.8	312.1	299.1	285.5	
Turkey	15,585	16,530	16,716	16,809	16,090	206.1	215.6	215.1	213.5	201.6	
United Kingdom	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
United States	117,007	116,012	114,542	111,956	112,244	372.6	366.9	359.6	348.9	347.4	
CPMI ³	760,791	768,555	768,460	754,473	687,652	294.7	294.9	290.0	281.8	267.0	

Please refer to the individual country tables for a detailed explanation.

¹ Except as noted. ² Includes also bank correspondents, which are non-financial entities acting as banks' agents. ³ Sum or average excluding those countries for which data are not available.

Table 5
Transferable deposits held by non-banks (end of year)¹

	Number of deposit accounts										
	Tot	tal number	of account	s (thousand	Number of accounts per inhabitant						
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	
Australia	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
Belgium	16,552	16,792	25,960	29,520	29,634	1.50	1.51	2.33	2.62	2.62	
Brazil	162,881	172,855	nav	nav	nav	0.82	0.86	nav	nav	nav	
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
China	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
France	78,412	79,510	80,462	81,590	81,648	1.20	1.21	1.22	1.23	1.23	
Germany	96,858	98,512	101,014	102,802	102,711	1.20	1.22	1.25	1.26	1.25	
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
India	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
Italy ²	38,970	42,597	43,168	44,789	40,169	0.65	0.71	0.71	0.74	0.67	
Japan	389,436	387,638	387,239	386,827	391,864	3.05	3.04	3.04	3.04	3.09	
Korea	33,869	37,267	39,008	35,809	37,411	0.68	0.74	0.77	0.71	0.74	
Mexico	86,198	86,870	85,508	92,976	101,251	0.74	0.74	0.72	0.77	0.83	
Netherlands	22,787	23,536	23,397	22,182	22,376	1.36	1.40	1.39	1.31	1.31	
Russia	670,976	715,107	753,438	788,976	825,307	4.69	4.98	5.24	5.39	5.63	
Saudi Arabia	nap	nap	nap	nap	nap	nav	nav	nav	nav	nav	
Singapore	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
South Africa	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
Sweden	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
Switzerland	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
Turkey	146,541	158,393	165,821	173,607	190,125	1.9	2.1	2.1	2.2	2.4	
United Kingdom	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
CPMI ³	1,743,481	1,819,076	1,705,014	1,759,076	1,822,496	1.84	1.91	2.26	2.32	2.39	

Table 5 (cont)

	Value of deposit accounts										
		Total val	ue (USD bi		Value per inhabitant (USD) ⁴						
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	
Australia	1,919	1,821	1,841	1,735	1,831	84,172	78,528	78,160	72,619	75,488	
Belgium	206	231	230	223	237	18,631	20,770	20,586	19,793	20,916	
Brazil	90	81	70	41	52	451	405	344	203	255	
Canada	635	645	616	559	635	18,393	18,463	17,434	15,668	17,609	
China	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
France	841	919	857	863	921	12,890	14,023	12,974	13,006	13,830	
Germany	1,919	2,122	1,992	2,015	2,126	23,858	26,317	24,600	24,668	25,770	
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
India	1,482	1,505	1,661	1,702	1,834	1,218	1,221	1,311	1,327	1,412	
Italy ²	1,003	1,078	1,032	1,005	nav	16,740	17,904	17,075	16,625	nav	
Japan⁵	5,230	4,567	4,382	4,224	5,133	40,993	35,842	34,437	33,236	40,436	
Korea	96	108	115	137	154	1,926	2,154	2,271	2,700	3,024	
Mexico	153	180	179	175	164	1,317	1,526	1,507	1,455	1,353	
Netherlands	470	486	607	536	541	28,055	28,931	36,005	31,655	31,739	
Russia	334	336	188	159	213	2,332	2,343	1,309	1,088	1,450	
Saudi Arabia	nap	nap	nap	nap	nap	nav	nav	nav	nav	nav	
Singapore	435	435	427	406	422	81,825	80,508	77,988	73,433	75,248	
South Africa	306	265	259	212	241	5,854	5,019	4,842	3,902	4,381	
Sweden	454	491	446	nav	433	47,633	51,141	45,967	nav	43,355	
Switzerland	800	781	714	797	883	100,021	96,486	87,249	96,281	105,419	
Turkey	464	479	491	464	442	6,129	6,242	6,320	5,897	5,534	
United Kingdom	5,304	5,556	5,304	5,057	nav	83,262	86,672	82,115	77,672	nav	
United States	1,755	1,911	2,102	2,172	2,317	5,590	6,044	6,598	6,770	7,172	
CPMI ³	23,895	23,998	23,514	22,485	18,578	8,940	8,894	8,574	8,144	6,956	

Table 5 (cont)

	Value of de	eposit acco	ounts as a	percentage	of GDP
	2012	2013	2014	2015	2016
Australia	122.6	130.5	139.8	145.4	149.5
Belgium	40.3	42.7	47.2	49.9	53.3
Brazil	3.8	3.6	3.2	2.7	2.7
Canada	34.4	35.6	35.7	38.9	41.1
China	nav	nav	nav	nav	nav
France	30.5	31.5	32.9	36.1	39.3
Germany	52.7	54.5	56.0	60.8	64.1
Hong Kong SAR	nav	nav	nav	nav	nav
India	81.6	82.6	84.2	83.2	82.1
Italy ²	47.1	48.7	52.4	56.1	61.7
Japan	87.8	91.0	93.8	95.7	103.6
Korea	7.5	8.0	8.5	10.2	11.3
Mexico	12.8	14.6	15.3	16.6	17.4
Netherlands	55.2	54.0	75.4	72.0	73.0
Russia	15.2	15.5	13.4	13.9	15.0
Saudi Arabia	nav	nav	nav	nav	nav
Singapore	148.2	145.4	145.2	142.8	148.7
South Africa	79.9	78.7	78.8	81.4	76.0
Sweden	80.1	83.7	87.6	nav	89.1
Switzerland	116.8	108.9	108.9	121.4	136.5
Turkey	52.7	56.4	55.7	57.8	60.2
United Kingdom	194.7	191.7	185.2	180.5	nav
United States	10.9	11.4	12.1	12.0	12.4
CPMI ³	48.1	47.9	46.1	47.9	42.2

Please refer to the individual country tables for a detailed explanation.

¹ Except as noted. ² Only deposits held at banks. ³ Sum or average excluding those countries for which data are not available. ⁴ Converted at end-of-year exchange rates, except as noted. ⁵ Converted at average of fiscal year ending March (following year) exchange rates.

Table 6
Payment transactions by non-banks: total number of transactions (total for the year)

	Total number of transactions (millions)						Increase in the number of transactions (%)				
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	
Australia	7,707	8,396	9,060	9,936	11,003	8.1	8.9	7.9	9.7	10.7	
Belgium	2,511	2,702	3,442	3,269	3,445	0.3	7.6	27.4	-5.0	5.4	
Brazil	23,509	25,805	27,304	28,579	29,133	9.1	9.8	5.8	4.7	1.9	
Canada	10,126	10,815	11,531	12,000	12,610	3.2	6.8	6.6	4.1	5.1	
China	11,203	15,502	22,902	35,790	46,565	32.9	38.4	47.7	56.3	30.1	
France	18,068	18,086	18,958	20,208	20,908	3.0	0.1	4.8	6.6	3.5	
Germany	18,211	19,590	17,940	19,823	21,423	2.7	7.6	-8.4	10.5	8.1	
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
India	8,557	9,807	11,383	14,952	19,062	11.3	14.6	16.1	31.4	27.5	
Italy	4,263	4,487	4,793	5,288	5,746	2.5	5.3	6.8	10.3	8.7	
Japan	11,119	nav	nav	nav	nav	12.6	nav	nav	nav	nav	
Korea	15,242	17,027	18,896	21,131	23,215	13.0	11.7	11.0	11.8	9.9	
Mexico	2,943	3,228	3,465	3,841	4,124	12.4	9.7	7.3	10.9	7.4	
Netherlands	5,783	6,351	6,452	9,174	7,565	3.2	9.8	1.6	42.2	-17.5	
Russia	7,309	9,779	12,645	15,549	20,292	29.5	33.8	29.3	23.0	30.5	
Saudi Arabia	1,715	1,755	2,017	2,369	2,643	8.9	2.3	14.9	17.4	11.5	
Singapore	3,421	3,767	3,886	4,029	4,256	4.3	10.1	3.2	3.7	5.6	
South Africa	2,768	3,078	3,432	3,798	4,371	nav	11.2	11.5	10.7	15.1	
Sweden	3,346	3,604	3,900	4,202	4,777	7.9	7.7	8.2	7.7	13.7	
Switzerland	1,638	1,710	1,797	2,022	2,146	16.9	4.4	5.1	12.5	6.1	
Turkey	2,898	3,461	3,743	4,160	4,615	15.5	19.4	8.2	11.1	10.9	
United Kingdom	18,504	19,722	21,266	23,119	25,154	4.0	6.6	7.8	8.7	8.8	
United States	119,000	125,765	132,142	140,459	nav	3.6	5.7	5.1	6.3	nav	
CPMI ¹	299,841	314,434	340,954	383,700	273,051	6.8	8.9	8.4	12.5	12.3	

Table 6 (cont)

	Number per inhabitant					Number per deposit account held by non-banks				
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	338	362	385	416	454	nav	nav	nav	nav	nav
Belgium	227	243	309	290	304	152	161	133	111	116
Brazil	118	128	135	140	141	144	149	nav	nav	nav
Canada	293	310	326	336	350	nav	nav	nav	nav	nav
China	8	11	17	26	34	nav	nav	nav	nav	nav
France	277	276	287	304	314	230	227	236	248	256
Germany	226	243	222	243	260	188	199	178	193	209
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	7	8	9	12	15	nav	nav	nav	nav	nav
Italy	71	75	79	87	95	109	105	111	118	143
Japan	87	nav	nav	nav	nav	29	nav	nav	nav	nav
Korea	305	339	375	417	457	450	457	484	590	621
Mexico	25	27	29	32	34	34	37	41	41	41
Netherlands	345	378	383	542	444	254	270	276	414	338
Russia	51	68	88	106	138	11	14	17	20	25
Saudi Arabia	59	60	67	77	83	nav	nav	nav	nav	nav
Singapore	644	698	710	728	759	nav	nav	nav	nav	nav
South Africa	53	58	64	70	79	nav	nav	nav	nav	nav
Sweden	351	375	402	427	478	nav	nav	nav	nav	nav
Switzerland	205	211	220	244	256	nav	nav	nav	nav	nav
Turkey	38	45	48	53	58	20	22	23	24	24
United Kingdom	290	308	329	355	383	nav	nav	nav	nav	nav
United States	379	398	415	438	nav	nav	nav	nav	nav	nav
CPMI ¹	74	79	85	95	73	64	77	69	75	78

Please refer to the individual country tables for a detailed explanation.

¹ Sum or average excluding those countries for which data are not available. For credit transfers, data for France and the United Kingdom include interbank transactions; however, the total number is relatively small.

Table 7
Use of payment instruments by non-banks: number of transactions per payment instrument (millions, total for the year)

		Cre	edit transfe	rs			Di	irect debits	3	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	1,640.8	1,746.0	1,784.6	1,922.1	2,090.8	737.3	807.5	883.1	976.6	1,082.4
Belgium	946.8	1,022.8	1,366.4	1,257.7	1,273.8	285.6	313.1	529.5	413.3	445.9
Brazil	9,074.1	9,588.0	9,560.8	10,084.5	10,214.4	4,357.9	4,953.4	5,557.1	5,427.0	5,335.7
Canada	1,136.0	1,225.3	1,262.4	1,317.6	1,350.5	699.3	728.4	762.3	791.3	825.9
China	1,410.0	1,837.2	2,569.0	6,342.8	7,900.3	nav	nav	nav	nav	nav
France	3,097.2	3,250.2	3,416.9	3,621.1	3,752.9	3,543.4	3,107.7	3,541.5	3,879.1	3,962.6
Germany	6,151.0	6,217.4	5,633.1	6,019.7	6,343.6	8,809.5	9,676.4	8,704.9	9,954.6	10,834.4
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	586.0	981.1	1,471.8	2,751.4	3,441.2	176.5	192.9	230.1	288.6	364.9
Italy	1,261.3	1,261.1	1,347.2	1,471.0	1,410.6	602.3	624.3	608.1	682.3	790.7
Japan	1,494.2	1,513.5	1,548.7	1,582.4	1,610.0	nav	nav	nav	nav	nav
Korea	3,165.2	3,434.8	3,696.3	4,011.9	4,241.4	1,653.0	1,702.2	1,700.0	1,709.1	1,771.5
Mexico	991.3	1,057.6	1,090.3	1,135.1	1,183.4	58.7	62.8	70.3	80.0	93.0
Netherlands	1,623.7	2,013.7	2,043.2	1,970.2	2,111.7	1,368.6	1,329.7	1,163.4	1,289.0	1,161.6
Russia	2,689.2	2,833.4	2,840.5	2,772.5	2,760.1	82.1	84.8	84.6	77.4	92.4
Saudi Arabia	5.9	7.2	8.4	11.1	11.9	1.2	1.4	1.6	2.3	3.5
Singapore	39.9	42.7	40.6	60.8	72.0	56.4	57.1	57.2	57.0	57.7
South Africa	653.3	664.6	695.3	738.3	770.0	707.2	766.1	786.0	782.9	822.8
Sweden	859.0	894.0	957.0	1,074.0	1,303.0	297.0	312.0	323.0	279.5	301.0
Switzerland	928.0	950.3	961.3	976.0	973.9	55.4	56.8	57.7	58.5	59.7
Turkey	14.9	229.5	266.6	315.2	374.8	nap	nap	nap	nap	nap
United Kingdom	3,693.1	3,871.1	3,939.7	4,051.8	4,233.3	3,416.7	3,524.9	3,672.0	3,908.3	4,071.9
United States	8,493.6	9,026.5	9,463.8	10,020.6	10,555.3	12,821.7	13,574.6	14,389.5	15,472.4	16,292.2
CPMI ¹	49,954.5	53,668.0	55,964.0	63,508.0	67,979.0	39,729.6	41,876.2	43,121.8	46,129.3	48,369.7

Table 7 (cont)

			Cheques			ı	E-money pa	ayment tra	nsactions	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	224.4	194.4	166.6	139.5	111.7	nap	nap	nap	nap	nap
Belgium	5.4	4.3	8.5	9.5	10.6	46.2	29.4	28.5	7.0	10.9
Brazil	1,439.3	1,297.0	1,164.8	1,018.0	864.1	36.0	38.1	27.8	24.4	23.4
Canada	805.5	761.1	708.9	648.2	502.7	nav	nav	nav	nav	nav
China	783.7	693.4	578.2	417.0	293.4	nap	nap	nap	nap	nap
France	2,805.6	2,620.6	2,482.8	2,311.5	2,137.5	52.2	50.5	52.9	36.4	38.1
Germany	34.4	31.3	29.9	21.4	18.5	33.6	31.8	33.6	31.9	37.0
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	1,313.7	1,257.3	1,195.8	1,096.4	1,206.7	66.1	133.6	310.7	748.0	1,963.7
Italy	275.7	252.4	231.5	208.6	186.2	191.2	244.0	291.4	373.9	461.2
Japan	77.5	73.1	68.9	64.1	59.4	2,720.3	3,293.9	4,039.6	4,678.4	5,191.6
Korea	460.1	364.3	310.3	254.0	200.4	69.6	47.9	38.8	33.3	31.5
Mexico	377.5	348.3	330.5	311.5	274.9	nav	nav	nav	nav	nav
Netherlands	nav	0.2	0.2	0.2	0.2	148.0	121.2	76.2	2.4	0.4
Russia	0.0	0.0	0.0	0.0	0.0	225.7	564.4	1,013.6	1,040.0	1,279.4
Saudi Arabia	7.1	7.1	6.8	6.7	5.5	nap	nap	nap	nap	nap
Singapore	74.6	72.2	69.4	65.7	61.9	3,015.1	3,085.3	3,138.1	3,233.0	3,366.3
South Africa	42.2	30.9	22.9	16.9	12.2	nap	nap	nap	nap	nap
Sweden	0.2	0.1	0.0	0.1	0.1	nap	nap	nap	3.5	6.6
Switzerland	0.3	0.2	nav	nav	nav	2.8	1.4	nav	22.5	30.3
Turkey	18.5	17.2	17.4	16.9	15.4	nav	42.0	75.0	67.6	58.7
United Kingdom	848.0	718.0	644.0	558.0	477.0	nav	nav	nav	nav	nav
United States	19,745.6	18,943.5	18,175.5	17,300.0	16,476.5	nav	nav	nav	nav	nav
CPMI ¹	29,339.1	27,686.9	26,213.0	24,464.2	22,914.6	6,606.9	7,683.3	9,126.1	10,302.2	12,499.0

Please refer to the individual country tables for a detailed explanation.

¹ Sum or average excluding those countries for which data are not available. For credit transfers, data for France and the United Kingdom include interbank transactions; however, the total number is relatively small.

Table 7 (cont)

-		Card paym	ents (exce	ot e-money)	of w	hich: by ca	ards with a	debit funct	tion
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	4,773.7	5,301.2	5,862.9	6,522.5	7,334.3	2,998.1	3,384.5	3,790.6	4,260.5	4,848.5
Belgium	1,226.9	1,332.3	1,508.2	1,556.9	1,702.2	1,087.6	1,168.6	1,349.5	1,352.5	1,441.2
Brazil	8,601.3	9,928.2	10,993.6	12,025.6	12,695.1	4,128.6	4,908.3	5,626.7	6,466.7	6,837.3
Canada	7,484.8	8,099.2	8,796.8	9,241.9	9,930.6	4,357.3	4,518.9	4,899.0	5,169.0	5,428.0
China	9,009.1	12,971.0	19,754.4	29,029.9	38,329.1	nav	nav	nav	nav	nav
France ¹	8,475.0	8,964.3	9,437.9	10,287.5	10,997.0	nav	nav	4,924.2	6,124.5	7,634.5
Germany	3,182.2	3,632.8	<i>3,4</i> 33.9	3,690.6	4,074.0	2,579.1	2,885.3	2,595.1	2,722.6	2,996.4
Hong Kong SAR	nav	nav	nav	nav	nav	112.2	114.1	118.3	126.1	133.3
India	6,414.3	7,241.6	8,514.3	10,067.7	12,085.2	5,999.2	6,711.9	7,872.5	9,247.0	10,962.4
Italy	1,629.0	1,813.2	2,034.0	2,269.8	2,612.9	1,091.5	1,225.8	1,390.1	1,617.1	1,836.5
Japan	6,826.7	nav	nav	nav	nav	12.9	12.4	11.4	10.6	9.9
Korea	9,893.6	11,477.7	13,150.2	15,122.8	16,970.4	2,545.3	3,443.4	4,401.6	5,403.3	6,398.6
Mexico	1,516.1	1,759.7	1,973.4	2,314.2	2,572.4	930.5	1,116.0	1,296.6	1,588.6	1,698.3
Netherlands	2,642.9	2,886.2	3,168.7	3,533.2	3,902.0	2,530.7	2,765.0	3,037.5	3,392.0	3,743.1
Russia	2,853.9	4,584.5	6,811.2	9,803.5	14,413.5	2,631.2	4,150.1	6,096.8	8,852.1	13,171.9
Saudi Arabia	1,570.9	1,601.0	1,856.0	2,190.5	2,447.3	1,570.9	1,601.0	1,856.0	2,190.5	2,447.3
Singapore	235.3	509.3	581.0	612.6	697.8	235.3	258.2	293.9	301.9	347.8
South Africa	1,365.5	1,616.0	1,927.9	2,260.3	2,765.8	nav	nav	nav	nav	nav
Sweden	2,190.0	2,398.0	2,619.9	2,845.0	3,166.0	1,810.0	1,986.8	2,169.5	2,343.0	2,604.0
Switzerland	651.3	701.1	778.5	965.3	1,082.1	435.6	460.9	508.8	668.9	737.5
Turkey	2,864.6	3,172.2	3,384.1	3,760.1	4,166.0	437.4	532.1	644.7	812.2	1,027.6
United Kingdom	10,546.0	11,608.0	13,010.0	14,601.0	16,371.0	8,155.0	9,040.0	10,227.0	11,544.0	13,298.0
United States	77,938.6	84,220.5	90,113.0	97,666.2	nav	51,717.2	56,020.8	59,539.3	64,268.2	nav
CPMI ²	171,891.6	185,818.0	209,710.0	240,366.9	168,314.7	95,365.5	106,304.0	122,649.2	138,461.3	87,602.1

Table 7 (cont)

	by c	ards with a	delayed d	ebit function	on		by cards и	ith a credi	t function	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	nav	nav	nav	nav	nav	1,775.6	1,916.8	2,072.3	2,262.0	2,485.8
Belgium	139.3	163.7	156.5	202.1	258.6	nav	nav	2.2	2.3	2.3
Brazil	nav	nav	nav	nav	nav	4,472.8	5,019.9	5,366.9	5,558.9	5,857.8
Canada ³	nap	nap	nap	nap	nap	3,127.5	3,580.3	3,897.8	4,072.9	4,502.6
China	nap	nap	nap	nap	nap	nav	nav	nav	nav	nav
France ¹	nav	nav	1,357.1	1,916.5	2,196.6	nav	nav	85.4	245.6	254.4
Germany	559.7	681.5	762.5	879.0	965.9	43.4	66.0	76.4	89.0	111.7
Hong Kong SAR	nav	nav	nav	nav	nav	431.6	462.1	482.0	515.9	556.4
India	16.0	17.7	22.4	29.0	29.4	399.1	512.0	619.4	791.7	1,093.5
Italy ⁵	nav	nav	nav	nap	nap	537.5	587.5	644.0	652.6	776.4
Japan	nav	nav	nav	nav	nav	6,813.8	nav	nav	nav	nav
Korea	nap	nap	nap	nap	nap	7,348.3	8,034.2	8,748.6	9,719.5	10,571.7
Mexico	nap	nap	nap	nap	nap	585.6	643.7	676.8	725.6	874.0
Netherlands ⁴	112.2	121.2	131.2	141.2	158.8	nav	nav	nav	nav	nav
Russia	nav	nav	nav	nav	nav	222.7	434.4	714.3	951.4	1,241.6
Saudi Arabia	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
Singapore	nav	nav	nav	nav	nav	nav	251.1	287.1	310.7	350.0
South Africa	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	<i>4</i> 3.0	<i>4</i> 2.6	44.7	61.0	61.0	337.0	368.7	405.8	441.0	501.0
Switzerland ⁶	nav	nav	nav	nav	nav	215.7	240.2	269.7	296.5	344.7
Turkey	nap	nap	nap	nap	nap	<i>2,4</i> 27.3	2,640.1	2,739.4	2,948.0	3,138.4
United Kingdom	368.0	374.0	381.0	370.0	168.0	2,023.0	2,194.0	2,402.0	2,687.0	2,905.0
United States	nav	nav	nav	nav	nav	26,221.4	28,199.7	30,573.7	33,398.0	nav
CPMI ²	1,238.2	1,400.7	2,855.3	3,598.8	3,838.4	56,982.2	55,150.7	60,063.7	65,668.2	35,567.4

Please refer to the individual country tables for a detailed explanation.

¹ A breakdown by types of function is not available. ² Sum or average excluding those countries for which data are not available. ³ For cards with a credit function, includes charge cards. ⁴ For cards with a delayed debit function, includes cards with a credit function. ⁵ For cards with a delayed debit function, includes cards with a delayed debit function.

Table 7a
Use of payment instruments by non-banks: relative importance of payment instruments, in number of transactions

(% of total number of transactions)

		Cre	dit transfer	s			Di	rect debits		
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	21.3	20.8	19.7	19.3	19.0	9.6	9.6	9.7	9.8	9.8
Belgium	37.7	37.9	39.7	38.5	37.0	11.4	11.6	15.4	12.6	12.9
Brazil	38.6	37.2	35.0	35.3	35.1	18.5	19.2	20.4	19.0	18.3
Canada	11.2	11.3	10.9	11.0	10.7	6.9	6.7	6.6	6.6	6.5
China	12.6	11.9	11.2	17.7	17.0	nav	nav	nav	nav	nav
France	17.1	18.0	18.0	17.9	17.9	19.6	17.2	18.7	19.2	19.0
Germany	33.8	31.7	31.4	30.4	29.6	48.4	49.4	48.5	50.2	50.6
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	6.8	10.0	12.9	18.4	18.1	2.1	2.0	2.0	1.9	1.9
Italy	29.6	28.1	28.1	27.8	24.5	14.1	13.9	12.7	12.9	13.8
Japan	13.4	nav	nav	nav	nav	nav	nav	nav	nav	nav
Korea	20.8	20.2	19.6	19.0	18.3	10.8	10.0	9.0	8.1	7.6
Mexico	33.7	32.8	31.5	29.6	28.7	2.0	1.9	2.0	2.1	2.3
Netherlands	28.1	31.7	31.7	21.5	27.9	23.7	20.9	18.0	14.1	15.4
Russia	36.8	29.0	22.5	17.8	13.6	1.1	0.9	0.7	0.5	0.5
Saudi Arabia	0.3	0.4	0.4	0.5	0.5	0.1	0.1	0.1	0.1	0.1
Singapore	1.2	1.1	1.0	1.5	1.7	1.6	1.5	1.5	1.4	1.4
South Africa	23.6	21.6	20.3	19.4	17.6	25.5	24.9	22.9	20.6	18.8
Sweden	25.7	24.8	24.5	25.6	27.3	8.9	8.7	8.3	6.7	6.3
Switzerland	56.7	55.6	53.5	48.3	45.4	3.4	3.3	3.2	2.9	2.8
Turkey	0.5	6.6	7.1	7.6	8.1	nav	nav	nav	nav	nav
United Kingdom	20.0	19.6	18.5	17.5	16.8	18.5	17.9	17.3	16.9	16.2
United States	7.1	7.2	7.2	7.1	nav	10.8	10.8	10.9	11.0	nav

Table 7a (cont)

			Cheques			E-money payment transactions					
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	
Australia	2.9	2.3	1.8	1.4	1.0	nav	nav	nav	nav	nav	
Belgium	0.2	0.2	0.2	0.3	0.3	1.8	1.1	0.8	0.2	0.3	
Brazil	6.1	5.0	4.3	3.6	3.0	0.2	0.1	0.1	0.1	0.1	
Canada	8.0	7.0	6.1	5.4	4.0	nav	nav	nav	nav	nav	
China	7.0	4.5	2.5	1.2	0.6	nav	nav	nav	nav	nav	
France	15.5	14.5	13.1	11.4	10.2	0.3	0.3	0.3	0.2	0.2	
Germany	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
India	15.4	12.8	10.5	7.3	6.3	0.8	1.4	2.7	5.0	10.3	
Italy	6.5	5.6	4.8	3.9	3.2	4.5	5.4	6.1	7.1	8.0	
Japan	0.7	nav	nav	nav	nav	24.5	nav	nav	nav	nav	
Korea	3.0	2.1	1.6	1.2	0.9	0.5	0.3	0.2	0.2	0.1	
Mexico	12.8	10.8	9.5	8.1	6.7	nav	nav	nav	nav	nav	
Netherlands	nav	0.0	0.0	0.0	0.0	2.6	1.9	1.2	0.0	0.0	
Russia	0.0	0.0	0.0	0.0	0.0	3.1	5.8	8.0	6.7	6.3	
Saudi Arabia	0.4	0.4	0.3	0.3	0.2	nav	nav	nav	nav	nav	
Singapore	2.2	1.9	1.8	1.6	1.5	88.1	81.9	80.7	80.2	79.1	
South Africa	1.5	1.0	0.7	0.4	0.3	nav	nav	nav	nav	nav	
Sweden	0.0	0.0	0.0	0.0	0.0	nav	nav	nav	0.1	0.1	
Switzerland	0.0	0.0	nav	nav	nav	0.2	0.1	nav	1.1	1.4	
Turkey	0.6	0.5	0.5	0.4	0.3	nav	1.2	2.0	1.6	1.3	
United Kingdom	4.6	3.6	3.0	2.4	1.9	nav	nav	nav	nav	nav	
United States	16.6	15.1	13.8	12.3	nav	nav	nav	nav	nav	nav	

Please refer to the individual country tables for a detailed explanation.

¹ Sum or average excluding those countries for which data are not available. For credit transfers, data for France (prior to 2005) and the United Kingdom include interbank transactions; however, the total number is relatively small.

Table 7a (cont)

	С	ard payme	nts (except	e-money)		of wh	nich: by car	rds with a d	debit functi	ion
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	61.9	63.1	64.7	65.6	66.7	38.9	40.3	41.8	42.9	44.1
Belgium	48.9	49.3	43.8	47.6	49.4	43.3	<i>4</i> 3.3	39.2	41.4	41.8
Brazil	36.6	38.5	40.3	42.1	43.6	17.6	19.0	20.6	22.6	23.5
Canada	73.9	74.9	76.3	77.0	78.8	43.0	41.8	<i>4</i> 2.5	43.1	43.0
China	80.4	83.7	86.3	81.1	82.3	nav	nav	nav	nav	nav
France	46.9	49.6	49.8	50.9	52.6	nav	nav	26.0	30.3	36.5
Germany	17.5	18.5	19.1	18.6	19.0	14.2	14.7	14.5	13.7	14.0
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	75.0	73.8	74.8	67.3	63.4	70.1	68.4	69.2	61.8	57.5
Italy	38.2	40.4	42.4	42.9	45.5	25.6	27.3	29.0	30.6	32.0
Japan	61.4	nav	nav	nav	nav	0.1	nav	nav	nav	nav
Korea	64.9	67.4	69.6	71.6	73.1	16.7	20.2	23.3	25.6	27.6
Mexico	51.5	54.5	57.0	60.3	62.4	31.6	34.6	37.4	41.4	41.2
Netherlands	45.7	45.4	49.1	38.5	51.6	43.8	<i>4</i> 3.5	47.1	37.0	49.5
Russia	39.0	46.9	53.9	63.0	71.0	36.0	42.4	48.2	56.9	64.9
Saudi Arabia	91.6	91.2	92.0	92.4	92.6	91.6	91.2	92.0	92.4	92.6
Singapore	6.9	13.5	14.9	15.2	16.4	6.9	6.9	7.6	7.5	8.2
South Africa	49.3	52.5	56.2	59.5	63.3	nav	nav	nav	nav	nav
Sweden	65.4	66.5	67.2	67.7	66.3	54.1	55.1	55.6	55.8	54.5
Switzerland	39.8	41.0	43.3	47.7	50.4	26.6	27.0	28.3	33.1	34.4
Turkey	98.8	91.7	90.4	90.4	90.3	15.1	15.4	17.2	19.5	22.3
United Kingdom	57.0	58.9	61.2	63.2	65.1	44.1	45.8	48.1	49.9	52.9
United States	65.5	67.0	68.2	69.5	nav	43.5	44.5	45.1	45.8	nav

Table 7a (cont)

	by c	ards with a	delayed d	ebit function	on		by cards w	ith a credit	function	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	nav	nav	nav	nav	nav	23.0	22.8	22.9	22.8	22.6
Belgium	5.5	6.1	4.5	6.2	7.5	nav	nav	0.1	0.1	0.1
Brazil	nav	nav	nav	nav	nav	19.0	19.5	19.7	19.5	20.1
Canada	nav	nav	nav	nav	nav	30.9	33.1	33.8	33.9	35.7
China	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
France	nav	nav	7.2	9.5	10.5	nav	nav	0.5	1.2	1.2
Germany	3.1	3.5	4.3	4.4	4.5	0.2	0.3	0.4	0.4	0.5
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	0.2	0.2	0.2	0.2	0.2	4.7	5.2	5.4	5.3	5.7
Italy	nav	nav	nav	nav	nav	12.6	13.1	13.4	12.3	13.5
Japan	nav	nav	nav	nav	nav	61.3	nav	nav	nav	nav
Korea	nav	nav	nav	nav	nav	48.2	47.2	46.3	46.0	45.5
Mexico	nav	nav	nav	nav	nav	19.9	19.9	19.5	18.9	21.2
Netherlands	1.9	1.9	2.0	1.5	2.1	nav	nav	nav	nav	nav
Russia	nav	nav	nav	nav	nav	3.0	4.4	5.6	6.1	6.1
Saudi Arabia	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Singapore	nav	nav	nav	nav	nav	nav	6.7	7.4	7.7	8.2
South Africa	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	1.3	1.2	1.1	1.5	1.3	10.1	10.2	10.4	10.5	10.5
Switzerland	nav	nav	nav	nav	nav	13.2	14.1	15.0	14.7	16.1
Turkey	nav	nav	nav	nav	nav	83.8	76.3	73.2	70.9	68.0
United Kingdom	2.0	1.9	1.8	1.6	0.7	10.9	11.1	11.3	11.6	11.5
United States	nav	nav	nav	nav	nav	22.0	22.4	23.1	23.8	nav

 $[\]underline{\ }^{1}$ Sum or average excluding those countries for which data are not available.

Table 7b
Use of payment instruments by non-banks: increase in the number of transactions (% change on previous year)

		Cre	dit transfer	s			Di	rect debits		
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	3.3	6.4	2.2	7.7	8.8	4.4	9.5	9.4	10.6	10.8
Belgium	-7.8	8.0	33.6	-8.0	1.3	8.0	9.6	69.1	-21.9	7.9
Brazil	7.5	5.7	-0.3	5.5	1.3	5.4	13.7	12.2	-2.3	-1.7
Canada	8.8	7.9	3.0	4.4	2.5	3.8	4.2	4.7	3.8	4.4
China	20.2	30.3	39.8	146.9	24.6	nav	nav	nav	nav	nav
France	4.0	4.9	5.1	6.0	3.6	0.3	-12.3	14.0	9.5	2.2
Germany	1.3	1.1	-9.4	6.9	5.4	1.9	9.8	-10.0	14.4	8.8
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	45.3	67.4	50.0	86.9	25.1	7.2	9.3	19.3	25.4	26.4
Italy	0.0	0.0	6.8	9.2	-4.1	0.3	3.7	-2.6	12.2	15.9
Japan	4.6	1.3	2.3	2.2	1.7	nav	nav	nav	nav	nav
Korea	8.8	8.5	7.6	8.5	5.7	10.7	3.0	-0.1	0.5	3.6
Mexico	6.2	6.7	3.1	4.1	4.3	10.6	7.1	11.9	13.8	16.2
Netherlands	-1.5	24.0	1.5	-3.6	7.2	2.1	-2.8	-12.5	10.8	-9.9
Russia	0.2	5.4	0.3	-2.4	-0.4	-30.4	3.3	-0.2	-8.6	19.4
Saudi Arabia	22.6	21.5	16.6	31.6	7.9	-2.0	20.6	12.3	44.7	50.3
Singapore	6.0	7.0	-4.8	49.6	18.4	2.6	1.2	0.1	-0.3	1.2
South Africa	15.2	1.7	4.6	6.2	4.3	12.6	8.3	2.6	-0.4	5.1
Sweden	3.4	4.1	7.0	12.2	21.3	2.8	5.1	3.5	-13.5	7.7
Switzerland	23.2	2.4	1.2	1.5	-0.2	20.5	2.5	1.7	1.4	2.0
Turkey	nav	1,437.4	16.2	18.2	18.9	nav	nav	nav	nav	nav
United Kingdom	2.5	4.8	1.8	2.8	4.5	2.8	3.2	4.2	6.4	4.2
United States	6.1	6.3	4.8	5.9	5.3	5.0	5.9	6.0	7.5	5.3
CPMI ¹	5.4	7.4	4.3	13.5	7.0	3.8	5.4	3.0	7.0	4.9

Table 7b (cont)

			Cheques			Ī	E-money pa	ayment trar	nsactions	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	-12.5	-13.4	-14.3	-16.3	-20.0	nav	nav	nav	nav	nav
Belgium	-16.3	-21.2	99.2	11.2	11.6	-8.5	-36.4	-2.9	-75.4	56.2
Brazil	-9.5	-9.9	-10.2	-12.6	-15.1	-3.7	5.8	-27.1	-12.3	-4.0
Canada	-7.5	-5.5	-6.9	-8.6	-22.5	nav	nav	nav	nav	nav
China	-7.4	-11.5	-16.6	-27.9	-29.6	nav	nav	nav	nav	nav
France	-5.6	-6.6	-5.3	-6.9	-7.5	12.4	-3.3	4.7	-31.3	4.7
Germany	-15.3	-9.0	-4.6	-28.4	-13.7	-6.5	-5.5	5.8	-5.1	16.1
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	-2.1	-4.3	-4.9	-8.3	10.1	116.0	102.1	132.6	140.8	162.5
Italy	-5.5	-8.4	-8.3	-9.9	-10.8	25.9	27.6	19.4	28.3	23.3
Japan	-6.2	-5.7	-5.7	-6.9	-7.3	21.6	21.1	22.6	15.8	11.0
Korea	-24.9	-20.8	-14.8	-18.1	-21.1	-38.4	-31.2	-19.0	-14.2	-5.4
Mexico	-5.2	-7.7	-5.1	-5.8	-11.7	nav	nav	nav	nav	nav
Netherlands	nav	nav	3.8	3.7	-23.2	-13.8	-18.1	-37.1	-96.9	-83.7
Russia	-66.7	nav	nav	nav	nav	112.5	150.1	79.6	2.6	23.0
Saudi Arabia	0.0	0.7	-4.4	-2.2	-18.0	nav	nav	nav	nav	nav
Singapore	-2.9	-3.1	-3.9	-5.3	-5.8	4.4	2.3	1.7	3.0	4.1
South Africa	-21.4	-26.6	-26.1	-26.1	-27.8	nav	nav	nav	nav	nav
Sweden	-50.0	-50.0	-78.0	263.6	-25.0	nav	nav	nav	nav	90.8
Switzerland	-18.2	-22.2	nav	nav	nav	-73.6	-51.1	nav	nav	34.7
Turkey	1.5	-7.0	1.2	-2.7	-8.9	nav	nav	78.4	-9.9	-13.2
United Kingdom	-12.6	-15.3	-10.3	-13.4	-14.5	nav	nav	nav	nav	nav
United States	-7.4	-4.1	-4.1	-4.8	-4.8	nav	nav	nav	nav	nav
CPMI ¹	-7.6	-5.6	-5.3	-6.7	-6.3	12.4	15.7	18.8	12.6	21.3

Please refer to the individual country tables for a detailed explanation.

¹ Sum or average excluding those countries for which data are not available. For credit transfers, data for France (prior to 2005) and the United Kingdom include interbank transactions; however, the total number is relatively small.

Table 7b (cont)

	С	ard payme	nts (except	e-money)		of wh	nich: by ca	rds with a	debit functi	ion
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	11.8	11.1	10.6	11.2	12.4	15.0	12.9	12.0	12.4	13.8
Belgium	6.3	8.6	13.2	3.2	9.3	6.6	7.4	15.5	0.2	6.6
Brazil	17.1	15.4	10.7	9.4	5.6	17.7	18.9	14.6	14.9	5.7
Canada	3.6	8.2	8.6	5.1	7.5	5.2	3.7	8.4	5.5	5.0
China	40.5	44.0	52.3	47.0	32.0	nav	nav	nav	nav	nav
France	7.1	5.8	5.3	9.0	6.9	nav	nav	nav	24.4	24.7
Germany	8.2	14.2	-5.5	7.5	10.4	7.5	11.9	-10.1	4.9	10.1
Hong Kong SAR	nav	nav	nav	nav	nav	2.3	1.7	3.7	6.5	5.7
India	11.6	12.9	17.6	18.2	20.0	10.9	11.9	17.3	17.5	18.6
Italy	4.0	11.3	12.2	11.6	15.1	11.3	12.3	13.4	16.3	13.6
Japan	11.5	nav	nav	nav	nav	-3.6	-4.1	-7.9	-7.3	-6.7
Korea	18.3	16.0	14.6	15.0	12.2	33.3	35.3	27.8	22.8	18.4
Mexico	23.0	16.1	12.1	17.3	11.2	<i>25.4</i>	19.9	16.2	22.5	6.9
Netherlands	8.1	9.2	9.8	11.5	10.4	8.4	9.3	9.9	11.7	10.4
Russia	71.7	60.6	48.6	43.9	47.0	69.0	57.7	46.9	<i>45.2</i>	48.8
Saudi Arabia	8.7	1.9	15.9	18.0	11.7	8.7	1.9	15.9	18.0	11.7
Singapore	6.1	116.5	14.1	5.4	13.9	6.1	9.7	13.8	2.7	15.2
South Africa	20.8	18.3	19.3	17.2	22.4	nav	nav	nav	nav	nav
Sweden	10.5	9.5	9.3	8.6	11.3	11.1	9.8	9.2	8.0	11.1
Switzerland	10.2	7.6	11.0	24.0	12.1	8.7	5.8	10.4	31.5	10.3
Turkey	15.0	10.7	6.7	11.1	10.8	41.8	21.7	21.2	26.0	26.5
United Kingdom	6.5	10.1	12.1	12.2	12.1	7.1	10.9	13.1	12.9	15.2
United States	6.3	8.1	7.0	8.4	nav	5.5	8.3	6.3	7.9	nav
CPMI ¹	10.6	12.6	12.9	14.6	17.9	9.2	11.5	10.7	12.9	18.1

Table 7b (cont)

	by c	ards with a	delayed d	ebit function	on		by cards w	ith a credit	function	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	nav	nav	nav	nav	nav	6.8	8.0	8.1	9.2	9.9
Belgium	4.1	17.5	-4.4	29.1	28.0	nav	nav	nav	4.2	3.1
Brazil	nav	nav	nav	nav	nav	16.6	12.2	6.9	3.6	5.4
Canada	nav	nav	nav	nav	nav	1.4	14.5	8.9	4.5	10.6
China	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
France	nav	nav	nav	41.2	14.6	nav	nav	nav	187.5	3.6
Germany	11.7	21.8	11.9	15.3	9.9	7.1	52.0	15.7	16.6	25.5
Hong Kong SAR	nav	nav	nav	nav	nav	10.2	7.1	4.3	7.0	7.9
India	15.9	10.6	26.6	29.6	1.1	23.9	28.3	21.0	27.8	38.1
Italy	nav	nav	nav	nav	nav	-8.2	9.3	9.6	1.3	19.0
Japan	nav	nav	nav	nav	nav	11.5	nav	nav	nav	nav
Korea	nav	nav	nav	nav	nav	13.8	9.3	8.9	11.1	8.8
Mexico	nav	nav	nav	nav	nav	19.3	9.9	5.2	7.2	20.5
Netherlands	1.5	8.0	8.3	7.6	12.5	nav	nav	nav	nav	nav
Russia	nav	nav	nav	nav	nav	111.6	95.1	64.4	33.2	30.5
Saudi Arabia	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Singapore	nav	nav	nav	nav	nav	nav	nav	14.3	8.2	12.7
South Africa	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	2.4	-1.0	4.9	36.6	0.0	8.4	9.4	10.1	8.7	13.6
Switzerland	nav	nav	nav	nav	nav	13.4	11.4	12.3	9.9	16.3
Turkey	nap	nap	nap	nap	nap	11.3	8.8	3.8	7.6	6.5
United Kingdom	1.4	1.6	1.9	-2.9	-54.6	5.0	8.5	9.5	11.9	8.1
United States	nav	nav	nav	nav	nav	8.0	7.5	8.4	9.2	nav
CPMI ¹	6.4	13.1	7.0	26.0	6.7	9.6	9.4	8.7	9.3	10.2

¹ Sum or average excluding those countries for which data are not available.

Table 7c
Use of payment instruments by non-banks: number of transactions per inhabitant (total for the year)

		Cre	dit transfer	'S			Di	rect debits		
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	72.0	75.3	75.8	80.4	86.2	32.3	34.8	37.5	40.9	44.6
Belgium	85.6	92.1	122.5	111.6	112.5	25.8	28.2	47.5	36.7	39.4
Brazil	45.5	47.7	47.2	49.3	49.6	21.8	24.6	27.4	26.5	25.9
Canada	32.9	35.1	35.7	36.9	37.5	20.2	20.8	21.6	22.2	22.9
China	1.0	1.4	1.9	4.6	5.7	nav	nav	nav	nav	nav
France	47.5	49.6	51.7	54.6	56.3	54.3	47.4	53.6	58.4	59.5
Germany	76.5	77.1	69.6	73.7	76.9	109.5	120.0	107.5	121.9	131.3
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	0.5	0.8	1.2	2.1	2.6	0.1	0.2	0.2	0.2	0.3
Italy	21.1	20.9	22.3	24.3	23.4	10.1	10.4	10.1	11.3	13.1
Japan	11.7	11.9	12.2	12.5	12.7	nav	nav	nav	nav	nav
Korea	63.3	68.4	73.3	79.3	83.5	33.1	33.9	33.7	33.8	34.9
Mexico	8.5	9.0	9.2	9.4	9.7	0.5	0.5	0.6	0.7	0.8
Netherlands	96.9	119.8	121.1	116.3	124.0	81.7	79.1	69.0	76.1	68.2
Russia	18.8	19.7	19.8	18.9	18.8	0.6	0.6	0.6	0.5	0.6
Saudi Arabia	0.2	0.2	0.3	0.4	0.4	0.0	0.0	0.1	0.1	0.1
Singapore	7.5	7.9	7.4	11.0	12.8	10.6	10.6	10.5	10.3	10.3
South Africa	12.5	12.6	13.0	13.6	14.0	13.5	14.5	14.7	14.4	15.0
Sweden	90.2	93.1	98.6	109.0	130.4	31.2	32.5	33.3	28.4	30.1
Switzerland	116.0	117.5	117.4	117.8	116.3	6.9	7.0	7.0	7.1	7.1
Turkey	0.2	3.0	3.4	4.0	4.7	nap	nap	nap	nap	nap
United Kingdom	58.0	60.4	61.0	62.2	64.5	53.6	55.0	56.8	60.0	62.0
United States	27.0	28.5	29.7	31.2	32.7	40.8	42.9	45.2	48.2	50.4
CPMI ¹	12.3	13.1	13.5	15.2	16.1	15.9	16.6	16.8	17.8	18.4

Table 7c (cont)

			Cheques				E-money pa	ayment trar	sactions	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	9.8	8.4	7.1	5.8	4.6	nap	nap	nap	nap	nap
Belgium	0.5	0.4	8.0	0.8	0.9	4.2	2.6	2.6	0.6	1.0
Brazil	7.2	6.5	5.7	5.0	4.2	0.2	0.2	0.1	0.1	0.1
Canada	23.3	21.8	20.1	18.2	13.9	nav	nav	nav	nav	nav
China	0.6	0.5	0.4	0.3	0.2	nap	nap	nap	nap	nap
France	43.0	40.0	37.6	34.8	32.1	0.8	0.8	0.8	0.5	0.6
Germany	0.4	0.4	0.4	0.3	0.2	0.4	0.4	0.4	0.4	0.4
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	1.1	1.0	0.9	0.9	0.9	0.1	0.1	0.2	0.6	1.5
Italy	4.6	4.2	3.8	3.5	3.1	3.2	4.1	4.8	6.2	7.6
Japan	0.6	0.6	0.5	0.5	0.5	21.3	25.9	31.7	36.8	40.9
Korea	9.2	7.3	6.2	5.0	3.9	1.4	1.0	0.8	0.7	0.6
Mexico	3.2	3.0	2.8	2.6	2.3	nav	nav	nav	nav	nav
Netherlands	nav	0.0	0.0	0.0	0.0	8.8	7.2	4.5	0.1	0.0
Russia	0.0	0.0	0.0	0.0	0.0	1.6	3.9	7.0	7.1	8.7
Saudi Arabia	0.2	0.2	0.2	0.2	0.2	nap	nap	nap	nap	nap
Singapore	14.0	13.4	12.7	11.9	11.0	567.6	571.5	573.7	584.1	600.4
South Africa	0.8	0.6	0.4	0.3	0.2	nap	nap	nap	nap	nap
Sweden	0.0	0.0	0.0	0.0	0.0	nap	nap	nap	0.4	0.7
Switzerland	0.0	0.0	nav	nav	nav	0.4	0.2	nav	2.7	3.6
Turkey	0.2	0.2	0.2	0.2	0.2	nav	0.5	1.0	0.9	0.7
United Kingdom	13.3	11.2	10.0	8.6	7.3	nav	nav	nav	nav	nav
United States	62.9	59.9	57.1	53.9	51.0	nav	nav	nav	nav	nav
CPMI ¹	7.3	6.8	6.3	5.9	5.5	3.3	3.7	4.3	4.8	5.8

Please refer to the individual country tables for a detailed explanation.

¹ Sum or average excluding those countries for which data are not available. For credit transfers, data for France (prior to 2005) and the United Kingdom include interbank transactions; however, the total number is relatively small.

Table 7c (cont)

	С	ard payme	nts (except	e-money)		of wh	nich: by car	rds with a d	debit functi	ion
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	209.4	228.6	249.0	273.0	302.4	131.5	145.9	161.0	178.3	199.9
Belgium	111.0	120.0	135.2	138.2	150.3	98. <i>4</i>	105.2	121.0	120.0	127.3
Brazil	43.1	49.4	54.2	58.8	61.6	20.7	24.4	27.7	31.6	33.2
Canada	216.7	231.8	248.9	258.9	275.6	126.2	129.3	138.6	144.8	150.6
China	6.7	9.5	14.4	21.1	27.7	nav	nav	nav	nav	nav
France	129.9	136.7	142.8	155.0	165.1	nav	nav	74.5	92.3	114.6
Germany	39.6	45.0	42.4	45.2	49.4	32.1	35.8	32.0	33.3	36.3
Hong Kong SAR	nav	nav	nav	nav	nav	15.7	15.8	16.3	17.2	18.1
India	5.3	5.9	6.7	7.8	9.3	4.9	5.4	6.2	7.2	8.4
Italy	27.2	30.1	33.6	37.6	43.3	18.2	20.4	23.0	26.8	30.4
Japan	53.5	nav	nav	nav	nav	0.1	0.1	0.1	0.1	0.1
Korea	197.9	228.5	260.8	298.8	334.1	50.9	68.6	87.3	106.7	126.0
Mexico	13.0	15.0	16.6	19.2	21.2	8.0	9.5	10.9	13.2	14.0
Netherlands	157.7	171.8	187.9	208.6	229.1	151.0	164.6	180.1	200.3	219.8
Russia	19.9	31.9	47.4	67.0	98.3	18.4	28.9	42.4	60.5	89.8
Saudi Arabia	53.8	54.5	61.9	70.9	77.0	53.8	54.5	61.9	70.9	77.0
Singapore	44.3	94.3	106.2	110.7	124.5	44.3	47.8	53.7	54.5	62.0
South Africa	26.1	30.6	36.0	41.7	50.3	nav	nav	nav	nav	nav
Sweden	230.0	249.7	270.0	288.8	316.8	190.1	206.9	223.6	237.8	260.5
Switzerland	81.4	86.7	95.1	116.6	129.2	54.5	57.0	62.1	80.8	88.1
Turkey	37.9	41.4	43.6	47.8	52.2	5.8	6.9	8.3	10.3	12.9
United Kingdom	165.5	181.1	201.4	224.3	249.4	128.0	141.0	158.3	177.3	202.6
United States	248.2	266.3	282.9	304.4	nav	164.7	177.2	186.9	200.3	nav
CPMI ¹	42.4	46.9	52.3	59.4	44.8	36.8	40.6	45.0	50.3	35.6

Table 7c (cont)

	by c	ards with a	delayed d	ebit function	on		by cards w	ith a credit	function	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	nav	nav	nav	nav	nav	77.9	82.6	88.0	94.7	102.5
Belgium	12.6	14.7	14.0	17.9	22.8	nav	nav	0.2	0.2	0.2
Brazil	nav	nav	nav	nav	nav	22.4	25.0	26.5	27.2	28.4
Canada	nap	nap	nap	nap	nap	90.5	102.5	110.3	114.1	124.9
China	nap	nap	nap	nap	nap	nav	nav	nav	nav	nav
France	nav	nav	20.5	28.9	33.0	nav	nav	1.3	3.7	3.8
Germany	7.0	8.5	9.4	10.8	11.7	0.5	0.8	0.9	1.1	1.4
Hong Kong SAR	nav	nav	nav	nav	nav	60.2	64.1	66.5	70.6	75.4
India	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.5	0.6	0.8
Italy	nav	nav	nav	nap	nap	9.0	9.8	10.7	10.8	12.9
Japan	nav	nav	nav	nav	nav	<i>53.4</i>	nav	nav	nav	nav
Korea	nap	nap	nap	nap	nap	147.0	160.0	173.5	192.0	208.1
Mexico	nap	nap	nap	nap	nap	5.0	5.5	5.7	6.0	7.2
Netherlands	6.7	7.2	7.8	8.3	9.3	nav	nav	nav	nav	nav
Russia	nav	nav	nav	nav	nav	1.6	3.0	5.0	6.5	8.5
Saudi Arabia	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
Singapore	nav	nav	nav	nav	nav	nav	<i>4</i> 6.5	52.5	56.1	62.4
South Africa	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	4.5	4.4	4.6	6.2	6.1	<i>35.4</i>	38. <i>4</i>	41.8	44.8	50.1
Switzerland	nav	nav	nav	nav	nav	27.0	29.7	32.9	35.8	41.2
Turkey	nap	nap	nap	nap	nap	32.1	34.4	35.3	37.4	39.3
United Kingdom	5.8	5.8	5.9	5.7	2.6	31.8	34.2	37.2	41.3	44.3
United States	nav	nav	nav	nav	nav	83.5	89.2	96.0	104.1	nav
CPMI ¹	0.9	1.0	1.9	2.3	2.5	22.5	22.7	23.5	25.5	15.6

¹ Sum or average excluding those countries for which data are not available.

Table 8
Payment transactions by non-banks: total value of transactions (total for the year)

	Total	value of tra	ansactions	(USD billio	ns)¹	Increase	in the real	value of tra	ansactions	(in %) ²
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	15,453	14,971	13,990	12,046	12,194	0.5	2.1	-1.9	2.0	0.2
Belgium	4,920	5,522	9,150	7,005	7,276	-8.2	7.2	65.1	-9.0	2.3
Brazil	16,668	18,307	17,374	12,602	12,818	18.4	14.6	-2.8	-7.1	-0.2
Canada	6,159	6,176	6,027	5,379	4,944	4.5	2.4	2.7	2.2	-6.1
China	149,881	193,758	226,451	434,035	439,549	17.9	23.6	13.7	92.4	6.9
France	35,735	35,429	36,106	29,741	29,605	-4.2	-5.1	1.4	-1.5	-0.5
Germany	92,049	93,937	70,368	60,998	60,240	-0.9	-2.9	-25.6	3.6	-1.4
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	15,473	15,308	15,223	16,006	18,187	-13.6	-0.4	-5.3	-0.4	12.0
Italy	12,536	12,963	11,823	9,520	9,573	-5.9	-1.2	-8.9	-3.8	0.8
Japan	38,862	33,828	31,354	27,840	31,515	2.6	6.2	-2.2	0.8	1.7
Korea	18,804	19,263	20,989	21,394	21,214	-2.8	-1.7	3.5	8.7	0.7
Mexico	19,603	20,467	20,297	17,598	15,620	-2.8	-2.5	-0.7	0.6	1.6
Netherlands	7,482	23,326	23,482	21,245	21,556	-1.1	194.0	0.4	8.0	1.6
Russia	16,066	18,011	17,439	12,466	10,307	5.4	7.8	3.7	1.2	-13.5
Saudi Arabia	18,954	16,251	16,390	14,918	12,461	16.3	-17.2	-1.8	-10.9	-19.3
Singapore	845	893	881	836	833	-1.0	3.4	-1.1	3.6	0.6
South Africa	19,824	22,782	24,419	26,319	1,922	nav	nav	nav	nav	nav
Sweden	2,225	2,401	2,377	1,712	1,878	7.0	3.8	4.5	-11.4	10.2
Switzerland	4,391	4,426	4,543	5,002	4,483	-6.5	-0.2	1.4	17.1	-7.9
Turkey	583	3,392	3,425	3,151	4,084	78.8	474.3	7.4	5.1	32.6
United Kingdom	122,771	118,734	121,814	112,878	100,533	7.7	-4.4	-4.0	-0.2	0.2
United States	163,442	169,948	187,079	179,732	nav	nav	nav	nav	nav	nav
CPMI ³	782,728	850,093	881,000	1,032,424	820,792	5.6	6.2	1.1	15.4	-5.1

Table 8 (cont)

	Ave	rage value	per transa	ction (USD) ¹	Average value per inhabitant (USD thousands) ¹				
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	2,005	1,783	1,544	1,212	1,108	678	646	594	504	503
Belgium	1,959	2,044	2,658	2,143	2,112	445	497	820	622	643
Brazil	709	709	636	441	440	84	91	86	62	62
Canada	608	571	523	448	392	178	177	171	151	137
China	13,379	12,499	9,888	12,127	9,439	111	142	166	316	318
France	1,978	1,959	1,905	1,472	1,416	548	540	546	448	444
Germany	5,055	4,795	3,922	3,077	2,812	1,145	1,165	869	747	730
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	1,808	1,561	1,337	1,070	954	13	12	12	12	14
Italy	2,941	2,889	2,467	1,800	1,666	209	215	196	158	159
Japan	3,495	nav	nav	nav	nav	305	265	246	219	248
Korea	1,234	1,131	1,111	1,012	914	376	384	416	423	418
Mexico	6,660	6,340	5,859	4,582	3,788	169	174	171	146	128
Netherlands	1,294	3,673	3,640	2,316	2,849	447	1,388	1,392	1,255	1,266
Russia	2,198	1,842	1,379	802	508	112	126	121	85	70
Saudi Arabia	11,050	9,259	8,124	6,296	4,715	649	553	546	483	392
Singapore	247	237	227	208	196	159	165	161	151	149
South Africa	7,161	7,403	7,115	6,929	440	380	431	456	485	35
Sweden	665	666	609	407	393	234	250	245	174	188
Switzerland	2,681	2,589	2,527	2,473	2,089	549	547	555	604	535
Turkey	201	980	915	758	885	8	44	44	40	51
United Kingdom	6,635	6,020	5,728	4,882	3,997	1,927	1,852	1,886	1,734	1,531
United States	1,373	1,351	1,416	1,280	nav	521	537	587	560	nav
CPMI ³	2,610	2,704	2,584	2,691	3,006	193	208	213	247	211

Table 8 (cont)

		Value a	s a ratio to	GDP		Value as a ratio to deposits held by non-banks ⁴					
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	
Australia	9.9	10.0	9.7	9.9	9.7	8.1	8.2	7.6	6.9	6.7	
Belgium	9.9	10.6	17.2	15.4	15.6	23.9	23.9	39.8	31.4	30.7	
Brazil	6.8	7.4	7.1	7.0	7.1	185.2	224.7	249.2	303.7	244.2	
Canada	3.3	3.3	3.3	3.5	3.2	9.7	9.6	9.8	9.6	7.8	
China	18.2	21.1	21.9	39.9	39.2	nav	nav	nav	nav	nav	
France	13.3	12.6	12.7	12.2	12.0	42.5	38.5	42.1	34.4	32.1	
Germany	26.0	25.0	18.1	18.1	17.3	48.0	44.3	35.3	30.3	28.3	
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
India	8.3	8.0	7.4	7.6	8.1	10.4	10.2	9.2	9.4	9.9	
Italy	6.1	6.1	5.5	5.2	5.2	12.5	12.0	11.5	9.5	nav	
Japan	6.3	6.6	6.5	6.4	6.4	7.4	7.4	7.2	6.6	6.1	
Korea	15.4	14.8	14.9	15.5	15.0	195.3	178.1	183.3	156.5	138.1	
Mexico	16.5	16.2	15.6	15.4	14.9	128.0	114.0	113.2	100.5	95.0	
Netherlands	9.0	26.9	26.7	28.0	27.7	15.9	48.0	38.7	39.6	39.9	
Russia	7.5	8.1	8.4	9.1	8.0	48.1	53.6	92.6	78.3	48.5	
Saudi Arabia	25.8	21.8	21.7	22.9	19.5	nav	nav	nav	nav	nav	
Singapore	2.9	3.0	2.9	2.9	2.8	1.9	2.1	2.1	2.1	2.0	
South Africa	50.0	62.1	69.5	82.9	6.5	64.8	85.9	94.2	124.3	8.0	
Sweden	4.1	4.1	4.1	3.4	3.6	4.9	4.9	5.3	nav	4.3	
Switzerland	6.6	6.4	6.4	7.4	6.7	5.5	5.7	6.4	6.3	5.1	
Turkey	0.7	3.6	3.7	3.7	4.8	1.3	7.1	7.0	6.8	9.2	
United Kingdom	46.0	43.3	40.3	39.1	38.2	23.1	21.4	23.0	22.3	nav	
United States	10.1	10.2	10.7	9.9	nav	93.1	88.9	89.0	82.7	nav	
CPMI ³	13.3	14.2	14.2	17.5	19.7	25.7	26.7	27.1	25.9	15.9	

Please refer to the individual country tables for a detailed explanation.

¹ Converted at yearly average exchange rates, except as noted. ² Total value of transactions in domestic currency deflated by yearly average CPI inflation. For the CPMI area, in US dollar terms. ³ Sum or average excluding those countries for which data are not available. Data for France (prior to 2005) and the United Kingdom include interbank transactions in credit transfers. Since the value of these transactions is relatively large, cross-country comparison and the CPMI figures should be treated with caution. ⁴ For Italy, as a ratio to deposits held only at banks.

Table 9
Use of payment instruments by non-banks: value of transactions per payment instrument (USD billions, total for the year)¹

		Cre	dit transfe	rs			Di	rect debits		
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	7,408	7,438	7,110	6,163	6,274	6,087	5,662	5,060	4,324	4,383
Belgium	4,695	5,278	8,858	6,781	7,045	91	104	159	112	122
Brazil	12,884	13,995	13,649	10,225	9,982	1,945	2,578	2,134	1,292	1,871
Canada	2,045	2,177	2,192	2,010	2,055	575	594	582	529	525
China	99,637	142,163	175,601	386,952	402,767	nav	nav	nav	nav	nav
France	30,962	30,798	31,894	25,912	26,216	1,683	1,858	2,009	1,609	1,651
Germany	74,523	75,649	64,793	55,837	55,193	16,980	17,724	4,749	4,474	4,343
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	13,228	13,313	13,389	14,221	16,460	20	22	30	39	55
Italy	10,083	10,666	9,669	7,696	7,749	495	473	420	398	404
Japan ²	32,342	28,840	26,693	25,121	27,133	nav	nav	nav	nav	nav
Korea	11,668	12,669	14,518	15,606	15,791	156	165	169	159	162
Mexico	18,748	19,628	19,514	16,927	15,055	19	22	22	22	22
Netherlands	6,982	22,818	23,044	20,845	21,162	373	369	290	267	251
Russia	15,683	17,516	16,878	12,029	9,789	42	49	49	32	34
Saudi Arabia	1,079	1,219	1,381	1,422	1,457	0.1	0.1	0.2	0.2	0.2
Singapore	170	185	192	215	235	64	68	72	71	73
South Africa	2,095	2,108	2,032	1,870	1,746	152	137	115	102	95
Sweden	2,014	2,176	2,152	1,546	1,701	80	85	81	57	59
Switzerland	4,233	4,261	4,373	4,833	4,314	88	92	93	85	82
Turkey	213	2,993	3,030	2,795	3,739	nap	nap	nap	nap	nap
United Kingdom	118,903	114,968	117,752	109,955	110,640	1,704	1,743	1,922	1,903	1,704
United States	69,404	74,298	79,060	83,058	87,416	61,793	63,225	75,363	63,813	67,381
CPMI ³	nap	nap	nap	nap	nap	92,348	94,969	93,319	79,288	83,217

Table 9 (cont)

		(Cheques			E-money payment transactions				
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	1,254	1,172	1,104	917	859	nap	nap	nap	nap	nap
Belgium	48	45	32	23	17	0.293	0.187	0.476	0.406	0.650
Brazil	1,479	1,350	1,190	772	648	1.156	1.528	0.751	0.387	0.344
Canada	2,992	2,850	2,696	2,344	1,861	nav	nav	nav	nav	nav
China	46,945	46,455	43,950	38,252	28,274	nap	nap	nap	nap	nap
France	2,091	1,752	1,613	1,300	1,192	0.145	0.145	0.324	0.446	0.654
Germany	291	267	226	172	170	0.155	0.143	0.532	0.550	0.804
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	1,873	1,593	1,400	1,276	1,204	1.481	1.405	3.488	7.603	12.468
Italy	873	773	707	547	530	16.293	15.603	17.889	18.824	22.790
Japan ²	4,629	3,754	3,144	2,470	3,904	29.701	31.286	36.514	38.671	47.461
Korea	6,435	5,849	5,671	4,996	4,576	1.437	1.111	0.949	0.743	0.701
Mexico	761	728	668	553	450	nap	nap	nap	nap	nap
Netherlands	nav	2	3	2	2	0.440	0.364	0.219	0.023	0.016
Russia	0	0	0	0	0	12.498	18.560	22.696	10.555	10.276
Saudi Arabia	223	234	239	202	149	nap	nap	nap	nap	nap
Singapore	555	579	553	490	461	1.881	1.954	2.043	1.980	2.029
South Africa	104	52	35	23	15	nap	nap	nap	nap	nap
Sweden	6	2	1	1	0	nap	nap	nap	0.001	0.001
Switzerland	1	1	nav	nav	nav	0.011	0.011	nav	1.599	1.959
Turkey	177	184	185	163	150	nav	0.159	0.290	0.278	0.281
United Kingdom	1,355	1,146	1,142	954	842	nav	nav	nav	nav	nav
United States	27,827	27,663	27,499	27,335	27,171	nav	nav	nav	nav	nav
CPMI ³	99,919	96,452	92,058	82,793	72,476	65.492	72.456	86.172	82.063	100.433

Please refer to the individual country tables for a detailed explanation.

¹ Converted at yearly average exchange rates, except as noted. ² For credit transfers and e-money payment transactions, total transactions during the fiscal year ending March of the following year, converted at average fiscal year exchange rates. ³ Sum or average excluding those countries for which data are not available. For credit transfers, data for France (prior to 2005) and the United Kingdom include interbank transactions. Since the value of these transactions is relatively large, cross-country comparison should be treated with caution; consequently, CPMI figures related to credit transfers have not been calculated.

Table 9 (cont)

	C	ard payme	nts (excep	t e-money)		of wl	hich: by cal	rds with a	debit functi	ion
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	439.1	433.3	436.7	388.2	410.3	178.4	181.3	187.0	170.2	185.2
Belgium	85.9	94.9	97.7	86.1	88.6	69.1	<i>75.3</i>	79.0	66.8	67.5
Brazil	359.5	382.7	400.1	312.4	317.2	121.5	135.6	147.9	116.7	123.6
Canada	546.4	554.3	556.6	494.9	503.1	190.5	190.4	191.0	169.7	167.6
China	3,298.8	5,139.9	6,899.6	8,831.2	8,506.2	nav	nav	nav	nav	nav
France	541.3	582.1	588.0	523.4	544.5	nav	nav	286.2	286.1	343.0
Germany	254.6	296.8	311.9	272.5	287.6	187.3	216.5	201.9	178.0	188.1
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	350.8	380.6	421.8	462.1	454.4	325.1	351.5	387.1	420.4	400.2
Italy	158.3	172.1	188.7	174.5	196.7	94.6	104.6	117.2	114.4	127.7
Japan	517.1	433.1	441.6	415.1	500.0	7.0	5.0	4.4	3.5	3.7
Korea	506.5	545.3	598.7	606.6	662.9	75.3	87.8	108.2	118.8	133.9
Mexico	75.6	89.6	93.2	95.9	93.5	33.5	41.2	<i>4</i> 5.5	<i>45.6</i>	45.2
Netherlands	126.8	136.9	145.2	130.6	140.5	112.3	121.8	129.2	115.8	124.5
Russia	168.4	255.7	317.5	270.2	356.7	154.7	232.9	290.2	250.6	334.7
Saudi Arabia	207.4	222.8	248.3	263.6	264.1	199.5	214.1	237.9	251.0	249.7
Singapore	53.8	58.6	61.4	58.6	61.7	23.1	24.6	25. <i>4</i>	23.7	25.1
South Africa	63.6	64.7	69.3	69.2	66.2	nav	nav	nav	nav	nav
Sweden	125.3	138.1	142.9	108.6	117.2	91.0	101.0	104.8	79.3	85.5
Switzerland	68.3	72.3	77.1	82.2	84.0	35.5	37.0	39. <i>4</i>	46.0	46.7
Turkey	193.0	214.8	209.6	193.1	194.0	9.1	11.5	13.1	13.5	16.4
United Kingdom	809.6	876.5	998.1	1,004.4	1,197.4	565.5	626.9	723.1	751.8	964.7
United States	4,417.6	4,762.0	5,156.6	5,527.1	nav	1,975.8	2,130.7	2,279.7	2,444.8	nav
CPMI ¹	13,367.7	15,907.2	18,460.8	20,370.5	15,046.6	4,448.8	4,889.6	5,598.3	5,666.7	3,632.8

Table 9 (cont)

	by c	ards with a	delayed d	lebit function	on		by cards w	ith a credit	function	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	nav	nav	nav	nav	nav	260.6	252.0	249.8	218.0	225.1
Belgium	16.8	19.6	18.2	18.9	20.8	nav	nav	0.5	0.5	0.3
Brazil	nav	nav	nav	nav	nav	238.1	247.2	252.2	195.7	193.6
Canada ²	nap	nap	nap	nap	nap	355.8	363.9	365.5	325.2	335.5
China	nap	nap	nap	nap	nap	nav	nav	nav	nav	nav
France ³	nav	nav	102.9	123.2	142.4	nav	nav	7.4	14.5	14.7
Germany	63.1	74.4	103.5	88.1	91.8	4.2	5.9	6.6	6.4	7.7
Hong Kong SAR	nav	nav	nav	nav	nav	57.9	61.9	66.9	71.9	73.4
India	2.4	2.6	3.2	3.7	4.9	23.3	26.5	31.5	38.0	49.3
Italy ⁴	nav	nav	nav	nap	nap	63.7	67.5	71.5	60.0	68.9
Japan	nav	nav	nav	nav	nav	510.2	<i>4</i> 28.1	437.2	411.6	496.3
Korea	nap	nap	nap	nap	nap	431.2	457.5	490.6	487.8	529.0
Mexico	nap	nap	nap	nap	nap	42.1	48.3	47.7	50.3	48.3
Netherlands	14.5	15.1	16.1	14.9	16.0	nav	nav	nav	nav	nav
Russia	nav	nav	nav	nav	nav	13.7	22.7	27.3	19.6	22.0
Saudi Arabia	nap	nap	nap	nap	nap	7.9	8.7	10.4	12.5	14.4
Singapore ²	nav	nav	nav	nav	nav	30.7	34.0	35.9	34.9	36.6
South Africa	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	4.9	<i>5.4</i>	5.3	<i>4.8</i>	4.8	29.4	31.7	32.8	24.5	26.9
Switzerland ⁴	nav	nav	nav	nav	nav	32.8	35.3	37.7	36.2	37.4
Turkey	nav	nav	nav	nav	nav	183.9	203.3	196.5	179.5	177.6
United Kingdom	53.9	51.8	53.6	44.8	24.4	190.2	197.8	221.4	222.6	208.3
United States	nav	nav	nav	nav	nav	2,441.8	2,631.4	2,876.9	3,082.3	nav
CPMI ¹	155.5	168.9	302.7	298.4	305.0	4,917.5	5,123.8	5,466.2	5,492.2	2,565.4

Please refer to the individual country tables for a detailed explanation.

¹ Sum or average excluding those countries for which data are not available. ² For cards with a credit function, includes charge cards. ³ A breakdown by types of function is not available. ⁴ For cards with a credit function, includes cards with a delayed debit function.

Table 9a
Use of payment instruments by non-banks: relative importance of payment instruments, in value of transactions

(% of total value of transactions)

		Cre	dit transfer	's			Di	rect debits		
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	47.9	49.7	50.8	51.2	51.5	39.4	37.8	36.2	35.9	35.9
Belgium	95.4	95.6	96.8	96.8	96.8	1.9	1.9	1.7	1.6	1.7
Brazil	77.3	76.4	78.6	81.1	77.9	11.7	14.1	12.3	10.3	14.6
Canada	33.2	35.2	36.4	37.4	41.6	9.3	9.6	9.7	9.8	10.6
China	66.5	73.4	77.5	89.2	91.6	nav	nav	nav	nav	nav
France	86.6	86.9	88.3	87.1	88.6	4.7	5.2	5.6	5.4	5.6
Germany	81.0	80.5	92.1	91.5	91.6	18.4	18.9	6.7	7.3	7.2
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	85.5	87.0	87.9	88.8	90.5	0.1	0.1	0.2	0.2	0.3
Italy	80.4	82.3	81.8	80.8	81.0	3.9	3.7	3.6	4.2	4.2
Japan	83.2	85.3	85.1	90.2	86.1	nav	nav	nav	nav	nav
Korea	62.1	65.8	69.2	72.9	74.4	0.8	0.9	0.8	0.7	0.8
Mexico	95.6	95.9	96.1	96.2	96.4	0.1	0.1	0.1	0.1	0.1
Netherlands	93.3	97.8	98.1	98.1	98.2	5.0	1.6	1.2	1.3	1.2
Russia	97.6	97.3	96.8	96.5	95.0	0.3	0.3	0.3	0.3	0.3
Saudi Arabia	5.7	7.5	8.4	9.5	11.7	0.0	0.0	0.0	0.0	0.0
Singapore	20.2	20.7	21.8	25.7	28.2	7.5	7.6	8.2	8.4	8.8
South Africa	10.6	9.3	8.3	7.1	90.8	0.8	0.6	0.5	0.4	4.9
Sweden	90.5	90.6	90.5	90.3	90.6	3.6	3.5	3.4	3.3	3.2
Switzerland	96.4	96.3	96.3	96.6	96.2	2.0	2.1	2.0	1.7	1.8
Turkey	36.6	88.2	88.5	88.7	91.6	nav	nav	nav	nav	nav
United Kingdom	96.8	96.8	96.7	97.4	110.1	1.4	1.5	1.6	1.7	1.7
United States	42.5	43.7	42.3	46.2	nav	37.8	37.2	40.3	35.5	nav

Table 9a (cont)

			Cheques			E-money payment transactions				
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	8.1	7.8	7.9	7.6	7.0	nav	nav	nav	nav	nav
Belgium	1.0	0.8	0.3	0.3	0.2	0.01	0.00	0.01	0.01	0.01
Brazil	8.9	7.4	6.8	6.1	5.1	0.01	0.01	0.00	0.00	0.00
Canada	48.6	46.1	44.7	43.6	37.6	nav	nav	nav	nav	nav
China	31.3	24.0	19.4	8.8	6.4	nav	nav	nav	nav	nav
France	5.9	4.9	4.5	4.4	4.0	0.00	0.00	0.00	0.00	0.00
Germany	0.3	0.3	0.3	0.3	0.3	0.00	0.00	0.00	0.00	0.00
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	12.1	10.4	9.2	8.0	6.6	0.01	0.01	0.02	0.05	0.07
Italy	7.0	6.0	6.0	5.7	5.5	0.13	0.12	0.15	0.20	0.24
Japan	11.9	11.1	10.0	8.9	12.4	0.08	0.09	0.12	0.14	0.15
Korea	34.2	30.4	27.0	23.4	21.6	0.01	0.01	0.00	0.00	0.00
Mexico	3.9	3.6	3.3	3.1	2.9	nav	nav	nav	nav	nav
Netherlands	nav	0.0	0.0	0.0	0.0	0.01	0.00	0.00	0.00	0.00
Russia	0.0	0.0	0.0	0.0	0.0	0.08	0.10	0.13	0.08	0.10
Saudi Arabia	1.2	1.4	1.5	1.4	1.2	nav	nav	nav	nav	nav
Singapore	65.7	64.8	62.8	58.6	55.3	0.22	0.22	0.23	0.24	0.24
South Africa	0.5	0.2	0.1	0.1	0.8	nav	nav	nav	nav	nav
Sweden	0.3	0.1	0.0	0.0	0.0	nav	nav	nav	0.00	0.00
Switzerland	0.0	0.0	nav	nav	nav	0.00	0.00	nav	0.03	0.04
Turkey	30.3	5.4	5.4	5.2	3.7	nav	0.00	0.01	0.01	0.01
United Kingdom	1.1	1.0	0.9	0.8	0.8	nav	nav	nav	nav	nav
United States	17.0	16.3	14.7	15.2	nav	nav	nav	nav	nav	nav

Please refer to the individual country tables for a detailed explanation.

¹ Sum or average excluding those countries for which data are not available. For credit transfers, data for France (prior to 2005) and the United Kingdom include interbank transactions. Since the value of these transactions is relatively large, cross-country comparison should be treated with caution; consequently, CPMI figures for credit transfers have not been calculated. The CPMI figures calculated ignore credit transfer data throughout.

Table 9a (cont)

	С	ard payme	nts (except	e-money)		of wh	nich: by car	rds with a c	lebit functi	ion
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	2.8	2.9	3.1	3.2	3.4	1.15	1.21	1.34	1.41	1.52
Belgium	1.7	1.7	1.1	1.2	1.2	1.40	1.36	0.86	0.95	0.93
Brazil	2.2	2.1	2.3	2.5	2.5	0.73	0.74	0.85	0.93	0.96
Canada	8.9	9.0	9.2	9.2	10.2	3.09	3.08	3.17	3.15	3.39
China	2.2	2.7	3.0	2.0	1.9	nav	nav	nav	nav	nav
France	1.5	1.6	1.6	1.8	1.8	nav	nav	0.79	0.96	1.16
Germany	0.3	0.3	0.4	0.4	0.5	0.20	0.23	0.29	0.29	0.31
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	2.3	2.5	2.8	2.9	2.5	2.10	2.30	2.54	2.63	2.20
Italy	1.3	1.3	1.6	1.8	2.1	0.75	0.81	0.99	1.20	1.33
Japan	1.3	1.3	1.4	1.5	1.6	0.02	0.01	0.01	0.01	0.01
Korea	2.7	2.8	2.9	2.8	3.1	0.40	0.46	0.52	0.56	0.63
Mexico	0.4	0.4	0.5	0.5	0.6	0.17	0.20	0.22	0.26	0.29
Netherlands	1.7	0.6	0.6	0.6	0.7	1.50	0.52	0.55	0.54	0.58
Russia	1.0	1.4	1.8	2.2	3.5	0.96	1.29	1.66	2.01	3.25
Saudi Arabia	1.1	1.4	1.5	1.8	2.1	1.05	1.32	1. 4 5	1.68	2.00
Singapore	6.4	6.6	7.0	7.0	7.4	2.73	2.75	2.89	2.84	3.02
South Africa	2.6	2.7	3.1	3.4	3.4	nav	nav	nav	nav	nav
Sweden	5.6	5.8	6.0	6.3	6.2	4.09	4.21	4.41	4.63	4.55
Switzerland	1.6	1.6	1.7	1.6	1.9	0.81	0.84	0.87	0.92	1.04
Turkey	33.1	6.3	6.1	6.1	4.7	1.56	0.34	0.38	0.43	0.40
United Kingdom	0.7	0.7	8.0	0.9	1.0	0.46	0.53	0.59	0.67	0.96
United States	2.7	2.8	2.8	3.1	nav	1.21	1.25	1.22	1.36	nav

Table 9a (cont)

	by c	ards with a	delayed d	ebit function	on		by cards w	ith a credit	function	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	nav	nav	nav	nav	nav	1.69	1.68	1.79	1.81	1.85
Belgium	0.3	0.4	0.2	0.3	0.3	nav	nav	0.01	0.01	0.00
Brazil	nav	nav	nav	nav	nav	1.43	1.35	1. 4 5	1.55	1.51
Canada	nav	nav	nav	nav	nav	5.78	5.89	6.06	6.05	6.79
China	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
France	nav	nav	0.3	0.4	0.5	nav	nav	0.02	0.05	0.05
Germany	0.1	0.1	0.1	0.1	0.2	0.00	0.01	0.01	0.01	0.01
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	0.0	0.0	0.0	0.0	0.0	0.15	0.17	0.21	0.24	0.27
Italy	nav	nav	nav	nav	nav	0.51	0.52	0.60	0.63	0.72
Japan	nav	nav	nav	nav	nav	1.31	1.27	1.39	1.48	1.57
Korea	nav	nav	nav	nav	nav	2.29	2.37	2.34	2.28	2.49
Mexico	nav	nav	nav	nav	nav	0.21	0.24	0.23	0.29	0.31
Netherlands	0.2	0.1	0.1	0.1	0.1	nav	nav	nav	nav	nav
Russia	nav	nav	nav	nav	nav	0.09	0.13	0.16	0.16	0.21
Saudi Arabia	nav	nav	nav	nav	nav	0.04	0.05	0.06	0.08	0.12
Singapore	nav	nav	nav	nav	nav	3.64	3.81	4.08	<i>4</i> .18	4.40
South Africa	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	0.2	0.2	0.2	0.3	0.3	1.32	1.32	1.38	1.43	1.43
Switzerland	nav	nav	nav	nav	nav	0.75	0.80	0.83	0.72	0.83
Turkey	nav	nav	nav	nav	nav	31.54	5.99	5.74	5.70	4.35
United Kingdom	0.0	0.0	0.0	0.0	0.0	0.15	0.17	0.18	0.20	0.21
United States	nav	nav	nav	nav	nav	1.49	1.55	1.54	1.71	nav

¹ Sum or average excluding those countries for which data are not available. The CPMI figures calculated ignore credit transfer data throughout.

Table 9b
Use of payment instruments by non-banks: increase in the real value of transactions
(% change on previous year, adjusted by CPI inflation)¹

		Cre	dit transfer	'S			Di	rect debits		
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	2.2	5.8	0.4	2.6	0.7	-0.4	-2.0	-6.2	1.2	0.3
Belgium	-8.4	7.4	67.2	-9.0	2.3	4.0	8.5	52.6	-16.0	7.2
Brazil	18.1	13.3	-0.1	-4.0	-4.2	45.4	38.3	-15.2	-22.5	42.1
Canada	13.5	8.7	6.0	5.0	4.4	-2.7	5.4	3.1	4.2	1.3
China	31.6	36.4	20.1	121.2	9.9	nav	nav	nav	nav	nav
France	-3.9	-4.7	3.0	-2.9	1.1	-3.2	5.7	7.6	-4.3	2.5
Germany	-0.4	-3.4	-14.9	3.0	-1.3	-2.5	-0.6	-73.4	12.6	-3.1
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	-15.0	1.4	-4.3	0.7	14.1	16.0	7.6	30.1	24.7	39.1
Italy	-5.9	1.0	-9.5	-4.9	1.0	4.6	-8.6	-11.4	13.1	1.8
Japan	3.3	7.2	-1.2	2.0	-2.4	nav	nav	nav	nav	nav
Korea	3.9	4.2	8.8	14.7	2.8	7.2	1.1	-2.8	0.5	3.3
Mexico	-2.9	-2.2	-0.4	0.7	1.8	6.8	6.0	2.4	14.6	15.9
Netherlands	-1.2	208.2	0.8	8.0	1.6	0.5	-6.7	-21.6	9.7	-5.7
Russia	5.4	7.4	3.2	0.9	-14.9	-15.4	12.2	6.4	-7.1	10.1
Saudi Arabia	13.5	9.1	10.3	8.0	-1.0	8.2	10.2	3.3	8.4	20.3
Singapore	3.0	6.3	3.9	22.2	10.4	3.8	4.6	6.3	6.5	4.7
South Africa	4.7	12.2	2.9	2.8	0.9	16.9	0.3	-10.2	-1.3	1.0
Sweden	7.3	3.9	4.4	-11.6	10.6	-0.5	1.5	1.1	-14.3	5.3
Switzerland	-7.0	-0.4	1.3	17.6	-8.3	15.9	3.7	-0.4	-2.7	-0.5
Turkey	nav	1,284.5	7.7	5.4	36.9	nav	nav	nav	nav	nav
United Kingdom	8.1	-4.5	-4.2	0.5	13.2	0.1	1.1	3.2	6.6	0.7
United States	nav	5.8	4.9	5.2	4.2	nav	1.1	17.5	-15.2	4.6
CPMI ²	nap	nap	nap	nap	nap	-5.9	0.5	-4.1	-16.3	3.5

Table 9b (cont)

			Cheques			E-money payment transactions				
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	-7.7	-1.6	-1.0	-1.7	-7.4	nav	nav	nav	nav	nav
Belgium	-22.3	-9.7	-29.8	-12.4	-26.7	-4.2	-39.1	154.2	1.3	57.7
Brazil	-1.9	-4.7	-9.7	-16.8	-17.6	1.6	38.0	-49.7	-34.0	-12.7
Canada	0.4	-2.8	-0.5	-0.4	-18.9	nav	nav	nav	nav	nav
China	-4.1	-5.4	-8.0	-12.7	-22.0	nav	nav	nav	nav	nav
France	-10.9	-19.7	-8.4	-3.6	-8.4	9.1	-4.4	122.7	64.3	46.6
Germany	-11.8	-12.7	-16.0	-9.2	-1.2	-2.9	-12.1	268.7	23.5	45.9
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	-9.7	-14.3	-16.4	-13.6	-7.0	14.1	-4.5	136.3	106.5	61.6
Italy	-17.1	-15.4	-8.6	-7.6	-2.8	26.4	-8.5	14.5	25.7	21.4
Japan	-2.7	-1.1	-11.7	-10.8	42.0	25.7	26.7	24.6	14.8	10.9
Korea	-13.7	-12.8	-7.9	-6.0	-7.0	-23.4	-25.8	-18.9	-16.5	-4.2
Mexico	-3.0	-10.6	-8.2	-3.8	-6.9	nav	nav	nav	nav	nav
Netherlands	nav	nav	16.1	4.5	-10.6	-22.1	-22.0	-40.0	-87.7	-27.5
Russia	-69.8	-65.8	-38.7	-100.0	nav	83.6	42.8	31.0	-34.2	1.9
Saudi Arabia	2.9	1.4	-0.6	-17.4	-28.8	nav	nav	nav	nav	nav
Singapore	-3.1	2.0	-4.3	-3.4	-5.0	2.3	1.6	4.8	5.7	3.5
South Africa	-31.8	-44.2	-27.2	-27.2	-29.4	nav	nav	nav	nav	nav
Sweden	33.2	-68.7	-49.1	-30.4	-18.1	nav	nav	nav	nav	72.7
Switzerland	-16.7	-19.0	nav	nav	nav	-79.9	0.2	nav	nav	25.9
Turkey	8.3	2.8	6.7	0.7	-5.5	nav	nav	94.2	9.4	3.5
United Kingdom	-13.6	-16.4	-6.8	-10.1	-0.6	nav	nav	nav	nav	nav
United States	-2.7	-1.8	-2.0	-0.5	-1.5	nav	nav	nav	nav	nav
CPMI ²	-5.0	-5.7	-6.9	-11.4	-13.7	21.2	7.9	16.1	-8.1	20.7

¹ Value of transactions in domestic currency deflated by yearly average CPI inflation. For the CPMI area, in US dollar terms. ² Sum or average excluding those countries for which data are not available. For credit transfers, data for France (prior to 2005) and the United Kingdom include interbank transactions. Since the value of these transactions is relatively large, cross-country comparison should be treated with caution; consequently, CPMI figures for credit transfers have not been calculated.

Table 9b (cont)

	С	ard payme	nts (except	e-money)		of which by cards with a: debit function				
	2012	2013	2014 ·	2015	2016	2012	2013	2014	2015	2016
Australia	5.2	4.0	5.8	5.3	4.6	9.5	7.1	8.3	7.8	7.6
Belgium	3.0	5.6	2.5	4.8	1.3	4.1	4.1	4.6	0.4	-0.5
Brazil	11.3	11.1	7.1	0.0	-0.3	14.6	16.5	11.8	1.0	4.0
Canada	4.7	3.6	5.7	1.8	3.8	2.7	2.0	5.6	1.7	0.9
China	33.4	49.0	30.5	28.5	1.7	nav	nav	nav	nav	nav
France	4.8	3.0	0.5	6.4	3.9	nav	nav	nav	19.5	19.8
Germany	4.0	11.0	4.4	4.4	5.4	3.6	10.0	-7.4	5.3	5.6
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	31.6	9.3	5.5	3.8	-3.1	30.5	8.9	4.8	2.9	-6.2
Italy	-2.7	3.9	9.5	10.5	13.1	6.5	5.6	11.9	16.7	11.9
Japan	7.4	2.2	7.6	6.7	8.2	-14.5	-13.0	-7.0	-8.4	-6.0
Korea	5.8	3.3	4.3	8.1	11.0	18.8	11.9	17.0	17.2	14.5
Mexico	17.2	10.6	4.2	19.4	11.6	18.0	15.0	10.6	16.3	13.4
Netherlands	-0.3	1.8	5.9	7.4	7.7	0.0	2.3	5.8	7.0	7.7
Russia	45.3	46.0	33.0	20.4	38.1	43.8	44.8	33.4	22.2	39.7
Saudi Arabia	8.1	3.8	8.6	3.8	-3.2	7.3	3.7	8.2	3.2	-3.9
Singapore	3.5	6.5	5.0	4.2	6.3	2.6	4.3	3.6	1.7	7.0
South Africa	8.1	13.4	14.4	11.4	3.4	nav	nav	nav	nav	nav
Sweden	5.7	6.1	9.2	-6.5	8.4	6.0	6.7	9.5	-7.0	8.4
Switzerland	6.5	4.8	5.3	13.4	5.1	6.7	3.4	5.1	24.2	4.2
Turkey	18.3	9.9	3.8	5.2	2.8	28.4	24.6	21.6	17.6	23.9
United Kingdom	-1.0	7.0	6.5	8.4	34.1	-0.4	9.5	7.9	12.0	44.4
United States	5.8	6.5	6.7	7.3	nav	4.9	6.5	5.5	7.4	nav
CPMI ¹	10.2	16.3	13.3	8.7	-0.1	4.7	7.4	6.0	-0.3	11.2

Table 9b (cont)

	by c	ards with a	delayed d	ebit function	on		by cards w	ith a credit	function	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	nav	nav	nav	nav	nav	2.4	1.9	4.1	3.3	2.2
Belgium	-1.3	11.6	-7.9	23.6	8.4	nav	nav	nav	6.8	-29.4
Brazil	nav	nav	nav	nav	nav	9.8	8.3	4.5	-0.6	-2.9
Canada	nav	nav	nav	nav	nav	5.8	4.4	5.7	1.9	5.4
China	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
France	nav	nav	nav	43.2	15.5	nav	nav	nav	135.3	1.3
Germany	5.1	12.2	38.2	1.7	4.1	2.2	33.6	10.0	17.6	19.3
Hong Kong SAR	nav	nav	nav	nav	nav	5.7	2.4	3.5	4.4	-0.2
India	3.0	11.2	13.8	11.2	29.7	<i>55.4</i>	15.0	13.0	14.3	27.8
Italy	nav	nav	nav	nav	nav	-13.7	1.3	5.8	0.3	15.1
Japan	nav	nav	nav	nav	nav	7.8	2.4	7.7	6.9	8.3
Korea	nav	nav	nav	nav	nav	3.8	1.8	1.8	6.1	10.1
Mexico	nav	nav	nav	nav	nav	16.7	7.2	-1.2	22.4	10.0
Netherlands	-2.2	-1.9	6.4	10.5	7.6	nav	nav	nav	nav	nav
Russia	nav	nav	nav	nav	nav	64.5	60.0	28.5	1.7	17.4
Saudi Arabia	nav	nav	nav	nav	nav	32.4	6.2	16. <i>4</i>	17.8	11.3
Singapore	nav	nav	nav	nav	nav	4.3	8.1	6.0	6.0	5.8
South Africa	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	-6.5	7.6	2.2	12.8	-0.7	7.2	3.9	9.2	-8.2	10.3
Switzerland	nav	nav	nav	nav	nav	6.3	6.3	5.5	2.2	6.1
Turkey	nav	nav	nav	nav	nav	17.9	9.2	2.8	4.4	1.2
United Kingdom	-7.5	-5.0	-3.1	-10.1	-38.7	-0.6	2.8	4.7	8.3	5.3
United States	nav	nav	nav	nav	nav	6.4	6.5	7.8	7.3	nav
CPMI ¹	-6.7	6.2	15.4	-2.9	0.8	4.1	1.8	4.0	-1.1	5.0

¹ Sum or average excluding those countries for which data are not available.

Table 9c
Use of payment instruments by non-banks: average value per transaction (USD, total for the year)¹

		Cre	dit transfe	rs			Di	rect debits		
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	4,515	4,260	3,984	3,206	3,001	8,255	7,012	5,730	4,428	4,049
Belgium	4,958	5,160	6,483	5,391	5,530	320	332	301	272	274
Brazil	1,420	1,460	1,428	1,014	977	446	520	384	238	351
Canada	1,800	1,776	1,736	1,525	1,522	822	815	763	669	635
China	70,664	77,382	68,353	61,007	50,981	nav	nav	nav	nav	nav
France	9,997	9,476	9,334	7,156	6,986	475	598	567	415	417
Germany	12,116	12,167	11,502	9,276	8,701	1,928	1,832	546	449	401
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	22,574	13,569	9,097	5,169	4,783	115	112	129	135	151
Italy	7,994	8,458	7,177	5,231	5,494	822	758	691	583	511
Japan ²	21,644	19,055	17,236	15,876	16,853	nav	nav	nav	nav	nav
Korea	3,686	3,689	3,928	3,890	3,723	95	97	99	93	91
Mexico	18,913	18,560	17,898	14,912	12,721	327	347	317	275	240
Netherlands	4,300	11,331	11,278	10,581	10,021	272	278	249	207	216
Russia	5,832	6,182	5,942	4,339	3,547	510	576	574	412	363
Saudi Arabia	181,954	169,078	164,365	128,591	122,092	107	101	96	73	61
Singapore	4,271	4,341	4,725	3,538	3,265	1,129	1,193	1,264	1,238	1,269
South Africa	3,207	3,171	2,922	2,533	2,267	215	178	146	130	115
Sweden	2,344	2,434	2,248	1,440	1,305	271	272	252	203	197
Switzerland	4,562	4,483	4,549	4,952	4,430	1,588	1,623	1,610	1,452	1,378
Turkey	14,294	13,040	11,365	8,867	9,977	nav	nav	nav	nav	nav
United Kingdom	32,196	29,699	29,889	27,137	26,136	499	494	523	487	418
United States	8,171	8,231	8,354	8,289	8,282	4,819	4,658	5,237	4,124	4,136
CPMI ³	nap	nap	nap	nap	nap	2,324	2,268	2,164	1,719	1,720

Table 9c (cont)

		(Cheques			ı	E-money pa	ayment trar	sactions	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	5,590	6,027	6,628	6,571	7,689	nav	nav	nav	nav	nav
Belgium	8,771	10,527	3,727	2,472	1,649	6.3	6.4	16.7	58.0	59.4
Brazil	1,028	1,041	1,021	759	750	32.1	40.1	27.0	15.9	14.7
Canada	3,715	3,744	3,803	3,617	3,702	nav	nav	nav	nav	nav
China	59,904	66,993	76,010	91,729	96,362	nav	nav	nav	nav	nav
France	745	669	650	563	558	2.8	2.9	6.1	12.3	17.2
Germany	8,468	8,534	7,568	8,034	9,211	4.6	4.5	15.8	17.3	21.7
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	1,426	1,267	1,171	1,164	998	22.4	10.5	11.2	10.2	6.3
Italy	3,166	3,062	3,055	2,621	2,848	85.2	64.0	61.4	50.3	49.4
Japan ²	59,770	51,387	45,650	38,529	65,706	10.9	9.5	9.0	8.3	9.1
Korea	13,985	16,058	18,275	19,668	22,829	20.6	23.2	24.5	22.3	22.2
Mexico	2,015	2,090	2,020	1,777	1,637	nav	nav	nav	nav	nav
Netherlands	nav	11,778	13,199	11,150	12,968	3.0	3.0	2.9	9.4	41.9
Russia	5,438	nav	nav	nav	nav	55.4	32.9	22.4	10.1	8.0
Saudi Arabia	31,580	32,894	35,140	30,318	27,267	nav	nav	nav	nav	nav
Singapore	7,445	8,016	7,966	7,450	7,440	0.6	0.6	0.7	0.6	0.6
South Africa	2,458	1,676	1,547	1,366	1,236	nav	nav	nav	nav	nav
Sweden	29,732	19,340	42,384	6,595	7,166	nav	nav	nav	0.1	0.1
Switzerland	4,537	4,776	nav	nav	nav	3.8	7.9	nav	71.1	64.6
Turkey	9,558	10,705	10,614	9,614	9,746	nav	3.8	3.9	4.1	4.8
United Kingdom	1,598	1,597	1,773	1,709	1,766	nav	nav	nav	nav	nav
United States	1,409	1,460	1,513	1,580	1,649	nav	nav	nav	nav	nav
CPMI ³	3,406	3,484	3,512	3,384	3,163	9.9	9.4	9.4	8.0	8.0

Please refer to the individual country tables for a detailed explanation.

¹ Converted at yearly average exchange rates, except as noted. ² For credit transfers and e-money payment transactions, total for the fiscal year ending March of the following year, converted at average fiscal year exchange rates. ³ Sum or average excluding those countries for which data are not available. For credit transfers, data for France (prior to 2005) and the United Kingdom include interbank transactions. Since the value of these transactions is relatively large, cross-country comparison should be treated with caution; consequently, CPMI figures for credit transfers have not been calculated.

Table 9c (cont)

	С	ard payme	nts (except	e-money)		of wh	nich: by car	rds with a d	debit functi	ion
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	92.0	81.7	74.5	59.5	55.9	59.5	53.6	49.3	40.0	38.2
Belgium	70.0	71.3	64.8	55.3	52.0	63.5	64.4	58.6	49.4	46.8
Brazil	41.8	38.6	36.4	26.0	25.0	29.4	27.6	26.3	18.0	18.1
Canada	73.0	68.4	63.3	53.6	50.7	43.7	<i>4</i> 2.1	39.0	32.8	30.9
China	366.2	396.3	349.3	304.2	221.9	nav	nav	nav	nav	nav
France	63.9	64.9	62.3	50.9	49.5	nav	nav	58.1	46.7	44.9
Germany	80.0	81.7	90.8	73.8	70.6	72.6	75.0	77.8	65.4	62.8
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	54.7	52.6	49.5	45.9	37.6	54.2	<i>52.4</i>	49.2	<i>45.5</i>	36.5
Italy	97.2	94.9	92.8	76.9	75.3	86.7	85.3	84.3	70.8	69.5
Japan	75.8	nav	nav	nav	nav	538.9	401.0	384.0	334.0	374.6
Korea	51.2	47.5	45.5	40.1	39.1	29.6	25.5	24.6	22.0	20.9
Mexico	49.9	50.9	47.2	41.5	36.4	36.0	37.0	35.1	28.7	26.6
Netherlands	48.0	47.4	45.8	37.0	36.0	44.4	44.1	<i>4</i> 2.5	34.1	33.3
Russia	59.0	55.8	46.6	27.6	24.7	58.8	56.1	47.6	28.3	25.4
Saudi Arabia	132.0	139.1	133.8	120.3	107.9	127.0	133.7	128.2	114.6	102.0
Singapore	228.7	115.0	105.6	95.7	88.5	98.0	95.3	86.5	78.5	72.2
South Africa	46.6	40.0	36.0	30.6	23.9	nav	nav	nav	nav	nav
Sweden	57.2	57.6	54.5	38.2	37.0	50.3	50.8	48.3	33.8	32.8
Switzerland	104.9	103.1	99.0	85.2	77.7	81.4	80.4	77.5	68.8	63.3
Turkey	67.4	67.7	61.9	51.3	46.6	20.8	21.6	20.4	16.6	15.9
United Kingdom	76.8	75.5	76.7	68.8	73.1	69.3	69.3	70.7	65.1	72.5
United States	56.7	56.5	57.2	56.6	nav	38.2	38.0	38.3	38.0	nav
CPMI ¹	77.8	85.6	88.0	84.7	89.4	46.7	46.0	45.6	40.9	41.5

Table 9c (cont)

	by c	ards with a	delayed d	ebit function	on		by cards w	ith a credit	function	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	nav	nav	nav	nav	nav	146.8	131.5	120.5	96.4	90.5
Belgium	120.6	120.0	116.0	93. <i>4</i>	80.4	nav	nav	241.7	208.2	144.8
Brazil	nav	nav	nav	nav	nav	53.2	49.2	47.0	35.2	33.0
Canada	nav	nav	nav	nav	nav	113.8	101.7	93.8	79.9	74.5
China	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
France	nav	nav	75.8	64.3	64.8	nav	nav	86.1	58.9	57.7
Germany	112.8	109.1	135.7	100.2	95.0	97.1	89.6	85.8	72.4	69.0
Hong Kong SAR	nav	nav	nav	nav	nav	134.2	133.9	138.8	139.4	132.0
India	149.2	148.9	140.7	127.4	165.8	58.3	51.8	50.9	48.0	45.1
Italy	nav	nav	nav	nav	nav	118.4	114.9	111.0	92.0	88.8
Japan	nav	nav	nav	nav	nav	74.9	nav	nav	nav	nav
Korea	nav	nav	nav	nav	nav	58.7	56.9	56.1	50.2	50.0
Mexico	nav	nav	nav	nav	nav	71.9	75.1	70.5	69.3	55.3
Netherlands	128.9	124.2	122.4	105.3	100.6	nav	nav	nav	nav	nav
Russia	nav	nav	nav	nav	nav	61.3	52.3	38.2	20.6	17.7
Saudi Arabia	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Singapore	nav	nav	nav	nav	nav	nav	135.3	125.2	112.4	104.6
South Africa	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	113.2	128.0	118.1	79.3	78.4	87.1	86.1	80.9	55.6	53.7
Switzerland	nav	nav	nav	nav	nav	152.2	146.8	139.8	122.1	108.4
Turkey	nav	nav	nav	nav	nav	75.8	77.0	71.7	60.9	56.6
United Kingdom	146.4	138.5	140.8	121.0	145.2	94.0	90.2	92.2	82.9	71.7
United States	nav	nav	nav	nav	nav	93.1	93.3	94.1	92.3	nav
CPMI ¹	125.6	120.6	106.0	82.9	79.5	86.3	92.9	91.0	83.6	72.1

¹ Sum or average excluding those countries for which data are not available.

Table 9d
Use of payment instruments by non-banks: value of transactions per inhabitant (USD, total for the year)¹

		Cr	edit transfe	ers			D	irect debits	1	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	325,004	320,701	301,920	257,913	258,664	267,034	244,141	214,854	180,967	180,675
Belgium	424,690	475,253	793,958	601,781	622,227	8,276	9,359	14,274	9,980	10,811
Brazil	64,583	69,613	67,313	50,011	48,437	9,748	12,825	10,527	6,319	9,077
Canada	59,201	62,307	62,020	56,301	57,033	16,645	16,989	16,460	14,828	14,563
China	73,767	104,477	128,380	281,497	291,288	nav	nav	nav	nav	nav
France	474,577	469,741	482,703	390,356	393,477	25,798	28,334	30,403	24,239	24,776
Germany	926,603	938,040	800,084	683,549	669,080	211,129	219,769	58,639	54,776	52,652
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	10,870	10,797	10,567	11,084	12,672	17	18	23	30	42
Italy	168,335	177,100	159,961	127,324	128,455	8,262	7,862	6,953	6,581	6,697
Japan ²	253,475	226,349	209,791	197,653	213,759	nav	nav	nav	nav	nav
Korea	233,342	252,273	287,929	308,317	310,837	3,127	3,281	3,345	3,139	3,181
Mexico	161,226	166,838	164,015	140,723	123,838	165	185	187	183	183
Netherlands	416,728	1,358,053	1,366,253	1,230,961	1,242,599	22,255	21,962	17,200	15,744	14,749
Russia	109,515	122,059	117,353	82,162	66,741	292	340	338	218	229
Saudi Arabia	36,963	41,481	46,038	46,036	45,833	4	5	5	5	7
Singapore	32,081	34,311	35,104	38,861	41,926	11,997	12,625	13,219	12,758	13,061
South Africa	40,116	39,861	37,947	34,464	31,727	2,910	2,586	2,150	1,875	1,727
Sweden	211,481	226,573	221,787	156,967	170,170	8,446	8,839	8,380	5,750	5,937
Switzerland	529,361	526,685	533,990	583,499	515,252	11,000	11,386	11,344	10,261	9,823
Turkey	2,822	39,040	39,000	35,500	46,850	nap	nap	nap	nap	nap
United Kingdom	1,866,460	1,793,410	1,822,868	1,688,762	1,685,352	26,744	27,189	29,752	29,233	25,951
United States	221,034	234,968	248,176	258,830	270,530	196,795	199,950	236,572	198,857	208,529
CPMI ³	nap	nap	nap	nap	nap	36,959	37,633	36,347	30,543	31,741

Table 9d (cont)

			Cheques			į.	E-money pa	ayment trar	sactions	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	55,028	50,515	46,898	38,377	35,393	nap	nap	nap	nap	nap
Belgium	4,312	4,059	2,849	2,079	1,540	26.5	16.8	42.7	36.0	57.4
Brazil	7,413	6,716	5,867	3,778	3,146	5.8	7.6	3.7	1.9	1.7
Canada	86,622	81,576	76,284	65,663	51,629	nav	nav	nav	nav	nav
China	34,756	34,140	32,132	27,827	20,448	nap	nap	nap	nap	nap
France	32,048	26,729	24,410	19,590	17,888	2.2	2.2	4.9	6.7	9.8
Germany	3,623	3,315	2,792	2,104	2,062	1.9	1.8	6.6	6.7	9.7
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	1,539	1,292	1,105	995	927	1.2	1.1	2.8	5.9	9.6
Italy	14,571	12,832	11,702	9,049	8,792	272.0	259.1	295.9	311.4	377.8
Japan ²	36,282	29,462	24,707	19,432	30,759	232.8	245.5	287.0	304.3	373.9
Korea	128,694	116,471	112,474	98,711	90,069	28.7	22.1	18.8	14.7	13.8
Mexico	6,541	6,187	5,610	4,601	3,702	nap	nap	nap	nap	nap
Netherlands	nav	129	149	130	116	26.3	21.7	13.0	1.3	1.0
Russia	0	0	0	0	0	87.3	129.3	157.8	72.1	70.1
Saudi Arabia	7,651	7,977	7,978	6,536	4,682	nap	nap	nap	nap	nap
Singapore	104,497	107,234	101,081	88,490	82,155	354.1	361.8	373.4	357.6	361.8
South Africa	1,984	981	660	425	274	nap	nap	nap	nap	nap
Sweden	625	201	96	54	43	nap	nap	nap	0.1	0.1
Switzerland	153	124	nav	nav	nav	1.3	1.3	nav	193.1	233.9
Turkey	2,336	2,400	2,376	2,067	1,883	nav	2.1	3.7	3.5	3.5
United Kingdom	21,270	17,882	17,678	14,647	12,829	nav	nav	nav	nav	nav
United States	88,621	87,484	86,322	85,184	84,089	nav	nav	nav	nav	nav
CPMI ³	24,758	23,592	22,279	19,864	17,245	16.2	17.7	20.9	19.7	23.9

Please refer to the individual country tables for a detailed explanation.

¹ Converted at yearly average exchange rates, except as noted. ² For credit transfers and e-money payment transactions, total for the fiscal year ending March of the following year, converted at average fiscal year exchange rates. ³ Sum or average excluding those countries for which data are not available. For credit transfers, data for France (prior to 2005) and the United Kingdom include interbank transactions. Since the value of these transactions is relatively large, cross-country comparison should be treated with caution; consequently, CPMI figures for credit transfers have not been calculated.

Table 9d (cont)

	С	ard payme	nts (except	e-money)		of wh	nich: by car	rds with a d	debit functi	ion
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	19,262	18,681	18,544	16,247	16,914	7,829	7,816	7,939	7,125	7,634
Belgium	7,771	8,549	8,760	7,643	7,824	6,251	6,781	7,085	5,925	5,958
Brazil	1,802	1,904	1,973	1,528	1,539	609	674	730	571	600
Canada	15,818	15,868	15,749	13,863	13,959	5,516	<i>5,450</i>	<i>5,40</i> 6	<i>4,7</i> 53	4,650
China	2,442	3,777	5,044	6,424	6,152	nav	nav	nav	nav	nav
France	8,296	8,878	8,899	7,885	8,172	nav	nav	4,331	4,310	5,149
Germany	3,166	3,681	3,852	3,336	3,487	2,329	2,685	<i>2,4</i> 93	2,179	2,281
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	288	309	333	360	350	267	285	306	328	308
Italy	2,643	2,858	3,122	2,886	3,261	1,580	1,737	1,939	1,893	2,116
Japan	4,053	3,399	3,471	3,266	3,939	55	39	34	28	29
Korea	10,129	10,858	11,874	11,984	13,049	1,505	1,7 4 8	2,145	2,347	2,636
Mexico	650	761	784	798	769	288	351	383	379	372
Netherlands	7,568	8,146	8,611	7,715	8,249	6,704	7,250	7,659	6,837	7,311
Russia	1,176	1,782	2,208	1,846	2,432	1,080	1,623	2,018	1,712	2,282
Saudi Arabia	7,103	7,582	8,279	8,532	8,308	6,832	7,286	7,932	8,126	7,854
Singapore	10,129	10,850	11,219	10,594	11,008	4,342	4,556	4,648	4,284	4,481
South Africa	1,218	1,223	1,295	1,275	1,202	nav	nav	nav	nav	nav
Sweden	13,157	14,385	14,726	11,028	11,722	9,562	10,514	10,797	8,047	8,551
Switzerland	8,542	8,937	9,416	9,926	10,038	4,435	4,578	4,813	5,556	5,575
Turkey	2,552	2,802	2,698	2,452	2,430	120	150	169	172	205
United Kingdom	12,708	13,673	15,451	15,426	18,240	8,877	9,779	11,194	11,546	14,694
United States	14,069	15,060	16,187	17,224	nav	6,292	6,738	7,156	7,619	nav
CPMI ¹	3,299	3,891	4,459	4,878	3,870	1,721	1,874	2,059	2,063	1,483

Table 9d (cont)

	by c	ards with a	delayed d	ebit function	on		by cards w	ith a credit	function	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	nav	nav	nav	nav	nav	11,434	10,866	10,606	9,122	9,280
Belgium	1,520	1,768	1,628	1,676	1,836	nav	nav	47	42	30
Brazil	nav	nav	nav	nav	nav	1,193	1,229	1,244	957	939
Canada	nap	nap	nap	nap	nap	10,302	10,417	10,343	9,109	9,309
China	nap	nap	nap	nap	nap	nav	nav	nav	nav	nav
France	nav	nav	1,557	1,857	2,137	nav	nav	111	218	220
Germany	<i>7</i> 85	922	1,278	1,078	1,113	52	73	81	79	93
Hong Kong SAR	nav	nav	nav	nav	nav	8,076	8,580	9,225	9,841	9,956
India	2	2	2	3	4	19	22	25	30	38
Italy	nav	nav	nav	nap	nap	1,063	1,121	1,183	993	1,143
Japan	nav	nav	nav	nav	nav	3,998	3,360	<i>3,436</i>	3,238	3,910
Korea	nap	nap	nap	nap	nap	8,624	9,110	9,729	9,637	10,413
Mexico	nap	nap	nap	nap	nap	362	411	401	418	398
Netherlands	863	896	952	878	938	nav	nav	nav	nav	nav
Russia	nav	nav	nav	nav	nav	95	158	190	134	150
Saudi Arabia	nap	nap	nap	nap	nap	271	296	347	406	454
Singapore	nav	nav	nav	nav	nav	5,787	6,294	6,570	6,310	6,527
South Africa	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	511	567	544	491	478	3,084	3,304	3,385	2,490	2,693
Switzerland	nav	nav	nav	nav	nav	4,107	4,359	4,603	4,370	4,463
Turkey	nav	nav	nav	nav	nav	2,432	2,652	2,528	2,280	2,225
United Kingdom	846	808	830	688	372	2,986	3,086	<i>3,4</i> 27	<i>3,4</i> 20	3,174
United States	nav	nav	nav	nav	nav	7,776	8,322	9,031	9,605	nav
CPMI ¹	111	119	200	194	197	1,918	1,979	2,018	2,006	1,051

¹ Sum or average excluding those countries for which data are not available.

Table 9e
Use of payment instruments by non-banks: value of transactions as a ratio to GDP
(in %, total for the year)

		Cre	dit transfer	'S			Di	rect debits		
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	473	497	493	505	499	388.5	378.1	350.5	354.5	348.3
Belgium	944	1,015	1,666	1,491	1,510	18.4	20.0	30.0	24.7	26.2
Brazil	523	567	556	569	555	79.0	104.5	87.0	71.9	104.0
Canada	111	116	121	129	131	31.2	31.7	32.1	34.0	33.6
China	1,211	1,548	1,695	3,561	3,595	nav	nav	nav	nav	nav
France	1,155	1,096	1,119	1,065	1,064	62.8	66.1	70.5	66.1	67.0
Germany	2,104	2,016	1,666	1,655	1,587	479.5	472.4	122.1	132.6	124.9
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	711	693	654	672	729	1.1	1.1	1.4	1.8	2.4
Italy	487	501	449	422	419	23.9	22.2	19.5	21.8	21.8
Japan	521	560	550	574	549	nav	nav	nav	nav	nav
Korea	955	971	1,029	1,129	1,119	12.8	12.6	12.0	11.5	11.5
Mexico	1,580	1,555	1,504	1,480	1,437	1.6	1.7	1.7	1.9	2.1
Netherlands	843	2,633	2,620	2,751	2,722	45.0	42.6	33.0	35.2	32.3
Russia	728	785	809	877	761	1.9	2.2	2.3	2.3	2.6
Saudi Arabia	147	163	183	218	228	0.0	0.0	0.0	0.0	0.0
Singapore	59	61	63	73	79	22.2	22.6	23.6	24.1	24.7
South Africa	529	575	579	589	592	38.4	37.3	32.8	32.0	32.2
Sweden	370	376	375	311	331	14.8	14.7	14.2	11.4	11.5
Switzerland	634	619	616	712	645	13.2	13.4	13.1	12.5	12.3
Turkey	24	314	324	325	436	nap	nap	nap	nap	nap
United Kingdom	4,454	4,197	3,893	3,809	4,204	63.8	63.6	63.5	65.9	64.7
United States	430	445	454	458	469	382.5	378.8	432.4	352.2	361.8
CPMI ¹	nap	nap	nap	nap	nap	212.9	212.2	202.9	184.9	192.0

Table 9e (cont)

			Cheques				E-money pa	ayment trar	sactions	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	80.1	78.2	76.5	75.2	68.2	nap	nap	nap	nap	nap
Belgium	9.6	8.7	6.0	5.2	3.7	0.06	0.04	0.09	0.09	0.14
Brazil	60.1	54.7	48.5	43.0	36.0	0.05	0.06	0.03	0.02	0.02
Canada	162.6	152.2	148.9	150.5	119.0	nav	nav	nav	nav	nav
China	570.7	505.8	424.2	352.0	252.4	nap	nap	nap	nap	nap
France	78.0	62.4	56.6	53.5	48.4	0.01	0.01	0.01	0.02	0.03
Germany	8.2	7.1	5.8	5.1	4.9	0.00	0.00	0.01	0.02	0.02
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	100.7	82.9	68.4	60.3	53.3	0.08	0.07	0.17	0.36	0.55
Italy	42.1	36.3	32.9	30.0	28.7	0.79	0.73	0.83	1.03	1.23
Japan	74.6	72.8	64.8	56.4	79.0	0.48	0.61	0.75	0.88	0.96
Korea	526.5	448.1	401.9	361.4	324.3	0.12	0.09	0.07	0.05	0.05
Mexico	64.1	57.7	51.4	48.4	43.0	nap	nap	nap	nap	nap
Netherlands	nav	0.3	0.3	0.3	0.3	0.05	0.04	0.02	0.00	0.00
Russia	0.0	0.0	0.0	0.0	0.0	0.58	0.83	1.09	0.77	0.80
Saudi Arabia	30.3	31.4	31.6	31.0	23.3	nap	nap	nap	nap	nap
Singapore	193.5	191.6	180.5	167.3	155.1	0.66	0.65	0.67	0.68	0.68
South Africa	26.2	14.1	10.1	7.3	5.1	nap	nap	nap	nap	nap
Sweden	1.1	0.3	0.2	0.1	0.1	nap	nap	nap	0.00	0.00
Switzerland	0.2	0.1	nav	nav	nav	0.00	0.00	nav	0.24	0.29
Turkey	20.2	19.3	19.8	18.9	17.5	nav	0.02	0.03	0.03	0.03
United Kingdom	50.8	41.8	37.8	33.0	32.0	nav	nav	nav	nav	nav
United States	172.2	165.7	157.8	150.9	145.9	nav	nav	nav	nav	nav
CPMI ¹	172.7	160.6	149.8	142.0	121.5	0.27	0.29	0.35	0.37	0.44

Please refer to the individual country tables for a detailed explanation.

¹ Sum or average excluding those countries for which data are not available. For credit transfers, data for France (prior to 2005) and the United Kingdom include interbank transactions. Since the value of these transactions is relatively large, cross-country comparison should be treated with caution; consequently, CPMI figures for credit transfers have not been calculated.

Table 9e (cont)

	С	ard payme	nts (except	e-money)		of wl	nich: by car	rds with a c	debit functi	on
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	28.0	28.9	30.3	31.8	32.6	11.4	12.1	13.0	14.0	14.7
Belgium	17.3	18.3	18.4	18.9	19.0	13.9	14.5	14.9	14.7	14.5
Brazil	14.6	15.5	16.3	17.4	17.6	4.9	5.5	6.0	6.5	6.9
Canada	29.7	29.6	30.7	31.8	32.2	10.4	10.2	10.6	10.9	10.7
China	40.1	56.0	66.6	81.3	75.9	nav	nav	nav	nav	nav
France	20.2	20.7	20.6	21.5	22.1	nav	nav	10.0	11.8	13.9
Germany	7.2	7.9	8.0	8.1	8.3	5.3	5.8	5.2	5.3	5.4
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	18.9	19.8	20.6	21.8	20.1	17.5	18.3	18.9	19.9	17.7
Italy	7.6	8.1	8.8	9.6	10.6	4.6	4.9	5. <i>4</i>	6.3	6.9
Japan	8.3	8.4	9.1	9.5	10.1	0.1	0.1	0.1	0.1	0.1
Korea	41.4	41.8	42.4	43.9	47.0	6.2	6.7	7.7	8.6	9.5
Mexico	6.4	7.1	7.2	8.4	8.9	2.8	3.3	3.5	4.0	4.3
Netherlands	15.3	15.8	16.5	17.2	18.1	13.6	14.1	14.7	15.3	16.0
Russia	7.8	11.5	15.2	19.7	27.7	7.2	10.4	13.9	18.3	26.0
Saudi Arabia	28.2	29.8	32.8	40.4	41.3	27.1	28.7	31.5	38.5	39.0
Singapore	18.8	19.4	20.0	20.0	20.8	8.0	8.1	8.3	8.1	8.5
South Africa	16.1	17.6	19.7	21.8	22.4	nav	nav	nav	nav	nav
Sweden	23.0	23.9	24.9	21.8	22.8	16.7	17. 4	18.3	15.9	16.6
Switzerland	10.2	10.5	10.9	12.1	12.6	5.3	5. <i>4</i>	5.6	6.8	7.0
Turkey	22.0	22.6	22.4	22.5	22.6	1.0	1.2	1.4	1.6	1.9
United Kingdom	30.3	32.0	33.0	34.8	45.5	21.2	22.9	23.9	26.0	36.7
United States	27.3	28.5	29.6	30.5	nav	12.2	12.8	13.1	13.5	nav
CPMI ¹	22.8	26.5	29.7	34.5	36.1	9.4	10.3	10.9	11.9	12.0

Table 9e (cont)

	by c	ards with a	delayed d	ebit function	on		by cards w	ith a credit	function	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	nav	nav	nav	nav	nav	16.6	16.8	17.3	17.9	17.9
Belgium	<i>3.4</i>	3.8	3.4	4.2	4.5	nav	nav	0.1	0.1	0.1
Brazil	nav	nav	nav	nav	nav	9.7	10.0	10.3	10.9	10.8
Canada	nap	nap	nap	nap	nap	19.3	19.4	20.2	20.9	21.5
China	nap	nap	nap	nap	nap	nav	nav	nav	nav	nav
France	nav	nav	3.6	5.1	5.8	nav	nav	0.3	0.6	0.6
Germany	1.8	2.0	2.7	2.6	2.6	0.1	0.2	0.2	0.2	0.2
Hong Kong SAR	nav	nav	nav	nav	nav	22.1	22.4	23.0	23.3	22.9
India	0.1	0.1	0.2	0.2	0.2	1.3	1.4	1.5	1.8	2.2
Italy	nav	nav	nav	nap	nap	3.1	3.2	3.3	3.3	3.7
Japan	nav	nav	nav	nav	nav	8.2	8.3	9.0	9.4	10.0
Korea	nap	nap	nap	nap	nap	35.3	35.0	34.8	35.3	37.5
Mexico	nap	nap	nap	nap	nap	3.5	3.8	3.7	4.4	4.6
Netherlands	1.7	1.7	1.8	2.0	2.1	nav	nav	nav	nav	nav
Russia	nav	nav	nav	nav	nav	0.6	1.0	1.3	1.4	1.7
Saudi Arabia	nap	nap	nap	nap	nap	1.1	1.2	1.4	1.9	2.3
Singapore	nav	nav	nav	nav	nav	10.7	11.2	11.7	11.9	12.3
South Africa	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	0.9	0.9	0.9	1.0	0.9	5. <i>4</i>	5.5	5.7	4.9	5.2
Switzerland	nav	nav	nav	nav	nav	4.9	5.1	5.3	5.3	5.6
Turkey	nav	nav	nav	nav	nav	21.0	21.4	21.0	20.9	20.7
United Kingdom	2.0	1.9	1.8	1.6	0.9	7.1	7.2	7.3	7.7	7.9
United States	nav	nav	nav	nav	nav	15.1	15.8	16.5	17.0	nav
CPMI ¹	1.6	1.6	2.2	2.4	2.4	10.6	11.0	10.7	11.6	8.6

¹ Sum or average excluding those countries for which data are not available.

Table 10
Cards issued in the country: number of cards
(millions, end of year)¹

		Cards wi	th a cash f	unction		C	ards with a	an e-money	y function	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	61.01	63.05	64.70	66.60	69.45	nap	nap	nap	nap	nap
Belgium	20.65	20.04	21.40	21.87	22.59	13.01	13.46	10.68	4.82	4.86
Brazil	335.56	348.19	350.25	349.99	344.84	2.65	3.32	2.67	2.44	1.92
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
China	3,534	4,214	4,936	5,442	6,125	nap	nap	nap	nap	nap
France	92.61	88.18	85.67	80.72	81.77	26.72	23.10	14.20	3.03	2.75
Germany	135.34	137.23	144.28	147.29	149.50	97.99	98.96	95.56	91.91	86.11
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	351.19	414.04	575.03	686.57	885.29	12.44	9.63	17.47	61.36	72.75
Italy	60.04	65.82	70.64	76.74	81.04	18.80	21.61	22.60	25.18	26.10
Japan	361.45	356.88	337.20	337.28	336.79	200.16	229.67	263.96	302.51	336.00
Korea	nav	nav	nav	nav	nav	21.44	23.76	26.25	27.40	28.13
Mexico	139.49	152.78	163.20	171.34	168.35	nav	nav	nav	nav	nav
Netherlands	30.51	30.45	31.97	32.37	32.02	24.31	24.47	25.78	0.11	0.03
Russia	239.55	248.57	278.50	286.15	315.32	48.05	31.11	50.83	42.25	60.58
Saudi Arabia	16.44	17.81	20.55	22.46	26.54	nap	nap	nap	nap	nap
Singapore	10.59	10.91	10.74	10.28	10.61	19.82	23.09	29.38	34.71	39.82
South Africa	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	12.03	12.60	13.26	11.01	17.40	nap	nap	nap	0.12	0.13
Switzerland	14.62	15.24	nav	nav	nav	1.53	0.22	2.13	2.27	2.40
Turkey	138.94	150.25	156.03	164.30	170.67	nav	4.72	9.18	13.41	16.36
United Kingdom	168.99	175.59	178.87	175.63	174.26	nav	nav	nav	nav	nav
United States	827.40	845.10	869.90	913.30	nav	nav	nav	nav	nav	nav
CPMI ²	6,550.56	7,366.63	8,307.90	8,996.21	9,011.09	486.93	507.13	570.69	611.51	677.94

Table 10 (cont)

		Cards with	a paymen	t function		of	which: car	ds with a d	ebit function	on
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	61.01	63.05	64.70	66.60	69.45	38.99	40.10	41.26	42.71	45.20
Belgium	20.65	20.04	20.15	22.58	22.51	16.2	15.7	16.2	17.0	16.9
Brazil	446.60	462.93	473.25	480.46	467.26	293.3	301.9	313.2	317.4	318.4
Canada	102.04	105.03	101.58	96.87	104.00	23.60	23.90	25.00	24.80	28.70
China	3534.15	4213.89	4935.72	5442.31	6124.64	3,203.05	3,823.10	4,480.62	5,010.11	5,659.60
France	82.31	82.22	81.04	77.69	78.87	80.11	80.08	55.27	50.24	50.34
Germany	133.19	133.85	134.61	139.25	142.29	105.59	105.17	103.35	106.10	108.62
Hong Kong SAR	17.44	18.12	18.51	19.04	19.18	nav	nav	nav	nav	nav
India	351.19	414.04	575.03	686.57	885.29	331.20	394.42	<i>553.45</i>	661.54	854.87
Italy	68.18	71.79	73.64	77.15	77.22	39.71	44.22	47.04	50.32	53.18
Japan	676.79	685.22	677.90	687.00	nav	417.00	418.00	419.00	<i>4</i> 21.00	<i>4</i> 22.00
Korea	264.61	251.30	246.37	252.32	259.66	148.38	149.28	154.05	159.23	164.02
Mexico	138.05	151.94	163.19	171.34	168.35	112.69	126.05	134.64	141.70	137.13
Netherlands	30.51	30.45	31.52	30.73	30.87	24.66	24.49	<i>25.5</i> 8	26.15	<i>25.7</i> 2
Russia	191.50	217.46	227.67	243.91	254.74	169.01	188.27	195.90	214.44	224.59
Saudi Arabia	16.44	17.81	20.55	22.46	26.54	16.44	17.81	20.55	22.46	26.54
Singapore	18.28	20.20	20.32	19.73	19.75	10.59	10.91	10.74	10.28	10.61
South Africa	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	22.10	21.97	22.10	21.03	20.92	10.59	10.74	11.32	10.43	10.57
Switzerland	14.63	15.26	15.82	16.25	16.83	8.87	9.11	9.81	10.06	10.49
Turkey	145.61	152.28	153.34	157.19	159.45	91.26	<i>95.45</i>	96.33	98.98	100.65
United Kingdom	147.32	153.31	154.74	157.78	158.19	88.55	95.69	95.66	98.80	99.63
United States	1196.40	1213.40	1246.70	1305.40	nav	290.80	296.00	301.60	307.30	nav
CPMI ²	7,678.98	8,515.58	9,458.43	10,193.68	9,106.02	5,520.63	6,270.42	7,110.63	7,801.03	8,367.76

Table 10 (cont)

	cai	rds with a d	delayed del	bit function	,		cards wit	th a credit i	function	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	nav	nav	nav	nav	nav	22.03	22.95	23.44	23.89	24.26
Belgium	4.45	4.36	1.83	3.23	3.33	nav	nav	2.10	2.33	2.28
Brazil	nav	nav	nav	nav	nav	153.25	161.00	160.03	163.10	148.87
Canada	nap	nap	nap	nap	nap	78.44	81.13	<i>76.58</i>	72.07	75.30
China	nap	nap	nap	nap	nap	331.10	390.79	<i>455.10</i>	432.21	465.03
France	23.38	23.81	38.76	28.12	29.58	26.84	19.61	24.92	19.90	19.69
Germany	23.91	24.78	26.86	28.25	27.99	3.68	3.90	4.39	4.90	5.68
Hong Kong SAR	nav	nav	nav	nav	nav	17.44	18.12	18.51	19.04	19.18
India	0.44	0.43	0.46	0.53	0.58	19.55	19.18	21.11	24.51	29.84
Italy	nav	nav	nav	nav	nav	28.47	27.57	26.61	26.84	24.04
Japan	nav	nav	nav	nav	nav	259.79	267.22	258.90	266.00	nav
Korea	nap	nap	nap	nap	nap	116.23	102.02	92.32	93.10	95.64
Mexico	nap	nap	nap	nap	nap	25.37	25.89	28.55	29.64	31.23
Netherlands	nav	nav	2.65	2.50	2.72	5.85	5.96	3.29	2.08	2.42
Russia	nav	nav	nav	nav	nav	22.48	29.19	31.76	<i>29.46</i>	30.14
Saudi Arabia	nap	nap	nap	nap	nap	nav	nav	nav	nav	nav
Singapore	nap	nap	nap	nap	nap	7.70	9.29	9.58	9. 4 5	9.14
South Africa	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	0.71	0.69	0.70	0.86	0.77	10.79	10.54	10.08	9.75	9.58
Switzerland	nav	nav	nav	nav	nav	5.77	6.15	6.01	6.19	6.35
Turkey	nap	nap	nap	nap	nap	54.34	56.84	57.01	58.22	58.80
United Kingdom	2.32	2.26	2.15	nav	nav	56.44	55.36	56.93	58.97	58.56
United States	nav	nav	nav	nav	nav	905.60	917.40	945.10	998.10	nav
CPMI ²	55.21	56.33	73.42	63.48	64.97	2,151.16	2,230.11	2,312.30	2,349.74	1,116.04

¹ Except as noted. ² Sum or average excluding those countries for which data are not available.

Table 10a
Cards issued in the country: increase in the number of cards
(% change on previous year)

		Cards wit	th a cash fu	ınction		C	ards with a	an e-money	/ function	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	3.4	3.3	2.6	2.9	4.3	nav	nav	nav	nav	nav
Belgium	3.2	-2.9	6.8	2.2	3.3	4.5	3.5	-20.7	-54.8	0.8
Brazil	3.3	3.8	0.6	-0.1	-1.5	17.4	25.2	-19.5	-8.9	-21.2
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
China	19.8	19.2	17.1	10.3	12.5	nav	nav	nav	nav	nav
France	-0.1	-4.8	-2.8	-5.8	1.3	-19.2	-13.5	-38.5	-78.7	-9.3
Germany	2.0	1.4	5.1	2.1	1.5	1.5	1.0	-3.4	-3.8	-6.3
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	18.5	17.9	38.9	19.4	28.9	18.5	-22.6	81.3	251.3	18.6
Italy	12.7	9.6	7.3	8.6	5.6	32.4	14.9	4.6	11.4	3.7
Japan	2.5	-1.3	-5.5	0.0	-0.1	14.4	14.7	14.9	14.6	11.1
Korea	nav	nav	nav	nav	nav	16.9	10.9	10.4	4.4	2.7
Mexico	26.5	9.5	6.8	5.0	-1.7	nav	nav	nav	nav	nav
Netherlands	0.2	-0.2	5.0	1.3	-1.1	1.2	0.7	5.3	-99.6	-76.2
Russia	19.7	3.8	12.0	2.7	10.2	28.9	-35.3	63.4	-16.9	43.4
Saudi Arabia	15.3	8.3	15.4	9.3	18.2	nav	nav	nav	nav	nav
Singapore	3.7	3.0	-1.5	-4.3	3.3	-3.0	16.5	27.2	18.1	14.7
South Africa	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	1.4	4.7	5.3	-17.0	58.1	nav	nav	nav	nav	7.5
Switzerland	4.1	4.2	nav	nav	nav	-49.0	-85.5	856.7	6.5	5.7
Turkey	9.4	8.1	3.8	5.3	3.9	nav	nav	94.7	46.0	22.0
United Kingdom	2.4	3.9	1.9	-1.8	-0.8	nav	nav	nav	nav	nav
United States	2.8	2.1	2.9	5.0	nav	nav	nav	nav	nav	nav
CPMI ¹	13.5	12.5	13.0	8.3	11.5	8.9	3.2	12.5	7.1	10.9

Table 10a (cont)

	(Cards with	a payment	function		of which: cards with a debit function					
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	
Australia	3.4	3.3	2.6	2.9	4.3	4.7	2.9	2.9	3.5	5.8	
Belgium	3.2	-2.9	0.6	12.0	-0.3	3.1	-3.2	3. <i>4</i>	4.9	-0.7	
Brazil	9.3	3.7	2.2	1.5	-2.7	15.3	2.9	3.7	1.3	0.3	
Canada	-0.1	2.9	-3.3	-4.6	7.4	1.3	1.3	4.6	-0.8	15.7	
China	19.8	19.2	17.1	10.3	12.5	20.3	19.4	17.2	11.8	13.0	
France	-30.8	-0.1	-1.4	-4.1	1.5	15.9	0.0	-31.0	-9.1	0.2	
Germany	2.4	0.5	0.6	3.4	2.2	1.6	-0.4	-1.7	2.7	2.4	
Hong Kong SAR	5.8	3.9	2.1	2.9	0.7	nav	nav	nav	nav	nav	
India	18.5	17.9	38.9	19.4	28.9	19.0	19.1	40.3	19.5	29.2	
Italy	1.2	5.3	2.6	4.8	0.1	5.7	11.4	6.4	7.0	5.7	
Japan	0.2	1.2	-1.1	1.3	nav	0.5	0.2	0.2	0.5	0.2	
Korea	0.4	-5.0	-2.0	2.4	2.9	4.9	0.6	3.2	<i>3.4</i>	3.0	
Mexico	25.2	10.1	7.4	5.0	-1.7	31.6	11.9	6.8	5.2	-3.2	
Netherlands	0.2	-0.2	3.5	-2.5	0.4	0.9	-0.7	4.4	2.2	-1.6	
Russia	17.6	13.6	4.7	7.1	4.4	14.3	11.4	4.1	9.5	4.7	
Saudi Arabia	15.3	8.3	15.4	9.3	18.2	15.3	8.3	15.4	9.3	18.2	
Singapore	4.0	10.5	0.6	-2.9	0.1	3.7	3.0	-1.5	-4.3	3.3	
South Africa	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
Sweden	1.3	-0.6	0.6	-4.8	-0.6	2.6	1.4	5.4	-7.9	1.3	
Switzerland	4.1	4.3	3.7	2.8	3.6	3.6	2.8	7.7	2.6	4.2	
Turkey	9.3	4.6	0.7	2.5	1.4	11.5	4.6	0.9	2.7	1.7	
United Kingdom	3.0	4.1	0.9	2.0	0.3	2.6	8.1	0.0	3.3	0.8	
United States	3.0	1.4	2.7	4.7	nav	1.7	1.8	1.9	1.9	nav	
CPMI ¹	11.0	10.9	11.1	7.8	11.0	15.1	13.6	13.4	9.7	11.7	

Table 10a (cont)

	ca	rds with a d	delayed del	bit function	,		cards with	h a credit f	unction	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	nav	nav	nav	nav	nav	1.1	4.2	2.1	1.9	1.5
Belgium	3.5	-2.1	-58.0	76.4	3.3	nav	nav	nav	11.0	-2.4
Brazil	nav	nav	nav	nav	nav	-0.5	5.1	-0.6	1.9	-8.7
Canada	nav	nav	nav	nav	nav	-0.5	3.4	-5.6	-5.9	4.5
China	nav	nav	nav	nav	nav	16.0	18.0	16.5	-5.0	7.6
France	4.8	1.8	62.8	-27.4	5.2	-2.6	-26.9	27.1	-20.1	-1.1
Germany	5.4	3.6	8.4	5.2	-0.9	6.5	5.9	12.6	11.6	16.0
Hong Kong SAR	nav	nav	nav	nav	nav	5.8	3.9	2.1	2.9	0.7
India	-5.8	-1.3	6.9	13.1	10.0	10.8	-1.9	10.1	16.1	21.8
Italy	nav	nav	nav	nav	nav	-4.5	-3.2	-3.5	0.9	-10.4
Japan	nav	nav	nav	nav	nav	-0.2	2.9	-3.1	2.7	nav
Korea	nav	nav	nav	nav	nav	-4.8	-12.2	-9.5	0.8	2.7
Mexico	nav	nav	nav	nav	nav	2.9	2.0	10.3	3.8	5.4
Netherlands	nav	nav	nav	-5.6	8.7	-2.7	1.9	-44.8	-36.7	16.5
Russia	nav	nav	nav	nav	nav	49.6	29.8	8.8	-7.2	2.3
Saudi Arabia	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Singapore	nav	nav	nav	nav	nav	4.3	20.7	3.1	-1.3	-3.3
South Africa	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	8.1	-3.0	2.0	22.3	-10.6	-0.4	-2.4	-4.4	-3.3	-1.7
Switzerland	nav	nav	nav	nav	nav	4.8	6.6	-2.3	3.1	2.5
Turkey	nav	nav	nav	nav	nav	5.8	4.6	0.3	2.1	1.0
United Kingdom	6.0	-2.7	-5.0	nav	nav	3.6	-1.9	2.8	3.6	-0.7
United States	nav	nav	nav	nav	nav	3.5	1.3	3.0	5.6	nav
CPMI ¹	5.0	2.0	25.6	-10.9	2.3	4.0	3.7	3.6	1.6	2.8

Please refer to the individual country tables and the footnotes to Comparative Table 9 for a detailed explanation.

¹ Sum or average excluding those countries for which data are not available.

Table 10b
Cards issued in the country: number of cards per inhabitant (end of year)¹

		Cards wit	th a cash fu	unction		C	ards with a	an e-money	y function	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	2.68	2.72	2.75	2.79	2.86	nap	nap	nap	nap	nap
Belgium	1.87	1.80	1.92	1.94	2.00	1.18	1.21	0.96	0.43	0.43
Brazil	1.68	1.73	1.73	1.71	1.67	0.01	0.02	0.01	0.01	0.01
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
China	2.62	3.10	3.61	3.96	4.43	nap	nap	nap	nap	nap
France	1.42	1.34	1.30	1.22	1.23	0.41	0.35	0.21	0.05	0.04
Germany	1.68	1.70	1.78	1.80	1.81	1.22	1.23	1.18	1.13	1.04
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	0.29	0.34	0.45	0.54	0.68	0.01	0.01	0.01	0.05	0.06
Italy	1.00	1.09	1.17	1.27	1.34	0.31	0.36	0.37	0.42	0.43
Japan	2.83	2.80	2.65	2.65	2.65	1.57	1.80	2.07	2.38	2.65
Korea	nav	nav	nav	nav	nav	0.43	0.47	0.52	0.54	0.55
Mexico	1.20	1.30	1.37	1.42	1.38	nav	nav	nav	nav	nav
Netherlands	1.82	1.81	1.90	1.91	1.88	1.45	1.46	1.53	0.01	0.00
Russia	1.67	1.73	1.94	1.95	2.15	0.34	0.22	0.35	0.29	0.41
Saudi Arabia	0.56	0.61	0.69	0.73	0.83	nap	nap	nap	nap	nap
Singapore	1.99	2.02	1.96	1.86	1.89	3.73	4.28	5.37	6.27	7.10
South Africa	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	1.26	1.31	1.37	1.12	1.74	nap	nap	nap	0.01	0.01
Switzerland	1.83	1.88	nav	nav	nav	0.19	0.03	0.26	0.27	0.29
Turkey	1.84	1.96	2.01	2.09	2.14	nav	0.06	0.12	0.17	0.20
United Kingdom	2.65	2.74	2.77	2.70	2.65	nav	nav	nav	nav	nav
United States	2.64	2.67	2.73	2.85	nav	nav	nav	nav	nav	nav
CPMI ²	1.67	1.86	2.08	2.23	2.41	0.25	0.24	0.27	0.28	0.31

Table 10b (cont)

		Cards with	a payment	function		of v	vhich: card	s with a de	bit functio	n
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	2.68	2.72	2.75	2.79	2.86	1.71	1.73	1.75	1.79	1.86
Belgium	1.87	1.80	1.81	2.00	1.99	1.47	1.41	1.45	1.51	1.49
Brazil	2.24	2.30	2.33	2.35	2.27	1.47	1.50	1.54	1.55	1.54
Canada	2.95	3.01	2.87	2.71	2.89	0.68	0.68	0.71	0.69	0.80
China	2.62	3.10	3.61	3.96	4.43	2.37	2.81	3.28	3.64	4.09
France	1.26	1.25	1.23	1.17	1.18	1.23	1.22	0.84	0.76	0.76
Germany	1.66	1.66	1.66	1.70	1.72	1.31	1.30	1.28	1.30	1.32
Hong Kong SAR	2.43	2.51	2.55	2.61	2.60	nav	nav	nav	nav	nav
India	0.29	0.34	0.45	0.54	0.68	0.27	0.32	0.44	0.52	0.66
Italy	1.14	1.19	1.22	1.28	1.28	0.66	0.73	0.78	0.83	0.88
Japan	5.30	5.38	5.33	5.41	nav	3.27	3.28	3.29	3.31	3.32
Korea	5.29	5.00	4.89	4.98	5.11	2.97	2.97	3.06	3.15	3.23
Mexico	1.19	1.29	1.37	1.42	1.38	0.97	1.07	1.13	1.18	1.13
Netherlands	1.82	1.81	1.87	1.81	1.81	1.47	1. 4 6	1.52	1.54	1.51
Russia	1.34	1.52	1.58	1.67	1.74	1.18	1.31	1.36	1.46	1.53
Saudi Arabia	0.56	0.61	0.69	0.73	0.83	0.56	0.61	0.69	0.73	0.83
Singapore	3.44	3.74	3.71	3.56	3.52	1.99	2.02	1.96	1.86	1.89
South Africa	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	2.32	2.29	2.28	2.14	2.09	1.11	1.12	1.17	1.06	1.06
Switzerland	1.83	1.89	1.93	1.96	2.01	1.11	1.13	1.20	1.21	1.25
Turkey	1.93	1.99	1.97	2.00	2.00	1.21	1.24	1.24	1.26	1.26
United Kingdom	2.31	2.39	2.40	2.42	2.41	1.39	1.49	1.48	1.52	1.52
United States	3.81	3.84	3.91	4.07	nav	0.93	0.94	0.95	0.96	nav
CPMI ²	1.92	2.11	2.31	2.47	2.45	1.38	1.55	1.74	1.89	2.18

Table 10b (cont)

	cai	rds with a d	delayed del	bit function	,		cards with	h a credit f	unction	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	nav	nav	nav	nav	nav	0.97	0.99	1.00	1.00	1.00
Belgium	0.40	0.39	0.16	0.29	0.29	nav	nav	0.19	0.21	0.20
Brazil	nav	nav	nav	nav	nav	0.77	0.80	0.79	0.80	0.72
Canada	nap	nap	nap	nap	nap	2.27	2.32	2.17	2.02	2.09
China	nap	nap	nap	nap	nap	0.25	0.29	0.33	0.31	0.34
France	0.36	0.36	0.59	0.42	0.44	0.41	0.30	0.38	0.30	0.30
Germany	0.30	0.31	0.33	0.35	0.34	0.05	0.05	0.05	0.06	0.07
Hong Kong SAR	nav	nav	nav	nav	nav	2.43	2.51	2.55	2.61	2.60
India	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.02	0.02
Italy	nav	nav	nav	nav	nav	0.48	0.46	0.44	0.44	0.40
Japan	nav	nav	nav	nav	nav	2.04	2.10	2.03	2.09	nav
Korea	nap	nap	nap	nap	nap	2.32	2.03	1.83	1.84	1.88
Mexico	nap	nap	nap	nap	nap	0.22	0.22	0.24	0.25	0.26
Netherlands	nav	nav	0.16	0.15	0.16	0.35	0.35	0.19	0.12	0.14
Russia	nav	nav	nav	nav	nav	0.16	0.20	0.22	0.20	0.21
Saudi Arabia	nap	nap	nap	nap	nap	nav	nav	nav	nav	nav
Singapore	nap	nap	nap	nap	nap	1.45	1.72	1.75	1.71	1.63
South Africa	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	0.07	0.07	0.07	0.09	0.08	1.13	1.10	1.04	0.99	0.96
Switzerland	nav	nav	nav	nav	nav	0.72	0.76	0.73	0.75	0.76
Turkey	nap	nap	nap	nap	nap	0.72	0.74	0.73	0.74	0.74
United Kingdom	0.04	0.04	0.03	nav	nav	0.89	0.86	0.88	0.91	0.89
United States	nav	nav	nav	nav	nav	2.88	2.90	2.97	3.11	nav
CPMI ²	0.04	0.04	0.05	0.04	0.04	0.54	0.56	0.57	0.57	0.30

Please refer to the individual country tables and the footnotes to Comparative Table 9 for a detailed explanation.

¹ Except as noted. ² Sum or average excluding those countries for which data are not available.

Table 11
Terminals located in the country: number of terminals (thousands, end of year)

			ATMs			POS terminals					
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	
Australia	30.3	30.2	31.5	31.7	32.9	755.5	804.5	843.6	956.2	954.2	
Belgium	15.7	14.9	12.7	15.6	17.4	136.3	140.1	183.2	185.3	187.0	
Brazil	175.1	182.5	184.4	182.4	175.9	4,096.4	4,451.8	5,035.2	5,187.3	5,081.4	
Canada	59.1	65.0	66.0	66.4	68.0	794.0	829.0	879.0	1,301.4	1,400.8	
China	415.6	520.0	614.9	866.7	924.2	7,117.8	10,632.1	15,935.2	22,821.0	24,535.0	
France	58.5	58.6	114.9	60.7	58.5	1,400.0	1,344.4	1,604.5	1,495.9	1,487.3	
Germany	82.6	82.8	86.8	86.7	85.4	720.0	743.6	1,034.6	998.8	1,002.3	
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
India	114.0	161.8	189.1	211.9	222.3	845.7	1,066.0	1,126.7	1,385.7	2,529.1	
Italy	50.7	50.0	49.7	50.5	49.3	1,510.6	1,584.2	1,847.5	1,979.4	2,226.1	
Japan	137.3	137.9	136.8	136.7	136.8	1,877.7	1,951.2	nav	nav	nav	
Korea	122.9	124.2	122.3	121.3	120.3	nav	nav	nav	nav	nav	
Mexico	40.5	40.2	43.0	45.9	48.1	621.6	682.1	765.2	864.7	895.4	
Netherlands	7.6	7.4	7.2	7.0	6.8	267.6	249.2	398.5	500.5	521.5	
Russia	171.9	188.8	222.8	206.9	201.4	718.0	965.5	1,288.7	1,489.8	1,778.0	
Saudi Arabia	12.7	13.9	15.5	17.2	17.9	92.5	107.8	138.8	225.4	276.2	
Singapore	2.7	2.7	2.7	2.8	2.7	135.6	146.4	143.7	172.1	186.3	
South Africa	22.9	26.1	27.8	28.9	29.6	254.4	308.8	393.9	394.3	402.7	
Sweden	3.4	3.2	3.2	3.3	2.9	198.4	195.7	197.0	183.8	257.9	
Switzerland	6.8	6.8	6.8	7.0	7.0	170.1	166.6	243.2	250.6	272.1	
Turkey	36.3	42.0	45.6	48.3	48.4	2,134.4	2,293.7	2,365.0	2,493.1	2,349.5	
United Kingdom	66.1	68.0	69.4	70.3	70.0	1,639.3	1,653.9	1,701.9	1,958.4	2,157.1	
United States ¹	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
CPMI ²	1,632.9	1,827.1	2,052.9	2,268.3	2,325.8	25,485.8	30,316.5	36,125.4	44,843.6	48,499.8	

Table 11 (cont)

	E-mon	ey card loa	ding/unloa	ding termi	nals	E	-money car	d payment	terminals	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
Belgium	nav	nav	12.7	3.9	2.5	55.0	44.7	48.3	0.4	0.0
Brazil	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
China	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
France	39.2	29.5	21.2	1.2	127.8	71.0	47.0	45.4	0.5	311.2
Germany	53.8	53.9	60.5	61.1	60.0	218.6	217.4	419.7	387.7	377.4
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nav	nav	45.7	48.2	45.6	nav	nav	612.4	732.7	939.3
Japan	nav	nav	nav	nav	nav	1,214.0	1,396.0	1,569.0	1,853.0	2,032.0
Korea	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Mexico	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Netherlands	2.7	2.4	1.3	0.0	0.0	36.8	31.0	29.4	0.0	0.0
Russia	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Saudi Arabia	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
Singapore	nav	nav	nav	nav	nav	124.5	131.8	160.6	167.0	181.8
South Africa	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
Sweden	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
Switzerland	6.8	6.8	nav	nav	nav	13.8	13.7	nav	nav	nav
Turkey	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
United Kingdom	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPMI ²	102.5	92.7	141.5	114.4	235.9	1,733.7	1,881.5	2,884.7	3,141.3	3,841.6

¹ For POS terminals, PIN-based debit terminals only. ² Sum or average excluding those countries for which data are not available.

Table 11a

Terminals located in the country: increase in the number of terminals (% change on previous year)

			ATMs				РО	S terminals	 S	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	-1.6	-0.4	4.1	0.6	3.8	0.6	6.5	4.9	13.3	-0.2
Belgium	-0.7	-5.1	-14.7	23.3	11.4	-3.3	2.8	30.8	1.1	0.9
Brazil	0.7	4.2	1.0	-1.1	-3.5	16.5	8.7	13.1	3.0	-2.0
Canada	-1.5	10.0	1.5	0.7	2.3	7.3	4.4	6.0	48.1	7.6
China	24.5	25.1	18.2	41.0	6.6	47.5	49.4	49.9	43.2	7.5
France	0.6	0.2	95.9	-47.1	-3.7	-3.0	-4.0	19.3	-6.8	-0.6
Germany	-1.8	0.2	4.8	-0.1	-1.6	1.3	3.3	39.1	-3.5	0.3
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	19.2	41.9	16.9	12.0	4.9	28.0	26.1	5.7	23.0	82.5
Italy	-2.1	-1.4	-0.8	1.8	-2.5	5.3	4.9	16.6	7.1	12.5
Japan	-0.4	0.4	-0.8	0.0	0.0	0.4	3.9	nav	nav	nav
Korea	3.7	1.1	-1.6	-0.8	-0.9	nav	nav	nav	nav	nav
Mexico	11.3	-0.9	7.0	6.7	4.8	13.5	9.7	12.2	13.0	3.5
Netherlands	-2.9	-2.5	-3.0	-2.2	-3.6	-4.3	-6.9	59.9	25.6	4.2
Russia	21.2	9.8	18.0	-7.1	-2.6	28.8	34.5	33.5	15.6	19.3
Saudi Arabia	8.0	9.2	11.8	11.0	3.9	4.2	16.5	28.8	62.4	22.5
Singapore	1.9	0.2	0.4	2.6	-2.4	50.8	8.0	-1.8	19.7	8.2
South Africa	-4.8	14.1	6.3	4.1	2.5	-8.3	21.4	27.5	0.1	2.1
Sweden	-4.2	-5.2	-0.2	1.7	-13.2	-5.4	-1.4	0.7	-6.7	40.3
Switzerland	1.5	0.9	-0.1	2.2	0.8	10.5	-2.0	46.0	3.0	8.6
Turkey	11.9	15.6	8.5	5.9	0.3	8.0	7.5	3.1	5.4	-5.8
United Kingdom	2.7	2.8	2.1	1.3	-0.4	20.5	0.9	2.9	15.1	10.1
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPMI ¹	9.4	11.9	12.4	10.5	2.5	17.8	19.0	27.4	24.1	8.2

Table 11a (cont)

	E-mon	ney card loa	ading/unloa	ading term	inals	E	-money car	rd payment	terminals	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Belgium	nav	nav	nav	-69.1	-37.5	-10.7	-18.8	8.2	-99.2	-100.0
Brazil	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
China	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
France	-59.2	-24.6	-28.1	-94.5	10,939.7	-43.1	-33.8	-3.3	-98.8	56,794.1
Germany	2.3	0.1	12.3	1.0	-1.8	-7.4	-0.5	93.0	-7.6	-2.7
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nav	nav	nav	5.6	-5.6	nav	nav	nav	19.6	28.2
Japan	nav	nav	nav	nav	nav	11.2	15.0	12.4	18.1	9.7
Korea	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Mexico	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Netherlands	-7.6	-9.1	-45.2	-100.0	nav	-13.5	-15.8	-5.1	-100.0	nav
Russia	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Saudi Arabia	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Singapore	nav	nav	nav	nav	nav	15.0	5.8	21.8	4.0	8.8
South Africa	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Switzerland	1.5	0.9	nav	nav	nav	-0.6	-0.8	nav	nav	nav
Turkey	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
United Kingdom	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPMI ¹	-35.2	-9.5	-3.3	-19.1	106.1	3.3	8.5	21.7	8.9	22.3

Please refer to the individual country tables for a detailed explanation.

¹ Sum or average excluding those countries for which data are not available.

Table 11b

Terminals located in the country: number of terminals per million inhabitants (end of year)

			ATMs				РО	S terminals	s	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	1,331	1,303	1,336	1,325	1,355	33,145	34,688	35,821	40,016	39,337
Belgium	1,417	1,338	1,137	1,387	1,538	12,326	12,617	16,421	16,443	16,518
Brazil	878	908	910	892	854	20,534	22,145	24,832	25,372	24,657
Canada	1,711	1,861	1,867	1,861	1,887	22,988	23,729	24,873	36,452	38,870
China	308	382	450	631	668	5,270	7,814	11,650	16,602	17,744
France	897	894	1,738	915	878	21,459	20,505	24,283	22,535	22,322
Germany	1,027	1,026	1,071	1,061	1,035	8,952	9,221	12,775	12,228	12,151
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	94	131	149	165	171	695	865	889	1,080	1,947
Italy	847	831	821	836	817	25,220	26,305	30,563	32,750	36,902
Japan	1,076	1,082	1,075	1,076	1,078	14,716	15,314	nav	nav	nav
Korea	2,458	2,474	2,425	2,397	2,368	nav	nav	nav	nav	nav
Mexico	349	342	362	382	396	5,346	5,798	6,431	7,189	7,365
Netherlands	452	439	425	414	396	15,970	14,831	23,628	29,553	30,619
Russia	1,200	1,316	1,549	1,413	1,373	5,014	6,728	8,960	10,176	12,122
Saudi Arabia	435	473	517	558	563	3,170	3,668	4,626	7,296	8,688
Singapore	512	505	501	508	489	25,523	27,110	26,279	31,096	33,219
South Africa	438	494	519	533	539	4,870	5,841	7,356	7,267	7,318
Sweden	359	337	333	333	285	20,837	20,380	20,304	18,660	25,800
Switzerland	845	843	832	841	838	21,268	20,594	29,702	30,254	32,495
Turkey	480	548	587	613	607	28,223	29,917	30,440	31,662	29,437
United Kingdom	1,038	1,060	1,074	1,079	1,067	25,732	25,800	26,346	30,078	32,858
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPMI ¹	437	484	537	588	598	6,909	8,145	9,914	12,193	13,071

Table 11b (cont)

	E-mon	ey card loa	ding/unloa	ading termi	nals	E	-money car	d payment	terminals	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
Belgium	nav	nav	1,139	348	217	4,977	4,022	4,332	34	0
Brazil	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
China	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
France	601	451	321	17	1,919	1,088	716	687	8	4,671
Germany	669	668	747	748	728	2,718	2,696	5,182	4,746	4,575
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nav	nav	756	798	755	nav	nav	10,131	12,122	15,570
Japan	nav	nav	nav	nav	nav	9,515	10,956	12,331	14,580	16,008
Korea	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Mexico	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Netherlands	160	145	79	0	0	2,194	1,843	1,742	0	0
Russia	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Saudi Arabia	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
Singapore	nav	nav	nav	nav	nav	23,441	24,408	29,351	30,177	32,415
South Africa	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
Sweden	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
Switzerland	845	843	nav	nav	nav	1,726	1,693	nav	nav	nav
Turkey	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
United Kingdom	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPMI ¹	601	542	601	483	992	5,515	5,973	7,834	8,505	10,373

Please refer to the individual country tables for a detailed explanation.

¹ Sum or average excluding those countries for which data are not available.

Table 12
Transactions at terminals: number of cash withdrawals and loading transactions (millions, total for the year)¹

			Casl	n withdraw	als at ATN	Is located	in the cour	ntry		
	with	cards issu	ed outside	the count	ry	,	with cards	issued in t	he country	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Belgium	8.84	8.80	10.28	9.66	10.35	411.26	420.25	318.23	295.45	290.84
Brazil	nav	nav	nav	nav	nav	3,250.78	3,385.18	3,529.11	3,628.28	3,449.02
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
China	nav	nav	nav	nav	nav	11,452.56	12,874.53	13,715.11	14,568.41	15,692.77
France	39.41	40.49	35.13	34.32	33.94	1,622.49	1,606.32	1,570.57	1,670.46	1,634.15
Germany	nap	nap	32.67	27.34	29.91	2,127.64	2,115.00	2,031.30	2,164.69	2,182.16
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	7.30	8.40	8.80	7.87	8.14	5,525.40	6,087.30	7,059.90	8,071.51	8,561.29
Italy	3.35	4.69	2.24	nav	nav	743.99	794.17	952.68	795.31	1,007.70
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Korea	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Mexico	16.66	17.25	16.94	17.99	19.15	1,422.18	1,470.82	1,536.75	1,580.77	1,746.56
Netherlands	19.62	19.02	12.76	16.95	3.97	419.25	395.45	379.08	350.65	327.83
Russia	21.02	17.88	15.35	13.90	12.33	2,743.71	3,085.00	3,215.74	3,264.64	3,349.50
Saudi Arabia	2.92	2.86	3.42	3.56	4.56	1,323.78	1,327.15	1,519.75	1,785.28	1,912.46
Singapore	nav	nav	nav	nav	nav	219.05	229.67	229.42	229.68	226.28
South Africa	nav	nav	nav	nav	nav	1,052.12	1,052.73	1,093.97	1,168.92	1,165.43
Sweden	5.00	4.00	2.00	3.18	3.00	202.00	225.00	214.00	151.00	136.00
Switzerland	5.83	5.82	5.83	5.63	5.43	122.36	124.54	125.64	130.99	129.31
Turkey	13.78	15.34	17.46	19.68	16.91	957.11	1,021.07	1,091.51	1,174.14	1,269.61
United Kingdom	nav	nav	nav	nav	nav	2,915.00	2,899.00	2,830.00	2,818.00	nav
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPMI ²	nap	nap	nap	nap	nap	36,510.69	39,113.18	41,412.74	43,848.18	43,080.91

Table 12 (cont)

	Cash wit	thdrawals a	at ATMs loc	ated outsi	de the	E-mon	ey loading/	unloading	transactio	ns at
			country				termina	Is in the co	untry	
				with ca	ards issue	d in the coເ	ıntry			
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	nav	nav	nav	nav	nav	nap	nap	nap	nap	nap
Belgium	14.34	14.93	13.20	14.32	21.48	6.77	4.81	3.92	1.50	2.43
Brazil	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
China	nav	nav	nav	nav	nav	nap	nap	nap	nap	nap
France	46.69	48.71	36.63	48.61	48.20	6.06	5.91	5.26	2.20	0.00
Germany	42.68	43.57	35.86	48.84	51.35	6.20	6.63	5.27	4.00	2.88
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	5.40	5.90	6.80	7.60	7.81	nav	nav	nav	nav	nav
Italy	7.00	7.55	3.78	0.86	2.50	nav	36.71	41.03	49.00	57.70
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Korea	nap	nap	nap	nap	nap	nav	nav	nav	nav	nav
Mexico	5.17	5.00	5.24	4.71	4.15	nav	nav	nav	nav	nav
Netherlands	35.90	32.16	36.05	35.03	38.65	21.82	18.39	11.82	4.43	0.14
Russia	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Saudi Arabia	6.30	5.63	5.82	6.70	5.67	nap	nap	nap	nap	nap
Singapore	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
South Africa	nav	nav	nav	nav	nav	nap	nap	nap	nap	nap
Sweden	8.00	7.00	4.00	12.26	12.88	nap	nap	nap	nav	nav
Switzerland	15.85	16.63	17.13	18.91	18.42	0.19	0.09	nav	2.79	3.89
Turkey	3.61	3.78	3.50	3.86	3.93	nav	nav	nav	nav	nav
United Kingdom	1.00	1.00	0.00	0.00	0.00	nav	nav	nav	nav	nav
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPMI ²	191.94	191.86	168.01	201.69	215.03	41.03	72.54	67.31	63.91	67.05

Please refer to the individual country tables for a detailed explanation.

¹ Except as noted. ² Sum or average excluding those countries for which data are not available. Excludes data for the United States, for which only 2003 data are available.

Table 12a
Transactions at terminals: increase in the number of cash withdrawals and loading transactions (% change on previous year)

			Casl	h withdraw	als at ATM	s located in	n the count	ry		
	with	cards issu	ed outside	the count	ry	V	ith cards is	ssued in th	e country	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Belgium	-2.3	-0.5	16.8	-6.0	7.1	1.4	2.2	-24.3	-7.2	-1.6
Brazil	nav	nav	nav	nav	nav	3.7	4.1	4.3	2.8	-4.9
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
China	nav	nav	nav	nav	nav	11.1	12.4	6.5	6.2	7.7
France	6.1	2.8	-13.2	-2.3	-1.1	-0.5	-1.0	-2.2	6.4	-2.2
Germany	nav	nav	nav	-16.3	9.4	1.4	-0.6	-4.0	6.6	0.8
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	-41.6	15.1	4.8	-10.6	3.4	8.9	10.2	16.0	14.3	6.1
Italy	130.2	40.0	-52.3	nav	nav	6.2	6.7	20.0	-16.5	26.7
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Korea	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Mexico	1.6	3.5	-1.8	6.2	6.4	3.6	3.4	4.5	2.9	10.5
Netherlands	-0.5	-3.1	-32.9	32.8	-76.6	-4.1	-5.7	-4.1	-7.5	-6.5
Russia	32.7	-14.9	-14.1	-9.4	-11.3	15.7	12.4	4.2	1.5	2.6
Saudi Arabia	11.5	-2.1	19.6	4.1	28.1	6.2	0.3	14.5	17.5	7.1
Singapore	nav	nav	nav	nav	nav	8.6	4.8	-0.1	0.1	-1.5
South Africa	nav	nav	nav	nav	nav	0.6	0.1	3.9	6.9	-0.3
Sweden	0.0	-20.0	-50.0	59.0	-5.7	-5.2	11.4	-4.9	-29.4	-9.9
Switzerland	-2.2	-0.2	0.2	-3.4	-3.6	1.5	1.8	0.9	4.3	-1.3
Turkey	11.9	11.4	13.8	12.7	-14.0	11.9	6.7	6.9	7.6	8.1
United Kingdom	nav	nav	nav	nav	nav	1.4	-0.5	-2.4	-0.4	nav
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPMI ¹	nap	nap	nap	nap	nap	7.1	7.1	5.9	5.9	5.0

Table 12a (cont)

	Cash wit	hdrawals a	at ATMs loc	ated outsi	de the	E-mon	ey loading/	unloading	transaction	ns at
			country				termina	ls in the co	untry	
				with ca	ards issue	d in the cou	intry			
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	nav	nav	nav	nav	nav	nap	nap	nap	nap	nap
Belgium	1.8	4.1	-11.6	8.5	50.0	-18.3	-28.9	-18.5	-61.9	62.6
Brazil	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
China	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
France	-0.8	4.3	-24.8	32.7	-0.8	9.0	-2.4	-11.0	-58.3	-99.9
Germany	2.8	2.1	-17.7	36.2	5.1	-3.4	6.9	-20.5	-24.1	-28.0
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	5.9	9.3	15.3	11.8	2.8	nav	nav	nav	nav	nav
Italy	7.9	7.9	-49.9	-77.3	190.7	nav	nav	11.8	19.4	17.8
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Korea	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Mexico	0.4	-3.3	4.8	-10.1	-12.0	nav	nav	nav	nav	nav
Netherlands	-5.8	-10.4	12.1	-2.8	10.3	-15.3	-15.7	-35.7	-62.5	-96.8
Russia	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Saudi Arabia	5.9	-10.6	3.4	15.1	-15.4	nav	nav	nav	nav	nav
Singapore	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
South Africa	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	9.6	-12.5	-42.9	206.5	5.0	nav	nav	nav	nav	nav
Switzerland	11.9	4.9	3.0	10.4	-2.6	-67.8	-52.6	nav	nav	39.4
Turkey	15.7	4.8	-7.4	10.1	2.0	nav	nav	nav	nav	nav
United Kingdom	0.0	0.0	-100.0	nav	nav	nav	nav	nav	nav	nav
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPMI	1.5	0.0	-12.4	20.0	6.6	-12.0	-12.7	-7.1	-9.2	4.9

¹ Sum or average excluding those countries for which data are not available.

Table 13
Transactions at terminals: value of cash withdrawals and loading transactions
(USD billions, total for the year)¹

		Cash withdrawals at ATMs located in the country											
	with	cards issu	ed outside	the count	ry	v	vith cards	issued in th	ne country				
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016			
Australia	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav			
Belgium	1.63	1.72	0.57	1.07	0.99	65.73	70.67	58.42	46.00	45.71			
Brazil	nav	nav	nav	nav	nav	486.26	496.18	500.94	390.37	376.03			
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav			
China	nav	nav	nav	nav	nav	2,417.92	3,125.32	3,553.07	3,854.59	3,872.88			
France	7.92	8.40	7.80	6.76	6.71	165.93	172.04	170.80	153.63	155.12			
Germany	nap	nap	7.84	5.22	5.56	439.46	458.22	445.52	404.44	419.54			
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav			
India	1.74	1.18	1.20	1.07	0.87	309.77	334.30	366.39	395.02	350.72			
Italy	0.78	1.51	0.00	nav	nav	175.12	194.06	236.67	201.00	214.19			
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav			
Korea	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav			
Mexico	3.46	3.60	3.56	3.30	3.63	170.05	187.60	200.37	177.36	169.59			
Netherlands	4.26	4.24	2.43	2.84	0.59	63.17	62.49	62.37	50.76	49.81			
Russia	3.81	3.20	2.48	1.72	1.70	508.83	603.50	572.10	383.95	375.96			
Saudi Arabia	0.83	0.83	0.89	0.88	0.91	165.07	176.18	192.85	204.93	198.49			
Singapore	nav	nav	nav	nav	nav	47.30	51.41	51.47	47.85	47.03			
South Africa	nav	nav	nav	nav	nav	64.97	79.88	77.05	72.27	65.24			
Sweden	0.93	1.85	1.76	0.41	0.25	26.00	31.68	28.51	17.76	12.61			
Switzerland	1.33	1.34	1.35	1.22	1.17	27.84	28.62	29.30	30.61	29.57			
Turkey	3.16	3.55	4.32	3.67	2.87	181.34	198.71	197.47	183.71	196.49			
United Kingdom	nav	nav	nav	nav	nav	306.69	299.85	311.77	296.97	254.10			
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav			
CPMI ²	nap	nap	nap	nap	nap	5,621.43	6,570.71	7,055.08	6,911.20	6,833.08			

Table 13 (cont)

	Cash wit	thdrawals a	at ATMs loc	ated outsi	E-money loading/unloading transactions at					
			country			terminals in the country				
				with ca	ards issue	d in the coເ	ıntry			
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	nav	nav	nav	nav	nav	nap	nap	nap	nap	nap
Belgium	2.59	2.78	3.14	2.30	2.26	0.26	0.19	0.15	0.20	0.30
Brazil	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
China	nav	nav	nav	nav	nav	nap	nap	nap	nap	nap
France	7.49	7.99	5.92	6.70	7.17	0.15	0.15	0.13	0.05	0.01
Germany	10.94	11.50	8.90	10.25	10.53	0.23	0.21	0.23	0.14	0.11
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	1.58	1.73	1.98	2.11	2.20	nap	nap	nap	nav	nav
Italy	1.24	1.39	0.01	0.15	0.44	nav	nav	15.88	15.59	18.59
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Korea	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Mexico	1.12	1.08	1.09	1.19	1.01	nap	nap	nap	nap	nap
Netherlands	6.99	6.52	7.00	5.70	5.96	0.47	0.40	0.28	0.05	0.02
Russia	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Saudi Arabia	0.97	1.15	1.29	1.44	1.51	nap	nap	nap	nap	nap
Singapore	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
South Africa	nav	nav	nav	nav	nav	nap	nap	nap	nap	nap
Sweden	1.62	1.21	1.68	2.08	2.25	nap	nap	nap	nav	nav
Switzerland	4.53	4.80	4.88	5.12	4.81	0.01	0.01	nav	2.10	2.18
Turkey	0.64	0.67	0.58	0.56	0.57	nav	nav	nav	nav	nav
United Kingdom	0.13	0.13	0.16	0.06	0.05	nav	nav	nav	nav	nav
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
СРМІ	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap

¹ Except as noted. ² Sum or average excluding those countries for which data are not available. Excludes data for the United States, for which only 2003 data are available.

Table 13a
Transactions at terminals: increase in the real value of cash withdrawals and loading transactions (% change on previous year, adjusted by CPI inflation)¹

	Cash withdrawals at ATMs located in the country										
	with	cards issu	ued outside	the count	ry	W	ith cards is	ssued in th	e country		
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	
Australia	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
Belgium	-5.1	0.4	-67.0	124.0	-8.9	1.1	2.7	-17.7	-6.4	-2.1	
Brazil	nav	nav	nav	nav	nav	6.1	6.5	3.4	-0.2	-5.4	
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
China	nav	nav	nav	nav	nav	20.4	23.6	10.6	8.9	6.1	
France	-1.6	1.5	-7.6	3.6	-0.8	-1.1	-0.7	-1.2	7.5	0.9	
Germany	nav	nav	nav	-20.5	6.4	0.6	-0.7	-3.4	8.4	3.6	
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
India	-0.5	-31.7	-3.0	-16.2	-19.8	6.2	8.7	4.3	2.2	-12.5	
Italy	84.9	85.9	-99.8	nav	nav	6.6	5.9	21.8	1.5	6.8	
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
Korea	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
Mexico	9.5	-2.8	-1.1	7.6	26.0	2.5	3.0	7.0	2.7	9.4	
Netherlands	-1.2	-6.3	-42.9	39.5	-79.1	-7.8	-6.7	-0.4	-2.8	-1.8	
Russia	25.9	-19.2	-17.0	-1.9	3.2	18.9	14.1	1.5	-5.0	2.5	
Saudi Arabia	15.1	-3.2	4.4	-3.1	-0.3	5.0	3.1	6.6	4.0	-6.4	
Singapore	nav	nav	nav	nav	nav	7.2	6.3	0.4	1.4	-0.7	
South Africa	nav	nav	nav	nav	nav	-24.1	37.2	2.9	4.8	-2.4	
Sweden	-32.1	90.7	0.2	-71.0	-38.2	-11.4	17.2	-5.0	-23.4	-28.6	
Switzerland	-1.7	-0.6	0.0	-4.6	-1.3	1.2	1.8	1.1	11.1	-0.7	
Turkey	12.6	10.8	29.5	-2.9	-19.9	13.6	8.2	5.7	6.3	9.5	
United Kingdom	nav	nav	nav	nav	nav	-1.6	-3.4	-2.7	2.6	-3.7	
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
CPMI ²	nap	nap	nap	nap	nap	7.8	14.2	4.8	-3.5	-2.5	

Table 13a (cont)

	Cash wit	thdrawals a	at ATMs loc	ated outsi	de the	E-money loading/unloading transactions at				
			country				termina	ls in the co	untry	
				with ca	ards issue	d in the cou	ıntry			
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	nav	nav	nav	nav	nav	nap	nap	nap	nap	nap
Belgium	0.1	2.4	12.4	-12.8	-3.1	-18.8	-29.5	-22.4	56.7	51.5
Brazil	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
China	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
France	0.5	2.2	-26.3	35.1	7.0	5.7	-5.4	-12.5	-52.3	-89.2
Germany	-7.3	0.1	-23.1	37.6	2.6	-3.1	-13.9	7.2	-27.1	-22.3
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	2.3	10.4	9.1	0.6	2.9	nav	nav	nav	nav	nav
Italy	5.9	6.9	-99.6	3,384.6	203.2	nav	nav	nav	17.3	19.5
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Korea	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Mexico	14.9	-9.5	1.1	26.4	-2.8	nav	nav	nav	nav	nav
Netherlands	-10.0	-12.0	7.1	-2.8	4.7	-20.6	-19.9	-30.5	-77.2	-65.4
Russia	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Saudi Arabia	19.8	15.2	9.0	8.8	1.6	nav	nav	nav	nav	nav
Singapore	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
South Africa	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	34.6	-28.2	46.0	52.5	8.9	nav	nav	nav	nav	nav
Switzerland	12.9	4.9	0.5	11.6	-3.4	-79.9	0.2	nav	nav	6.9
Turkey	21.2	3.1	-7.5	9.6	5.2	nav	nav	nav	nav	nav
United Kingdom	-45.0	-4.9	17.0	-55.8	-5.4	nav	nav	nav	nav	nav
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPMI	-5.6	2.8	-10.5	2.8	3.0	-21.0	-14.5	-17.3	-3.8	17.0

Please refer to the individual country tables for a detailed explanation.

¹ Value of cash withdrawals and loading transactions in domestic currency deflated by yearly average CPI inflation. For the CPMI area, in US dollar terms. ² Sum or average excluding those countries for which data are not available.

Table 14
Transactions at terminals: number of payment transactions (millions, total for the year)

			POS t	ransaction	s at termi	nals locate	d in the co	untry		
	with	n cards issu	ued outsid	e the coun	try	,	with cards	issued in t	he country	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Belgium	59.41	70.01	57.94	65.41	69.99	1,118.63	1,205.74	1,281.48	1,397.05	1,517.83
Brazil	nav	nav	nav	nav	nav	8,601.35	9,928.23	10,993.63	12,025.55	12,695.14
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
China	nav	nav	nav	nav	nav	9,009.07	12,970.95	19,754.40	29,029.95	38,371.19
France	347.03	405.11	353.73	366.54	285.27	8,152.67	8,578.48	8,249.81	8,940.74	8,807.26
Germany	nap	nap	144.41	144.86	157.12	2,907.25	3,254.87	2,870.24	2,995.33	3,219.37
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	15.30	16.10	18.20	22.96	35.13	850.30	1,075.00	1,405.00	1,936.33	3,451.31
Italy	96.19	112.95	78.35	53.00	218.70	2,038.73	2,274.07	2,025.62	2,176.96	2,537.40
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Korea	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Mexico	31.67	35.39	44.46	50.85	63.02	1,526.50	1,767.45	1,976.19	2,294.11	2,515.17
Netherlands	24.69	25.88	70.10	3,900.14	4,025.74	2,512.31	2,699.72	2,968.31	3,319.31	3,651.16
Russia	32.10	36.50	50.45	37.64	40.78	1,543.43	2,428.64	3,920.57	5,873.65	8,844.59
Saudi Arabia	nap	nap	nap	nap	nap	237.95	294.04	362.56	394.92	524.57
Singapore	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
South Africa	nav	nav	nav	nav	nav	1,042.31	1,195.82	1,242.60	1,442.99	1,598.59
Sweden	94.00	101.00	99.00	114.00	166.00	1,885.00	2,139.00	2,271.00	2,387.00	2,641.00
Switzerland	49.44	54.08	58.17	51.46	60.81	537.56	571.95	636.03	812.61	909.38
Turkey	22.35	27.16	36.62	43.82	39.49	2,829.33	3,165.54	3,403.65	3,766.43	4,148.96
United Kingdom	439.00	196.00	564.00	nav	733.45	9,853.00	10,668.00	11,518.00	12,662.00	13,578.55
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPMI ¹	1,211.17	1,080.19	1,575.43	4,850.68	5,895.49	54,645.38	64,217.51	74,879.09	91,454.91	109,011.5

Table 14 (cont)

-	POS trans	sactions at	terminals l	ocated out	side the	E-money payment transactions at terminals in the				
			country					country		
				with c	ards issue	d in the coເ	ıntry			
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	nav	nav	nav	nav	nav	nap	nap	nap	nap	nap
Belgium	108.25	126.51	140.85	129.55	148.21	46.20	29.36	26.41	1.44	1.63
Brazil	91.71	107.84	125.79	95.38	87.44	nav	nav	nav	nav	nav
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
China	nav	nav	nav	nav	nav	nap	nap	nap	nap	nap
France	322.31	385.81	325.03	456.31	499.86	nav	nav	48.45	20.01	1.91
Germany	308.55	409.74	204.13	269.56	290.41	nap	nap	25.15	26.23	27.34
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	26.60	37.10	46.40	55.94	71.92	66.10	133.60	310.70	748.02	1,963.66
Italy	26.46	42.21	8.40	10.50	75.50	nav	nav	221.40	131.00	432.10
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Korea	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Mexico	52.87	66.05	59.11	77.42	148.95	nav	nav	nav	nav	nav
Netherlands	130.59	152.59	167.00	192.98	214.98	nav	122.10	86.56	2.38	0.39
Russia	148.84	229.38	323.57	278.26	372.65	nav	nav	nav	nav	nav
Saudi Arabia	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
Singapore	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
South Africa	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	70.00	88.00	53.00	166.00	191.00	nap	nap	nap	nav	6.60
Switzerland	113.74	129.17	142.43	152.74	172.75	2.80	1.37	nav	6.78	9.91
Turkey	35.28	48.71	55.45	61.29	75.66	nav	nav	nav	nav	nav
United Kingdom	639.00	891.00	1,442.00	1,878.00	2,057.00	nav	nav	nav	nav	nav
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPMI ¹	2,074.19	2,714.10	3,093.16	3,823.92	4,406.32	115.10	286.43	718.66	935.87	2,443.52

 $^{^{\}mbox{\scriptsize 1}}$ Sum or average excluding those countries for which data are not available.

Table 14a
Transactions at terminals: increase in the number of payment transactions (% change on previous year)

			POS t	ransaction	s at termin	als located	in the cou	ntry		
	with	cards issu	ed outside	the count	ry	W	ith cards i	ssued in th	e country	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Belgium	6.0	17.8	-17.2	12.9	7.0	6.7	7.8	6.3	9.0	8.6
Brazil	nav	nav	nav	nav	nav	17.1	15.4	10.7	9.4	5.6
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
China	nav	nav	nav	nav	nav	40.5	44.0	52.3	47.0	32.2
France	23.3	16.7	-12.7	3.6	-22.2	6.9	5.2	-3.8	8.4	-1.5
Germany	nav	nav	nav	0.3	8.5	7.1	12.0	-11.8	4.4	7.5
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	-17.3	5.2	13.0	26.2	53.0	35.2	26.4	30.7	37.8	78.2
Italy	4.4	17.4	-30.6	-32.4	312.6	16.8	11.5	-10.9	7.5	16.6
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Korea	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Mexico	12.9	11.7	25.6	14.4	23.9	23.2	15.8	11.8	16.1	9.6
Netherlands	-16.5	4.8	170.9	5,463.8	3.2	8.1	7.5	9.9	11.8	10.0
Russia	36.6	13.7	38.2	-25.4	8.3	87.3	57.4	61.4	49.8	50.6
Saudi Arabia	nav	nav	nav	nav	nav	25.0	23.6	23.3	8.9	32.8
Singapore	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
South Africa	nav	nav	nav	nav	nav	-6.6	14.7	3.9	16.1	10.8
Sweden	16.0	7.4	-2.0	15.2	45.6	13.5	13.5	6.2	5.1	10.6
Switzerland	5.1	9.4	7.6	-11.5	18.2	9.1	6.4	11.2	27.8	11.9
Turkey	21.4	21.5	34.8	19.7	-9.9	15.0	11.9	7.5	10.7	10.2
United Kingdom	404.6	-55.4	187.8	nav	nav	4.4	8.3	8.0	9.9	7.2
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPMI ¹	58.8	-10.8	32.5	379.6	6.4	15.6	17.5	16.6	22.1	19.2

Table 14a (cont)

	POS trans	actions at	terminals l	ocated out	side the	E-money payment transactions at terminals in the				
			country					country		
				with ca	ards issue	d in the coເ	ıntry			
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	nav	nav	nav	nav	nav	nap	nap	nap	nap	nap
Belgium	2.3	16.9	11.3	-8.0	14.4	-8.5	-36.4	-10.1	-94.5	12.8
Brazil	6.7	17.6	16.7	-24.2	-8.3	nav	nav	nav	nav	nav
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
China	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
France	12.6	19.7	-15.8	40.4	9.5	nav	nav	nav	-58.7	-90.5
Germany	17.5	32.8	-50.2	32.1	7.7	nav	nav	nav	4.3	4.2
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	-4.7	39.5	25.1	20.6	28.6	116.0	102.1	132.6	140.8	162.5
Italy	20.4	59.5	-80.1	25.1	619.0	nav	nav	nav	-40.8	229.8
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Korea	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Mexico	7.3	24.9	-10.5	31.0	92.4	nav	nav	nav	nav	nav
Netherlands	8.4	16.8	9.4	15.6	11.4	nav	nav	-29.1	-97.2	-83.8
Russia	63.9	54.1	41.1	-14.0	33.9	nav	nav	nav	nav	nav
Saudi Arabia	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Singapore	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
South Africa	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	22.0	25.7	-39.8	213.2	15.1	nav	nav	nav	nav	nav
Switzerland	15.5	13.6	10.3	7.2	13.1	-73.6	-51.1	nav	nav	46.2
Turkey	21.8	38.1	13.8	10.5	23.4	nav	nav	nav	nav	nav
United Kingdom	36.2	39.4	61.8	30.2	9.5	nav	nav	nav	nav	nav
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPMI ¹	21.7	30.9	14.0	23.6	15.2	25.5	42.8	48.6	29.3	160.4

Please refer to the individual country tables for a detailed explanation.

¹ Sum or average excluding those countries for which data are not available.

Table 15
Transactions at terminals: value of payment transactions
(USD billions, total for the year)¹

			POS t	ransaction	s at termir	nals located	l in the cou	untry		
	with	cards issu	ed outside	the count	ry	1	with cards	issued in t	he country	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Belgium	5.58	6.22	5.78	4.67	3.82	75.26	82.26	82.97	73.84	77.09
Brazil	nav	nav	nav	nav	nav	359.55	382.73	400.13	312.39	317.15
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
China	nav	nav	nav	nav	nav	3,298.84	5,139.92	6,899.56	8,831.17	8,508.25
France	39.42	46.42	44.52	37.06	24.32	512.26	519.05	505.56	439.31	399.43
Germany	nap	nap	17.77	14.74	14.84	224.20	257.76	228.61	195.94	208.16
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	2.68	3.44	3.58	4.40	5.03	34.20	39.09	47.43	57.91	92.91
Italy	15.48	18.08	0.10	6.96	30.42	206.12	219.65	187.69	163.63	190.62
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Korea	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Mexico	6.61	6.01	5.36	5.22	5.86	71.64	84.58	87.36	84.08	82.83
Netherlands	3.96	4.46	5.83	159.20	150.74	114.12	122.80	128.62	113.32	118.90
Russia	3.28	3.61	3.57	2.38	2.32	80.10	109.42	128.66	100.19	126.49
Saudi Arabia	nap	nap	nap	nap	nap	32.59	35.79	42.66	46.09	48.73
Singapore	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
South Africa	nav	nav	nav	nav	nav	46.28	45.64	45.76	44.89	43.37
Sweden	6.76	6.92	6.57	7.21	9.39	85.66	95.29	94.01	81.36	107.10
Switzerland	7.89	8.61	9.10	8.74	8.73	50.60	52.78	56.06	62.20	63.43
Turkey	5.42	6.40	7.58	7.11	5.21	189.68	211.01	205.72	189.17	189.74
United Kingdom	48.70	21.34	40.28	nav	nav	755.36	813.41	906.20	910.94	864.70
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPMI ²	145.79	131.51	150.04	257.69	260.68	6,136.47	8,211.17	10,047.01	11,706.43	11,438.91

Table 15 (cont)

	POS trans	actions at	terminals l	ocated out	side the	E-money payment transactions at terminals in the				
			country					country		
				with ca	ards issue	d in the coເ	ıntry			
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	nav	nav	nav	nav	nav	nap	nap	nap	nap	nap
Belgium	10.63	12.68	13.13	8.97	10.08	0.25	0.19	0.12	0.07	0.08
Brazil	10.67	10.72	11.05	7.37	6.14	nav	nav	nav	nav	nav
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
China	nav	nav	nav	nav	nav	nap	nap	nap	nap	nap
France	29.01	33.20	23.42	28.81	33.22	nav	nav	0.23	0.10	0.07
Germany	30.60	39.20	26.57	25.61	26.15	nap	nap	0.10	0.09	0.19
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	2.48	3.53	4.18	4.98	5.58	1.47	1.38	3.49	7.60	12.47
Italy	2.20	2.96	0.01	1.13	6.08	nav	nav	14.24	7.52	21.46
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Korea	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Mexico	6.07	7.99	8.37	5.26	6.32	nap	nap	nap	nap	nap
Netherlands	12.67	14.07	12.08	11.44	13.82	nav	0.39	0.26	0.02	0.02
Russia	18.38	23.73	23.20	13.09	13.45	nav	nav	nav	nav	nav
Saudi Arabia	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
Singapore	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
South Africa	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	4.10	4.90	4.66	9.06	10.37	nap	nap	nap	nav	0.00
Switzerland	17.70	19.52	21.04	20.01	20.62	0.01	0.01	nav	0.44	0.54
Turkey	3.34	3.99	4.16	4.17	4.50	nav	nav	nav	nav	nav
United Kingdom	54.37	63.22	92.07	98.36	92.15	nav	nav	nav	nav	nav
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPMI ²	202.21	239.72	243.94	238.27	248.49	1.73	1.97	18.45	15.84	34.83

Please refer to the individual country tables for a detailed explanation.

¹ Converted at yearly average exchange rates. ² Sum or average excluding those countries for which data are not available. ³ For e-money payment transactions, total transactions during the fiscal year ending March of the following year, converted at average fiscal year exchange rates.

Table 15a
Transactions at terminals: increase in the real value of payment transactions
(% change on previous year, adjusted by CPI inflation)¹

		POS transactions at terminals located in the country											
	with	cards issu	ed outside	the count	ry	v	ith cards is	ssued in th	e country				
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016			
Australia	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav			
Belgium	-4.4	6.5	-7.3	-4.1	-19.5	3.7	4.4	0.5	5.8	2.8			
Brazil	nav	nav	nav	nav	nav	11.3	11.1	7.1	0.0	-0.3			
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav			
China	nav	nav	nav	nav	nav	33.4	49.0	30.5	28.5	1.7			
France	18.5	12.8	-4.6	-0.5	-34.4	4.6	-3.0	-3.1	3.9	-9.2			
Germany	nav	nav	nav	-0.9	0.5	3.4	9.4	-11.9	2.4	6.1			
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav			
India	-35.8	29.3	-1.2	16.6	12.8	25.6	15.1	15.5	15.7	58.1			
Italy	5.8	11.5	-99.4	7,887.0	338.2	9.6	1.8	-14.7	4.2	16.8			
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav			
Korea	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav			
Mexico	17.0	-15.1	-10.7	13.0	28.5	17.3	10.3	3.4	11.7	12.8			
Netherlands	-4.2	6.2	30.4	3,158.1	-5.2	-0.7	1.5	4.5	5.2	5.0			
Russia	15.5	5.7	5.9	-5.7	2.1	53.0	31.4	25.9	10.2	32.1			
Saudi Arabia	nav	nav	nav	nav	nav	20.1	6.1	16.1	5.7	2.2			
Singapore	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav			
South Africa	nav	nav	nav	nav	nav	-22.9	10.0	7.0	9.6	4.4			
Sweden	21.2	-1.5	0.2	34.9	30.9	7.5	7.0	4.1	6.4	32.3			
Switzerland	2.4	7.9	4.4	2.3	2.6	4.9	3.3	4.9	18.0	4.8			
Turkey	9.5	16.6	26.0	7.2	-25.1	18.5	9.8	3.7	5.1	2.6			
United Kingdom	106.7	-56.7	76.6	nav	nav	-2.1	6.4	4.2	8.2	6.8			
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav			
CPMI ²	22.2	-11.8	-1.8	131.2	-0.3	16.2	30.8	19.4	14.7	-3.7			

Table 15a (cont)

	POS trans	actions at	terminals I	ocated out	side the	E-money payment transactions at terminals in the				
			country					country		
				with ca	ards issue	d in the cou	ıntry			
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia	nav	nav	nav	nav	nav	nap	nap	nap	nap	nap
Belgium	-2.0	14.0	3.1	-18.8	10.7	-17.6	-29.2	-33.6	-31.1	13.8
Brazil	8.5	4.8	5.6	-14.6	-18.2	nav	nav	nav	nav	nav
Canada	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
China	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
France	7.9	9.6	-29.8	47.0	15.2	nav	nav	nav	-51.0	-26.1
Germany	8.4	22.0	-32.7	15.2	2.0	nav	nav	nav	2.5	117.7
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
India	-24.3	43.2	12.5	13.1	10.4	13.3	-5.6	140.8	106.5	61.6
Italy	10.9	28.7	-99.6	12,079.8	437.6	nav	nav	nav	-36.9	186.1
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Korea	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Mexico	17.0	23.0	4.9	-27.1	37.6	nav	nav	nav	nav	nav
Netherlands	3.3	4.7	-14.3	13.09	20.9	nav	nav	-33.9	-89.6	-27.9
Russia	34.6	24.2	4.8	-20.16	7.5	nav	nav	nav	nav	nav
Saudi Arabia	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Singapore	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
South Africa	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	9.8	15.0	0.5	138.9	15.1	nav	nav	nav	nav	nav
Switzerland	11.3	9.2	6.4	1.2	5.9	-79.9	0.2	nav	nav	26.7
Turkey	9.3	17.9	10.9	14.6	10.4	nav	nav	nav	nav	nav
United Kingdom	18.8	14.9	36.2	15.0	5.4	nav	nav	nav	nav	nav
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPMI ²	5.4	15.9	-0.7	-3.8	2.8	-1.2	-11.1	93.1	-17.8	116.8

Please refer to the individual country tables for a detailed explanation.

¹ Value of payment transactions in domestic currency deflated by yearly average CPI inflation. For the CPMI area, in US dollar terms.

² Sum or average excluding those countries for which data are not available.

Table PS1
Features of selected interbank funds transfer systems (at end-2016)

System	Туре	Settlement	Owner/manager	Processing	Membership	Degree of centralisation
Australia						
RITS	L	RTGS	СВ	RTT	0	С
Belgium						
TARGET2-BE	L	RTGS	СВ	RTT	R	С
Clearing house	R	MN	B, CB	RTT	Ο	С
CEC	R	MN	B, CB	RTT	Ο	С
Brazil						
STR	L	RTGS	СВ	RTT	O^1	С
SITRAF	R	MN, BN, G	PA^2	RTT	O^1	С
BmfBovespa-FX	FX	MN	Other ⁴	ACH	O^5	С
SILOC	R	MN	PA^2	ACH	O^1	С
COMPE	R	MN	В	ACH	O ¹	C
Canada		IVII	Б	AOH	J	O
LVTS	L	MN	PA	RTT	0	С
ACSS	R	MN	PA	nap ¹	R^2	D
Interac e-Transfer	R	BN	Other ³			D
China	K	DIN	Other	nav	nav	D
HVPS	L	RTGS	СВ	RTT	0	С
BEPS	R	MN	СВ	RTT	0	C
France	, N	IVIIN	СВ	KHI	O	C
TARGET2-BDF ¹	,	DTCC	CD	DTT	Ъ	0
	L	RTGS	СВ	RTT	R	С
CORE (FR) ²	R	MN	В	ACH	Ο	С
Germany	_				_	
TARGET2-BBk	L	RTGS	СВ	RTT	0	С
RPS	R	BA	СВ	ACH	Ο	С
Hong Kong SAR			1		_	
HKD CHATS	L, FX	RTGS	CB, B ¹	RTT	0	С
USD CHATS	L, FX	RTGS	B ¹	RTT	0	C
EUR CHATS	L, FX	RTGS	B ¹	RTT	0	C C C
RMB CHATS	L, FX	RTGS	B ¹	RTT	Ο	C
India		DTOO	0.5	DTT	5	•
RTGS	L	RTGS	СВ	RTT	R	С
Clearing House		N AN I	0D D	NA A OLL	Б	Б
-Cheque Clearing	R	MN	CB, B	M, ACH	R	D
-ECS / NECS	R	MN	B, CB	M, ACH	R	D^1 , C^2
-NACH	R	MN	B, PA	ACH	R	C
-UPI	R	MN	B, PA	RTT	R	С
-NEFT	R	MN	СВ	ACH	R	С
Italy		DT00	0.5	D.T.T		•
TARGET2-BDI	L	RTGS	СВ	RTT	0	С
BI-COMP	R	MN	СВ	ACH	Ο	С
Japan		DTOO	OD	DTT	Б	0
BOJ-NET	L	RTGS	СВ	RTT	R	С
FXYCS	L	RTGS	В	RTT	R	С
Zengin System	R	MN	В	RTT	R	С
Tokyo Clearing House	R	MN	В	ACH	R	С
Korea	_				_	_
BOK-Wire+	L _	RTGS	СВ	RTT	R	С
Check Clearing System	R	MN	PA	M, ACH	0	D, C
Interbank Shared	R	MN	PA	RTT	0	С
Networks For the footnotes regarding the						

For the footnotes regarding the systems, see after Comparative Table PS4.

Table PS1 (cont)

System	Туре	Settlement	Owner/manager	Processing	Membership	Degree of centralisation
Mexico						
SPEI	L, R	MN	СВ	RTT	0	С
CECOBAN	R	MN	В	ACH	0	С
Netherlands						
TARGET2-NL	L	RTGS	СВ	RTT	R	С
Equens	R	MN, BA	В	ACH	R	Č
Russia		, =				_
BESP System	L	RTGS	СВ	RTT	R	С
NSD	L+R, FX	RTGS, BA	В	RTT	0	Č
VER	L, R	G	СВ	RTT	Ö	C, D ¹
MER			СВ	RTT		
	L, R	G G	CB CB		0 0	C D
Payments using letters of advice	L, R	G	CB	М	U	U
Saudi Arabia					_	
SARIE	L, R	RTGS	СВ	RTT	R	С
Singapore					_	_
MEPS+(IFT)	L	RTGS	СВ	RTT	0	C
SGDCCS	R	MN	PA	ACH	0	С
USDCCS	R	MN	PA	ACH	Ο	С
IBG	R	MN	PA	ACH	Ο	С
South Africa						
SAMOS	L, R	RTGS	СВ	RTT	R	С
Sweden						
RIX	L	RTGS	СВ	RTT	R	С
Bankgirot	R	MN	В	ACH	0	С
Dataclearing	R	MN	В	ACH	0	С
Switzerland						
SIC	L, R	RTGS	B, CB	RTT	0	D
Turkey	_,		2, 02		· ·	
EFT ¹		DTOO	OD	DTT	0	0
	L, R	RTGS	СВ	RTT	0	С
Garanti Payment	R	MN	В	ACH	R	С
Systems	_		_			_
Interbank Card Center	R	MN	В	ACH	0	С
	R	MN	CB, B	ACH	0	D
Interbank Clearing House						
United Kingdom						
CHAPS Sterling	L	RTGS	B, CB	RTT	R	С
Cheque/credit	R	MN	В	ACH	R	D
BACS	R	MN	В	ACH	R	С
	R	MN	В	RTT	R	С
Faster Payments Service						
United States ¹						
CHIPS ²	L	MN, BN, G	В	RTT	R	С
Fedwire	L	RTGS	СВ	RTT	O^3	C
European Union	L	KIGO	CD	IXTI	O	C
TARGET2	1	RTGS	CB, B, PA	RTT	R, O	C
	L					C
EURO1 / STEP1	L	MN	В	RTT	R	С
STEP2	R	BA	В	ACH	R	С
Мето:						
CLS	FX	RTGS	B^1	RTT	R	С
For the footnotes regarding the					• • • • • • • • • • • • • • • • • • • •	

Table PS1 (cont)

System	Pricing	Closing time for same day	Settlement finality	Cut-off third- party orders	Standard mor	ney market hours
		transactions	illiality	party orders	opening	closing
Australia				1 24		1
RITS	V	18.28 ¹ ; 20.28 ^{2,3}	Real time	18.05 ¹ ; 20.05 ^{2,4}	07:30	18.30 ¹ ; 20.30 ²
Belgium	_	40.00	Doel the .	47-00	07:00	40-00
TARGET2-BE	F	18:00	Real time	17:00	07:00	18:00
Clearing house	F F	15:15	nav	nav	nap	nap
CEC Brazil	-	15:00	nav	nav	nap	nap
STR	F	18:30	Real time	17:30	06:30	18:30
SITRAF	F	17:00	Intraday ⁶	17:00		nap
BmfBovespa-FX	F	10:00	T+2: 14:05 ⁷		nap	•
SILOC	F	nap	T+1: 08:20; 16:10	nap 21:59	nap nap	nap nap
COMPE	F '	nap	T+1: 09:00, 17:15 ⁸	nap	nap	nap
Canada	'	Παρ	171.00.00, 17.10	Παρ	Παρ	Παρ
LVTS	F	18:30	Real time ⁴	18:00	nap ⁵	nap
ACSS	F '	nap	nap ⁶	nap	nap	nap
Interac e-Transfer		-	пар Т+1	· ·	•	-
China	nav	nap	171	nap	nap	nap
HVPS	_	17.20	Real time	17:00	00:20	17.00
	F F	17:30	Real time Intraday ¹	17:00	08:30	17:00
BEPS France	-	16:00	штааау	nap	nap	nap
TARGET2-BDF ¹		18:00	Real time	17:00	07:00	18:00
	F					
CORE (FR) ² Germany	F	13:30	15:15	nap	nap	nap
TARGET2-BBk		18:00	Real time	18:00	07:00	18:00
RPS	F F		Real time Intraday			
INF U		$09:00^{1}; 10:00^{2};$	muauay	nap	nap	nap
Hong Kong SAR		13:00 ³				
HKD CHATS	F	18:30	Real time	nap	08:30 ²	18:30 ²
USD CHATS	F	18:30	Real time	nap	08:30 ²	18:30 ²
EUR CHATS	F F	18:30	Real time	nap	08:30 ²	18:30 ²
RMB CHATS	F.	05:00 next day	Real time	nap	08:30 ²	05:00 next day ²
India			· · · · ·	1	-	
RTGS	V	20:00	Real time	16:30	09:00	17:00
Clearing House						
-Cheque Clearing	S	19:30	T+1	nap	nap	nap
-ECS / NECS	S	17:00	T+1	nap	nap	nap
-NEFT	S	19:00	Intraday	nap	nap	nap
Italy	_	40	5		a=	4
TARGET2-BDI	F -	18:00	Real time	17:00	07:00	18:00
BI-COMP	F	12:00	ı	12:00	nap	nap
Japan	, ,1	24.22	5 12	24.22	00.003	0.4.002
BOJ-NET	V ¹	21:00 ²	Real time	21:00 ²	08:30 ³	21:00 ²
FXYCS	F _	21:00 ⁴	Real time	21:00 ⁴	08:30 ³	21:00 ⁴
Zengin System	F _	15:30	16:15, Real time ⁵	15:30	nap	nap
Tokyo Clearing House	F	08:00 ⁶	12:30	08:00 ⁶	nap	nap
Korea						
BOK-Wire+	F	17:30	Real time	17:30	09:00	17:30
Check Clearing System	F -	16:00	T+1: 11:00	nap	nap	nap
Interbank Shared	F	18:00 ¹ , 23:55 ² ,	T+1: 11:00	nap	nap	nap
Networks		14:00/17:00 ³				

For the footnotes regarding the systems, see after Comparative Table PS4.

Table PS1 (cont)

System	Pricing	Closing time for same day	Settlement finality	Cut-off third- party orders	Standard mone	ey market hours
		transactions	,	party or along	opening	closing
Mexico						
SPEI	F	17.59	Real time	17:30	18:00 ¹	17:59
CECOBAN	F	nap	T+1	nap	14:00	23:00
Netherlands						
TARGET2-NL	F	18:00	Real time	17:00	07:00	18:00
Equens	F	17:00	every 30 min	15:30	nap	nap
Russia						
BESP System	V	21:00 ²	Real time	21:00 ²	10:00	19:00
NSD	V	20:30	Real time	20:30	10:00	19:00
VER	V	21:00 ^{3, 4}	Intraday	21:00 ³	10:00	19:00
MER	V	21:00 ^{3, 4}	Intraday ⁵	21:00 ³	10:00	19:00
Payments using letters of	V	21:00 ^{3, 4}	T+3	21:00 ³	10:00	19:00
advice						
Saudi Arabia						
SARIE	F	16:00	Real time	15:30	09:00	16:00
Singapore						
MEPS+(IFT)	V	19:00	Real time	19:00 ¹	09:00	19:00
SGDCCS	F	17:30	15:05, 18:15	nap	nap	nap
USDCCS	F	15:30	T+1: 10:30	nap	nap	nap
IBG	F	12:00	18:15	nap	nap	nap
South Africa						
SAMOS	F	24:00	Real time	nap	08:00	12:00
Sweden						
RIX	F	17:00	Real time	17:00	09:00	16:15
Bankgirot	F	nap ¹	Intraday ²	16:20 ³	nap	nap
Dataclearing	F	nap ¹	Intraday ²	15:20 ⁴	nap	nap
Switzerland						
SIC	F	16:15 ¹	Real time	15:00	07:00	18:00
Turkey						
EFT ¹	F	17:30	Real time	17.29	08:30	17:30
Garanti Payment	F	nap	T+2	nap	nap	nap
Systems						
Interbank Card Center	F	nap	T+2	nap	nap	nap
Interbank Clearing House	F	nan	T+2	nan	nan	nan
United Kingdom	Г	nap	172	nap	nap	nap
CHAPS Sterling	F	16:20	Real time	16:00	07:00	16:00
Cheque/credit	F		1			
BACS		nap	2	nap	nap	nap
BACS	F F	nap	intraday	nap	nap	nap
Faster Payments Service	Г	nap	intraday	nap	nap	nap
United States ¹						
CHIPS ²	F	47.00	Introde: 4	47.00	24.00	47.00
	F	17:00	Intraday ⁴	17:00	21:00	17:00
Fedwire	F	18:00	Real time	18:00	21:00	18:30
European Union ¹	_	40.00	Dool fire	47.00	07.00	40.00
TARGET2	F	18:00 16:00	Real time about 16:30	17:00	07:00 07:00	18:00 18:00
EURO1 / STEP1	F			16:00		
STEP2	F	nap	Multiple ²	nap	16:00 on D-1 ³	02:00 on day D ³
Мето:						
CLS	F	06:30 ²	Real time	nap	nap	nap
For the footnotes regarding the	svstems, see	after Comparative Tab	ole PS4.			

Table PS2
Payments processed by selected interbank funds transfer systems: number of transactions (total for the year)

System	Νι	ımber of t	ransactio	ns (million	s)		ase in the			ions
	2012	2013	2014	2015	2016	2012	(% change 2013	on previo 2014	ous year) 2015	2016
Australia										
RITS	9.42	10.24	10.63	11.17	11.33	5.0	8.7	3.7	5.1	1.4
Belgium										
TARGET2-BE	2.49	2.31	2.52	2.28	2.25	-3.9	-7.2	9.1	-9.5	-1.3
Clearing house	nap	nap	nap	nap	nap	nav	nav	nav	nav	nav
CEC	1,295.1	1,365.6	1,272.2	1,402.2	1,387.1	5.7	5.4	-6.8	10.2	-1.1
Brazil										
STR	23.03	30.41	36.50	42.54	69.59	33.8	32.1	20.0	16.5	63.6
SITRAF	nap	nap	nap	294.10	411.31	nav	nav	nav	nav	39.9
BmfBovespa-FX	0.040	0.035	0.029	0.032	0.024	-9.1	-12.5	-17.1	10.3	-25.0
COMPE	1,030.4	887.4	799.7	711.6	694.3	-9.0	-13.9	-9.9	-11.0	-2.4
SILOC	4,183.6	5,075.7	5,877.5	6,582.3	7,613.4	53.2	21.3	15.8	12.0	15.7
Canada										
LVTS	7.03	7.58	7.92	8.09	8.57	6.3	7.8	4.5	2.2	5.9
ACSS	6,506.0	6,734.2	6,776.4	6,983.2	7,329.8	4.0	3.5	0.6	3.1	5.0
Interac e-Transfer	32.24	47.22	71.24	106.62	158.00	47.8	46.5	50.9	49.6	48.2
China										
HVPS	470.4	595.5	712.6	788.8	825.7	26.4	26.6	19.7	10.7	4.7
BEPS	753.94	1,040.28	1,435.80	1,835.27	2,348.30	33.9	38.0	38.0	27.8	28.0
France		•	,		ŕ					
TARGET2-BDF ¹	8.66	9.12	9.38	8.94	7.95	-1.3	5.3	2.9	-4.7	-11.1
CORE (FR) ²				14,180.2		1.9	1.5	2.1	1.8	1.8
Germany	10,402.0	10,000.4	10,024.0	14,100.2	14,402.2	1.0	1.0	2.1	1.0	1.0
•	40.04	44.40	44.00	44.70	44.50	0.4	4.0	7.0	0.0	0.4
TARGET2-BBk	43.81	44.40	41.30	44.70	44.50	-0.1	1.3	-7.0	8.2	-0.4
RPS	2,817.1	3,115.5	4,036.1	3,764.1	4,168.0	4.7	10.6	29.5	-6.7	10.7
Hong Kong SAR	F C0	0.00	C 44	C 00	7.04	4.4	7.0	5 0	7.0	4.0
HKD CHATS	5.68	6.09	6.41 4.68	6.88	7.01 5.51	1.4	7.2	5.3 7.7	7.3 5.4	1.9
USD CHATS	3.82	4.34		4.93		8.3	13.8			11.8
EUR CHATS	0.108	0.118	0.131	0.141	0.146	10.2	9.3	10.7	7.9	3.5
RMB CHATS	1.09	1.56	2.97	4.25	3.81	13.0	43.5	90.5	43.1	-10.3
India RTGS	60 51	01 10	02.77	00 22	107.04	24.5	18.4	14.4	6.0	0.7
Cheque Clearing	68.51 1,313.7	81.10 1,257.3	92.77 1,195.8	98.33	107.84	-2.1	-4.3	-4.9	6.0 -8.3	9.7 10.1
ECS / NECS	298.7	345.5	341.4	1,096.4 263.8	1,206.7 18.9	-2.1 4.4	-4.3 15.6	-4.9 -1.2	-0.3 -22.7	-92.8
NACH		86.5	340.2	1,425.1	2,057.3			293.3	-22.7 318.9	-92.6 44.4
UPI	nav			-	17.9	nav	nav			
NEFT	nap 394.13	nap 661.01	nap	nap 1,252.88		nav 74.3	nav 67.7	nav 40.3	nav 35.1	nav 29.5
	394.13	001.01	927.00	1,202.00	1,022.10	74.3	07.7	40.3	33.1	29.5
Italy TARGET2-BDI	8.92	10.38	11.48	10.25	8.08	3.1	16.4	10.5	-10.7	-21.2
BI-COMP	2,248.9		1,883.0	1,927.9	2,097.7	6.8	2.4	-18.2	-10.7 2.4	8.8
	2,240.9	2,302.1	1,003.0	1,921.9	2,097.7	0.0	2.4	-10.2	2.4	0.0
Japan BOJ-NET	15.30	16.28	16.69	16.90	16.50	18.3	6.4	2.5	1.3	2.4
FXYCS	6.29	6.70		6.77	6.92	-0.7	6.4	2.5		-2.4
			6.49			-0. <i>1</i> 4.7	6.5	-3.1	4.3 2.2	2.3
Zengin System	1,460.9	1,480.7	1,514.9	1,548.3	1,576.0		1.4	2.3		1.8
Tokyo Clearing House	24.97	23.48	22.03	20.59	19.00	-6.3	-6.0	-6.1	-6.5	-7.7
Korea	2 20	2.42	2.52	2.50	2 77	0.0	2.0	2.5	4.0	F 0
BOK-Wire+	3.30 308.6	3.43 241.1	3.52 203.6	3.56 164.8	3.77 129.4	-8.8 -26.1	3.8	2.5 15.5	1.2	5.9
Check Clearing System Interbank Shared							-21.9	-15.5	-19.1	-21.5
	3,750.1	4,055.8	4,340.7	4,703.8	5,051.3	7.8	8.2	7.0	8.4	7.4
Networks	a ovetera a	oo ofter O-	mnorethie "	Table DC4						
For the footnotes regarding the	s systems, s	ee aller CC	ппрагашуе	i abie PS4.						

Table PS2 (cont)

System	Nu	mber of t	ransactio	ns (million	s)		ase in the			ions
	2012	2013	2014	2015	2016	2012	(% change 2013	e on previo 2014	us year) 2015	2016
Mexico										
SPEI	171.74	217.58	262.90	334.90	394.99	55.2	26.7	20.8	27.4	17.9
CECOBAN	149.7	142.6	137.4	131.0	128.5	-3.1	-4.7	-3.7	-4.7	-1.9
Netherlands										
TARGET2-NL	8.52	7.98	6.38	5.74	5.60	2.0	-6.3	-20.0	-10.0	-2.4
Equens	2,739.9	2,556.9	1,921.9	1,619.4	1,710.2	-31.9	-6.7	-24.8	-15.7	5.6
Russia	,	•	,	,	,					
BESP System	1.2	2.1	2.93	3.25	3.37	89.9	77.0	39.0	11.2	3.6
NSD	nap	nav	nav	0.73	0.70	nap	nap	nap	nav	-3.7
VER	923.4	934.6	919.7	894.8	839.9	2.7	1.2	-1.6	-2.7	-6.1
MER	333.9	404.4	448.0	500.5	592.6	16.1	21.1	10.8	11.7	18.4
Payments using letters of advice	0.51	0.13	0.01	0.00	0.00	-28.5	-74.7	-95.3	-33.3	-50.0
Saudi Arabia										
SARIE	53.69	56.51	62.95	79.19	89.28	25.4	5.3	11.4	25.8	12.7
Singapore										
MEPS+(IFT)	4.73	5.08	5.21	5.32	5.44	7.6	7.3	2.6	2.1	2.2
SGDCCS	73.64	71.30	68.47	64.84	61.07	-2.9	-3.2	-4.0	-5.3	-5.8
USDCCS	0.92	0.93	0.94	0.90	0.85	-4.6	1.4	0.2	-3.4	-5.5
IBG	96.35	99.81	97.83	98.97	102.84	4.0	3.6	-2.0	1.2	3.9
South Africa										
SAMOS - large	5.02	5.80	6.42	7.04	7.52	22.4	15.5	10.8	9.5	6.9
SAMOS - retail ¹	0.31	0.33	0.35	0.39	0.42	7.1	5.9	5.9	11.7	10.1
Sweden	0.01	0.00	0.00	0.00	0.12	, , ,	0.0	0.0		10.1
RIX	3.62	3.81	4.06	4.36	4.54	4.6	5.2	6.6	7.4	4.2
Bankgirot	808.0	850.0	903.0	1,173.3	1,303.9	2.1	5.2	6.2	29.9	11.1
Dataclearing	135.00	140.70	144.70	145.59	144.25	7.6	4.2	2.8	0.6	-0.9
Switzerland										
SIC	410.2	420.0	428.8	440.8	448.3	1.9	2.4	2.1	2.8	1.7
Turkey		0.0	0.0							• • • • • • • • • • • • • • • • • • • •
EFT ¹ - large	182.18	2.95	2.85	2.92	2.50	9.3	-98.4	-3.4	2.5	-14.4
EFT - retail	14.93	229.53	266.61	315.24	374.80		1,437.4	16.2	18.2	18.9
Garanti Payment	57.45	70.13	84.24	97.25	105.45	29.8	22.1	20.1	15.5	8.4
Systems			•							• • • • • • • • • • • • • • • • • • • •
Interbank Card Center	1,459.1	1,654.0	1,838.9	2,054.0	2,274.0	19.4	13.4	11.2	11.7	10.7
Interbank Clearing House		17.19	17.39	16.93	15.42	1.5	-7.0	1.2	-2.7	-8.9
United Kingdom										
CHAPS Sterling	33.94	34.98	36.52	37.55	38.96	-0.3	3.1	4.4	2.8	3.8
Cheque/credit	667.4	587.3	518.5	444.7	377.5	-12.5	-12.0	-11.7	-14.2	-15.1
BACS	5,616.4	5,695.0	5,841.2	6,080.0	6,218.7	-1.8	1.4	2.6	4.1	2.3
Faster Payment Service	811.1	967.6	1,100.9	1,247.0	1,426.1	nav	19.3	13.8	13.3	14.4
United States			,	,	,					
CHIPS	97.10	103.10	109.40	110.40	110.80	2.1	6.2	6.1	0.9	0.4
Fedwire	131.6	134.2	135.0	142.8	148.1	3.6	2.0	0.6	5.8	3.7
European Union										
TARGET	89.62	91.34	87.76	88.59	88.96	0.7	1.9	-3.9	1.0	0.4
EURO1 / STEP1	66.59	64.14	57.68	55.26	53.34	6.9	-3.7	-10.1	-4.2	-3.5
STEP2 XCT Service ⁴	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
STEP2 ICT Service ⁵	309.7	278.0	23.5	nav	nav	0.5	-10.2	-91.6	nav	nav
STEP2 SCT Service				4,047.46		46.0	68.8	250.1	6.8	4.2
STEP2 SDD B2B Service		5.21	78.83	82.92	83.79	71.5	216.3	1,414.0	5.2	1.0
STEP2 SDD CORE Service	64.09	440.91	5,063.78	0,195.59	6,116.8	1,186.7	587.9	1,048.5	2.6	17.7
Memo:										
CLS ³	206.86	176.63	204.97	204.70	219.13	4.4	-14.6	16.0	-0.1	7.0
For the footnotes regarding the										

Table PS3
Payments processed by selected interbank funds transfer systems: value of transactions (total for the year)

System		Value	of transa	ctions		, A	verage va	alue per tr	ansaction	
		(USD billio	ns except	as noted) 1	I		(US	D thousan	ds) ¹	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia										
RITS	40,359.2	37,940.5	36,614.4	30,794.3	30,801.1	4,284.4	3,703.7	3,445.1	2,756.6	2,719.7
Belgium										
TARGET2-BE	24,026.0	21,477.2	21,550.7	17,327.2	18,761.0	9,649.0	9,297.5	8,551.9	7,599.7	8,338.2
Clearing house	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CEC	1,167.3	1,210.3	1,154.8	979.5	1,018.5	0.9	0.9	0.9	0.7	0.7
Brazil										
STR	86,348	109,422	113,277	83,546	89,879	3,749.4	3,597.9	3,103.3	1,964.0	1,291.6
SITRAF	nav	nav	nav	1,237.6	1,247.8	nav	nav	nav	4.2	3.0
BmfBovespa-FX	510.7	523.7	352.6	326.0	302.6	12,768.7	14,963.3	12,160.1	10,187.5	12,607.8
COMPE	574.2	519.7	469.1	311.8	299.9		0.6	0.6	0.4	0.4
SILOC	763.0	1,104.5	1,403.0	1,032.8	1,036.4		0.2	0.2	0.2	0.1
Canada		.,	.,	1,00=10	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					• • • • • • • • • • • • • • • • • • • •
LVTS	38 187 0	36 517 0	34 996 8	33,648.1	33 334 3	5,432.0	4,820.7	4,421.0	4,158.7	3,891.0
ACSS	5,800.4			5,036.9	4,596.4		0.9	0.8	0.7	0.6
Interac e-Transfer	13.5	19.8	28.0	34.9	47.6		0.4	0.4	0.3	0.3
China	13.5	13.0	20.0	34.3	47.0	0.4	0.4	0.4	0.5	0.5
HVPS	280 600	332 757	383 044	473,998	544 450	596.8	558.8	536.2	600.9	659.4
BEPS	,	,	,	4,004.54	,		3.2	2.5	2.2	2.0
	2,930.03	3,200.30	3,333.34	4,004.34	4,054.15	3.9	3.2	2.5	2.2	2.0
France		4400=0	44=000		00.400					40.000
TARGET2-BDF ¹	141,546	•	,	87,808	-	16,344.9		•	•	10,373.7
CORE (FR) ²	6,940.6	7,138.1	7,127.3	6,143.7	6,099.2	0.5	0.5	0.5	0.4	0.4
Germany										
TARGET2-BBk	353,929	•					6,707.7	5,432.2	5,081.4	4,999.9
RPS	3,224.1	3,639.5	4,359.6	3,313.0	3,182.3	1.1	1.2	1.1	0.9	0.8
Hong Kong SAR										
HKD CHATS	15,805.0	15,724.9	17,383.7	19,560.0	18,742.5	2,781.1	2,582.1	2,709.9	2,841.1	2,672.2
USD CHATS	4,047.9	4,255.7	5,245.9	5,879.6	6,490.6	1,060.5	980.1	1,122.1	1,192.9	1,178.0
EUR CHATS	184.7	182.9	190.8	100.1	87.9	1,710.5	1,550.3	1,461.2	709.8	602.3
RMB CHATS	7,866.1	14,606.4	27,601.5	34,980.0	30,190.8	7,236.5	9,363.1	9,287.2	8,226.7	7,915.8
India										
RTGS	12,652.5	12,519.9	12,356.5	12,857.4	14,608.8	184.7	154.4	133.2	130.8	135.5
Cheque Clearing	1,872.8	1,593.2	1,400.1	1,276.4	1,204.5	1.426	1.267	1.171	1.164	0.998
ECS / NECS	53.36	64.12	61.60	42.27	2.73		0.186	0.180	0.160	0.145
NACH	nav	3.7	20.0	61.8	117.8		0.042	0.059	0.043	0.057
UPI	nav	nav	nav	nav	1.03		nav	nav	nav	0.058
NEFT	542.53	746.60		1,298.45			1.129	1.057	1.036	1.101
Italy	0 12.00	7 10.00	000.02	1,200.10	1,700.00	1.077	1.120	1.007	1.000	1.101
TARGET2-BDI	/1 038 N	/IQ 73Q 1	5/ 038 /	35,712.1	20 374 8	4,702.6	4,791.4	4,787.7	3,484.1	2,521.6
BI-COMP	3,584.8	-	-		1,682.6		1.5	1.0	0.9	0.8
	3,304.0	3,333.4	1,900.5	1,032.0	1,002.0	1.0	1.5	1.0	0.9	0.0
Japan	244 470	202 224	200 400	272 220	200 620	22 226 2	17.060.0	17 200 2	16 170 1	10 770 6
BOJ-NET						22,326.2				
FXYCS				31,722.5			4,455.8	4,449.2	4,688.5	5,232.4
Zengin System	1	-		24,631.3	-		19.8	18.1	15.9	17.0
Tokyo Clearing House	3,415.7	2,763.4	2,253.0	1,732.6	1,496.3	136.8	117.7	102.2	84.1	78.7
Korea	40.00= =	50 70 / =	50 C=4 :	50 0 4 4 5	00.000 =	45 400 5	45.000	40.000 =	10010:	40.000 =
BOK-Wire+						15,128.0				
Check Clearing System	1	-	2,933.9		1,931.5		14.1	14.4	13.6	14.9
Interbank Shared	11,676.2	12,673.4	14,513.2	15,603.9	15,797.4	3.1	3.1	3.3	3.3	3.1
Networks	e systems s									

For the footnotes regarding the systems, see after Comparative Table PS4.

¹ Converted at yearly average exchange rates.

Table PS3 (cont)

System		Value	of transa	ctions		Average value per transaction					
•		(USD billio	ns except	as noted) 1	l		(US	D thousan	ds) ¹		
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	
Mexico		40.000	40 =00 0			00.4			40.0		
SPEI				15,457.6	-	88.1	74.7	63.9	46.2	35.5	
CECOBAN	290.1	280.6	253.2	207.3	177.5	1.9	2.0	1.8	1.6	1.4	
Netherlands TARGET2-NL	135,881	91,841	78,165	66,801	77 2/1	15,946.6	11 507 /	12 245 9	11 622 7	12 906 0	
Equens	2,736.4		2,101.3	1,678.1	1,804.4	1.0	1.0	1.1	1.0	1.1	
Russia	2,730.4	2,070.0	2,101.5	1,070.1	1,004.4	1.0	1.0	1.1	1.0	1.1	
BESP System	14.396.5	15,841.9	12.525.3	8,830.6	8.373.1	12,108.1	7,525.8	4,280.7	2,713.8	2,483.9	
NSD	nap	nap	nav	2,279.4	2,227.0		nap	nav	3,126.7	3,172.4	
VER		18,991.9			9,644.6		20.3	17.4	12.8	11.5	
MER	3,332.6		3,210.9	2,107.4	2,014.0	10.0	9.0	7.2	4.2	3.4	
Payments using letters of	15.33	3.03	0.06	0.04	0.04	30.1	23.5	10.0	10.0	22.0	
advice											
Saudi Arabia											
SARIE	17,439.4	14,568.6	14,513.6	13,024.6	10,591.2	324.8	257.8	230.6	164.5	118.6	
Singapore											
MEPS+(IFT)				11,674.1	-	2,991.7	2,618.8	2,308.4	2,193.8	2,290.5	
SGDCCS	506.0	526.8	500.4	453.3	426.6	6.9	7.4	7.3	7.0	7.0	
USDCCS	49.06	52.17	52.46	50.19	47.06	53.3	55.9	56.1	55.6	55.2	
IBG	234.14	253.41	264.32	258.67	269.17	2.4	2.5	2.7	2.6	2.6	
South Africa	10 146 4	0.400 5	0.740.0	0.400.0	0.026.2	2 022 2	1 E71 C	1 511 0	1 206 0	1 100 2	
SAMOS - large SAMOS - retail	10,146.4 970.4	9,108.5 905.2	9,712.3 865.6	9,188.2 793.7	8,936.2 735.9	2,022.2	1,571.6	1,511.8	1,306.0	1,188.3	
Sweden	970.4	905.2	005.0	193.1	730.9	nav	nav	nav	nav	nav	
RIX	18 363 6	17 189 2	17 124 7	15,843.4	18 533 N	5,072.8	4,511.6	4,217.9	3,634.6	4,081.3	
Bankgirot	1,278.8	1,388.2	1,368.7	1,574.6	1,641.1	1.6	1.6	1.5	1.3	1.3	
Dataclearing	397.5	417.5	428.1	383.4	385.7	2.9	3.0	3.0	2.6	2.7	
Switzerland											
SIC	32,219	34,450	32,497	40,390	39,544	78.5	82.0	75.8	91.6	88.2	
Turkey	,	•	•		·						
EFT ¹ - large	18,239.5	18,178.0	18,314.7	15,709.4	14,914.8	100.12	6,162.02	6,426.21	5,379.94	5,965.93	
EFT - retail	213.4	2,993.1	3,030.1	2,795.3	3,739.4	14.29	13.04	11.37	8.87	9.98	
Garanti Payment	4.7	6.9	7.8	7.6	7.8	0.08	0.10	0.09	0.08	0.07	
Systems											
Interbank Card Center	94.14	99.40	99.92	89.12	87.30	0.06	0.06	0.05	0.04	0.04	
Interbank Clearing House	176.66	184.04	184.60	162.77	150.26	9.56	10.71	10.61	9.61	9.75	
United Kingdom											
CHAPS Sterling	113,607		111,894	104,553	102,001	3,347.7	3,134.6	3,063.8	2,784.5	2,617.8	
Cheque/credit	1,023.3	900.5	884.6	754.6	587.9	1.5	1.5	1.7	1.7	1.6	
BACS	6,514.2	•	7,278.3	7,015.2	6,446.9		1.2	1.2	1.2	1.0	
Faster Payment Service	978.8	1,205.7	1,488.1	1,590.5	1,604.8	1.2	1.2	1.4	1.3	1.1	
United States CHIPS	264 940	270.005	200 605	275 062	264 224	2 757 1	2 605 6	2 571 2	2 404 5	2 200 2	
Fedwire	364,819 599,201	379,985 713,310	390,695 884,552	375,862 834,630	364,331 766,962	3,757.1 4,553.2	3,685.6 5,315.3	3,571.3 6,552.2	3,404.5 5,844.8	3,288.2 5,178.7	
European Union	399,201	113,310	004,332	034,030	700,902	4,555.2	5,515.5	0,002.2	5,044.0	5,176.7	
TARGET	912,920	743,057	661,493	564,347	537,468	10,186.2	8,134.9	7,537.6	6,370.0	6,041.7	
EURO1 / STEP1	74,350	64,625	54,712	48,944	45,474	1,116.5	1,007.6	948.6	885.7	852.5	
STEP2 XCT Service ⁴	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
STEP2 ICT Service ⁵	1,340.4	1,220.8	89.6	nav	nav	4.3	4.4	3.8	nav	nav	
STEP2 SCT Service	3,140.0	•		11,635.3		4.9	4.5	3.3	2.9	3.0	
STEP2 SDD B2B Service		125.1	769.6	670.8	748.3	8.7	24.0	9.8	8.1	8.9	
STEP2 SDD CORE	14.3	97.3	1,458.4	1,240.2	1,311.9	0.2	0.2	0.3	0.2	0.2	
Service		23	,	, ~.	,	J	J	0.5	v. _	V.=	
Memo:											
CLS ³	1,221.0	1,290.6	1,274.9	1,232.2	1,255.8	5,902.6	7,307.0	6,219.9	6,019.8	5,730.8	

For the footnotes regarding the systems, see after Comparative Table PS4.

¹ Converted at yearly average exchange rates.

Table PS3 (cont)

System			eal value (Value of	transactio	ns as a p (in %)	ercentage	of GDP
	2012	2013	inflation) 2014	2015	2016	2012	2013	2014	2015	2016
Australia	2012	2010	2017	2010	2010	LUIL	2010	2014	2010	2010
RITS	-11.8	-0.9	1.3	-0.4	-1.0	2,576.2	2,533.7	2,536.6	2,524.8	2,447.6
Belgium						,	,	•	,	,
TARGET2-BE	-17.7	-14.6	-0.1	-4.4	6.6	4,829.1	4,129.7	4,053.9	3,809.3	4,022.2
Clearing house	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CEC	-0.1	-1.0	-5.0	0.8	2.4	234.6	232.7	217.2	215.3	218.4
Brazil										
STR	3.3	32.2	6.0	-5.5	5.6	3,506.1	4,434.0	4,615.6	4,648.5	4,995.7
SITRAF	nav	nav	nav	nav	-1.0	nav	nav	nav	68.9	69.4
BmfBovespa-FX	-8.8	7.0	-31.0	18.4	-8.9	20.7	21.2	14.4	18.1	16.8
COMPE	-5.6	-5.5	-7.5	-14.9	-5.6		21.1	19.1	17.4	16.7
SILOC	11.1	51.1	30.1	-5.7	-1.5	31.0	44.8	57.2	57.5	57.6
Canada										
LVTS	-5.0	-2.4	0.9	10.1	1.2	2,075.0	1,950.3	1,932.7	2,159.8	2,132.0
ACSS	4.4	2.2	2.2	2.2	-6.8		310.2	311.7	323.3	294.0
Interac e-Transfer	44.8	49.6	48.4	42.8	39.1	0.7	1.1	1.5	2.2	3.0
China										
HVPS	27.4	13.3	11.7	24.5	21.3		3,622.7	3,687.4	4,362.4	4,859.8
BEPS	-1.5	6.8	6.5	11.8	22.7	35.7	35.7	34.7	36.9	41.5
France										
TARGET2-BDF ¹	5.4	-21.3	-1.5	-8.8	-6.2	5,282.4	4,138.4	4,037.7	3,609.7	3,346.8
CORE (FR) ²	-1.6	-1.5	-0.7	3.0	-0.8	259.0	254.1	250.0	252.6	247.6
Germany										
TARGET2-BBk	6.7	-19.9	-25.2	21.0	-2.2	9,993.9	7,937.4	5,768.0	6,730.6	6,396.6
RPS	1.9	7.5	19.0	-9.2	-4.1	91.0	97.0	112.1	98.2	91.5
Hong Kong SAR										
HKD CHATS	-11.5	-4.6	5.8	9.2	-6.3		5,704.1	5,964.7	6,322.3	5,840.6
USD CHATS	10.7	0.8	18.0	8.8	7.9	1,541.4	1,543.7	1,800.0	1,900.4	2,022.6
EUR CHATS	-9.8	-5.1	-0.2	-49.1	-14.1	70.3	66.4	65.5	32.3	27.4
RMB CHATS	71.7	78.0	80.9	23.0	-15.6	2,995.4	5,298.4	9,470.6	11,306.5	9,408.2
India	40.4	0.0	0.4		40.0	000.0	054.4	000.0	007.4	0.40.7
RTGS	12.1	-0.3	-6.1	-1.4	12.0		651.4	603.8	607.4	646.7
Cheque Clearing	-9.7	-14.3	-16.4	-13.6	-7.0		82.9	68.4	60.3	53.3
ECS / NECS	-4.6	21.0	-8.5	-35.0	-93.6		3.3	3.0	2.0	0.1
NACH UPI	nav	nav	419.9	192.7	87.9		0.2	1.0	2.9	5.2
NEFT	nav 44.7	nav 38.6	nav 24.9	nav 25.5	nav 35.6	nav 29.2	nav 38.8	nav 47.9	nav 61.3	0.0 79.1
Italy	44.7	30.0	24.9	25.5	33.0	29.2	30.0	47.9	01.3	79.1
TARGET2-BDI	-4.3	13.3	10.3	-22.3	-42.8	2,024.7	2,334.9	2,553.9	1,957.4	1,101.2
BI-COMP	-12.8	-9.6	-42.3	0.7	2.1	173.1	159.3	91.1	90.6	90.9
Japan	-12.0	-9.0	-42.3	0.7	2.1	173.1	133.3	31.1	30.0	30.3
BOJ-NET	9.7	4.4	4.1	7.6	1.8	5,502.3	5,671.3	5,942.7	6,242.6	6,264.1
FXYCS	-12.8	18.0	2.1	24.7	2.5		578.9	594.7	724.5	732.4
Zengin System	3.4	7.3	-1.2	2.1	-2.5		567.5	564.4	562.5	541.0
Tokyo Clearing House	-2.9	-1.3	-14.0	-12.7	-22.4	55.0	53.6	46.4	39.6	30.3
Korea		1.5	11.0	12.7		00.0	30.0	10.7	00.0	00.0
BOK-Wire+	7.0	1.2	2.6	12.2	7.8	4,087.8	4,037.5	4,037.7	4,334.2	4,509.2
Check Clearing System	-20.4	-14.4	-17.8	-18.7	-12.3		259.6	207.9	161.8	136.9
Interbank Shared	3.8	4.1	8.7	14.7	2.8		970.9	1,028.6	1,128.8	1,119.6
Networks			J.,		5	330.2	2. 3.3	.,0_0.0	.,0.0	.,
For the footnotes regarding the	e systems, se	ee after Co	mparative T	able PS4.						

Table PS3 (cont)

System		se in the re				Value of transactions as a percentage of GDP					
	•		inflation)	•				(in %)			
Mayina	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	
Mexico SPEI	6.0	0.4	2.4	6.0	4.0	1 274 6	1 200 0	1 204 4	1 251 0	1 240 7	
	6.9	0.4	3.4	6.8	4.0 -2.0	1,274.6	1,288.0	1,294.4	1,351.9	1,340.7	
CECOBAN	-2.8	-9.6	-9.7	-5.0	-2.0	24.4	22.2	19.5	18.1	16.9	
Netherlands TARGET2-NL	29.9	-36.3	-15.1	2.0	15.0	16,403.6	10 507 0	8,888.5	8,815.1	9,949.3	
Equens	1.1	-30.3 -7.8	-13.1	-4.7	7.6	330.3	308.7	238.9	221.4	232.1	
Russia	1.1	-7.0	-21.0	-4.1	7.0	330.3	300.7	230.9	221.4	232.1	
BESP System	88.3	5.8	-15.3	-0.2	-0.8	668.3	709.9	600.4	643.6	651.0	
NSD	nap	nap	nap	nav	2.2	nap	nap	nav	166.1	173.1	
VER	-6.4	-5.3	-9.7	1.0	-11.7	895.3	851.0	767.3	832.7	749.8	
MER	5.1	5.5	-5.9	-7.1	0.0	154.7	163.8	153.9	153.6	156.6	
Payments using letters of	31.3	-81.0	-97.9	-5.2	15.3	0.7	0.1	0.0	0.0	0.0	
advice	01.0	01.0	37.3	0.2	10.0	0.7	0.1	0.0	0.0	0.0	
Saudi Arabia											
SARIE	16.8	-19.3	-3.0	-12.2	-21.4	2,369.6	1,951.2	1,918.9	1,998.4	1,655.9	
Singapore	10.0	10.0	0.0	12.2	2	2,000.0	1,001.2	1,010.0	1,000.1	1,000.0	
MEPS+(IFT)	-3.0	-8.1	-9.3	5.9	7.8	4,932.8	4,398.1	3,925.8	3,987.8	4,194.3	
SGDCCS	-2.9	1.8	-4.8	-1.2	-5.0		174.3	163.3	154.8	143.6	
USDCCS	-5.6	4.0	0.8	4.4	-5.3	17.1	17.3	17.1	17.1	15.8	
IBG	3.2	5.9	4.6	6.7	5.1	81.6	83.8	86.3	88.4	90.6	
South Africa	0.2	0.0	1.0	0.1	0.1	01.0	00.0	00.0	00.1	00.0	
SAMOS - large	2.9	0.1	13.8	5.7	5.1	2,560.1	2,483.1	2,766.0	2,893.0	3,029.4	
SAMOS - retail	4.0	4.1	2.0	2.4	0.2	244.8	246.8	246.5	249.9	249.5	
Sweden			2.0		0.2	21110	210.0	2.0.0	2.0.0	210.0	
RIX	-1.1	-10.0	5.1	13.7	17.6	3,377.5	2,970.5	2,985.6	3,181.9	3,601.9	
Bankgirot	4.7	4.4	4.1	41.4	4.8	235.2	239.9	238.6	316.2	318.9	
Dataclearing	3.1	1.0	8.2	10.1	1.1	73.1	72.2	74.6	77.0	75.0	
Switzerland											
SIC	-19.6	5.9	-6.9	32.2	0.6	4,828.1	5,005.7	4,579.2	5,948.8	5,912.4	
Turkey						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0,000	.,	0,0 1010	-,- : :	
EFT ¹ - large	-21.6	-1.6	7.2	-2.0	-2.8	2,083.5	1,909.5	1,960.0	1,828.0	1,739.3	
EFT - retail	nav	1284.5	7.7	5.4	36.9	24.4	314.4	324.3	325.3	436.1	
Garanti Payment	33.3	44.6	20.2	11.1	4.4	0.5	0.7	0.8	0.9	0.9	
Systems	55.5	77.0	20.2		7.7	0.0	0.7	0.0	0.5	0.5	
Interbank Card Center	16.9	4.2	7.0	1.9	0.2	10.8	10.4	10.7	10.4	10.2	
Interbank Clearing House	8.3	2.8	6.7	0.7	-5.5	20.2	19.3	19.8	18.9	17.5	
United Kingdom	0.0	2.0	0	0	0.0	20.2	10.0	10.0	10.0	11.0	
CHAPS Sterling	9.2	-4.6	-4.5	0.6	9.8	4,255.6	4,002.1	3,699.4	3,622.1	3,875.6	
Cheque/credit	-13.6	-13.1	-8.1	-8.1	-12.3	38.3	32.9	29.2	26.1	22.3	
BACS	-8.3	0.0	3.3	3.8	3.4	244.0	240.7	240.6	243.0	245.0	
Faster Payments Service	nav	21.7	15.5	15.1	13.5	36.7	44.0	49.2	55.1	61.0	
United States										00	
CHIPS	-11.3	2.9	1.3	-3.7	-4.0	2,258.2	2,276.5	2,241.8	2,074.2	1,956.2	
Fedwire	-11.5	17.6	22.2	-5.5	-9.0	3,709.0	4,273.5	5,075.6	4,606.0	4,118.0	
European Union ⁶						,	,	,	,	,	
TARGET	6.5	-22.3	-11.3	2.0	-4.8	7,229.0	5,634.8	4,911.8	4,848.3	4,509.6	
EURO1 / STEP1	-11.8	-17.1	-15.6	7.0	-7.1	588.7	490.1	406.3	420.5	381.5	
STEP2 XCT Service ⁴	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
STEP2 ICT Service ⁵	-17.8	-13.1	-92.7			10.6	9.3	0.7			
STEP2 ICT Service	-17.8 51.0	-13.1 47.7	-92.7 153.6	nav 12.5	nav 7.5	24.9	9.3 36.9	91.8	nav 100.0	nav 105.0	
STEP2 SCT Service STEP2 SDD B2B Service	86.8			12.5 4.2				91.8 5.7	5.8		
STEP2 SDD B2B Service STEP2 SDD CORE		737.8	513.1		11.5	0.1	0.9			6.3	
Service	252.7	549.8	1393.6	1.7	5.8	0.1	0.7	10.8	10.7	11.0	
For the footnotes regarding the	aa.t			abla DO 1							

CPMI – Red Book statistical update

Table PS4
Participation in selected interbank funds transfer systems (end of year)

System		Total num	ber of pa	rticipants			of which:	direct part	ticipants	
-	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia										
RITS	82	85	88	87	95	60	61	59	60	60
Belgium										
TARGET2-BE	48	46	45	47	48	14	14	14	16	19
Clearing house	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
CEC	72	70	63	59	56	15	14	13	14	14
Brazil										
STR	171	169	172	181	187	171	169	172	181	187
SITRAF	nap	nap	nap	101	101	nap	nap	nap	101	101
BmfBovespa-FX	71	76	76	77	80	71	76	76	77	80
COMPE	136	131	129	119	118	136	131	129	119	118
SILOC	121	119	122	122	120	121	119	122	122	120
Canada										
LVTS	89	90	84	82	82	16	16	16	17	17
ACSS	122	117	123	123	124	12	12	12	12	12
Interac e-Transfer	nav	nav	nav	258	259	nav	nav	nav	nap	nap
China	1141	1141	1164	200	200	1141	1164	1141	пар	nαρ
HVPS	119,214	125,937	131,653	137,488	141,329	1,783	1,799	773	656	305
BEPS	119,115	125,823	131,522	137,012	140,825	1,791	1,807	774	640	284
France	110,110	120,020	101,022	107,012	140,020	1,701	1,007	117	040	204
TARGET2-BDF ¹	320	328	320	317	329	114	124	121	123	133
CORE (FR) ²	419	380	367	367	363	10	10	10	10	10
Germany		a= 4			222					0.40
TARGET2-BBk	2,744	874	944	865	989	283	644	719	719	848
RPS	204	202	175	182	187	204	202	175	182	187
Hong Kong SAR										
HKD CHATS	152	154	159	156	153	152	154	159	156	153
USD CHATS	222	223	222	219	217	92	94	100	100	105
EUR CHATS	52	55	55	55	55	33	37	37	37	38
RMB CHATS	174	184	199	219	212	174	184	199	219	212
India										
RTGS	160	172	177	192	193	160	172	177	192	193
Cheque Clearing	200	535	701	1,244	1,356	108	213	258	264	270
ECS / NECS	117	117	123	123	nav	117	117	123	123	nav
NACH	nav	283	282	368	260	nav	49	12	5	2
UPI	nap	nap	nap	nap	45	nap	nap	nap	nap	45
NEFT	146	161	161	173	183	146	161	161	173	183
Italy										
TARGET2-BDI	426	170	167	156	148	103	102	105	100	99
BI-COMP	nav	nap	76	72	69	87	83	76	72	69
Japan										
BOJ-NET	550	542	538	536	534	550	542	538	536	534
FXYCS	206	203	202	201	201	27	27	28	27	27
Zengin System	1,361	1,352	1,340	1,322	1,296	143	142	143	145	145
Tokyo Clearing House	318	317	315	312	305	105	106	106	106	106
Korea										
BOK-Wire+	133	134	133	130	135	133	134	133	130	135
Check Clearing System	27	27	27	25	25	27	27	27	25	25
Interbank Shared	57	57	58	58	56	57	57	58	58	56
Networks										
For the footnotes regarding the	systems s	ee after this	table							

For the footnotes regarding the systems, see after this table.

Table PS4 (cont)

Occatama .		Fa4al	l	4:-:	<u> </u>	·iainamta				
System		Total num	ber of par 2014	-	2016		of which: (-	-	2046
Mexico	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
SPEI	93	95	107	107	109	93	95	107	107	109
CECOBAN	28	29	29	29	35	28	29	29	29	35
Netherlands	20	20	20	20		20	20	20	20	00
TARGET2-NL	107	112	111	105	105	61	66	66	63	66
Equens	64	123	161	162	37	61	99	66	72	27
Russia										
BESP System	2,894	2,776	2,495	2,113	1,741	2,894	2,776	2,495	2,113	1,741
NSD	nap	nav	nav	730	656	nap	nav	nav	730	656
VER	2,991	2,773	2,426	2,038	1,658	2,991	2,773	2,426	2,038	1,658
MER	2,996	2,773	2,426	2,038	1,658	2,996	2,773	2,426	2,038	1,658
Payments using letters of	86	85	86	82	81	86	85	86	82	81
advice										
Saudi Arabia										
SARIE	23	23	23	23	25	23	23	23	23	25
Singapore										
MEPS+(IFT)	137	140	143	126	130	62	64	64	63	62
SGDCCS	63	64	63	61	61	34	34	34	34	35
USDCCS	48	48	49	48	49	32	32	32	32	33
IBG	44	45	45	45	45	38	39	40	40	39
South Africa										
SAMOS - large	23	25	28	31	31	23	25	28	31	31
SAMOS - retail	24	26	28	29	31	22	23	25	29	29
Sweden										
RIX	25	27	30	29	29	25	27	30	29	29
Bankgirot	21	21	21	22	23	21	21	21	22	23
Dataclearing	21	21	21	29	31	21	21	21	29	31
Switzerland										
SIC	378	368	358	350	337	378	368	358	350	337
Turkey										
EFT ¹ - large	48	49	49	52	52	48	49	49	52	52
EFT - retail	48	49	49	52	52	48	49	49	52	52
Garanti Payment	9	9	10	10	10	9	9	10	10	10
Systems										
Interbank Card Center	28	28	28	29	30	28	28	28	29	30
Interbank Clearing House	41	41	41	42	43	41	41	41	42	43
United Kingdom										
CHAPS Sterling	nav	nav	nav	nav	nav	19	20	21	22	24
Cheque/credit	nav	nav	nav	nav	nav	11	11	11	11	11
BACS	63,416	63,016	nav	nav	nav	16	16	16	16	16
Faster Payments Service	nav	nav	nav	nav	nav	10	10	10	10	12
United States CHIPS	50	50	40	40	40					
	52	50	49	49	48	nav	nav	nav	nav	nav
Fedwire ⁵	7,143	6,930	7,866	6,820	6,430	nav	nav	nav	nav	nav
European Union	4 40 4	0.000	0.005	0.070	0.444	4 470	4 505	4 000	4 00 4	4 775
TARGET	4,484	2,326	2,365	2,270	2,414	1,172	1,535	1,600	1,604	1,775
EURO1 / STEP1	235	212	199	183	168	235	212	199	183	168
STEP2 XCT Service ⁴	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
STEP2 ICT Service ⁵	68	70	69	nav	nav	6	6	6	nav	nav
STEP2 SCT Service	4,696	4,823	4,806	4,825	4,844	125	127	128	136	138
STEP2 SDD B2B Service	3,366	3,438	3,402	3,408	3,373	74	78	83	90	94
STEP2 SDD CORE	3,874	4,024	3,927	3,922	3,910	90	93	94	102	109
Service										
Memo:		<u>.</u> .		<u> </u>		<u>.</u> .				<u>.</u> .
CLS	63	64	65	64	66	61	62	63	62	64
For the footnotes regarding the	systems, se	ee after this	table.							

Table PS4 (cont)

System	Concenti	ration ratio	o in terms	of volum	e (in %)	Concen	tration rat	io in term	s of value	(in %)
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia										
RITS	72.2	70.7	70.2	69.5	69.3	62.3	60.4	61.6	60.5	60.0
Belgium										
TARGET2-BE	90.6	89.5	93.7	93.9	94.3	90.9	89.9	90.8	90.5	91.1
Clearing house	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
CEC	85.6	86.7	89.0	87.6	87.7	85.2	85.9	86.1	86.2	85.7
Brazil										
STR	47.0	45.8	47.7	51.2	64.9	52.6	58.0	60.4	58.5	62.1
SITRAF	nap	nap	nap	81.5	82.4	nap	nap	nap	81.6	82.3
BmfBovespa-FX	45.4	47.8	47.3	34.8	26.0	54.7	58.1	61.5	40.8	40.7
COMPE	80.7	79.4	79.1	78.4	68.7	80.5	80.3	79.8	78.9	69.4
SILOC	84.7	84.0	85.2	84.4	82.9	84.1	82.4	81.7	81.6	81.9
Canada										
LVTS	80.9	80.9	80.4	81.0	81.1	74.4	72.2	76.4	76.8	76.8
ACSS	79.9	85.8	89.2	85.9	86.7	80.1	79.5	80.1	76.8	77.1
Interac e-Transfer	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
China										
HVPS	57.6	58.6	58.4	58.3	57.7	40.3	41.0	35.1	33.8	26.2
BEPS	63.0	63.2	62.4	67.7	70.8	47.2	47.3	53.6	58.4	60.8
France		00.2	0=	• • • • • • • • • • • • • • • • • • • •	. 0.0			00.0		00.0
TARGET2-BDF ¹	53.7	54.2	55.0	55.5	61.2	54.7	63.2	62.1	65.6	67.3
CORE (FR) ²		83.0		82.7	82.5				75.3	74.3
` ,	82.7	03.0	84.0	02.7	02.5	74.8	74.5	75.8	15.3	74.3
Germany	50.4	E0.0	40.0	FO F	E4 4	20.0	20.5	20.0	45.0	40.0
TARGET2-BBk	50.1	50.0	49.2	52.5	51.4	28.9	29.5	26.2	45.8	43.6
RPS	32.0	29.3	38.9	51.8	61.8	14.5	18.4	44.8	57.4	57.1
Hong Kong SAR	50.0	E0.0	F7 4	FC 0	50.0	40.0	40.0	E0.0	40 C	40.0
HKD CHATS	58.6	58.3	57.4	56.2	58.0	48.3	49.0	50.3	49.6	48.0
USD CHATS	59.5	61.7	60.6	58.8	56.9	64.2	58.4	59.8	59.2	65.0
EUR CHATS	72.4	73.6	73.9	73.1	70.9	94.3	96.7	96.1	86.9	86.9
RMB CHATS	48.0	44.0	50.7	48.3	49.2	nav	nav	nav	nav	nav
India	45.0	40.0	40.0	40.5	40.7	40.4	44.0	45.0	40.5	50.0
RTGS	45.6	40.8	40.8	40.5	40.7	40.1	41.0	45.8	48.5	52.0
Cheque Clearing	45.7	36.0	27.7	17.6	13.5	74.7	65.0	55.5	46.1	36.8
ECS / NECS	10.4	9.9	7.9	4.2	0.2	2.1	2.6	2.4	1.5	0.1
NACH	nav	2.5	7.9	22.9	23.1	nav	0.2	0.8	2.2	3.6
UPI	nap	nap	nap	nap	0.2	nap	nap	nap	nap	0.0
NEFT	13.7	18.9	21.5	20.2	18.2	21.7	30.5	38.9	46.9	54.6
Italy	14.0	440	45.0	44.0	40.4	50.0	50.5	50.7	50.7	40.0
TARGET2-BDI	41.9	44.6	45.2	44.6	43.4	52.3	50.5	50.7	50.7	42.0
BI-COMP	52.0	52.6	41.3	54.1	31.4	57.5	57.6	53.9	47.7	32.7
Japan										
BOJ-NET	47.5	45.8	49.4	48.0	49.1	37.8	37.4	43.0	41.5	44.3
FXYCS	79.4	80.7	80.4	76.3	76.8	75.4	75.5	74.6	72.2	70.8
Zengin System	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Tokyo Clearing House	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Korea										
BOK-Wire+	28.0	26.6	28.1	27.8	33.0	35.2	32.7	33.8	34.3	39.2
Check Clearing System	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Interbank Shared	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Networks										

For the footnotes regarding the systems, see after this table.

Table PS4 (cont)

System	Concent	ration ratio	o in terms	of volum	e (in %)	Concen	tration rat	io in term	s of value	(in %)
•	2012	2013	2014	2015	2016	2012	2013	2014	2015	`2016
Mexico										
SPEI	81.2	81.4	82.2	82.6	81.8	61.3	59.3	58.8	58.9	58.8
CECOBAN	83.4	84.3	83.7	82.8	81.8	81.2	82.0	81.3	80.9	78.9
Netherlands										
TARGET2-NL	68.0	68.0	75.0	80.0	81.2	76.0	66.0	75.0	70.9	79.6
Equens	98.0	99.0	98.0	98.4	98.5	94.0	93.0	90.0	89.0	91.9
Russia										
BESP System	18.1	12.9	21.8	22.3	26.1	47.4	51.6	41.4	62.0	62.0
NSD	nap	nav	nav	48.5	47.6	nap	nav	nav	73.7	71.2
VER	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
MER	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
Payments using letters of	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
advice										
Saudi Arabia										
SARIE	79.0	83.0	78.0	75.0	79.0	76.0	78.0	72.0	74.0	69.0
Singapore										
MEPS+(IFT)	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
SGDCCS	88.2	88.2	88.4	88.4	88.4	82.6	82.7	82.5	81.8	82.0
USDCCS	76.0	76.2	76.9	77.8	78.6	70.9	70.6	70.3	70.8	71.3
IBG	86.2	85.7	85.0	83.6	83.4	81.4	80.5	79.4	79.7	79.5
South Africa										
SAMOS - large	92.4	92.6	91.2	90.8	90.3	85.5	80.2	73.8	72.8	74.9
SAMOS - retail	59.8	59.3	59.3	58.8	57.0	94.8	93.7	92.9	92.3	92.7
Sweden										
RIX	89.0	86.5	88.5	88.1	87.8	79.6	74.0	74.2	81.9	80.0
Bankgirot	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
Dataclearing	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
Switzerland										
SIC	62.3	61.8	61.8	61.5	61.9	66.6	64.1	66.1	64.2	66.0
Turkey										
EFT ¹ - large	55.5	66.3	61.6	60.7	57.5	56.3	45.6	44.7	44.5	42.1
EFT - retail	nav	55.2	54.0	54.6	54.8	nav	36.9	37.7	38.1	37.7
Garanti Payment	95.7	94.9	95.1	95.7	96.2	95.5	95.0	93.8	94.8	95.6
Systems										
Interbank Card Center	61.8	60.4	61.2	61.2	62.6	65.6	63.3	62.6	62.1	61.7
Interbank Clearing House	52.9	51.4	49.3	49.8	50.4	47.8	48.3	49.1	49.7	53.2
United Kingdom										
CHAPS Sterling	73.0	73.0	72.0	71.0	66.9	67.0	65.0	63.0	63.0	nav
Cheque/credit	79.0	79.0	80.0	81.2	nav	83.0	81.0	82.0	81.7	nav
BACS	81.0	81.0	81.0	81.0	87.7	nav	nav	nav	nav	nav
Faster Payments Service	88.0	88.0	88.0	89.0	93.7	87.0	87.0	88.0	88.0	nav
United States										
CHIPS	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Fedwire	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
European Union										
TARGET	nav	nav	nav	nav	nav	13.0	16.9	15.7	17.1	17.9
EURO1 / STEP1	32.7	31.6	32.2	33.6	35.9	51.9	47.4	48.6	50.7	48.9
STEP2 XCT Service ⁴	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
STEP2 ICT Service ⁵	99.9	99.9	99.9	nav	nav	99.9	99.9	99.7	nav	nav
STEP2 SCT Service	46.4	37.7	45.7	44.5	42.9	26.6	27.0	35.7	35.1	34.9
STEP2 SDD B2B Service		74.0	55.0	54.0	54.1	76.0	81.0	57.0	58.0	53.2
STEP2 SDD CORE	93.0	84.0	59.0	62.0	65.4	85.0	71.0	56.0	58.0	60.6
Service	შპ.0	04.0	59.0	0∠.0	00.4	03.0	11.0	56.0	56.0	0.00
For the footnotes regarding the			4-1-1-							

For the footnotes regarding the systems, see after this table.

Footnotes for Tables PS1-4

Australia: ¹ Australian eastern standard time. ² Australian eastern daylight-saving time ³ Based on the final time for Austraclear transactions for direct participants ⁴ Final time for receiving MT 202 transactions in the evening session.

Brazil: ¹ Any financial institution holding a reserve account or a settlement account at the Central Bank of Brazil. ² The system is owned by CIP, a not-for-profit association owned by banks. ³ Any bank holding a reserve account at the Central Bank of Brazil. ⁴ The system is owned by BM&F BOVESPA, which is a for-profit company. ⁵ Any bank authorised by the Central Bank of Brazil to carry out FX transactions and holding a reserve account at the Central Bank of Brazil. ⁶ Payments become final at the moment settlement is completed by the system, which occurs throughout the day. ⁷ T and T+1 are also possible, but the relevant volume and value are very low. ⁸ The time of settlement finality depends on the value of the cleared documents.

Canada: ¹ Not all payment categories process in real time. ² To become a direct clearer, an institution must process payment items volume of at least 0.5% of the total national volume of payment items. ³ Interac e-Transfer is owned by Acxsys Corporation. ⁴ Final settlement occurs at 18:30. However, due to the risk controls and legal framework in place, the LVTS provides real-time settlement finality on a payment basis. ⁵ No standard hours. ⁶ ACSS does not legally support settlement finality, however, settlement entries in accounts at the central bank are considered final

China: ¹ Payment orders are submitted for settlement during the day at the designated time.

France: ¹ Since 18 February 2008, TBF (the French component of TARGET) and PNS have been replaced by TARGET2-Banque de France, the single French large-value payment system. ² Launched on 28 January 2008, CORE progressively replaced the former retail payment infrastructure SIT, closed on 25 October 2008.

Germany: ¹ For legacy credit transfers, legacy direct debits and BSE cheque collection procedure. Payments submitted after 09:00 are settled on the next banking business day. ² For SEPA direct debits and ISE cheque collection procedure. ISE payments submitted after 10:00 are settled on the next banking business day. SEPA direct debit payments are settled on the individual interbank settlement date of the relevant transaction. ³ For SEPA credit transfers. Payments submitted after 13:00 are settled on the next banking business day.

Hong Kong SAR: ¹ Hong Kong Interbank Clearing Limited is the system operator of HKD CHATS, USD CHATS, EUR CHATS and RMB CHATS in Hong Kong. It is jointly owned by the Hong Kong Monetary Authority and the Hong Kong Association of Banks. ² The money market in Hong Kong can operate at any time during the day, but for same day settlement in Hong Kong a transaction must be submitted for processing between (a) 08:30 and 18:30 for HKD CHATS, USD CHATS and EUR CHATS, (b) 08:30 and 05:00 next day for RMB CHATS.

India: 1 For ECS. 2 For NECS.

Italy: ¹ Transfer orders are legally enforceable and binding on third parties when the system completes the gathering of the transfer orders or the bilateral balances stemming from the two BI-COMP subsystems ("Local Clearing" and "Retail").

Japan: ¹ Processing costs of transfer orders are recovered from the participants, but development and maintenance costs of BOJ-NET are covered by the Bank of Japan. ² The "Core Time" of BOJ-NET Fund Transfer Service is from 9:00 to 17:00. During the Core Time, all users must be connected to BOJ-NET. During hours other than the Core Time, users can send payments after obtaining consent from the receiving party. 3 On the last business day of each month, BOJ-NET opens at 7:30. ⁴ The "Core Time" for FXYCS fund transfers is from 9:00 to 15:00. 5 Large-value payments (equal to or larger than 100 million yen) are routed to BOJ-NET for real-time settlement. ⁶ Cut-off time for bills and cheques sorted by banks. Bills and cheques for sorting at TCH must be submitted by 21:00 of the day before the value date.

Korea: ¹ For Interbank Funds Transfer System. ² For CD/ATM System and Electronic Banking System. ³ For CMS System.

Mexico: 1 SPEI opens at 18:00 of the previous day, and mostly CLS and government payments are settled before 07:45.

Netherlands: 1 In principle; sometimes less.

Russia: ¹ A small number of payments are not processed centrally due to technical issues. ² Moscow time. The closing time can be extended. ³ Local time of the regional subsystem. The closing time can be extended. In some selected regions, the closing time for orders of participants in the BRPS can be set earlier than 21:00 but later than 17:00 local time. ⁴ In the regional subsystem some orders are accepted on paper not later than 14:00. ⁵ In the MER system payments are carried out on a gross basis with intraday finality, except for settlements between regions located in remote time zones, which have finality no later than the next day (T+1).

Singapore: ¹ MEPS+(IFT) does not impose a cut-off time for third-party/international correspondents' payments, but the Association of Banks in Singapore (ABS) bye-laws on MEPS require all such payments to be made by 17:30 on Monday to Friday.

South Africa: ¹ Volumes of transactions in retail payment streams are settled in batches. Thus, volumes recorded by the system represent the number of batches and not actual transactions settled.

Sweden: ¹ No same day transaction. ² Payments become final on completion of settlement, which occurs throughout the day. ³ The settlement points for the different flows are spread out between 07:15 and 16:20. ⁴ The settlement points for the different flows are spread out between 07:15 and 15:20.

Switzerland: ¹ The system is open for input 24 hours a day. Settlement services are limited by the indicated opening and closing times. A value day starts at 17:00 local time on the previous business day and ends at 16:15 on the value day. Third-party payments may be entered for same-day settlement until 15:00. Between 15:00 (clearing stop 1) and 16:00 (clearing stop 2) only cover (bank-to-bank) payments are accepted for same-day settlement. From 16:00 to 16:15 transactions are restricted to the processing of Liquidity-Shortage Financing Facility (special-rate repo transactions, collateralised loans from the Swiss National Bank at a penalty rate).

Turkey: ¹ EFT (Electronic Funds Transfer) system is the RTGS system operated by the CBRT. It encompasses both a customer payment system and a banking payment system.

United Kingdom: ¹ In net settlement, the payment becomes final and irrevocable once details of the payment have been entered into the Interbank Data Exchange (IBDE). ² In net settlement, the payment becomes final when the payment has had an effect on the bilateral net position.

Footnotes for Tables PS1-4 (cont)

United States: ¹ Local times are Eastern Time. ² CHIPS, the Clearing House Interbank Payments System, is owned by The Clearing House. ³ Any depository institution, including a US branch or agency of a foreign bank, may maintain an account with a Federal Reserve Bank. ⁴ Payments over CHIPS become final on completion of settlement, which occurs throughout the day. ⁵ Other Fedwire Funds Service participants not included here are: the US Treasury and any entity specifically authorised by federal statute to use the Reserve Banks as fiscal agents or depositories; entities designated by the Secretary of the Treasury; foreign central banks, foreign monetary authorities, foreign governments and certain international organisations.

European Union: ¹ All times are Central European Time (CET). ² STEP2 SCT payments are settled in TARGET2 through multiple day-time cycles and optional night-time cycles. STEP2 SDD payments are settled in TARGET2 through two separate cycles. ³ Opens the day before (D-1) and closes the day after (D). ⁴ STEP2 XCT Service closed in December 2011. ⁵ STEP2 ICT Service closed in September 2014. ⁶ Using euro area consumer price (HICP) inflation and GDP respectively.

CLS: ¹ Includes some non-bank financial institutions. ² Central European Time (CET). ³ Each side of the transaction is counted separately. Spot and forward transactions have two sides, while swaps have four. In trillions of US dollars.

Table TRS1
Features of selected exchanges and trading systems (at end-2016)

System	Owner/ manager	Markets / products	Trading	Operating times	Relationship with CCP
Australia					
ASX	SE ¹	SEC: E, O; DER	ELT	10:00-16:00	int ²
ASX 24	SE ¹	DER	ELT	17:10-07:00, 08:30-16:30 ³	int ⁴
Belgium					
Regulated off-exchange ¹	0	SEC: G	ELT	nap	nap
Euronext Brussels	SE	SEC: B, G, E, O; DER	ELT	9:00-17:40	indep
Brazil				,	
BmfBovespa-Equities	SE	SEC: E, O; DER	ELT	10:00-17:00 ¹	int ²
BmfBovespa-Derivatives	SE	DER	ELT	9:00-18:00 ³	int ²
Canada					
TSX	SE ¹	SEC: B, E	ELT	09:30-16:00	par ²
MX	SE ¹	DER	ELT	06:00-16:15 ³	par ⁴
NGX	SE ¹	DER	ELT	05:00-15:00 ³	int ⁵
ICE	SE^6	DER	ELT	20:00-14:15 ⁷	par ⁸
CSE	O^9	SEC: E	ELT	09:30-16:00	indep ¹⁰
Alpha	B, O ¹¹	SEC: E, B, O;	ELT	04:30-17:00 ¹²	indep ¹⁰
	В, О	DER		04.30-17.00	шаер
China	05	050 0 0 5 0	E. T	4	3
Shanghai Stock Exchange	SE	SEC: B, G, E, O;	ELT	09:15-11:30 ¹ ,	indep ³
		DER		13:00-15:30 ²	
Shenzhen Stock Exchange	SE	SEC: B, G, E, O;	ELT	9:15-11:30,	indep ³
		DER		13:00-15:00	
France					
Euronext Paris	SE ¹	SEC: B, G, E, O; DER	ELT	09:00-17:30	indep ²
Germany					
Xetra	SE ¹	SEC: E, O	ELT	09:00-17:30	
Xetra Frankfurt Specialist	SE ¹	SEC: B, G, E, O	FLT	09:00-20:00	
(since 2011; before: Frankfurt Floor)	0_				int ²
Eurex	SE^3	DER	ELT	07:30-22:00 ⁴	
Hong Kong SAR	02			01.00 22.00	
The Stock Exchange of Hong	SE ¹	SEC: B, G, E;	ELT	$09:00-12:00^3$,	int
Kong Limited	V -	DER: O ²		12:00-13:00 ^{3, 4} ,	
3		5211.		13:00-16:00 ³ ,	
India				16:00-16:10 ⁵	
NDS	CB, O	SEC: G	ETL	09:00-17:00	nan
BSE: BOLT	SE	SEC: E, B; DER	ETL	09:00-17:30	nap :1
NSE: NEAT	SE		ETL		int ¹
		SEC: E, B; DER		09:00-15:30	int ²
USE	SE	DER	ETL	09:00-15:30	int ¹
MCX-SX	SE	SEC: E; B; DER	ETL	09:00-15:30	int ³
Italy Borsa Italiana	SE	SEC: B, G, O	ELT	08:00-1730 ¹	int ²
MTS	SE	DER SEC: B, G	ELT	08:00-17:30	int ² ; indep ³
PCT	SE	SEC: B, G	ELT	07:45-18:30	int ² ; indep ³
Japan	OL.	3LO. D, O	LL1	07.43-10.30	пт, паер
Tokyo Stock Exchange (TSE)	SE ¹	SEC: B, G, E, O	ELT	09:00-15:00	par ²
	SE ¹	DER	ELT	08:45-15:15	par ²
Osaka Exchange (OSE)					
Tokyo Financial Exchange	B, O	DER	ELT	08:45-15:30	int ³
(TFX)					
Korea	_	050 5 6 5 5	 -		•
Korea Exchange(KRX)	0	SEC: B, G, E, O; DER	ELT	09:00-15:00 ¹ , 09:00-15:15 ²	int ³
				U3.UU=10.10	
Mexico				00.00 .00	
· , ,	SE	SEC: E	ELT	08:30-15:00	par ¹

Table TRS1 (cont)

System	Owner/ manager	Markets / products	Trading	Operating times	Relationship with CCP
Netherlands		, , , , , , , , , , , , , , , , , , ,			
Euronext Amsterdam	SE ¹	nav	nav	09:00-17:00	nav
Russia	_				
Moscow Exchange	CB, B, O	DER, O	ELT	10:00-23:50	par
MICEX SE	SE	SEC: B, G, E, O	ELT	09:30-19:30	int
Saudi Arabia					
Tadawul	SE	SEC: B, E	ELT	11:00 - 15:30	nap
Singapore					
SGX	SE	SEC: B, E, O; DER	ELT	09:00-17:00 ¹	int
South Africa					
Johannesburg Stock Exchange (JSE)	SE	SEC: B, E	ELT	09:00-17:00	nap
Sweden					
NASDAQ OMX Stockholm	SE ¹	SEC: B, G, E, O; DER	ELT	09:00-17:30	int ²
Switzerland					
SIX Swiss Exchange	B, CB ¹	SEC: B, G, E, O; DER	ELT	08:30-17:30	int ² ; indep
Turkey					
Borsa İstanbul	SE	SEC: B, G, E, O; DER	ELT, FLT	09:15-17:40 ¹ , 09:15-17:00 ²	nap
Turkish Derivatives Exchange ³	nap	nap	nap	nap	nap
United Kingdom					
London Stock Exchange	nav	nav	nav	nav	nav
Virt-x	nav	nav	nav	nav	nav
United States ¹					
New York Stock Exchange	0	SEC: E, O; DER	FLT, ELT	09:30-16:00	indep ²
Nasdaq	0	SEC: E,O	ELT	09:30-16:00	indep ²
American Stock Exchange	SE	SEC: E, O; DER	FLT	09:30-16:00	indep ²

Australia: ¹ ASX Group. ² ASX Clear. ³ Market hours vary for individual products and depending on whether daylight saving time is in place. ⁴ ASX Clear (Futures).

Belgium: ¹ The regulated off-exchange market in linear bonds, strips and treasury certificates was discontinued on 1 April 2012, by the same Royal Decree of 19 March 2012. ² NYSE Euronext.

Brazil: ¹ Regular operating time, which is changed to 10:00-18:00 during the daylight saving time. ² BmfBovespa. ³ General operating time. There are specific operating times for specific markets and products.

Canada: ¹ TMX Group. ² CDS. ³ Market hours vary for individual product classes. ⁴ CDCC. ⁵ NGX. ⁶ IntercontinentalExchange. ⁷ Operating time is from 20:00 to 14:15 of the following day. ⁸ ICE. ⁹ CSE. ¹⁰ CDS. ¹¹ CIBC World Markets Inc., RBC Dominion Securities Inc., National Bank Financial Inc., TD Securities Inc., Scotia Capital Inc., Canaccord Financial Inc., Desjardins Securities Inc. and the Canada Pension Plan Investment Board. ¹² Trading hours are from 09:30-17:00 EST.

China: ¹ 9:15-9:25 for call auction. ² 15:00-15:30 for block trading. ³ SD&C.

France: ¹ Euronext has a credit institution's status. ² LCH.Clearnet SA.

Germany: ¹ Deutsche Börse AG. ² Eurex Clearing AG. ³ Deutsche Börse AG (50%) and SIX Swiss Exchange (50%). ⁴ Depending on instruments

Hong Kong SAR: ¹ Hong Kong Exchanges and Clearing Limited (HKEX). ² Equities include ordinary shares, preference shares, registered warrants, provisional allotment letters representing nil paid rights, depositary receipts; structured products include derivative warrants, equity linked instruments, callable bull/bear contracts; bonds include Exchange Fund notes, Hong Kong SAR retail bonds and Hong Kong SAR Link Retail Bonds; unit trust funds includes Exchange Traded Funds, REITs. ³ Before 09:30, auction session; after 09:30, continuous trading session. ⁴ For iShares only. ⁵ Closing auction session.

India: ¹ BOISL and ICCL. ICCL took over these operations from BOISL in March 2012. ² NSCCL. ³ MCX-SXCCL.

Italy: ¹ An afterhours session is scheduled for some markets. ² Cassa di Compensazione e Garanzia.

Japan: ¹ Japan Exchange Group. ² JSCC. ³ TFX.

Korea: ¹ For securities. ² For derivatives. ³ KRX.

Mexico: ¹ CCV. ² Asigna.

Netherlands: 1 NYSE Euronext.

Singapore: ¹ SGX has a pre-opening routine where orders entered from 08:30 to 08:59 are matched between 08:59 to 09:00 before trading commences at 09:00. Similarly there is another closing routine where all orders entered between 17:00 and 17:05 are matched between 17:05 and 17:06 and the prices established in the closing routine will be the closing price for the day.

Sweden: ¹ OMX AB. ² OMX Derivatives Markets, which is a secondary legal name for the OMX Nordic Exchange Stockholm AB.

Switzerland: ¹ The Swiss National Bank owns an immaterial number of shares of SIX Group. ² SIS x-clear AG.

Footnotes for Tables TRS1 (cont)

Turkey: ¹ For equities only. ² For bonds, government securities only. No trading between 12:00-13:00. ³ Turkish Derivatives Exchange merged with Borsa Istanbul in April 2013 and ceased operating in August 2013.

United States: ¹ Local times are Eastern time. ² NSCC.

Table TRS2
Trades executed on selected exchanges and trading systems: number of transactions (total for the year)

System	Nu	Number of transactions (millions)					se in the		of transac	tions
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia										
ASX	313.30	331.92	306.97	314.31	358.85	10.2	5.9	-7.5	2.4	14.2
ASX 24	103.78	123.05	119.51	129.44	142.42	-0.7	18.6	-2.9	8.3	10.0
Belgium										
Regulated off-exchange	nap	nap	nap	nap	nap	nav	nav	nav	nav	nav
Euronext Brussels	1,438.48	1,435.38	1,075.9	919.6	972.4	-0.2	-0.2	-25.0	-14.5	5.7
Brazil										
BmfBovespa-Equities	193.09	220.60	228.13	244.85	261.86	35.6	14.2	3.4	7.3	6.9
BmfBovespa-Derivatives	24.53	31.75	44.33	72.37	118.81	24.7	29.4	39.6	63.3	64.2
Canada										
TSX	186.09	174.38	203.48	217.70	236.62	-16.7	-6.3	16.7	7.0	8.7
Montréal Exchange	64.36	66.27	69.99	76.67	91.92	4.2	3.0	5.6	9.6	19.9
NGX	0.36	0.34	0.34	0.33	0.37	-5.9	-6.0	-0.3	-2.5	11.1
ICE	5.04	5.69	5.68	5.75	6.43	6.0	12.9	-0.2	1.2	11.9
CSE	0.06	0.05	0.21	0.19	0.75	23.2	-13.7	332.5	-8.8	294.5
Alpha	64.35	55.28	61.35	44.04	19.13	-12.8	-14.1	11.0	-28.2	-56.6
China										
Shanghai Stock Exchange	980.1	1,254.2	1,742.7	5,288.8	2,537.2	-25.2	28.0	39.0	203.5	-52.0
Shenzhen Stock Exchange	982.6	1,387.2	1,851.7	4,907.8	3,814.7	-6.2	41.2	33.5	165.0	-22.3
France										
Euronext Paris	121.04	109.38	121.09	147.11	142.01	-17.6	-9.6	10.7	21.5	-3.5
Germany										
Xetra	109.03	109.08	115.41	143.31	144.36	-19.2	0.0	5.8	24.2	0.7
Xetra Frankfurt Specialist	4.34	4.18	3.95	4.56	3.00					
(since 2011; before: Frankfurt										
Floor)						-69.3	-3.6	-5.6	15.5	-34.2
Eurex	1,504.0	1,050.1	1,470.1	1,140.5	1,174.5	-26.1	-30.2	40.0	-22.4	3.0
Hong Kong SAR										
Hong Kong Stock Exchange	191.61	229.47	262.45	355.76	264.85	-11.6	19.8	14.4	35.6	-25.6
India										
NDS	0.66	0.82	1.09	1.02	1.51	59.7	24.3	32.8	-6.3	48.2
BSE: BOLT	586.0	665.2	733.9	432.9	406.2	37.3	13.5	10.3	-41.0	-6.2
NSE: NEAT		3,389.3			4,103.0	-4.6	-1.8	23.1	11.5	-11.8
USE	nav	nav	0.06	0.00	0.00	-99.8	-14.7	-89.4	-100.0	nav
MCX-SX	597.6	405.7	6.8	3.6	1.8	-22.4	-32.1	-98.3	-46.3	-49.3
Italy										
Borsa Italiana	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
MTS	0.11	0.18	0.28	0.21	0.22	-27.5	64.8	54.5	-23.3	2.4
PCT	0.82	0.90	0.93	1.02	1.02	10.4	10.4	3.3	9.2	-0.5
Japan										
TSE	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
OSE	nav	nav	nap	nap	nap	nav	nav	nav	nav	nav
TFX	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav

Table TRS2 (cont)

System	Nui	mber of tr	ansactio	ns (million	s)			number o		tions
	2012	2013	2014	2015	2016	2012	% Criarige 2013	on previo	2015	2016
Korea										
KRX	1,828.7	816.7	675.0	787.7	690.1	-53.4	-55.3	-17.4	16.7	-12.4
Mexico										
BMV	19.68	34.56	38.74	48.95	72.81	75.9	75.6	12.1	26.3	48.7
Mexder	42.6	27.4	29.9	17.0	19.5	-8.8	-35.8	9.3	-43.0	14.5
Netherlands										
Euronext Amsterdam	44.7	46.2	47.8	62.7	62.1	-14.4	3.4	3.5	31.2	-0.9
Russia										
MICEX SE	103.51	85.89	106.07	109.32	107.58	-22.8	-17.0	23.5	3.1	-1.6
Moscow Exchange	189.89	146.79	183.29	321.87	349.19	nap	-22.7	24.9	75.6	8.5
Saudi Arabia						•				
Tadawul	42,107	28,969	35,762	30,448	27,275	64.8	-31.2	23.5	-14.9	-10.4
Singapore										
SGX	22.01	28.64	22.17	52.11	51.97	5.6	30.1	-22.6	135.1	-0.3
South Africa										
JSE	29.74	42.40	50.18	66.26	75.64	1.0	42.6	18.4	32.0	14.2
Sweden										
NASDAQ OMX Stockholm	60.90	56.40	62.56	83.29	90.52	-14.9	-7.4	10.9	33.1	8.7
Switzerland										
SIX Swiss Exchange	30.66	33.63	38.03	50.68	46.92	-20.7	9.7	13.1	33.3	-7.4
Turkey										
Borsa İstanbul	80.08	87.22	91.60	106.82	120.18	-22.4	8.9	5.0	16.6	12.5
Turkish Derivatives Exchange	62.47	nap	nap	nap	nap	-15.9	nav	nav	nav	nav
United Kingdom										
London Stock Exchange	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Virt-x	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
United States										
New York Stock Exchange	1,386.2	1,202.1	1,553.0	1,765.7	1,866.9	-30.9	-13.3	29.2	13.7	5.7
Nasdaq	1,933.1	1,893.9	2,412.4	2,512.8	2,590.9	-14.1	-2.0	27.4	4.2	3.1
American Stock Exchange	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav

Table TRS3
Trades executed on selected exchanges and trading systems: value of transactions (total for the year)

System	Valu	e of trans	sactions	(USD billic	ns)¹	Δ	verage va	_		n
	2012	2013	2014	2015	2016	2012	2013	D thousan 2014	2015	2016
Australia	2012	2010	2017	2010	2010	2012	2010	2017	2010	2010
ASX	1,067.8	1,029.1	920.2	889.2	902.7	3.41	3.10	3.00	2.83	2.52
ASX 24	nap	nap	nap				nap		290.2	266.9
Belgium	·	•		,	,	•		•		
Regulated off-exchange	nap	nap	nap	nap	nap	nav	nav	nav	nav	nav
Euronext Brussels	113	124.5	129.8		140.0		0.09	0.12	0.17	0.14
Brazil										
BmfBovespa-Equities	1,329.8	1,339.8	1,087.3	724.0	758.0	6.89	6.07	4.77	2.96	2.89
BmfBovespa-Derivatives	24,762.5	25,233.6	20,061.9	17,952.4	16,797.7	1,009.3	794.7	452.6	248.1	141.4
Canada										
TSX	1,216.6	1,127.2	1,155.1	1,029.4	1,064.7	6.54	6.46	5.68	4.73	4.50
Montréal Exchange		24,533.7	-		nav		370.2		256.5	nav
NGX	16.83	28.19	30.90		8.18		82.7		35.2	
ICE	57.39	57.89	44.44		46.38		10.18		7.19	7.21
CSE	0.18	0.12			1.21		2.42			
Alpha	336.51	221.17	205.71	129.37	104.69		4.00		2.94	
China										
Shanghai Stock Exchange	8.673.1	13.969.0	20.861.1	42,769.6	42.739.0	8.85	11.14	11.97	8.09	16.84
Shenzhen Stock Exchange				21,853.7	•		3.45		4.45	3.69
France	,	,	,	,	,					
Euronext Paris	1,192.6	1,192.3	1,420.7	1,530.4	1,272.7	9.85	10.90	11.73	10.40	8.96
Germany	,	,	,	,	,					
Xetra	1,486.8	1,535.8	1,702.3	1,814.7	1,521.3	13.64	14.08	14.75	12.66	10.54
Xetra Frankfurt Specialist	186.0	138.2	146.1	146.5	147.5		33.05		32.14	
(since 2011; before: Frankfurt										
Floor)										
Eurex	270 085	121,726	122 726	42,659	37,437	186.16	115.91	83.48	37.40	31.87
Hong Kong SAR	219,903	121,720	122,720	42,039	37,437	100.10	113.31	05.40	37.40	31.07
Hong Kong Stock Exchange	1,714.7	1,968.0	2 212 /	3,365.5	2,112.3	8.95	8.58	8.43	9.46	7.98
India	1,7 14.7	1,300.0	2,212.4	5,505.5	2,112.5	0.33	0.50	0.43	3.40	1.30
NDS	1,233.7	1,524.3	4,242.9	4,206.6	6,016.5	1,873.1	1 862 2	3,902.1	4,129.0	3,983.7
BSE: BOLT				1,261.9		· '				1.58
NSE: NEAT	7,386.9			11,552.8						3.79
USE	nav	nav					nav			nav
MCX-SX	619.0	440.9	108.2						14.94	
Italy	013.0	440.5	100.2	J4.2	77.7	1.04	1.00	10.01	14.54	24.04
Borsa Italiana	nov	nav	nov	nav	nav	nav	nov	nav	nav	nov
MTS	nav	nav 1 200 4					nav 6 743 7		nav 6 438 5	nav 7,092.5
PCT					•					25,481.5
Japan	22,385.4	23,104.3	30,031.2	20,001.7	20,003.7	21,308.1	JZ,ZU1.4	JZ, 103.3	20,000. I	20,401.0
TSE	1 115 0	7 5/2 0	6 /65 0	6,756.3	7 055 1	nav	nav	nav	nav	nav
OSE				21,943.6			nav nav		nav nav	nav
TFX				1,652.0			nav		nav	nav nav
¹ Converted at yearly average excha	•	5, 107.3	۷,٥٥٥.4	1,002.0	۷,500.0	IIIav	IIaV	IIdV	IIdV	IIaV

Table TRS3 (cont)

System	Valu	e of trans	sactions (USD billio	ns) ¹	A۱	verage va	lue per tr	ansactior	1
			`		,		(USE) thousand	ds) ¹	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Korea										
Korea Exchange(KRX)	11,228.5	10,331.3	8,305.3	8,671.4	8,474.9	6.14	12.65	12.30	11.01	12.28
Mexico										
BMV	202.70	227.93	184.75	148.01	139.05	10.30	6.59	4.77	3.02	1.91
Mexder	370.1	264.6	296.9	163.8	166.5	8.68	9.67	9.93	9.61	8.53
Netherlands										
Euronext Amsterdam	467.6	529.4	612.1	649.8	568.0	10.47	11.47	12.81	10.37	9.14
Russia										
MICEX SE	5,915.0	7,190.7	5,374.7	3,322.5	4,785.4	57.14	83.72	50.67	30.39	44.48
Moscow Exchange	1,819.7	4,629.8	5,585.8	4,965.6	5,053.8	9.58	31.54	30.48	15.43	14.47
Saudi Arabia										
Tadawul	514.6	365.3	572.5	443.4	308.8	0.01	0.01	0.02	0.01	0.01
Singapore										
SGX	257.3	283.6	209.8	203.6	196.9	11.69	9.90	9.46	3.91	3.79
South Africa										
JSE	3,791.3	3,124.4	2,702.6	2,756.8	2,817.8	127.5	73.7	53.9	41.6	37.3
Sweden										
NASDAQ OMX Stockholm	961.3	1,088.3	1,181.9	1,250.6	1,149.4	15.8	19.3	18.9	15.0	12.7
Switzerland										
SIX Swiss Exchange	916.9	1,050.5	1,224.8	1,397.5	1,281.8	29.91	31.24	32.21	27.58	27.32
Turkey										
Borsa İstanbul	547.2	861.6	744.5	680.6	653.7	6.83	9.88	8.13	6.37	5.44
Turkish Derivatives Exchange	225.28	nap	nap	nap	nap	3.61	nap	nap	nap	nap
United Kingdom										
London Stock Exchange	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Virt-x	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
United States										
New York Stock Exchange	13,505.0	13,776.0	15,938.9	17,536.2	17,375.2	9.74	11.46	10.26	9.93	9.31
Nasdaq	13,655.0	14,489.4	17,779.0	18,941.0	18,092.3	7.06	7.65	7.37	7.54	6.98
American Stock Exchange	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav

Table TRS3 (cont)

System			eal value dious year,			Value o	of transac G	tions as a	-	age of
	(70 orians		inflation)	aajaotoa	by Ci i		J	(1170)		
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia										
ASX	-23.1	1.6	-6.1	14.4	0.4	68.2	68.7	63.8	72.9	71.7
ASX 24	nap	nap	nap	nap	0.1	nap	nap	nap	3,079.8	3,021.0
Belgium										
Regulated off-exchange	nav	nav	nav	nav	nav	nap	nap	nap	nap	nap
Euronext Brussels	-4.9	5.0	3.8	39.3	-9.4	22.8	23.9	24.4	33.4	30.0
Brazil										
BmfBovespa-Equities	3.7	5.1	-16.9	-14.7	2.8	54.0	54.3	44.3	40.3	42.1
BmfBovespa-Derivatives	-1.3	6.3	-18.6	14.6	-8.2	1,005.5	1,022.5	817.4	998.9	933.7
Canada										
TSX	-21.3	-5.4	7.8	2.0	5.6	66.1	60.2	63.8	66.1	68.1
Montréal Exchange	-1.9	9.1	6.4	-9.3	nav	1,247.3	1,310.3	1,370.1	1,262.3	nav
NGX	-50.0	70.9	15.3	-56.7	-28.5	0.9	1.5	1.7	0.7	0.5
ICE	8.1	3.0	-19.2	6.5	14.6	3.1	3.1	2.5	2.7	3.0
CSE	-1.1	-34.6	307.6	-29.5	344.7	0.0	0.0	0.0	0.0	0.1
Alpha	-18.7	-32.9	-2.1	-28.0	-17.3	18.3	11.8	11.4	8.3	6.7
China										
Shanghai Stock Exchange	17.4	54.0	45.2	105.8	5.5	105.4	152.1	201.3	393.6	381.5
Shenzhen Stock Exchange	-9.9	61.9	47.0	203.0	-32.0	34.4	52.2	69.9	201.1	125.6
France										
Euronext Paris	-29.1	-4.3	18.5	28.7	-16.9	44.5	42.4	49.8	62.9	51.7
Germany										
Xetra	-24.0	-1.7	10.1	27.4	-16.3	42.0	40.9	43.8	53.8	43.7
Xetra Frankfurt Specialist										
(since 2011; before: Frankfurt										
Floor)	-62.2	-29.3	5.0	19.7	0.5	5.3	3.7	3.8	4.3	4.2
Eurex	99.0	-58.6	0.1	-58.5	-12.4	7,905.9	3,244.2	3,155.3	1,264.1	1,076.3
Hong Kong SAR	00.0	00.0	0	00.0		,,000.0	0,2 : ::2	0,100.0	.,20	1,010.0
Hong Kong Stock Exchange	-25.9	10.0	7.6	47.7	-38.6	653.0	713.9	759.1	1,087.8	658.2
India					00.0	000.0			.,	000.2
NDS	68.7	24.4	165.0	-6.1	41.0	66.32	79.30	207.33	198.72	266.33
BSE: BOLT	-26.6	-12.7	49.9	-21.9	26.9	5.51	4.63	6.85	5.45	6.57
NSE: NEAT	-9.2	4.8	28.7	5.4	32.8	397.09	399.75	507.53	545.75	688.84
USE	-92.1	109.4	-84.2	nav	nav	nav	nav	0.42	0.00	0.00
MCX-SX	-20.8	-28.6	-76.5	-52.6	-18.6	33.27	22.94	5.29	2.56	1.98
Italy	20.0	20.0	. 0.0	02.0	10.0	00.2.		0.20	2.00	
Borsa Italiana	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
MTS	-36.7	57.2	64.1	-17.7	13.1	35.2	56.3	91.7	74.5	82.8
PCT	-6.0	23.3	2.8	5.8	-2.5		1,369.0	1,396.1	1,458.1	1,397.8
Japan	0.0	20.0	2.0	5.0	2.0	1,000.0	1,000.0	1,000.1	1,400.1	1,007.0
TSE	-10.7	121.9	-9.6	18.6	-6.2	66.8	146.3	133.2	154.3	142.7
OSE	21.6	36.4	-9.6 -4.6	15.6	-13.6	343.3	462.4	443.8	501.2	427.0
TFX	-34.1	5.9	-4.8 -47.8	-26.7	25.4		100.2	52.7	37.7	46.7

Table TRS3 (cont)

System		ge on prev	eal value vious year, inflation)			Value of transactions as a percentage of GDP (in %)				age of
	2012	2013	2014 [´]	2015	2016	2012	2013	2014	2015	2016
Korea										
Korea Exchange(KRX)	-22.5	-11.7	-23.7	11.4	-0.8	919	791	589	627	601
Mexico										
BMV	22.0	5.0	-18.8	-7.0	7.5	17.1	18.1	14.2	12.9	13.3
Mexder	-10.7	-33.2	12.4	-36.0	16.4	31.2	21.0	22.9	14.3	15.9
Netherlands										
Euronext Amsterdam	-23.9	6.8	15.4	26.7	-12.5	56.4	61.1	69.6	85.7	73.1
Russia										
MICEX SE	85.9	16.9	-19.9	-12.5	50.7	274.6	322.2	257.7	242.1	372.0
Moscow Exchange	nap	144.7	29.2	25.8	6.5	84.5	207.5	267.8	361.9	392.9
Saudi Arabia										
Tadawul	70.4	-31.4	52.6	-24.2	-32.7	69.9	48.9	75.7	68.0	48.3
Singapore										
SGX	-17.6	7.8	-25.8	5.9	-2.4	89.7	93.8	68.5	69.6	66.3
South Africa										
JSE	2.0	-8.1	-7.7	13.9	10.5	956.6	851.8	769.7	868.0	955.3
Sweden										
NASDAQ OMX Stockholm	-16.4	8.9	14.6	30.1	-7.6	176.8	188.1	206.0	251.2	223.4
Switzerland										
SIX Swiss Exchange	-21.9	13.4	15.1	21.4	-5.7	137.4	152.6	172.6	205.8	191.6
Turkey										
Borsa İstanbul	-21.3	55.4	-8.1	4.5	-1.7	62.5	90.5	79.7	79.2	76.2
Turkish Derivatives Exchange	-13.5	nav	nav	nav	nav	25.73	nap	nap	nap	nap
United Kingdom										
London Stock Exchange	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Virt-x	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
United States										
New York Stock Exchange	-26.8	0.8	14.0	10.2	-1.9	83.6	82.5	91.5	96.8	93.3
Nasdaq	-6.3	4.8	20.9	6.7	-5.4	84.5	86.8	102.0	104.5	97.1
American Stock Exchange	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
¹ Converted at yearly average exchange	nge rates.									

Table TRS4
Participation in selected exchanges and trading systems (end of year)

System		Total nu	mber of participan	ts	
	2012	2013	2014	2015	2016
Australia					
ASX	81	72	72	71	67
ASX 24	nav	nav	nav	nav	nav
Belgium					
Regulated off-exchange	nap	nap	nap	nap	nap
Euronext Brussels	191	177	156	140	205
Brazil					
BmfBovespa-Equities	83	76	72	98	88
BmfBovespa-Derivatives	66	60	58	86	72
Canada					
TSX	118	111	103	88	84
Montréal Exchange	87	91	87	86	75
NGX	248	259	264	269	286
ICE	nav	nav	nav	nav	nav
CSE	88	87	84	73	71
Alpha	80	77	74	69	67
China	00	• • •	, ,	00	O1
Shanghai Stock Exchange	228	240	258	262	272
Shenzhen Stock Exchange	119	119	120	122	129
France	119	119	120	122	129
Euronext Paris	191	177	156	140	146
	191	177	150	140	140
Germany Xetra	214	202	400	470	105
	214	202	186	179	195
Xetra Frankfurt Specialist					
(since 2011; before: Frankfurt					
Floor)	182	173	162	155	148
Eurex	576	589	597	609	608
Hong Kong SAR					
Hong Kong Stock Exchange	550	543	540	550	592
India					
NDS	184	191	203	260	191
BSE: BOLT	1,386	1,376	1,413	1,435	1,440
NSE: NEAT	1,422	1,472	1,428	1,430	1,429
USE	385	361	313	nav	nav
MCX-SX	939	959	930	909	830
Italy					
Borsa Italiana	128	128	123	nav	nav
MTS	87	79	77	72	73
PCT	114	118	117	110	114
Japan					
TSE	127	126	95	95	93
OSE	99	79	111	110	108
TFX	68	51	49	51	51
11 /\	00	JI	1 3	JI	31

Table TRS4 (cont)

System		Total nu	mber of participan	ts	
	2012	2013	2014	2015	2016
Korea					
Korea Exchange(KRX)	94	93	92	97	92
Mexico					
BMV	34	31	30	31	31
Mexder	48	45	68	48	48
Netherlands					
Euronext Amsterdam	nav	nav	nav	nav	nav
Russia					
MICEX SE	634	559	512	466	nap
Moscow Exchange	755	733	669	686	660
Saudi Arabia					
Tadawul	62	53	53	53	54
Singapore					
SGX	4,148	3,975	4,421	4,199	3,955
South Africa					
JSE	nav	nav	nav	nav	nav
Sweden					
NASDAQ OMX Stockholm	173	192	192	186	171
Switzerland					
SIX Swiss Exchange	119	108	107	105	108
Turkey					
Borsa İstanbul	140	213	214	211	209
Turkish Derivatives Exchange	101	nap	nap	nap	nap
United Kingdom					
London Stock Exchange	nav	nav	nav	nav	nav
Virt-x	nav	nav	nav	nav	nav
United States					
New York Stock Exchange	nav	nav	nav	nav	nav
Nasdaq	nav	nav	nav	nav	nav
American Stock Exchange	nav	nav	nav	nav	nav

Table TRS5 Securities listed in selected exchanges and trading systems (end of year)

System	ı	Number c	of securiti	es listed		Mark	et capital	isation (JSD billior	ns) 1
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia										
ASX	2,188	2,195	2,208	2,238	2,215	1,387	1,366	1,292	1,190	1,274
ASX 24	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
Belgium						-			-	-
Regulated off-exchange	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
Euronext Brussels	1,615	3,500	5,231	8,165	6,894	300	375	380	413	378
Brazil										
BmfBovespa-Equities	1,163	1,157	1,205	1,224	1,262	1,231	1,028	842	488	757
BmfBovespa-Derivatives	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
Canada										
TSX	4,254	4,156	4,016	3,776	3,577	2,060	2,112	2,090	1,595	1,995
Montréal Exchange	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
NGX	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
ICE	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
CSE	189	209	266	316	313	1.1	1.4	2.0	1.6	2.4
Alpha	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
China										
Shanghai Stock Exchange	2,098	2,786	3,758	5,914	9,647	2,525	2,479	4,004	4,584	4,158
Shenzhen Stock Exchange	2,190	2,328	2,523	3,440	4,481	1,140	1,442	2,101	3,636	3,216
France										
Euronext Paris	17,351	22,162	30,587	33,806	35,320	1,810	2,303	2,093	2,081	2,160
Germany										
Xetra	7,250	5,411	5,318	5,037	4,715	1,723	2,358	2,044	1,940	1,719
Xetra Frankfurt Specialist										
(since 2011; before: Frankfurt										
Floor) ²	1,175.3	1,330.3	1,412.6	1,614.7	1,618.3	nap	nap	nap	nap	nap
Eurex	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
Hong Kong SAR										
Hong Kong Stock Exchange	6,903	8,522	9,060	9,015	8,591	2,832	3,101	3,232	3,185	3,193
India										
NDS	1,840	1,970	2,160	2,410	2,929	nav	nav	nav	nav	nav
BSE: BOLT	10,940	13,500	15,030	16,340	17,346	1,166	1,198	1,603	1,429	1,789
NSE: NEAT	2,780	4,600	5,650	6,320	6,486	1,139	1,176	1,568	1,404	1,763
USE	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
MCX-SX	nav	10	80	160	242	1,131	1,170	1,552	1,384	1,741
Italy										
Borsa Italiana	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
MTS	113	113	113	113	113	nap	nap	nap	nap	nap
PCT	1,021	892	993	956	716	nap	nap	nap	nap	nap
Japan										
TSE	2,618	3,732	3,787	3,846	3,891	3,493	4,550	4,388	4,899	4,951
OSE	1,924	nap	nap	nap	nap	2,057	nap	nap	nap	nap
TFX	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap

¹Converted at end of year exchange rates. **Germany**: ² For number of securities listed, thousands.

Table TRS5 (cont)

System	I	Number o	f securiti	es listed		Mark	et capital	isation (JSD billior	າຣ) ¹
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Korea										
Korea Exchange(KRX)	12,187	13,232	13,885	14,513	14,936	1,180	1,238	1,216	1,236	1,253
Mexico										
BMV	898	969	958	1,018	951	524	527	481	404	352
Mexder	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
Netherlands										
Euronext Amsterdam	10,387	11,359	13,454	16,869	17,575	651	819	789	726	856
Russia										
MICEX SE	1,755	1,882	1,749	1,855	1,867	812	774	412	395	624
Saudi Arabia										
Tadawul	169	173	179	180	184	373	467	483	421	449
Singapore										
SGX	2,496	2,775	3,053	3,051	3,034	765	743	755	640	640
South Africa										
JSE	2,324	2,420	2,486	2,547	2,482	987	1,012	994	753	993
Sweden										
NASDAQ OMX Stockholm	6,227	8,822	8,456	11,407	13,055	602	751	688	684	678
Switzerland										
SIX Swiss Exchange	35,186	37,373	34,941	35,081	32,188	1,203	1,478	1,623	1,563	1,451
Turkey										
Borsa İstanbul	1,142	2,090	2,481	2,620	3,759	310	237	271	191	174
Turkish Derivatives Exchange	15	nap	nap	nap	nap	nap	nap	nap	nap	nap
United Kingdom										
London Stock Exchange	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Virt-x	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
United States										
New York Stock Exchange	nav	nav	nav	nav	nav	14,086	17,950	19,351	17,787	19,573
Nasdaq	2,735	2,804	3,007	3,130	3,212	4,582	6,085	6,979	7,281	7,779
American Stock Exchange	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
¹ Converted at end of year exchange	rates.									

Table CCP1
Features of selected central counterparties and clearing houses (at end-2016)

System	CCP or clearing house	Owner/ manager	Relationship with exchange	Relationship with CSD	Intraday margining
Australia					
ASX Clear	CCP	SE ¹	int ²	int ³	event: P
ASX Clear (Futures)	CCP	SE ¹	int ⁴	nap	routine; event: P
Belgium Brazil			nap		
BmfBovespa-Equities	CCP	SE	int ¹	int ¹	routine
BmfBovespa-Derivatives	ССР	SE	int ¹	nap	routine; event: P, S
BmfBovespa-Securities	CCP	SE	int ¹	indep ²	event: P
CETIP	СН	0	nap	int ³	nap
Canada			,		·
CDCC	CCP	SE ¹	par ¹	indep	routine
NGX	CCP	SE ²	int ³	nap	event: P
ICE	CCP	SE ⁴	par ⁴	nap	event: P
China		SE	μαι	παρ	OVOIII. I
SD&C	ССР	CE ¹ O	:2	int ³	nap
	COF	SE ¹ , O	indep ²	int	Παρ
France LCH.Clearnet SA	000 011	В	2	3	event: D
	CCP, CH ¹	D	indep ²	indep ³	event: P
Germany Eurex Clearing AG	ССР	SE ¹	par ²	int ^{3, 4} ; indep ^{5, 6, 7, 8,} 9, 10, 11, 12	routine; event: P, S
Hong Kong SAR					
HKSCC India	CCP, CH	SE ¹	int	int	routine
CCIL	CCP	B, O	nap	indep ¹	event: P
NSCCL	CCP	SE ²	par ²	int ³	routine; event: P,S
BOISL ⁴	CCP	SE ⁵ , B	int ⁶	int ⁷	routine; event: P,S
				int ⁷	
ICCL	CCP	SE ⁵ , B	par ⁵		routine; event: P,S
MCX-SXCCL Italy	CCP	SE ⁸	par ⁸	indep	routine; event: P,S
CCG	CCP	CCP ¹	par ²	indep ³	routine
Japan Japan Securities Clearing Corporation (JSCC)	ССР	B, SE ^{1, 2} , O	par ³	indep	event: P
JASDEC DVP Clearing Corporation (JDCC)	ССР	O^4	nap	par ⁴	event: P ⁵
TFX Korea	ССР	В, О	int ⁶	nap	event: P
Korea Exchange (KRX)	CCP, CH	0	int ¹	indep	nap
Korea Securities Depository (KSD) ²	CCP, CH	SE, O, B	indep	int ³	nap
Mexico					
CCV	CCP	SE	par ¹	int ²	routine
Asigna	CCP	SE, O	int ³	int ²	routine
Netherlands					
EuroCCP N.V.	ССР	B, SE	par ¹	indep	routine; event: P, S
Russia					
NSD	CH	SE ¹ , B, O	par	int ²	regular
NCC	CCP	SE^3	par	int ²	regular
Saudi Arabia					
Saudi Arabia clearing house	CH	O^1	int ²	int ²	nap
Singapore					
CDP	CCP, CH	CH	int	int	nap
South Africa			nap		
Sweden					
SE Nasdaq OMXDM ¹	CCP	0	int	indep	nav
For the footnotes regarding the syst	tems, see after this tab	ole.			

Table CCP1 (cont)

System	CCP or clearing	Owner/ manager	Relationship with	Relationship with	Intraday
	house		exchange	CSD	margining
Switzerland					
SIX x-clear	CCP	В	int ¹ ; indep ²	int ³ ; indep ^{4, 5, 6, 7}	routine; event: P, S
Turkey					,
Takasbank	CH ¹ , CCP ¹	SE^2 , B^3 , O^3	par ²	indep ⁴	event: P ⁵
United Kingdom			·	·	
LCH.Clearnet Ltd	CCP	SE, O ¹	par ¹ , indep ²	indep	routine
ICE Clear Europe	CCP	O^3	int	indep ⁴	routine
LME Clear Limited	CCP	0	indep	indep	event-driven; P
CME Clearing Europe Limited	CCP	0	indep	indep	event-driven; P
United States					
National Securities Clearing	CCP	B, O	indep	int ¹	event
Corporation (NSCC)					
Fixed Income Clearing	CCP	B, O	indep	indep ²	routine; event
Corporation: Government				·	
Securities Division					
(FICC/GSD)					
Fixed Income Clearing	CCP	B, O	indep	indep ²	event
Corporation: Mortgage-Backed					
Securities Division					
(FICC/MBSD)					
For the footnotes regarding the syste	ms, see after this tab	ole.			

Table CCP1 (cont)

System	Products cleared	Currencies	Securities	Cash settlement	Links to other
			settlement agent	agent	CCPs
Australia					
ASX Clear	SEC, DER	AUD	CSD^3	СВ	no link
ASX Clear (Futures)	DER	AUD, NZD	CSD⁵	СВ	no link
Belgium			nap		
Brazil					
BmfBovespa-Equities	SEC, DER	BRL	CSD ¹	СВ	nap
BmfBovespa-Derivatives	DER	BRL	nap	СВ	nap
BmfBovespa-Securities	SEC, REP	BRL	CSD^2	СВ	nap
CETIP	SEC, DER	BRL	CSD^3	СВ	nap
Canada					•
CDCC	DER	CAD	nap	В	no link
NGX	DER	CAD, USD	nap	В	no link
ICE	DER	CAD	nap	В	no link
China			·		
SD&C	SEC, DER, REP	RMB, USD, HKD	CSD^3	В	nav
France					
LCH.Clearnet SA	SEC, DER, REP	EUR	2	BdF, DNB, NBB	cross: EUR: 14

Table CCP1 (cont)

System	Products cleared	Currencies	Securities settlement agent	Cash settlement agent	Links to other CCPs
Germany				agont	<u> </u>
Eurex Clearing AG	SEC, DER, REP	EUR, CHF, GBP,	CSD ³ : SEC, REP:	DER: EUR: CB;	nap
		USD	EUR;	DER: CHF: CB;	
			CSD ⁵ : SEC: CHF;	DER: GBP: B;	
			CSD ⁷ :SEC:EUR;	DER: USD: B;	
				SEC: EUR: CB;	
			ICSD ⁴ : SEC, REP:	REP: EUR: CB;	
			EUR, USD;	REP: CHF: CB;	
			ICSD ⁶ : REP: EUR,	SEC: DKK: CB;	
			USD; ICSD ⁷ : SEC:	SEC: NOK: CB;	
			EUR; ICSD ⁸ : SEC:	SEC: SEK: CB	
			EUR; ICSD9: SEC:		
			EUR; ICSD ¹⁰ :		
			SEC: EUR;		
			ICSD ¹¹ : SEC:		
			DKK; ICSD ¹² :		
			SEC: NOK; ICSD ⁷ :		
			SEC: SEK		
Hong Kong SAR					
HKSCC	SEC, DER ²	HKD, USD, CNY	HKSCC ³	В	2
India		, ,			
CCIL	SEC, DER, REP ⁹	INR	СВ	СВ	nap
NSCCL	SEC, DER, REP	INR	CSD ^{3, 7}	В	nav
BOISL	SEC, DER, REP	INR	CSD ^{3, 7}	В	nav
ICCL					
	SEC, DER, REP	INR	CSD ^{3, 7}	В	nav
MCX-SXCCL	SEC, DER, REP	INR	CSD ^{3, 7}	В	nav
Italy	050 050 050	=	0053	0.0	
CCG	SEC, DER, REP	EUR	CSD ³	СВ	1
Japan		IDV LICE FUE			
JSCC	OFO DED DED	JPY, USD, EUR,	cop^4 op	OD D	
1000	SEC, DER, REP	AUD	CSD ⁴ , CB	CB, B	nap
JDCC	SEC	JPY	CSD ⁴	CB	nap
TFX	DER	JPY	nap	CB, B	1
Korea Factoria (KDV)	050 050 050	L/D\M	0003	D 0D	
Korea Exchange (KRX)	SEC, DER, REP	KRW	CSD ³	B, CB	nap
Korea Securities Depository	050	IZD\A/	cop^3	D 0D	
(KSD)	SEC	KRW	CSD ³	B, CB	nap
Mexico	050	R #1\/ R I	00D ²	\mathbf{c}^4	
CCV	SEC	MXN	CSD ²	O ⁴	nap
Asigna	DER	MXN, USD	B, CSD ²	В	nap
Netherlands	050	ELID DIZIZ OLIE	000- 000	- ?	0
EuroCCP N.V.	SEC	EUR, DKK, CHF,	CSD's, CB,B	B, CB ²	2
		GBP, NOK, SEK,			
		USD, HUF, CZK,			
		JPY, PLN.			
Russia	SEC DED	DIID LICH FLID	0002		202
NSD	SEC, REP	RUR, USD, EUR,	CSD ²	O-RUR, USD,	nap
		CNY, GBP, CHF,		EUR, CNY, HKD,	
		HKD		CHF, GBP, B-	
NCC	000 000 000	חוום נוסף בנים	?	USD	
NCC		RUR, USD, EUR,	CSD ²	O^2	nap
	0	CNY, HKD, GBP,			
		KZT, BYR, UAH			

Table CCP1 (cont)

System	Products cleared	Currencies	Securities settlement agent	Cash settlement agent	Links to other CCPs
Saudi Arabia Saudi Arabia clearing house Singapore	SEC	SAR	CSD	CB, B	no link
CDP	SEC	SGD, AUD, USD, HKD	CSD ¹	В	nav
South Africa Sweden			nap		
SE Nasdaq OMXDM	DER	SEK, DKK, NOK, EUR, ISL	CSD	CB: SEK; CB: DKK; CB: EUR, NOK; O	NOK, GBP ²
Switzerland SIX x-clear	SEC, DER	AUD, CAD, CHF, CZK, DKK, EUR, GBP, HUF, JPY, NOK, SEK, USD	CSD ^{3, 4, 5, 6, 7}	CB: NOK (SEC); B: AUD, CAD, CHF, CZK, DKK, EUR, GBP, HUF, JPY, NOK (DER), SEK, USD	2 links ⁸
Turkey Takasbank	SEC, DER, REP	TRY, USD, EUR	CSD ⁴ :SEC ⁶ :TRY; CB: SEC ⁷ , REP: TRY, USD, EUR	CB: TRY; O ¹ : TRY; B: USD, EUR	nap
United Kingdom			TRT, USD, EUR	B. OSD, LON	
LCH.Clearnet Ltd	SEC, DER, REP	AUD, CAD, CHF, CZK, DKK, EUR, GBP, HKD, HUF, JPY, NOK, NZD, PLN, RMB ⁷ , SEK, SGD, USD, ZAR	CSD ⁸	CB: EUR, GBP; B: AUD, CAD, CHF, CZK, DKK, EUR, GBP, HKD, HUF, JPY, NOK, NZD, PLN, SEK, SGD, USD, ZAR	3 links ⁹
ICE Clear Europe	DER	CAD, CHF, CZK, DKK, EUR, GBP, HUF, JPY, NOK, PLN, SEK, TRY, USD	В	CB: GBP; B: CAD, CHF, CZK, DKK, EUR, GBP, HUF, JPY, NOK, PLN, SEK, TRY, USD	nap
LME Clear Limited	DER	USD, EUR, JPY, GBP	nap	В	nap
CME Clearing Europe Limited	DER	EUR, GBP, USD, AUD, CAD, CHF, DKK, JPY, NOK, SEK, MXN, HKD, NZD, SGD, CZK, HUF, PLN, ZAR	nap	СВ; В	nap
United States					
NSCC	SEC	USD	CSD1	CSD ^{1, 3}	cross
FICC/GSD FICC/MBSD For the footnotes regarding the syste	SEC, REP SEC	USD USD	В В	B, CB B, CB	cross: 2 cross

Footnotes for Table CCP1

Australia: ¹ ASX Group. ² ASX. ³ ASX Settlement. ⁴ ASX 24. ⁵ Austraclear.

Brazil: ¹ BmfBovespa. ² SELIC. ³ CETIP.

Canada: ¹ MX. ² TMX Group. ³ NGX. ⁴ ICE.

China: ¹ Shanghai Stock Exchange and Shenzhen Stock Exchange each hold 50% of SD&C's shares. ² Shanghai Stock Exchange, Shenzhen Stock Exchange. ³ SD&C.

France: ¹ LCH.Clearnet SA is located in France but serves Amsterdam, Brussels and Paris Euronext markets. ² Euronext Paris, Amsterdam, Brussels, Lisbon. ³ Euroclear France, Euroclear Netherlands, Euroclear Belgium and Euroclear Bank. ⁴ Corresponds to the link established with CC&G which is used for products traded on Italian markets.

Germany: ¹ Eurex Frankfurt AG. ² Eurex. ³ Clearstream Banking AG. ⁴ Clearstream Banking Luxembourg. ⁵ SIS SegaInterSettle. ⁶ Euroclear Bank. ⁷ Euroclear UK & Ireland, Euroclear France S.A., Euroclear Nederland, Euroclear Belgium, Euroclear Finland, Euroclear Sweden and Iberclear. ⁸ Montetitoli. ⁹ OeKB. ¹⁰ Interbolsa. ¹¹ VP Denmark. ¹² VPS Norway.

Hong Kong SAR: ¹ Hong Kong Exchanges and Clearing Limited (HKEX). ² Equities include ordinary shares, preference shares, registered warrants, provisional allotment letters representing nil paid rights, depository receipts; structured products include derivative warrants, equity linked instruments, callable bull/bear contracts; bonds include Exchange Fund notes, Hong Kong SAR retail bonds and Hong Kong SAR Link Retail Bonds; unit trust funds includes Exchange Traded Funds, REITs. ³ Hong Kong Securities Clearing Company Limited (HKSCC).

India: ¹ RBI (SSS). ² NSE. ³ NSDL. ⁴ ICCL took over these operations from BOISL in March 2012. ⁵ BSE. ⁶ BSE and Bank of India. ⁷ CSDL. ⁸ MCX-SX. ⁹ CCIL clears foreign exchange related transactions as well.

Italy: ¹ Cassa di Compensazione e Garanzia. ² Borsa Italiana. ³ Monte Titoli, Euroclear Bank.

Japan: ¹ Japan Exchange Group. ² Regional securities exchanges. ³ JSCC is jointly owned by Japan Exchange Group, its participants and regional securities exchanges in Japan. ⁴ JASDEC. ⁵ JDCC accepts participants' settlement obligations on a settlement day. ⁶ TFX.

Korea: ¹ KRX. ² KSD started clearing services for institutional investor stocks from January 2012. ³ KSD.

Mexico: ¹ BMV. ² Indeval. ³ Mexder. ⁴ CCV settles the cash leg in the CSD. CSD always holds funds at its central bank account that cover the sum of all CSD participants' (including CCV's) balances.

Netherlands: ABNAMRO Clearing, Bats Chi-X, Depository Trust and Clearing Corp, Euronext nv, OMX AB. Euroclear Bank. CZK Deutsche Bank Praag, HUF Deutsche Bank Budapest, PLN Deutsche Bank Warsaw.

Russia: ¹ Moscow Exchange - 99.997%. ² NSD. ³ Moscow Exchange - 100%.

Saudi Arabia: ¹ The Capital Market Authority (CMA). ² Tadawul.

Singapore: 1 CDP.

Sweden: ¹ OMX Derivatives Markets, which is a secondary legal name for the OMX Nordic Exchange Stockholm AB. ² The currency area description of OMX DM's links is very misleading. OMX DM has a link to the London market and specifically to LCH.Clearnet Ltd to facilitate the clearing of Nordic derivatives traded in London. The derivatives settled through the link are denominated in DKK, EUR, NOK and SEK.

Switzerland: ¹ SIX Swiss Exchange. ² All other exchanges and MTFs that are cleared by SIX x-clear Ltd. ³ SIX SIS. ⁴ Euroclear Finland. ⁵ Euroclear Sweden. ⁶ Euroclear UK. ⁷ VPS Oslo. ⁸ EuroCCP N.V., LCH. Clearnet Ltd.

Turkey: ¹ Takasbank is a CH in clearing ISE market trades. For TURKDEX transactions, Takasbank guarantees settlement limited to transaction collateral and the guarantee fund. ² ISE. ³ Takasbank is owned by 19 banks and 67 brokerage houses, none of which can exceed a 5% share. ⁴ Central Registry Agency (MKK), CSD of Turkey; 65% of its shares are owned by Takasbank. ⁵ Intraday margining is only applicable to derivatives clearing. ⁶ Equities. ⁷ G-bonds, T-bills.

United Kingdom: ¹ LCH. Clearnet Ltd is a wholly owned subsidiary of LCH. Clearnet Group Ltd LCH. Clearnet Group Ltd is majority-owned (57%) by London Stock Exchange Group plc. ² LCH. Clearnet Ltd clears for exchanges outside the London Stock Exchange Group. ³ Intercontinental Exchange Inc. ⁴ Euroclear Bank, Euroclear UK and Ireland. ⁵ Hong Kong Exchanges and Clearing Limited 100%. ⁶ CME Group Inc. 100%. ⁷ Offshore renminbi. ⁸ Euroclear UK and Ireland. ⁹ EuroCCP N.V., Oslo Clearing ASA, SIX x-Clear Ltd.

United States: ¹ DTC. ² NBES. ³ Cash settlement is completed at the central bank.

Table CCP2
Transactions cleared by selected central counterparties and clearing houses: number of transactions (total for the year)

System	N	umber of to	ransaction	ns (millions	s)		se in the			tions
							/% change	•	- ,	
-	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia										
ASX Clear (Futures)	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
ASX Clear (Futures) Brazil	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
BmfBovespa-Equities	193.09	220.60	228.13	244.85	260.47	35.6	14.2	3.4	7.3	6.4
BmfBovespa-Derivatives	712.34	703.2	637.5	701.3	794.1	6.0	-1.3	-9.3	10.0	13.2
BmfBovespa-Securities	0.000	0.000	0.000	0.000	0.000	-79.0	-77.8	-98.1	-100.0	nav
CETIP	30.47	86.05	116.94	310.38	405.72	-12.7	182.4	35.9	165.4	30.7
Canada	00.47	00.00	110.04	010.00	400.72	12.7	102.4	00.0	100.4	00.7
CDCC	146.11	152.82	160.45	179.23	230.83	16.1	4.6	5.0	11.7	28.8
NGX	0.74	0.69	0.69	0.68	0.75	-5.9	-5.6	0.1	-2.1	11.0
ICE	5.06	5.74	5.72	5.78	6.46	5.8	13.6	-0.4	1.0	11.8
China		• • • • • • • • • • • • • • • • • • • •						• • • • • • • • • • • • • • • • • • • •		
SD&C	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
France										
LCH.Clearnet SA	722.2	658.3	688.5	760.6	727.4	-18.8	-8.8	4.6	10.5	-4.4
Germany										
Eurex Clearing AG	3,514.7	3,313.5	3,171.4	3,581.5	3,689.1	-19.2	-5.7	-4.3	12.9	3.0
Hong Kong SAR										
HKSCC	14.05	16.63	18.59	21.69	17.16	-13.6	18.4	11.8	16.7	-20.9
India										
CCIL	0.77	0.94	1.21	1.14	1.64	47.8	22.1	28.5	-5.9	44.6
NSCCL	3,450.5	3,388.8	4,170.8	4,649.7	4,102.7	-4.6	-1.8	23.1	11.5	-11.8
BOISL	323.5		•		•	-18.0				
		nav	nav	nav	nav		nav	nav	nav	nav
ICCL	608.6	709.7	1,213.0	994.0	868.6	75.1	16.6	70.9	-18.1	-12.6
MCX-SXCCL	597.6	404.0	103.6	50.0	44.2	-22.4	-32.4	-74.4	-51.7	-11.6
Italy	244.4	199.2	220.4	050.4	270 5	40.0	F C	45.7	0.0	C 0
CCG	211.1	199.2	230.4	253.4	270.5	-16.0	-5.6	15.7	9.9	6.8
Japan JSCC	nav	nav	nov	nov.	nav	nov	nav	nov	201	nov
JDCC	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
JGBCC	nav	nav	nav	nav	nav	nav	nav nav	nav nav	nav nav	nav
TFX	nav nav	nap nav	nap nav	nap nav	nap nav	nav nav	nav	nav	nav	nav nav
OSE	nav	nav	nap	nap	nap	nav	nav	nav	nav	nav
Korea	nav	nav	Пар	Παρ	Παρ	nav	Hav	παν	nav	nav
Korea Exchange (KRX)	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Korea Securities	l lav	nav	nav	i i a v	nav	nav	nav	i i a v	nav	nav
Depository (KSD)	26.95	24.92	26.16	28.86	28.07	nav	-7.5	5.0	10.3	-2.7
Mexico										
CCV	20.87	35.76	40.01	50.37	73.89	69.8	71.3	11.9	25.9	46.7
Asigna	42.63	27.36	29.91	17.05	20.39	-8.8	-35.8	9.3	-43.0	19.6
Netherlands										
EuroCCP N.V.	816.4	673.4	1,274.1	1,758.8	1,960.0	-29.9	-17.5	89.2	38.0	11.4
Russia										
NCC	174.15	232.70	289.36	431.19	456.77	635.0	33.6	24.3	49.0	5.9
NSD	nav	0.09	0.12	0.11	0.12	nap	nap	42.0	-12.5	10.8
Saudi Arabia										
Saudi Arabia clearing	42.11	28.97	35.76	30.45	27.28	64.8	-31.2	23.5	-14.9	-10.4
Singapore										
CDP	242	286	224	24	22	-6	18	-22	-89	-9
South Africa			nap					nap		
Sweden										
SE Nasdaq OMXDM	104.9	98.4	92.3	107.8	97.8	-10.0	-6.2	-6.2	16.7	-9.2
Switzerland		_	_		ا ا					
SIX x-clear	183.05	241.64	315.36	399.49	429.75	80.2	32.0	30.5	26.7	7.6
Turkey	,			:					.	
Takasbank	156.08	132.67	143.62	187.84	212.44	-12.3	-15.0	8.2	30.8	13.1

Table CCP2 (cont)

System	N	Number of transactions (millions)				Increase in the number of transactions (% change on previous year)				
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
United Kingdom										
LCH.Clearnet Ltd	445.9	496.9	668.9	620.4	938.5	-1.1	11.4	34.6	-7.2	51.3
ICE Clear Europe	nav	1,328.23	1,325.23	1,136.9	1,202.0	nav	nav	-0.2	-14.2	5.7
LME Clear Limited	nav	nav	99.21	342.10	313.06	nav	nav	nav	244.8	-8.5
CME Clearing Europe	nav	nav	0.30	0.75	1.51	nav	nav	nav	150.5	100.4
United States										
NSCC	17,263.0	17,723.0	20,240.0	22,395.0	25,680.0	-17.1	2.7	14.2	10.6	14.7
FICC/GSD	34.90	36.40	37.00	40.10	40.40	-13.8	4.3	1.6	8.4	0.7
FICC/MBSD	4.20	3.80	3.70	3.90	3.80	7.7	-9.5	-2.6	5.4	-2.6

Table CCP3
Transactions cleared by selected central counterparties and clearing houses: value of transactions (total for the year)

System	Va	lue of tran	sactions (USD billion	ns) ¹	Α	verage v	alue per t	ransactio	n
	2012	2013	2014	2015	2016	2012	(US 2013	D thousan 2014	ds) ¹ 2015	2016
Australia	2012	2013	2017	2013	2010	2012	2013	2017	2013	2010
ASX Clear	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
ASX Clear (Futures)	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Brazil										
BmfBovespa-Equities	1,329.8	1,339.8	1,087.3	724.0	758.0	6.89	6.07	4.77	2.96	2.91
BmfBovespa-Derivatives	24,822.1	25,359.8	•	18,048.6	16,915.4	34.85	36.06	31.62	25.74	21.30
BmfBovespa-Securities	20.53		0.01	0.00	0.00	87,724	34,308	8,494	nav	nav
CETIP	8,981.4		9,105.0		6,656.9	294.7	109.1	77.9	26.6	16.4
Canada	0,501.4	3,331.3	5,105.0	0,201.2	0,000.0	254.1	100.1	11.5	20.0	10.4
CDCC	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
NGX	51.5	77.5	83.1	38.4	34.9	70.1	111.6	119.6	56.5	46.3
ICE	57.60	58.47	44.73	41.55	46.59	11.39	10.18	7.82	7.19	7.21
China	37.60	36.47	44.73	41.55	40.59	11.39	10.16	1.02	7.19	1.21
SD&C	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
France	05 000 0	404.000.4	407.450.0	00 040 5	00 004 5	440.00	450.00	450.00	400.00	400.00
LCH.Clearnet SA	85,893.2	104,208.4	107,450.6	96,043.5	96,281.5	118.93	158.29	156.06	126.28	132.36
Germany										
Eurex Clearing AG	247,156	274,867	288,551	272,489	261,287	70.32	82.95	90.99	76.08	70.83
Hong Kong SAR										
HKSCC	3,122.7	3,614.7	4,083.9	6,157.9	3,953.5	222.3	217.4	219.7	283.9	230.4
India										
CCIL	2,926.9	3,426.3	5,533.6	5,551.9	7,450.6	3,803.0	3,646.2	4,583.3	4,888.6	4,536.8
NSCCL	7,029.7	7,345.2	9,886.2	11,087.5	15,029.8	2.04	2.17	2.37	2.38	3.66
BOISL	31.50	nav	nav	nav	nav	0.10	nav	nav	nav	nav
ICCL	1,370.62	1,602.81	3,705.64	1,261.94	640.47	2.25	2.26	3.05	1.27	0.74
MCX-SXCCL	0.65	0.44	0.26	0.18	0.09	0.00	0.00	0.00	0.00	0.00
Italy										
CCG	33,206.4	46,205.8	46,496,9	42,856.8	43,073.9	157.32	231.97	201.78	169.15	159.23
Japan	00,20011	.0,_00.0	10, 10010	,000.0	.0,0.0.0			_0 0		.00.20
JSCC	30,548.2	23,024.9	27 233 5	29,030.4	35,170.6	nav	nav	nav	nav	nav
JDCC ¹	328.3	448.6	485.2	530.1	623.3	nav	nav	nav	nav	nav
JGBCC										
	nap	nap	nap	nap	nap	nav	nav	nav	nav	nav
TFX OSE	0.50 36.78	0.49	0.16	0.13	0.31	nav	nav	nav	nav	nav
Korea	30.76	74.45	nap	nap	nap	nav	nav	nav	nav	nav
	400.0	400.4	407.0	400.0	450.7					
Korea Exchange (KRX)	400.0	423.4	467.3	460.3	450.7	nav	nav	nav	nav	nav
Korea Securities	470.0	455.4	450.4	454.4	405.0	•	0	5.00	5.00	4.04
Depository (KSD)	172.3	155.4	156.4	151.1	135.9	6	6	5.98	5.23	4.84
Mexico	255		~ · · · -	- · · ·						~ =-
CCV	253.0	313.7	241.0		202.9	12.12	8.77	6.02	4.18	2.75
Asigna	368.7	262.6	294.9	160.5	169.2	8.65	9.60	9.86	9.41	8.30
Netherlands	1					_	_	_	_	_
EuroCCP N.V.	5,017.3	4,953.1	9,432.6	12,326.8	11,819.7	6.15	7.36	7.40	7.01	6.03
Russia										
NCC	5,964.0	11,913.5	10,960.5		9,839.1	34.25	51.20	37.88	19.22	21.54
NSD	nav	898.7	3,073.2	1,585.8	1,484.4	nap	10,323.1	24,861.5	14,655.5	12,381.1
Saudi Arabia										
Saudi Arabia clearing	514.7	365.4	572.5	443.6	308.8	12.22	12.61	16.01	14.57	11.32
Singapore										
CDP	257.3	283.6	209.8	203.6	196.9	1.06	0.99	0.94	8.44	9.00
South Africa			nap					nap		
Sweden			•					-		
SE Nasdaq OMXDM	5,944.9	5,650.2	3,933.6	3,674.6	3,014.3	56.66	57.43	42.60	34.10	30.82
Switzerland		•	,	•	,					
SIX x-clear	2,081.6	2,482.7	3,144.7	3,456.5	3,293.9	11.37	10.27	9.97	8.65	7.66
¹ Converted at yearly average ex	_				·					

¹ Converted at yearly average exchange rates.

Japan: ¹ Data refer to total transactions during the fiscal year ending March of the following year (see Japan, Table21). As a consequence, they are converted at average fiscal-year exchange rates.

Table CCP3 (cont)

System	Value o	f transaction	ons (USD	billions ex	cept as	Average value per transaction				
		noted) ¹				(USD thousands) ¹				
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Turkey										
Takasbank	4,133.9	4,067.2	3,920.9	4,207.5	4,266.4	26.49	30.66	27.30	22.40	20.08
United Kingdom										
LCH.Clearnet Ltd1	nav	nav	nav	nav	786	nav	nav	nav	nav	838
ICE Clear Europe ¹	nav	131.9	130.5	96.0	102.4	nav	99.3	98.5	84.5	85.2
LME Clear Limited ¹	nav	nav	10.3	27.5	0.0	nav	nav	104.1	80.3	0.0
CME Clearing Europe	nav	nav	0.0	0.1	0.1	nav	nav	139.2	95.5	97.7
United States										
NSCC ¹	185.7	207.2	232.2	243.3	nav	10.8	11.7	11.5	10.9	nav
FICC/GSD ¹	1,116.2	1,076.5	1,008.4	917.1	917.0	31,982.8	29,574.2	27,253.9	22,869.5	22,697.5
FICC/MBSD ¹	102.9	78.7	65.1	68.2	74.4	24,500.0	20,710.5	17,593.5	17,482.1	19,579.5

¹ Converted at yearly average exchange rates.

United Kingdom: ¹ For value of transactions, trillions. **United States**: ¹ For value of transactions, trillions.

Table	CCP3	(aant
14010	1.1.6.	

System		se in the r				Value o	of transac		-	age of
	(% cha	nge on pre	-	adjusted k	by CPI		G	iDP (in %))	
	2012	2013	inflation) 2014	2015	2016	2012	2013	2014	2015	2016
Australia										
ASX Clear	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
ASX Clear (Futures)	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Brazil										
BmfBovespa-Equities	3.7	5.1	-16.9	-14.7	2.8	54.0	54.3	44.3	40.3	42.1
BmfBovespa-Derivatives	-1.4	6.6	-18.6	14.7	-8.0	1,007.9	1,027.6	821.3	1,004.2	940.2
BmfBovespa-Securities	-85.4	-90.9	-99.5	-100.0	nav	0.8	0.1	0.0	0.0	0.0
CETIP	-3.7	9.1	-0.7	16.3	-21.0	364.7	380.6	371.0	460.0	370.0
Canada										
CDCC	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
NGX	-43.1	53.5	12.9	-47.1	-7.2	2.8	4.1	4.6	2.5	2.2
ICE	7.9	3.6	-19.5	6.3	14.6	3.1	3.1	2.5	2.7	3.0
China										
SD&C	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
France										
LCH.Clearnet SA	-2.3	16.2	2.6	6.8	0.2	3,205.4	3,709.6	3,769.4	3,948.2	3,907.8
Germany										
Eurex Clearing AG	-20.9	5.9	4.3	12.8	-4.3	6,978.9	7,325.6	7,418.7	8,074.4	7,511.8
Hong Kong SAR										
HKSCC	-27.4	11.0	8.1	46.4	-37.2	1,189.1	1,311.2	1,401.3	1,990.4	1,232.0
India										
CCIL	26.6	17.9	53.7	-4.9	32.3	157.3	178.3	270.4	262.3	329.8
NSCCL	-8.8	5.2	28.1	6.3	33.6	377.9	382.1	483.1	523.8	665.3
BOISL	-17.3	nav	nav	nav	nav	1.7	nav	nav	nav	nav
ICCL	709	18	120	-68	-50.0	73.7	83.4	181.1	59.6	28.4
MCX-SXCCL	5.0	-31.8	-44.1	-35.6	-48.9	0.0	0.0	0.0	0.0	0.0
Italy	0.5	00.0	0.5	40.4	0.0	4 000 4	0.400.0	0.404.5	0.040.4	0.000.0
CCG	9.5	32.9	0.5	10.1	8.0	1,603.1	2,169.0	2,161.5	2,349.1	2,328.0
Japan										
JSCC	16.6	-8.1	24.8	21.0	8.8	492.2	446.7	561.0	663.0	711.6
JDCC	10.8	64.3	15.5	18.4	6.2	5.5	8.9	10.4	12.0	12.6
JGBCC	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
TFX	-51.4	18.7	-66.2	-8.8	118.7	0.0	0.0	0.0	0.0	0.0
OSE	-6.6	146.9	nav	nav	nav	0.6	1.4	nav	nav	nav
Korea Fuel en en (KDV)	40.0	4.5	4.0	5 4	0.0	20.7	20.4	00.4	20.0	04.0
Korea Exchange (KRX)	40.2	1.5	4.8	5.1	-0.6	32.7	32.4	33.1	33.3	31.9
Korea Securities		40.5	4.4	0.4	0.0	444	44.0	44.4	40.0	0.0
Depository (KSD)	nav	-13.5	-4.4	3.1	-8.6	14.1	11.9	11.1	10.9	9.6
Mexico	47.0	45.0	00.4	4.4	40.0	04.0	04.0	40.0	40.4	40.4
CCV	17.2	15.8	-23.1	1.4	10.3	21.3	24.8	18.6	18.4	19.4
Asigna Natharlanda	-10.6	-33.5	12.4	-36.8	20.7	31.1	20.8	22.7	14.0	16.2
Netherlands EuroCCP N.V.	20.4	6.0	00.0	FC 0	4.0	60F 7	E71 C	1 070 6	1 606 7	1 E20 E
	-38.1	-6.9	90.0	56.0	-4.0	605.7	571.6	1,072.6	1,626.7	1,520.5
Russia NCC	000.4	00.4	4.5	7.0	24.2	070.0	F22.0	EOE 4	004.0	705.0
NSD	838.1	92.1	-1.5	7.0	24.2	276.8	533.8	525.4	604.0	765.0
Saudi Arabia	nap	nap	266.2	-27.0	-2.1	nap	40.3	147.3	115.6	115.4
	70.4	21.4	E2 6	24.2	22.7	60.0	40 O	75.7	60.1	10 2
Saudi Arabia clearing Singapore	70.4	-31.4	52.6	-24.2	-32.7	69.9	48.9	75.7	68.1	48.3
CDP	-15.9	7.8	-25.8	5.9	-2.4	89.7	93.8	68.5	69.6	66.3
South Africa	-15.9	1.0		ა.ყ	-2.4	09.7	ყა.ბ		09.60	00.3
Sweden			nap					nap		
	-0.3	-8.6	-26.7	14.8	-16.7	1,093.4	976.4	685.8	738.0	585.8
SE Nasdaq OMXDM Switzerland	-0.3	-0.0	-20.7	14.0	-10.7	1,093.4	910.4	0.00.6	130.0	505.8
SIX x-clear	12.7	10.4	OE 4	16.0	2.4	211 0	260.7	112 1	E00.4	400 F
	13.7	18.1	25.1	16.9	-2.1	311.9	360.7	443.1	509.1	492.5
Turkey	38.8	2.0	0.6	20 E	2.0	470.0	427.0	440 G	400 G	407 F
Takasbank	J 30.0	-2.9	2.6	22.6	3.8	472.2	427.2	419.6	489.6	497.5

Table CCP3 (cont)

System		se in the re				Value of transactions as a percentage of GDP (in %)					
	(70 0714	(% change on previous year, adjusted by CPI inflation)					351 (11770)				
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	
United Kingdom											
LCH.Clearnet Ltd	nav	nav	nav	nav	nav	nav	nav	nav	nav	29.9	
ICE Clear Europe	nav	nav	-7.4	-20.8	20.0	nav	4.8	4.3	3.3	3,891.0	
LME Clear Limited	nav	nav	nav	186.3	-100.0	nav	nav	0.3	1.0	0.0	
CME Clearing Europe	nav	nav	nav	85.0	130.6	nav	nav	0.0	0.0	5.6	
United States											
NSCC	-17.5	10.3	10.4	4.9	nav	1,149.3	1,241.5	1,332.1	1,342.7	nav	
FICC/GSD	-2.8	-4.7	-7.7	-8.9	-1.0	6,909.2	6,449.4	5,786.2	5,060.9	4,923.5	
FICC/MBSD	3.3	-24.4	-18.5	4.9	8.1	636.9	471.5	373.5	376.3	399.5	

Table CCP4
Participation in selected central counterparties and clearing houses (end of year)

Australia ASX Clear ASX Clear (Futures) Brazil BmfBovespa-Equities BmfBovespa-Derivatives BmfBovespa-Securities CETIP Canada	39 17 88 74 62 558	2013 34 19 80 70	mber of participant 2014 33 19	2015 37 20	2016 37 20
ASX Clear ASX Clear (Futures) Brazil BmfBovespa-Equities BmfBovespa-Derivatives BmfBovespa-Securities CETIP	39 17 88 74 62	34 19 80	33	37	37
ASX Clear ASX Clear (Futures) Brazil BmfBovespa-Equities BmfBovespa-Derivatives BmfBovespa-Securities CETIP	17 88 74 62	19 80			
ASX Clear (Futures) Brazil BmfBovespa-Equities BmfBovespa-Derivatives BmfBovespa-Securities CETIP	17 88 74 62	19 80			
Brazil BmfBovespa-Equities BmfBovespa-Derivatives BmfBovespa-Securities CETIP	88 74 62	80			∠0
BmfBovespa-Equities BmfBovespa-Derivatives BmfBovespa-Securities CETIP	74 62				
BmfBovespa-Derivatives BmfBovespa-Securities CETIP	74 62		79	70	68
BmfBovespa-Securities CETIP	62	70	69	58	57
CETIP		58	54	43	40
	550	598	699	700	698
Canada		330	000	700	030
CDCC	40	37	34	36	35
NGX	248	259	264	269	286
ICE	9	9	9	9	9
China	9	Э	9	9	9
	222	226	220	251	256
SD&C	223	226	230	251	256
France	444	400	440	440	400
LCH.Clearnet SA	114	109	110	110	100
Germany	400		400	400	40=
Eurex Clearing AG	163	175	183	186	195
Hong Kong SAR					
HKSCC	24,344	24,573	24,884	25,286	25,630
India					
CCIL	255	264	266	269	271
NSCCL	1,393	1,299	1,369	1,235	1,226
BOISL					
	nap	nap	nap	nap	nap
ICCL	52	1,361	1,375	1,381	1,396
MCX-SXCCL	513	582	579	573	498
Italy					
CCG	74	83	81	82	87
Japan					
JSCC	139	139	138	136	132
JDCC	53	52	54	53	52
JGBCC	34	nap	nap	nap	nap
TFX	65	49	47	50	50
OSE	83	nap	nap	nap	nap
Korea					
Korea Exchange (KRX)	91	91	92	97	92
Korea Securities Depository					
(KSD)	91	91	90	85	84
Mexico					
CCV	27	27	30	31	31
Asigna ¹	6	6	7	7	7
Netherlands					
EuroCCP N.V.	51	49	48	45	nav
Russia	0.		.0	.0	1101
NCC	727	825	794	713	655
NSD	nav	289	333	358	350
Saudi Arabia	IIav	209	333	330	330
Saudi Arabia clearing house	22	22	22	22	22
	22	22	22	22	22
Singapore CDP	07	00	00	25	25
	27	26	26	25	25
South Africa			nap		
Sweden	4-	40	40	4-	4-
SE Nasdaq OMXDM	47	46	48	47	47
Switzerland					_
SIX x-clear	70	70	68	66	84
Turkey					
Takasbank Mexico: 1 Please refer to the individual	125	123	121	118	124

Comparative tables

Table CCP4 (cont)

System	Total number of participants								
	2012	2013	2014	2015	2016				
United Kingdom									
LCH.Clearnet Ltd	171	165	161	154	158				
ICE Clear Europe	nav	81	80	79	81				
LME Clear Limited	nav	nav	42	42	44				
CME Clearing Europe Limited	nav	nav	18	19	17				
United States									
NSCC	181	173	170	161	156				
FICC/GSD	104	85	106	119	114				
FICC/MBSD	74	76	78	151	151				

Table CSD1
Features of selected central securities depositories (at end-2016)

System	Type of securities held	Owner/ manager	Settlement system	Closing time for same-day transactions	Links to other CSDs
Australia					
ASX Settlement	E, O	SE ¹	ASX Settlement	DVP: 10:30, FoP: 19:00	no link
Austraclear Belgium	DOM, B, C, G	SE ¹	Austraclear	18:30 ² , 20:30 ³	no link
NBB SSS	B, C, G, O	СВ	NBB SSS	18:00	no link
Euroclear Belgium	B, C, G, E, O	Ο	ESES Belgium	20:00	direct: Euroclear Bank
Euroclear Bank	B, C, G, E, O	O, B	Euroclear Bank	19:00	46 links
Brazil SELIC BMFBOVESPA-Equities	DOM; G DOM; E, B, O	CB SE	SELIC BMFBOVESPA-	18:30 17:00	no link no link
·			Equities		
CETIP Canada	DOM; B,C,G	0	CETIP	19:00	no link
CDS	DOM, INT, B, C, G, E	B, SE, O ¹	CDSX	16:00 ²	direct: DVP: DTC. direct: FoP: Euroclear France, SEB, CAVALI, JASDEC
SD&C CDC Depository and Settlement System	DOM, B, G, E, O B, G, O	SE ¹ , O O	SD&C ² CDC Depository and Settlement System	16:00 17:00	nav direct: Central Moneymarkets Unit, Clearstream Banking Luxembourg
France Euroclear France	B, G, E, O	0	ESES France ¹	17:00	FoP: 16 ²
Germany	2, 3, 2, 3	O	ESES FIAIICE	17.00	FOF. 10
Clearstream Banking AG	DOM, INT: B, C, G, E, O	SE ¹	CASCADE, CREATION	DVP: 16:30 ² , FoP: 18:00	direct: DVP: EUR, CHF, DKK; direct: FoP: EUR: 6, USD, JPY; indirect: 45
Hong Kong SAR CCASS					dina ata Ea Da LIKD
	DOM, B, G, E, O ¹	SE ²	CCASS ³	15:45	direct: FoP: HKD, RMB, USD: 3 direct: DVP: HKD, RMB: 2
CMU	DOM, INT, B, C, G	СВ	Central Moneymarkets Unit	18:30	direct: FoP/DVP ⁴
India RBI (SSS) NSDL CDSL Italy	G E, B, O E, B, O	CB SE, O SE, O	SSS NSDL CDSL	19:30 15:30 15:30	nap direct direct
Monte Titoli	DOM, INT: G, E, B, O	O ¹	Monte Titoli - T2S	18:00 ²	direct: FoP, DvP: EUR:10, CHF:1, EUR, GBP:1; direct FoP: EUR:2, USD:1 ³
Japan BOJ	DOM: G	0	BOJ-NET	21:00 ¹	no link
JASDEC For the footnotes regarding the sy	E, B, O ²	SE, O, B	JASDEC	15:30 ³ , 17:00 ⁴	direct: FoP: 3; indirect: FoP: 3

Table CSD1 (cont)

System	Type of securities held	Owner/ manager	Settlement system	Closing time for same-day transactions	Links to other CSDs
Korea Korea Securities Depository (KSD)	B, C, G, E, O	SE, O, B	KSD	DVP: 16:00 ¹ , 16:10 ² , 16:50 ² , 17:00 ³	direct: DVP, FoP: 3 direct: Fop: 2 indirect: DVP, FoP: 36 ⁴
Mexico Indeval	DOM: B, C, G, E, O	SE, CB	DALI	16:15	direct: (FoP/DVP): EUR, GBP, CLP, COP, PEN: 5 indirect: (FoP/DVP): USD:2
Netherlands Euroclear Netherlands	nav	O ¹	nav	nav	nav
Russia NSD	DOM: B, G, E INT: B, G, E	SE, B, O	NSD	17:00 ¹ ; 20:00 ² ; 19:30 ³	direct ⁴
Saudi Arabia Tadawul	DOM, B, E, G	SE ¹	Equator	15:30	no link
Singapore MEPS+(SGS) DCSS CDP	G B DOM, INT, B, E, O, G	CB SE O	MEPS+(SGS) PSMS ¹ CDP	19:00 17:30 12:00	nav nav nav
South Africa SAFIRES	B, E	B, SE, O ¹	SAFIRES	15:00	no link
Sweden Euroclear Sweden	DOM, B, G, E, O	В, О	VPC	17:00	direct: FoP: DKK, GBP, EUR: 2, CHF; direct: DVP:EUR; indirect: FoP: DKK, EUR, ISL, USD; indirect: DVP: USD
Switzerland SECOM	DOM: B, G, E, O; INT: B, G, E, O	В	SECOM	14:30 ¹ ; 21:30 ²	direct: DVP, FoP: 10; indirect: DVP, FoP: 60
Turkey Takasbank	DOM, INT, E ¹ , O ²	SE , B ³ , O ³	Takasbank	21:00	direct/indirect: Euroclear, FoP/DVP
Central Securities Depository	DOM: B, E, O	SE, O	Central Dematerialized	DVP: 17:00; FoP: 18:30	no link
ESTS	G	СВ	System ⁴ ESTS	17:30	no link
United Kingdom CREST ¹	DOM, B, C, G, E, O	CB, B, O	RTGS	DVP: 16:10; FoP: 16:40	DVP: SIS SegaInterSettle AG; FoP: Euroclear SA and Depositary Trust & Clearing Corporation
United States NBES ¹	G, O	СВ	Fedwire Securities	15:30 ²	no link
DTC	B, C, E, O, DOM	В, О	Service DTC-NSCC Consolidated Settlement Service	15:20 ²	16

Table CSD1 (cont)

System	Intraday finality	DVP (Delivery Versus	Delivery lag (T+n)	Currencies	Cash settlement agent
Australia		Payment)			
ASX Settlement	yes	DVP3	T+2	AUD	СВ
Austraclear	*	DVP1	T ⁴ , T+1 ⁵ , T+2 ⁶	AUD,RMB	CB
Belgium	yes	DVFI	1,171,172	AUD, NIVID	СВ
NBB SSS	Voc	DVP1	T+2, T+3	EUR	СВ
Euroclear Belgium	yes	DVP1	T+3	EUR	СВ
Euroclear Bank	yes	DVP1	T, T+n		В
Brazil	yes	DVFI	1, 1711	EUR, 50 ¹	Ь
SELIC	Vec	DVP1	Т	BRL	СВ
	yes	DVP3		BRL	СВ
BMFBOVESPA-Equities	no ¹		T+1 ² ; T+3		
CETIP	no ¹	DVP3	T+1	BRL	СВ
Canada		D\/D0	345		OD: OAD: D: UOD
CDS	yes	DVP2	$T+3^3$, $T+0^4$, $T+2^5$, $T+3^6$	CAD, USD	CB: CAD; B: USD
China					_
SD&C	no	DVP1, DVP2	T+1,T+3	RMB, USD, HKD	В
CDC Depository and Settlement System	yes	DVP1	Т	RMB	CDC
France		D\/D4	T.0	EUD	OD
Euroclear France	yes	DVP1	T+3	EUR	СВ
Germany Clearstream Banking AG Hong Kong SAR	yes	DVP1	T+2 ³ , T- T+40 ⁴	EUR, 42	СВ, В
CCASS	V00	DVP2 ⁴	T+2	HKD, USD, CNY	В
CMU	yes yes	DVP1, DVP3	T+0- T+2	HKD, USD, EUR, CNY	CB: HKD; B: CNY, EUR, USD
India					
RBI (SSS)	yes	DVP3	T+0, T+1	INR	CB
NSDL	yes	DVP3	T+2	INR	В
CDSL	yes	DVP3	T+2	INR	В
Italy Monte Titoli	yes	DVP1, DVP3	T+2 ⁴ , T- T+n ⁵	EUR	СВ
Japan BOJ	yes	DVP1	T- T+2	JPY	СВ
JASDEC	yes	DVP1, DVP2 ⁵ ,			
		DVP3 ⁶	T- T+3	JPY	СВ, В
Korea Coourition Depositors		D\/D1_D\/D2			
Korea Securities Depository	yes	DVP1, DVP2, DVP3 ⁵	T,T+1,T+2 ⁶	KRW	СВ, В
Mexico					
Indeval	yes	DVP3 ¹	T	MXN	СВ
Netherlands					
Euroclear Netherlands	yes	DVP1	T+3	EUR/non-EUR	CB, B
Russia					
NSD	yes	DVP1, DVP2, DVP3	OTC transactions - not stipulated. Exchange transactions - T+0, T+2	EUR, CHF, GBP, HKD, CNY ^{5,} CHF,	O - RUB, USD, EUR, CHF, GBP, CNY, HKD; B - USE
Saudi Arabia					
Tadawul	yes	DVP1 ² , DVP3 ³	$T+0^2$, $T+2^3$	SAR	CB, B
Singapore					
MEPS+(SGS)	yes	DVP1	T+1	SGD	СВ
DCSS	yes	DVP1	$T+0^2$	SGD	B, CB
CDP	yes	DVP2	T+3	SGD, AUD, HKD, USD	В
South Africa					
SAFIRES	yes	DVP1	$T+3^2$, $T+5^3$	ZAR	СВ
Sweden			,		•
Euroclear Sweden	yes	yes	T+2, T+3	SEK, EUR	СВ
	ems, see after this tab		,	, -	J-D

Table CSD1 (cont)

System	Intraday finality	DVP (Delivery Versus Payment)	Versus		Cash settlement agent
Switzerland					
SECOM	yes	DVP1	T, T+1, T+2, T+3	37	CB: CHF; B: CHF and all other 36 currencies: SIX SIS
Turkey					
Takasbank	yes	DVP3	$T+0^5$, $T+1^6$, $T+2^7$	TRY, USD, EUR	Takasbank
Central Securities Depository	yes	DVP1 ⁸ , DVP3 ⁹	T+0, T+2	TRY	Takasbank
ESTS	yes	DVP1	nap	TRY	СВ
United Kingdom	•		·		
CREST	yes	DVP1 ² , DVP2 ³	T^4 , T+1 ⁵ , T+3 ⁶	GBP, EUR, USD	CB, B
United States		•	. ,	. ,	,
NBES ¹	yes	DVP1	T, T+1	USD	СВ
DTC	no	DVP2	T, T+2	USD	СВ

Footnotes for Table CSD1

Australia: ¹ ASX Group. ² Australian eastern standard time. ³ Australian eastern daylight-saving time. ⁴ Short-term debt securities if terms are agreed prior to midday. ⁵ Short-term debt securities if terms are agreed after midday. ⁶ Long-term debt securities.

Belgium: 1 Settlement currencies.

Brazil: ¹ Some special transactions have intraday finality. ² Payments relating to derivatives on stocks.

Canada: ¹ IIROC. ² Once payment exchange commences usually at 16:00, no further funds settlement is permitted that day; however, securities settlement can occur up to 19:30. ³ Equities. ⁴ GoC T-bills and money market securities. ⁵ GoC bonds with maturity of three years or less. ⁶ GoC bonds with maturity of more than three years and all provincial, municipal, corporate and other bonds or other certificates of indebtedness including mortgage-backed securities.

China: ¹ Shanghai Stock Exchange and Shenzhen Stock Exchange each hold 50% of SD&C's shares. ² There is no official name for the system yet.

France: ¹ ESES France replaced RGV2 in November 2007 while the revocable channel was suppressed. ² Eleven links are operating in EUR. **Germany**: ¹ Deutsche Börse AG. ² 17:30 for specific Euro GC pooling transactions. ³ For stock exchange. ⁴ For over-the-counter.

Hong Kong SAR: ¹ Equities include ordinary shares, preference shares, registered warrants, provisional allotment letters representing nil paid rights, depository receipts; structured products include derivative warrants, equity linked instruments, callable bull/bear contracts; bonds include Exchange Fund notes, Hong Kong SAR retail bonds and Hong Kong SAR Link Retail Bonds; unit trust funds includes Exchange Traded Funds, REITs. ² Hong Kong Exchanges and Clearing Limited (HKEX). ³ CCASS stands for Central Clearing and Settlement System. ⁴ Austraclear in Australia and New Zealand, Korean Securities Depository in South Korea, China Govt Sec Depository Trust and Clearing Com Ltd in Mainland China. ⁵ Exchange trade: They are settled under continuous net settlement system on a netting basis, with final transfer of securities from the seller to the buyer at securities-on-hold status occurring throughout the 4 batches settlement runs processing cycle on T+2, with the final netting funds from the buyer to the seller on same value day. The allocated on-hold securities will become available upon receipt of bank confirmation of brokers' designated banks at about 20:00

on T+2; Non-exchange trade: securities transfer instructions are settled on a trade-by-trade basis, with final transfer of securities from the seller to the buyer occurring throughout the 4 batch settlement runs processing cycle, with the final transfer of fund from the buyer to the seller on same value day

Italy: ¹ Monte Titoli spa. ² For matched transactions in the gross settlement. ³ The currencies reflect the denomination of financial instruments, cash leg is settled in EUR. ⁴ For main regulated markets (eg stock exchanges) and MTFs. ⁵ For OTC trades.

Japan: ¹ "Core Time" of JGB Services is set from 9:00 to 16:30. ² Commercial paper and investment trusts. ³ For equities. ⁴ For bonds, commercial paper and investment trusts. ⁵ For equities traded outside the exchanges. ⁶ For exchange-traded equities cleared via the Japan Securities Clearing Corporation.

Korea: ¹ Transactions on exchange. ² 16:10 for securities settlements, 16:50 for funds settlements of institutional investor stock transactions. ³ For bonds traded on OTC market. ⁴ Links to other CSDs through global custodians, counted on a country basis. ⁵ DVP1 for bonds traded on OTC market, DVP2 for institutional investor stock transactions, DVP3 for transactions on exchange. ⁶ T for bonds traded on exchange, T+1 for government bonds traded on exchange and for bonds traded on OTC market, T+2 for stocks traded on exchange and institutional investor stock.

Mexico: ¹ DVP settlement cycle occurs every two minutes or less.

Netherlands: ¹ Euroclear Group.

Russia: ¹ For paper-based depo orders on OTC transactions. ² For non-paper-based depo orders. ³ For depo orders settled on DVP1, DVP2 and DVP3 basis. For some transactions a different closing time may be set during the business day; up to that time depo orders are accepted and settled on the same business day. ⁴ NSD has accounts with eight CSDs (two of which allow settlement on a DVP basis). Eight CSDs have accounts with NSD. ⁵ Settlements on DVP basis, payments of securities gains, banking operations. ⁶ Payments of securities gains, banking operations.

Saudi Arabia: ¹ Tadawul. ² For equities. ³ For bonds.

Singapore: ¹ Pre-Settlement Matching System. ² Shares will be transferred once payment is confirmed on settlement date.

South Africa: ¹ The owners are the stock exchange and banks and the manager is STRATE Ltd. ² T+3 for bonds. ³ T+3 for equities.

Switzerland: ¹ For central bank money. ² For commercial bank money.

Turkey: ¹ Takasbank is the custodian for non-fungible domestic stocks. ² Takasbank is the custodian for domestic private pension funds. ³ Takasbank is owned by 19 banks and 67 brokerage houses, none of which can exceed a 5% share. ⁴ Settlement is processed and finalized through the Central Securities Depository-Takasbank integrated system. Takasbank, as the cash clearing agent, manages the DVP system. ⁵ G-Bonds, T-Bills and Repos. ⁶ Derivatives T+1 until 14:00. ⁷ Equities. ⁸ Securities for delivery lag of T+0. ⁹ Securities for delivery lag of T+2.

United Kingdom: ¹ Owned and operated by Euroclear UK and Ireland. ² For sterling and euro settlement. ³ For US dollar settlement. ⁴ T for delivery by value transactions. ⁵ T+1 for gilts. ⁶ T+3 for equities.

United States: ¹ NBES is the Federal Reserve's National Book-Entry System. ² Eastern time.

Table CSD2
Transactions processed by selected central securities depositories: number of transactions (total for the year)

System	Nu	mber of to	ransactio	ns (million	s)	Increase in the number of transactions					
	2012	2013	2014	2015	2016	2012	% change 2013	on previo	ous year) 2015	2016	
Australia	2012	2013	2017	2013	2010	2012	2013	2017	2013	2010	
ASX Settlement	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	
Austraclear	0.34	0.35	0.34	0.33	0.32	3.0	2.6	-2.3	-2.7	-4.3	
Belgium											
NBB SSS	0.58	0.55	0.95		0.52	12.3	-5.5	72.2	-47.5	3.8	
Euroclear Belgium	1.80	1.91	2.12		2.38	-0.1	5.9	11.0	16.5	-3.6	
Euroclear Bank	64.9	70.1	75.7	83.7	84.6	8.2	8.1	8.0	10.6	1.0	
Brazil											
SELIC	3.64	3.97	3.95	4.14	4.22	7.9	9.0	-0.4	4.8	1.9	
BMFBOVESPA-Equities	18.89	20.93	19.16	18.00	17.80	11.1	10.8	-8.5	-6.1	-1.1	
CETIP	30.47	86.01	116.94	309.82	405.35	-12.7	182.2	36.0	164.9	30.8	
Canada	200.2	252.5	400.7	440.5	475.0	40.0	0.0	24.0	2.0	C F	
CDS	360.3	352.5	429.7	446.5	475.3	-13.9	-2.2	21.9	3.9	6.5	
China SD&C	2.050.0	0.055.0	2 000 2	40 202 5	0.505.4	40.7	20.7	20.0	407.0	20.5	
CDC Depository and	2,058.6	2,855.8	•	10,393.5	6,595.1	-13.7	38.7	36.2	167.2	-36.5	
Settlement System	587.4	457.5	466.4	677.3	1,008.2	13.9	-22.1	1.9	45.2	48.9	
France											
Euroclear France	23.62	24.38	24.30	25.61	25.56	-14.5	3.2	-0.4	5.4	-0.2	
Germany	20.02	24.50	24.00	20.01	20.00	14.5	0.2	0.4	0.4	0.2	
Clearstream Banking AG	52.80	60.93	55.33	61.17	56.05	-16.4	15.4	-9.2	10.6	-8.4	
Hong Kong SAR	02.00	00.00	00.00	01.17	00.00	10.4	10.4	0.2	10.0	0.4	
CCASS	18.03	20.20	21.76	24.76	20.45	-12.7	12.0	7.7	13.8	-17.4	
CMU	0.089	0.092	0.098	0.086	0.073	-22.3	4.4	5.8	-12.0	-14.8	
India	0.000	0.002	0.000	0.000	0.0.0			0.0	.2.0		
RBI (SSS)	2.3	2.6	3.0	3.1	3.7	22.5	13.6	16.2	3.1	17.0	
NSDL	107.7	99.5	147.3		152.7	-8.8	-7.6	48.0	-10.4	15.6	
CDSL	68.41	69.21	104.67	95.16	110.12	20.9	1.2	51.2	-9.1	15.7	
Italy											
Monte Titoli	21.29	21.00	24.66	23.72	22.23	-9.4	-1.4	17.5	-3.8	-6.3	
Japan											
BOJ	4.21	4.36	4.65	4.46	4.41	7.2	3.5	6.8	-4.3	-1.0	
JASDEC	88.35	107.29	111.02	118.18	118.31	3.4	21.4	3.5	6.4	0.1	
Korea											
KSD	7.72	7.71	7.81	8.61	8.94	-18.6	-0.1	1.4	10.2	3.8	
Mexico											
Indeval	4.77	5.35	5.22	5.52	5.80	5.7	12.0	-2.5	5.8	5.1	
Netherlands											
Euroclear Netherlands	5.00	5.35	5.71	6.24	5.89	-4.1	7.0	6.7	9.4	-5.6	
Russia											
NSD	2.34	2.61	2.49	2.45	2.66	-9.7	11.4	-4.4	-1.8	8.7	
DCC	0.11	0.00	nap	nap	nap	-12.2	-99.7	nav	nap	nap	
Saudi Arabia											
Tadawul	42.11	43.25	48.81	30.45	27.28	64.8	2.7	12.8	-37.6	-10.4	
Singapore											
MEPS+(SGS)	0.090	0.102	0.098	0.115	0.123	14.1	13.1	-3.4	17.0	6.6	
DCSS	5.23	4.98	5.93		6.65	nav	-4.8	19.1	5.8	6.0	
CDP	5.23	4.98	5.93	6.28	6.65	nav	-4.8	19.1	5.8	6.0	
South Africa											
SAFIRES	6.24	6.60	7.13	7.98	8.26	24.2	5.8	7.9	12.0	3.4	
Sweden	44.00	40		40.00	40.0-	4-0	40.4	400			
Euroclear Sweden	11.38	12.57	14.11	13.28	13.87	-17.9	10.4	12.2	-5.9	4.4	
Switzerland	40.00	50.40	55.07	00.00	50.40	00.0	- .	0.0	04.5	40.7	
SECOM	49.82	53.49	55.07	66.92	58.42	-23.6	7.4	3.0	21.5	-12.7	
Turkey	400.05	400.00	0.45.00	000.00	000 40	4.4.4	70.4	00.0	00.4	2.2	
Takasbank	106.35	180.88	245.93	296.06	323.42	11.1	70.1	36.0	20.4	9.2	
Central Securities Depository	2.86	3.56	3.45		2.92	18.4	24.4	-3.0	-7.6	-8.3	
ESTS	0.18	0.27	0.26	0.28	0.28	41.8	46.6	-3.6	9.5	-0.7	
United Kingdom	47.07	EC 05	EZ 0Z	E0.00	FO 00	7.0	40.0	<i>A</i> 4	0.0	^ 4	
CREST	47.87	56.85	57.67	59.89	59.83	-7.6	18.8	1.4	3.8	-0.1	
United States NBES	18.23	19.04	17.04	17.46	16.57	-2.1	4.4	-10.5	2.5	-5.1	
DTC	18.23	319.5	323.0		356.0	-2.1 -1.0	4.4 6.7	-10.5 1.1	2.5 6.9	-5.1 3.1	
טוט	299.3	319.3	ა∠ა.0	345.2	ააი.0	-1.0	0.7	1.1	0.9	ა. 1	

Table CSD3

Transactions processed by selected central securities depositories: value of transactions (total for the year)

System	Value of) billions e	xcept as							
			noted) ¹				(US	D thousan	ds) ¹	
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia										
ASX Settlement	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Austraclear	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Belgium										
NBB SSS		10,969.5	-							
Euroclear Belgium	709.9	•	1,108.2	•	1,060.2		545.0		419.6	446.0
Euroclear Bank	396,680	454,350	515,293	487,810	493,401	6,116.1	6,481.8	6,806.3	5,826.3	5,835.6
Brazil										
SELIC	•	241,468								•
BMFBOVESPA-Equities	2,723.1	-	2,378.8						83.13	73.75
CETIP	8,981.4	9,391.5	9,105.0	7,752.7	6,178.6	294.7	109.2	77.9	25.0	15.2
Canada										
CDS	92,762	112,771	110,681	97,985	96,446	257.4	319.9	257.6	219.5	202.9
China										
SD&C	16,619	27,684	40,961	82,892	88,864	8.07	9.69	10.53	7.98	13.47
Settlement System	11,221.7	5,970.5	5,044.3	9,721.0	11,974.7	19.11	13.05	10.82	14.35	11.88
France										
Euroclear France	157,791	174,214	145,776	102,138	114,268	6,680.4	7,145.2	6,000.0	3,987.9	4,470.2
Germany										
Clearstream Banking AG	71,623	79,240	105,764	73,982	51,531	1,356.6	1,300.4	1,911.4	1,209.4	919.4
Hong Kong SAR										
CCASS	5,646.1	6,768.1	•				335.1	297.6	324.0	281.0
CMU	834.2	744.8	694.4	497.5	483.7	9,419	8,054	7,095	5,774	6,593
India										
RBI (SSS) ¹	22.8	23.4		23.5	28.8		8.9		7.5	7.8
NSDL	2,841.4	2,730.9	•	2,936.0					22.24	21.81
CDSL	115.21	140.41	215.17	179.28	293.26	1.68	2.03	2.06	1.88	2.66
Italy	75.055	00 775	400 704	70.000	70 770	0.505.4	0.040.0	4.004.0	0.404.5	0.040.4
Monte Titoli	75,055	82,775	100,731	73,633	73,772	3,525.1	3,942.2	4,084.3	3,104.5	3,318.1
Japan	050 540	000 050	000 540	004.000	400.040	04 000 0	F0 000 7	FO 47F 7	45 000 0	44 450 7
BOJ		226,658								
JASDEC ¹	15,837.5	13,640.7	16,008.9	14,043.1	7,224.9	179.3	127.1	144.2	118.8	61.1
Korea	F F00 7	F 744 4	7 400 0	0.000.0	0.004.5	7407	7447	040.4	000.0	740.0
KSD Mexico	5,529.7	5,741.1	7,182.8	6,922.2	0,031.5	716.7	744.7	919.1	803.6	742.0
Indeval	02 261 1	96,720.1	07 524 6	01 617 7	72 262 1	10 244 2	10 000 2	19 602 0	1/1 705 0	12 629 2
Netherlands	92,301.1	90,720.1	91,524.0	01,017.7	13,202.1	19,344.2	10,002.3	10,093.0	14,705.0	12,020.2
Euroclear Netherlands	5 763 4	5,843.9	5 790 6	5 421 0	5 104 3	1 153 1	1 092 7	1,014.7	868.5	881.3
Russia	3,703.4	0,040.0	3,730.0	5,721.0	3,134.3	1,100.1	1,002.7	1,014.7	000.5	001.0
NSD	4,329.7	5.370.5	5,350.9	4.194.4	4,863.3	1.848.8	2,059.0	2,145.5	1,712.5	1,826.5
DCC	107.4		nav	nap	nap			nav	nap	nap
Saudi Arabia					- 1		-,			
Tadawul	514.7	365.3	572.5	443.4	308.9	12.22	8.45	11.73	14.56	11.33
Singapore										
MEPS+(SGS)	1,116.3	1,187.4	1,114.0	938.2	1,003.5	12,403.0	11,670.4	11,339.4	8,159.1	8,187.9
DCSS	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CDP	257.3	283.6	209.8	203.6	196.9	49.2	56.9	35.4	32.4	29.6
South Africa										
SAFIRES	3,995.8	3,108.7	2,733.2	2,601.6	2,566.3	640.3	471.0	383.6	326.0	310.9
Sweden										
Euroclear Sweden	13,808.1	14,266.7	12,428.6	11,023.7	11,250.9	1,212.9	1,134.8	880.8	830.0	811.2
Switzerland			:							
SECOM	5,735.2	4,191.1	4,504.3	6,678.7	5,655.7	115.1	78.4	81.8	99.8	96.8
Turkey	0.755.0	0.004.0	0.004.0	0.444 =	4 000 0	25.0	40.5	40.0	- -	5 0
Takasbank	2,755.6			2,141.7			16.5		7.2	5.8
Central Securities Depository	989.4	•	962.3		726.6		365.6	278.6	233.3	248.4
ESTS	4,215.0	5,437.3	4,250.4	4,120.0	4,∪98. ७	ZZ,09U.1	∠∪, ≀აბ.პ	16,333.6	14,409.7	14,409.7

¹Converted at yearly average exchange rates.

India: ¹ For value of transactions, trillions.

Japan: ¹ Data refer to total transactions during the fiscal year ending March of the following year (see Japan, Table26). As a consequence, they are converted at average fiscal-year exchange rates.

Table CSD3 (cont)

System	Valu	Average value per transaction (USD thousands) ¹								
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
United Kingdom										
CREST	183,955	437,115	377,795	410,743	262,243	3,843.1	7,688.9	6,551.0	6,858.8	4,383.2
United States										
NBES	284,402	295,186	287,104	295,756	286,672	15,599.7	15,505.8	16,848.7	16,935.6	17,305.3
DTC	110,300	106,400	113,700	112,300	111,100	368.5	333.0	352.0	325.3	312.1

Table CSD3 (cont)

System		ge on prev	eal value /ious year, inflation)			Value		ctions as % except a	a percent as noted)	age of
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Australia										
ASX Settlement	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Austraclear	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Belgium	00.0	00.4	00.5	00.4	0.7	0.045.0	0.400.0	0.704.0	4.050.0	0.000.0
NBB SSS	-29.3 -3.1	-20.4 39.9	30.5 6.1	-26.4 11.0	6.7 0.9	2,645.2 142.7	2,109.3 200.0			2,066.9
Euroclear Belgium Euroclear Bank	-3.1 -9.6	39.9 9.4	13.0	12.5	-0.4	79,730	87,364		227.6 107,241	227.3 105,780
Brazil	-9.0	9.4	13.0	12.5	-0.4	19,130	67,304	90,932	107,241	105,760
SELIC	14.1	36.8	12.4	1.1	-1.6	7,481.2	0 78/ 0	10 200 2	11,636.0	11 6/18 7
BMFBOVESPA-Equities	26.9	3.2	-9.5	-19.4	-13.9	110.6	109.1	96.9	83.3	73.0
CETIP	-3.7	9.1	-0.7	9.1	-21.8	364.7	380.6	371.0	431.4	343.4
Canada										
CDS	0.3	24.1	3.3	1.4	0.5	5,040.4	6,022.9	6,112.4	6,289.3	6,168.6
China										
SD&C	21.4	59.3	43.9	103.1	13.2	202.0	301.4			793.2
CDC Depository and	1.9	-49.1	-17.8	93.4	30.0	136.4	65.0	48.7	89.5	106.9
France										
Euroclear France	-18.0	5.7	-16.8	-16.3	11.8	5,888.6	6,201.7	5,113.8	4,198.7	4,637.8
Germany	24.0	5 0	20.0	10.4	20.5	0.000.4	0.444.0	0.740.0	0.400.0	4 404 5
Clearstream Banking AG Hong Kong SAR	-31.8	5.3	32.6	-16.4	-30.5	2,022.4	2,111.9	2,719.2	2,192.3	1,481.5
CCASS	-18.8	14.9	-8.4	20.2	-30.0	2,150.0	2,455.1	2,222.0	2,592.9	1,790.6
CMU	-95.3	-14.4	-10.8	-30.5	-4.9	317.6	270.2			150.7
India	00.0		10.0	00.0	1.0	017.0	210.2	200.0	100.0	100.7
RBI (SSS) ¹	10.9	3.4	-6.3	-3.5	20.9	12.3	12.2	11.3	11.1	12.7
NSDL	33.5	-3.2	7.8	-10.0	11.8	152.7	142.1	151.1	138.7	147.4
CDSL	40.1	22.7	45.9	-21.0	61.2	6.2	7.3	10.5	8.5	13.0
Italy										
Monte Titoli	-21.6	5.3	21.5	-12.7	0.5	3,623.5	3,885.7	4,682.7	4,035.9	3,987.1
Japan										
BOJ	11.3	6.9	8.7	-0.4					4,678.0	
JASDEC	2.0	3.6	25.3	-4.9	-53.5	265.8	271.7	342.6	318.1	145.8
Korea KSD	-15.5	-0.4	18.8	2.8	-2.7	452.4	439.8	509.1	500.8	470.0
Mexico	-10.0	-0.4	10.0	2.0	-2.1	402.4	455.0	303.1	300.0	470.0
Indeval	4.4	-2.2	1.0	-2.9	2.7	7,783.1	7,661.5	7.515.7	7,138.3	6.995.1
Netherlands						.,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-,
Euroclear Netherlands	-7.9	-4.4	-1.1	11.8	-4.1	695.8	674.3	658.5	715	668
Russia										
NSD	50.9	19.3	6.7	10.9	21.3	201.0	240.6	256.5	305.7	378.1
DCC	-36.8	-98.1	nav	nap	nap	5.0	0.1	nap	nap	nap
Saudi Arabia				0.1.0			40.0			40.0
Tadawul	70.4	-31.4	52.6	-24.2	-32.7	69.9	48.9	75.7	68.0	48.3
Singapore	44.0	11	6.0	0.1	8.0	389.1	202.0	363.6	220 E	337.8
MEPS+(SGS) DCSS	44.9 nav	4.1 nav	-6.0 nav	-8.1 nav	nav	nav	392.9 nav	nav		nav
CDP	-15.9	7.8	-25.8	5.9	-2.4	89.7	93.8	68.5	69.6	66.3
South Africa	10.0	7.0	20.0	0.0	۷.٦	00.7	50.0	00.0	00.0	00.0
SAFIRES	6.0	-13.2	-6.2	6.3	6.6	1,008.2	847.5	778.4	819.1	870.0
Sweden	0.0	10.2	0.2	0.0	0.0	1,000.2	017.0	770.1	010.1	070.0
Euroclear Sweden	-2.4	-0.6	-8.1	9.1	2.6	2,539.6	2,465.5	2,166.8	2,213.9	2,186.6
Switzerland						,	,	•	,	•
SECOM	-56.1	-27.7	6.1	57.7	-13.0	859.4	609.0	634.7	983.7	845.6
Turkey										
Takasbank	24.3	6.8	-7.0	-6.1	-10.1	314.8	313.2			219.3
Central Securities Depository	144.0	29.8	-21.3	-11.6	-0.1	113.0	136.7			84.7
ESTS	-8.5	27.3	-16.8	10.7	1.8	481.5	571.2	454.9	479.4	478.0
United Kingdom	400	4040	40.4	47.4	00.0	0.000.0	45.050.4	40 400 4	44.000.5	0.004.0
CREST United States	-12.6	134.8	-19.1	17.1	-28.2	ხ,890.8	15,956.1	12,490.4	14,229.5	9,964.2
NBES	-4.4	2.5	-4.1	3.1	-4.0	1 760 4	1 768 5	1,647.4	1 632 1	1,539.2
DTC	-13.2	-4.7	5.3	-1.1	-4.0 -2.0		637.5	652.4		596.5
	10.2	-⊤.1	5.5	1.1	۷.0	002.0	001.0	002.4	010.7	550.5

¹ Converted at yearly average exchange rates. **India**: ¹ For value of transactions as a percentage of GDP, fraction.

Table CSD4
Participation in selected central securities depositories (end of year)

System					
•	2012	2013	umber of participant 2014	2015	2016
Australia					
ASX Settlement	83	77	82	79	79
Austraclear	775	829	845	849	836
Belgium					
NBB SSS	84	84	99	69	66
Euroclear Belgium	73	76	78	77	74
Euroclear Bank	1,391	1,474	1,539	1,602	1,617
Brazil					
SELIC	499	497	486	484	471
BMFBOVESPA-Equities	201	201	193	193	186
CETIP Canada	558	598	699	700	698
CDS	100	100	100	100	93
China	100	100	100	100	93
SD&C	nap	nap	nap	nap	nap
CDC Depository and	12,415	6,075	6,681	10,018	15,300
France	12,110	0,070	0,001	10,010	10,000
Euroclear France	156	157	152	147	137
Germany					
Clearstream Banking AG	405	359	298	288	270
Hong Kong SAR					
CCASS	24,344	24,573	24,884	25,286	25,630
CMU	180	184	205	206	202
India					
RBI (SSS)	297	304	344	361	371
NSDL	282	278	273	270	264
CDSL	578	579	575	583	589
Italy					
Monte Titoli	248	239	232	183	184
Japan					
BOJ	291	283	280	279	279
JASDEC	199	186	177	175	171
Korea	200	005	000	000	250
KSD Maying	300	295	299	298	352
Mexico Indeval	113	107	111	113	116
Netherlands	113	107	111	113	110
Euroclear Netherlands	67	69	71	69	69
Russia		00	, ,	00	03
NSD	909	908	896	895	846
DCC	199	115	nap	nap	nap
Saudi Arabia					
Tadawul	54	54	54	54	54
Singapore					
MEPS+(SGS)	62	64	64	63	62
DCSS	42	45	47	50	53
CDP	27	25	26	26	26
South Africa					
SAFIRES	43	45	48	50	52
Sweden					
Euroclear Sweden	53	53	52	49	46
Switzerland					
SECOM	375	367	354	342	327
Turkey	4.054	4.040	4.045	4 000	4 100
Takasbank	1,051	1,048	1,015	1,022	1,122
Central Securities Depository ESTS	601	657 50	672	678	695
	49	50	50	53	53
United Kingdom CREST	32,388	26,643	23,648	23,648	17,050
United States	32,300	۷ ۵,04 3	23,040	23,040	17,030
NBES	2,139	2,084	2,012	1,839	1,918
DTC	375	353	338	338	319
	373	333	330	550	313

Table CSD5
Securities held on account at selected central securities depositories (end of year)

System			of securit			Market capitalisation (USD billions) ¹						
		(thousand	•		2012	2012	2212	2011	0045	2012		
Australia	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016		
ASX Settlement	2.19	2.20	2.21	2.24	2.22	1,335.0	1,312.8	1,237.7	1,143.3	1,278.9		
Austraclear	nav	nav	nav	nav	nav	•	•		1,350.9	1,409.1		
Belgium	liav	IIav	IIav	IIav	IIav	1,420.7	1,314.3	1,300.3	1,550.9	1,403.1		
NBB SSS	1.85	2.06	2.12	2 36	2,949.00	700.9	747.1	676.6	626.5	645.7		
Euroclear Belgium	0.82	1.04	0.97	1.09	1.09		279.6	273.0	295.2	249.8		
Euroclear Bank	202.8	212.1	220.0	230.7					13,361.8			
Brazil	202.0		220.0	200.7	2.0.2	1,10110	. 1,000.2	,0 .0.0	10,00110	10,02 110		
SELIC	0.45	0.37	0.39	0.36	0.35	1,432.6	1,312.0	1,297.1	1,071.6	1,484.2		
BMFBOVESPA-Equities	1.26	1.30	1.32	1.34	1.39		464.2	417.8	242.3	393.9		
CETIP	2,523.5	2,695.4	3,272.0	7,430.1	9,174.9		1,608.7	1,558.2	1,137.8	1,529.8		
Canada	,	,	,	,	,	ŕ				,		
CDS	78.17	76.76	75.36	75.15	52.53	4,152.0	4,080.7	3,983.4	3,322.0	3,780.1		
China												
SD&C	4.09	5.07	6.33	8.51	13.06	3,899.6	4,297.6	6,629.6	8,918.7	8,518.2		
CDC Depository and	3.57	4.23	4.86	6.16	7.46	3,779.3	4,249.8	4,695.2	5,396.1	6,303.4		
France												
Euroclear France	54.09	52.51	62.48	61.90	65.77	7,023.5	7,764.5	6,989.3	6,612.6	6,618.1		
Germany												
Clearstream Banking AG	2,655.7	3,938.4	4,171.1	4,703.0	4,050.0	7,920.5	8,793.2	9,195.3	8,499.2	8,136.8		
Hong Kong SAR												
CCASS	6,725.0	8,217.0	8,529.0	8,362.0	7,807.0	-		1,922.1	1,944.7	1,983.2		
CMU	2.03	2.21	2.24	2.07	1.94	198.95	230.54	235.54	241.13	254.64		
India												
RBI (SSS)	0.002	0.002	0.002	0.002	0.003	813.0	826.9	913.7	990.5	1,080.0		
NSDL ¹	686.5	795.5	927.4	1,100.2	1,317.6	1,401.9	1,444.3	1,855.1	1,766.4	2,155.7		
CDSL ¹	151.7	177.3	206.0	226.6	255.2	179.8	175.7	220.2	199.6	261.3		
Italy												
Monte Titoli	43.79	42.37	38.24	43.32	29.64	4,233.3	4,549.6	4,066.3	3,598.9	3,346.9		
Japan												
BOJ	nav	nav	nav	nav	nav	10,867.0	9,115.5	8,071.8	8,155.4	8,573.4		
JASDEC ¹	73.28	70.88	70.85	71.26	76.48	4,051.2	8,237.0	8,373.7	8,736.1	9,569.7		
Korea												
KSD	44.39	48.72	51.38	51.37	57.19	1.51	1.66	1.68	1.67	1.67		
Mexico												
Indeval	8.75	9.15	9.67	10.34	10.90	1,353.0	1,508.3	1,461.5	1,296.3	1,110.5		
Netherlands												
Euroclear Netherlands	10.00	12.00	14.00	17.00	18.00	1,152.1	1,323.0	1,248.1	1,081.5	1,061.0		
Russia												
NSD	6.62	6.85	7.81	9.20	11.89		727.7	497.5	487.5	662.0		
DCC	1.11	0.51	nap	nap	nap	28.7	0.1	nap	nap	nap		
Saudi Arabia												
Tadawul ¹	104,147	135,755	159,906	161,536	167,130	390.0	507.8	483.5	421.1	0.5		
Singapore												
MEPS+(SGS)	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav		
DCSS	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav		
CDP	nav	nav	nav	nav	nav	1,306.4	1,444.3	1,563.8	1,477.0	1,529.6		
South Africa	4.55	F 70	0.04	0.07	0.00	044.0	004 4	000.7	650.0	705.0		
SAFIRES Sweden	4.55	5.79	8.64	8.97	9.02	941.6	881.4	863.7	652.9	795.6		
Sweden Euroclear Sweden	2017	201	no.	2011	201	1 500 0	1 770 6	1 170 4	1 407 9	1 467 4		
Switzerland	nav	nav	nav	nav	nav	1,590.0	1,772.6	1,172.4	1,407.8	1,467.1		
SECOM	254.2	285.5	296.4	325.6	336.8	2 027 2	3 2/10 /	3 231 5	3,151.0	3 080 3		
·-		200.0	230.4	323.0	550.0	۷. ۱ د و	5,243.4	5,254.5	5,151.0	5,003.3		
Converted at end of year exchange	rates.											

¹ Converted at end of year exchange rates.

Japan: ¹ Data refer to total transactions during the fiscal year ending March of the following year (see Japan, Table23). As a consequence, they are converted at end-March of following year exchange rates.

 $^{{\}bf India}$: 1 For number of securities held, billions.

Saudi Arabia: 1 For number of securities held, millions.

Table CSD5 (cont)

System	Number of securities held (thousands)					Market capitalisation (USD billions) ¹				
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
Turkey										
Takasbank	0.78	0.77	0.74	0.70	0.77	28.28	26.83	31.75	29.76	29.81
Central Securities Depository ¹										
	1.78	1.96	2.34	2.53	2.77	438.4	355.6	394.5	287.7	259.3
ESTS	0.06	0.05	0.06	0.06	0.07	212.79	182.64	173.07	157.42	128.00
United Kingdom										
CREST	11.29	12.04	14.17	14.17	14.17	5,957.0	7,023.9	6,909.5	9,219.1	6,125.7
United States										
NBES	1,217.6	1,225.9	1,231.5	1,243.6	nav	63,196.0	65,726.0	67,914.9	70,489.7	74,039.8
DTC	1,354.0	1,326.0	1,300.0	1,341.0	1,348.0	37,200.0	42,907.5	46,436.6	45,361.4	48,225.2

¹ Converted at end of year exchange rates.

Turkey: ¹ For number of securities held, millions.

Annexes

General comments

Exceptions Data in the tables conform to this methodology unless indicated otherwise

in the table concerned.

However, it should be noted that varying methods of collecting data can

also complicate cross-country comparisons.

Breaks in series Where these occur, they are indicated by a footnote.

Sources of data These are indicated under the table concerned where appropriate.

Definitions Definitions in the tables which are not given in this methodology are based

on "A glossary of terms used in payments and settlement systems",

revised version, March 2003 (http://www.bis.org/publ/cpss00b.htm).

Where necessary, footnotes to individual tables explain the country-specific definitions, eg of "banks". (Note that in general the term "banks" should be broadly construed according to local regulations so as to include all relevant financial institutions, eg "credit institutions" in EU countries.)

Intrabank items These are included as appropriate except where indicated.

Foreign currencies are not included in the figures unless otherwise

indicated.

Time period Each table indicates the period (eg year) or point in time (eg end-year) for

which the data are presented. The data are totals unless the table explicitly

indicates otherwise (eg a daily average).

Estimated data Where data are broadly estimated and thus only indicative, this is indicated

in a footnote (except for population and GDP in Table 1 and data in Country Tables 7 and 8, where it is taken for granted that the data are

estimated).

Seasonal adjustment Figures are not seasonally adjusted unless otherwise indicated.

"nap", "nav" and "0" Where data are not applicable (ie the category does not exist in the

reporting country), this is indicated by "nap". Where data are not available (ie the category exists, but data are not available), this is indicated by

"nav". Where data are exactly zero or none this is indicated by "0".

Statistical methodology for the country tables

General

Stock data are collected at annual frequency with reference date end-December, except when specified otherwise. Transaction data cover the whole calendar year.

Note that definitions are only provided once. The items only appear on the left-hand side of this methodology when they appear for the first time in the tables, in which case a definition is given, or when there are some specific methodological issues in the table concerned.

Basic information: banknotes and coin; institutions; transferable deposits

Table 1: Basic statistical data

Population Average for the year (computed as the average of two point values at the

start and end of the year, or otherwise).

GDP Nominal (not real) GDP.

GDP per capita GDP divided by population.

CPI inflation Changes in the price of consumer goods and services (yearly averages of

monthly values), in per cent.

Exchange rate (domestic currency vis-à-vis USD) Provided both as a year-end value and as an average for the year.

Table 2: Settlement media used by non-banks

Notes and coin (or currency) in circulation outside banks

The value of cash in circulation in the economy. The figure excludes notes and coin kept in vaults at central banks or at banks (see Table 4) but includes holdings by non-residents. It also excludes commemorative coins that are not used for payments, unless otherwise indicated.

Transferable deposits

Deposits which are convertible into currency and/or can be used to make cashless payments using one of the instruments mentioned in Tables 7 and 8, as included in the national definition of M1. They include, when relevant, overnight overdrafts on these accounts. In addition, they include deposits in foreign currencies and outstanding values on e-money storages if these are also included in M1.

Narrow money supply

(M1)

Other

Items other than notes and coin and transferable deposits included in M1.

Cash in circulation and transferable deposits held by non-banks including

non-residents, unless otherwise indicated.

E-money storages Instruments for storing e-money funds, eg cards (card-based, see cards

with an e-money function in Table 6), personal computers or servers (computer-based, of which software- or network-based) or other devices like mobile phones (mobile-based, with the funds stored locally on a mobile

phone).

Software-based Electronic money products which employ specialised software on a

personal computer and which can typically be used to transfer electronic

value via telecommunications networks such as the internet.

Network-based Electronic money products which allow consumers to store monetary value

on a centrally located server. This value can subsequently be used for making payments on the internet.

Outstanding value on e-money storages The difference between the value of cash loaded onto an e-money storage and the value spent. The value loaded is issued against a payment to the issuer in advance and is widely accepted as a means of payment by parties other than the issuer. The value of electronic money held by banks other than the issuer is included, unless otherwise specified.

Table 3: Settlement media used by banks

Transferable balances held at the central bank

Deposits held by banks at the central bank which can be used for payment purposes, regardless of the type of account (eg current account, reserve account, settlement account, clearing account).

Required reserves

Funds that banks are required to hold at the central bank. If only part of the required reserves can be used for payment purposes, that amount is indicated here.

Free reserves

Funds held voluntarily at the central bank that can be used for payment purposes.

Transferable balances held at other banks

Deposits held at other banks in the country (not at the central bank) which are convertible into currency and/or can be used for payment purposes.

Credit extended by the central bank

Intraday: credit extended by the central bank for a period of less than one business day. It is calculated as the average of the daily maximum value of simultaneous intraday overdraft positions or drawings on intraday credit facilities during the day for the aggregate of all banks, over the opening days of the interbank payment system.

Overnight: credit extended by the central bank (in the forms specified by the respective country) at the end of the day, in order to cover any (unexpected) overdrafts caused by banks' payment activities. This includes discount window facilities in the United States and marginal lending facilities in the euro area countries. It is calculated as the average of the daily total value for the aggregate of all banks, over the opening days of the interbank payment system.

Longer-term refinancing operations: credit of varying maturities extended by the central bank (in the forms specified by the respective country) through its monetary policy operations. Although banks' borrowing of these funds is not determined by their payment activities, the funds are made available in the payment system and therefore contribute to the liquidity of the system.

Table 4: Banknotes and coin

Total banknotes and coin issued

Value of banknotes and coin excluding those kept in vaults at central banks or at treasury departments (but including those held at banks). Commemorative coins that are not commonly used to make payments are excluded.

Total banknotes issued

Value of banknotes which are part of the liabilities of the central bank; a breakdown by denomination is provided.

Total coin issued

Value of coin; a breakdown by denomination is provided.

Banknotes and coin held by banks

Banknotes and coin in banks' vaults and thus not in circulation among the public.

Banknotes and coin in circulation outside banks

Total banknotes and coin in circulation less banknotes and coin held by banks (identical to notes and coin in Table 2).

Table 5: Institutions offering payment services to non-banks

Categories

Categories of institutions are based on the individual countries' own financial systems. Particular categories are explained where this is felt to be necessary. As a rule, subsidiaries of foreign banks with legal personality in the reporting country are counted alongside domestic banks. The same holds for the post office when it is recognised as a bank by the national jurisdiction.

Branches of foreign banks

All places of business located in the reporting country of banks headquartered in other countries, which have no legal personality, and which carry out all or some of the transactions inherent in the business of banking.

Foreign-owned banks or subsidiaries of foreign banks are included with domestic banks.

Other institutions offering payment services

Non-banking institutions offering payment services to non-banks, such as the post office (when it is not considered as a bank), money remitters, card schemes or public authorities offering such services. Whenever possible, the types of institutions included are indicated.

In some countries, information for some or all of these institutions is not available, or is restricted to transaction data (which is shown in Tables 6 to 8). In such cases, Tables 6 to 8 may include information from a larger range of service providers than those included in Table 5; if required, an explanatory footnote is given.

Number of institutions

Any institution which offers payment services is included even if it does not hold deposits for customers (eg because the money transferred is given in cash by the customer to the institution, or debited from a sight account held at another institution). Each institution is counted once, irrespective of the number of branches or offices it holds in the country.

Number of branches or offices

All places of business of an institution that offer cashless payment services to non-banks. The head office of the institution is counted as an office if it offers such services. Mobile offices are excluded.

Number of accounts

The number of accounts held by banks for non-banks (including the government) and individuals, which can be debited directly using one of the instruments mentioned in Tables 7 and 8. This excludes savings accounts; it may include time deposits.

Value of accounts

The aggregate amount of deposits held by non-banks at institutions offering payment services.

This amount differs from Table 2, as that table also contains deposits held at institutions which do not offer payment services (eg money market funds).

Electronic money institutions

An undertaking or any other legal person, other than a bank, which issues means of payment in the form of electronic money.

Outstanding value on e-money storages The value of e-money issued by electronic money institutions and held by entities other than the issuer, including banks other than the issuer.

This figure differs from that in Table 2, as that table also contains outstanding value on e-money storages issued by banks.

Retail payment instruments

Table 6: Payment card functions and accepting devices

A. Cards

A card which has several functions is counted in each relevant line. Therefore, in general, these figures should not be added because of the risk of double-counting. In cases where certain functions are not indicated separately but grouped together, this is indicated in the table concerned.

Cards are counted on the issuing side. Each country reports the number of cards that have been issued in the country (and used for transactions within and outside the country of issue) and not the number of cards used in the country.

All valid cards are included, irrespective of when they were issued and how actively they are used. Expired or withdrawn cards are not included. Cards issues by three-party schemes, eg American Express or Diners, are included. Cards issued by merchants are not included in the standard categories, unless they have been issued in cooperation with a bank. When relevant, they can be included under the memorandum item *Retailer cards*.

Cards with a cash function

Cards enabling the holder to withdraw cash from a cash dispenser and/or to deposit cash.

Cards with a debit function

Cards which enable the holder to have purchases directly charged to funds on his/her account at a bank (may sometimes be combined with another function, such as that of a cash card or cheque guarantee card). The total represents the number of cards in circulation, not the number of accounts to which the cards are linked.

Cards with a delayed debit function

Cards enabling the holder to charge his/her account up to an authorised limit. These cards allow holders to make purchases, but do not offer extended credit, the full amount of the debt incurred having to be settled at the end of a specified period.

Cards with a credit function

Cards indicating that the holder has been granted a line of credit. They enable him/her to make purchases and/or draw cash up to a prearranged ceiling. The credit granted may be settled in full by the end of a specific period, or may be settled in part, with the balance taken as extended credit. Interest is charged on the amount of extended credit and the holder is sometimes charged an annual fee.

Cards with an e-money function

Reloadable multipurpose prepaid cards which can be used at the sites of several service providers for a wide range of purposes and which have the potential to be used on a national or an international scale, but may sometimes be restricted to a certain area.

Cards with an e-money function which have been loaded at least once These cards can be considered as activated: the loading may be interpreted as indicating the intention to use the e-money function.

Retailer cards

Cards issued by non-banking institutions (merchants) for use at specified retail outlets. May function as cards with a debit, delayed debit or credit function.

If the retailer cards have been issued in cooperation with a bank (cobranding) they are included according to the function(s) available on the card; whenever possible these cards are specified as a sub-item.

Non-co-branded cards can be included as a memorandum item or as a footnote.

B. Terminals

ATMs with several functions (eg cash dispensing and credit transfer function) are counted in each relevant line. Therefore, in general, these figures should not be added because of the risk of double-counting.

For some countries, there may be double-counting of the number of ATMs when the data are reported per card issuer or per card scheme, and the same ATM is reported under several schemes; if required, an explanatory footnote is given.

ATMs (automated teller machines)

Electromechanical devices allowing authorised users, by using a payment card, to withdraw cash from their account and in some cases to access a range of other services, such as balance enquiries, transfers of funds and acceptance of deposits. ATMs may be operated online (with real-time reference to an authorisation database) or offline.

ATMs with a cash withdrawal function

ATMs allowing their users, by using a card with a cash function, to withdraw cash from their accounts.

ATMs with a credit transfer function

ATMs allowing their users, using a payment card, to make credit transfers.

POS (point of sale)

This term refers to the use of payment cards at a retail location. The payment information is captured either by paper vouchers or by electronic terminals. Each single terminal is counted separately, independent of the existence of several terminals within one merchant location. Countries reporting each merchant location as one terminal will specify this in a footnote.

EFTPOS (electronic funds transfers at the point of sale)

A terminal at a retail location which is designed to capture, and in some cases also transmit, debit card transactions by electronic means. Each single terminal is counted separately, independent of the existence of several terminals within one merchant location. Countries reporting each merchant location as one terminal will specify this in a footnote.

E-money card terminals

Terminals allowing the transfer of e-money between the issuer of e-money and the holder of an e-money card, or between the holder of an e-money card and a beneficiary.

E-money card loading/unloading terminals Terminals allowing the transfer of electronic value from an issuer of electronic money to the holder of a card with an e-money function and vice versa (unloading).

E-money card payment terminals

Terminals located at the point of sale that permit the holder of e-money to transfer e-money value from his/her e-money card to the balance of the merchant or other beneficiary. Each single e-money accepting terminal is counted separately, independent of the existence of several terminals within one merchant location. Countries reporting each merchant location as one terminal will specify this in a footnote.

Tables 7 and 8: Indicators of the use of payment instruments and terminals by non-banks (volume and value of transactions)

The objective of the upper part of these tables is to estimate the volume and value of transactions effected with cashless payment instruments issued in the country concerned, irrespective of where the transactions were effected. Thus payments with cards issued in the country will include both domestic payments and payments executed abroad. The lower part of each table distinguishes between cashless payments effected in the reporting country with instruments issued in the reporting country and abroad, and payments effected abroad with instruments issued in the reporting country.

Figures concerning only a sample of banks or customers should be extrapolated to provide figures covering the whole volume and value of cashless payment instruments used in the country. Only customer transactions are included. Transactions initiated by banks are excluded, unless they are related to the bank's own retail payments (utility bills, salaries etc). Transfers between accounts in the same name are only included when these accounts are at different banks. Transfers between accounts in the same name at the same bank are not included, unless indicated otherwise.

In the case of cross-border payments, there is a need to avoid double-counting (ie in the country of the originator and in that of the beneficiary). Cross-border cashless payments are accordingly counted in the country of the originator. Card payments and e-money payment transactions are counted on the issuing side. Only transactions with cards or e-money storages issued in the country are counted in the upper part of each table. For these cards and storages all transactions, within and outside the country, are reported.

A. Payment instruments

Credit transfers

Payment orders or possibly sequences of payment orders made for the purpose of placing funds at the disposal of the beneficiary. Both the payment orders and the funds move from the payer's bank to the payee's bank, possibly via several other banks as intermediaries and/or one or more interbank funds transfer systems. Payments are counted on the payer's side.

Credit transfers performed via ATMs with a credit transfer function are included. Credit transfers which have cash at one or both ends of the payment transaction, eg money and postal orders, are also included. Credit transfers used to settle balances of cards with a credit or a delayed debit function are included, as these are separate payments from the card holder to the card issuer. Cross-border credit transfers (sent) are included.

Cash payments into the account using a bank form are not included under credit transfers, but can be shown in a memorandum item *OTC cash deposits*.

In the case of standing orders and in the case of bulk or batch payment orders, each individual transaction is counted as one transaction.

The categories *paper-based* and *non-paper-based* are mutually exclusive.

Paper-based

Credit transfers which are submitted on paper forms. Includes submissions by telefax if they require manual intervention to be transformed into electronic payments.

Non-paper-based

Credit transfers which are submitted without the use of paper forms, eg electronically or via telephone. Includes submissions by telefax if they do not require manual intervention to be transformed into electronic payments. Includes standing orders which are originally submitted on paper forms, but then executed electronically. Includes credit transfers initiated at an ATM.

Direct debits

Preauthorised debits, possibly recurrent, of the payer's account by the payee. Both one-off and recurrent direct debits are included. In the case of recurrent direct debits, each individual payment is counted as one transaction. Direct debits used to settle balances of cards with a credit or delayed debit functions are included, as they are separate payments from the card holder to the card issuer. Direct debits resulting from the settlement of an individual card transaction should not be reported because

of the risk of double-counting. Payments are counted on the payee's side.

Cash payments out of the account using a bank form are not included, but may be shown under the memorandum item *OTC cash withdrawals*.

Card payments with cards issued in the country

Payment transactions performed with cards with a debit, credit or delayed debit function issued in the reporting country, at a terminal or via other channels. Payments can have been made in the reporting country or abroad. E-money transactions and mobile payments are not included. For the breakdown of cards by category, see Table 6. These sub-categories mutually exclusive. Only payments are included. withdrawals/deposits at ATMs or credit transfers at ATMs are not included. Cash advances at POS terminals are also excluded, when it is possible to distinguish them. Payments by phone and over the internet using a card are included. Payments with retailer cards are excluded, except when the retailer card was issued in cooperation with a credit institution. For countries with significant business with retailer cards, a memorandum item or a footnote can be included.

E-money payment transactions

Transactions where the holder of e-money transfers e-money value from his/her balance to the balance of the merchant. This can be done either with an e-money card or through other e-money storages.

Cheques

A written order from one party (the drawer) to another (the drawee, normally a bank) requiring the drawee to pay a specified sum on demand to the drawer or to a third party specified by the drawer. Cheques may be used for settling debts and withdrawing money from banks. Traveller's cheques, promissory notes and banker's drafts are included under cheques. Commercial bills are included if funds transfers can be made on the basis of these, without using another medium.

Cash withdrawals using bank forms are not included.

Cheques are counted on the payee's side when submitted for cheque clearing. Cheques issued but not submitted for clearing are not included.

Other payment instruments

Includes payment instruments that exist in some countries and cannot be included in any of the other categories. These could be, for example, bills of exchange, included truncated bills of exchange. Mobile payments are not included, unless specified otherwise. A footnote states which payment instruments are included.

B. Terminals

Transactions at ATM, POS and e-money card payment and loading/unloading terminals are reported according to the location of the terminal and the country of issue of the card used.

ATM cash withdrawals

Cash withdrawals performed at ATMs using a card with a cash function. Cash advances at POS terminals using a debit, credit or delayed debit card are not included, but are reported under *POS transactions*. If it is possible to distinguish them, they are, in addition, reported as a memorandum item *Cash advances at POS terminals*.

ATM cash deposits

Cash deposits performed at ATMs using a card with a cash function.

POS payment transactions

Transactions performed through POS terminals using a card with a debit, delayed debit or credit function. Cash advances at POS terminals are included. If it is possible to distinguish them, they are, in addition, reported in a memorandum item *Cash advances at POS terminals*.

E-money card loading/unloading transactions Transactions allowing the transfer of e-money value from an issuer of electronic money to a holder's card with an e-money function and vice versa. Both loading and unloading transactions are included.

E-money card payment transactions

E-money payment transactions with e-money cards.

Interbank funds transfer systems (IFTSs)

Table 9: Participation in selected interbank funds transfer systems

Total number of participants

Any institution that is identified/recognised by the system and which is allowed to send transfer orders to and receive transfer orders from the system, either directly (as a direct participant) or indirectly (as an indirect participant).

For CLS: settlement members and user members.

Direct participants

Any participant in a system that directly exchanges transfer orders with other participants in the system, without an intermediary, and is directly responsible for settling them. In some systems, direct participants also exchange orders on behalf of indirect participants.

For CLS: settlement members only.

Banks Any institution recognised as a bank by the national jurisdiction which is a

direct participant in the system.

Central bank is a direct participant in the system when it directly

exchanges transfer orders with other participants in the system.

General government Central, regional or local government, government agencies and other

(semi-) public institutions which are direct participants in the system.

Postal institution The postal institution is only counted separately when it i) participates

directly in the system and ii) is not considered (and supervised) as a bank

(if this is the case, it is counted together with other banks).

Clearing and settlement

organisations

All clearing and settlement organisations which are direct participants in the system. Generally, retail and securities clearing and/or settlement organisations directly participate in the large-value funds transfer system in which the respective retail or securities transactions are finally settled. When the relevant settlement organisations are considered as banks, they can be counted either under "banks" or under "clearing and settlement organisations"; a footnote explains the choice made.

When CLS is recognised as a direct participant in the system, it should be

reported as a clearing and settlement organisation.

Other financial institutions

All other financial institutions that are under the supervision of the relevant authorities (either the central bank or the prudential supervisor), but are not

considered as banks.

Other All other entities directly participating in the system.

Tables 10 and 11: Payments processed by selected interbank funds transfer systems (volume and value of transactions)

With regard to the volume and value of transactions, each payment instruction is counted once (not twice, ie the debit from the payer's account and the credit to the payee's account are not counted separately).

Funds transfer systems

(FTSs)

Formal arrangements based on private contract or statute law with multiple membership, common rules and standardised arrangements for the transition and settlement of money obligations arising between the members.

Interbank funds transfer systems (IFTSs)

Transfer systems in which most (or all) direct participants are banks and which are used primarily to process cashless payments.

As a rule, all IFTSs with significant business for the country are mentioned here, both those managed by the central bank and those managed by

private operators.

Figures are provided system by system, with categories of various payment instruments when relevant (cheques, direct debits, credit transfers, ATM transactions, card payments, e-money transactions etc) as sub-items.

Concentration ratio in terms of volume/value

Market share of the five largest senders of payment messages in each system (this may include the central bank). The five largest senders of transactions in terms of volume may differ from the five largest senders in terms of value. Each participant which has individual access to the system is counted separately, irrespective of whether there is a legal link (eg merger) between two or more participants.

Card payments

All card payments processed in the IFTSs are reported, irrespective of where the card was actually issued or used.

Cross-border transactions are counted in the country where the transaction originates in order to avoid double-counting (this differs from Tables 7 and 8, where card payments are reported in the acquiring country). Whenever received transactions are available, they can be reported as a memorandum item.

For other payment instruments settled in these systems (credit transfers, direct debits, cheques etc), see the definitions given for Country tables 7 and 8.

Table 12: Participation in SWIFT by domestic institutions

These figures are provided by SWIFT. Totals and their components (members, sub-members, participants) refer to "legal" users, ie users who have been approved by SWIFT's Board via the monthly Board Paper. *Live* users are those that have cutover and are connected on SWIFT.

Sub-members Domestic users sponsored by members abroad.

Participants Participants are not shareholders of SWIFT and their message traffic over

the network is restricted.

Table 13: SWIFT message flows to/from domestic users

These figures are provided by SWIFT. All traffic for domestic and international Market Infrastructures is allocated to the country of the SWIFT destination making the payment. The traffic exchanged between Market Infrastructures and their participants is excluded from the domestic traffic.

Category I Messages used by banks to transfer funds to an account of a customer

(ie messages relating to payments that are category I messages,

eg MT100 messages).

Category II Messages used by banks to transfer funds to an account of another bank

(ie messages relating to payments that are category II messages,

eg MT200 messages).

Domestic traffic Messages sent to/received from domestic users.

Securities and derivatives trading, clearing and settlement

Exchanges and trading systems

Table 14: Number of participants in exchanges and trading systems

Figures are provided separately for each trading system, with categories of various participants as sub-items. When countries are unable to provide a breakdown, only the total number of participants is reported.

Trading system

An infrastructure or mechanism aimed at facilitating securities or derivatives transactions between those who wish to buy and sell. A trading system can be a legal entity recognised as an exchange or an integrated part of a stock exchange; it can also be a multilateral trading facility or an OTC trading platform.

Only recognised and/or supervised exchanges and trading systems are reported; only the exchanges and systems that the reporting central banks consider to be relevant for this publication are reported. Reporting is done by entity; if available, more detailed figures can be provided for each or some of the markets serviced by the entity.

Participant

A participant is a legal entity that can submit (buy and sell) orders to the trading system on its own behalf or on behalf of its customers.

Domestic vs foreign participants

Any participant that is located in the country of incorporation of the trading system (which is also the reporting country) is considered as a domestic participant.

In the European Union, branches of foreign entities located in the reporting country, and participants in systems that are part of an international group, located in one of the participating countries, are considered as domestic participants. Other countries specify in a footnote how participants are classified.

When it is not possible to distinguish between the location of the participants in the system, the categories of participants appear as subitems under Total number of participants, instead of under the two subcategories Number of domestic participants and Number of foreign participants.

Central counterparty (CCP)

An entity that interposes itself between counterparties to contracts traded in one or more financial markets, becoming the buyer to every seller and the seller to every buyer.

A CCP may at the same time be a bank. In that case, it is classified as a CCP (ie according to its function) and not as a bank.

Banks See Country Table 5.

If a bank is at the same time a CCP, the institution is classified as a CCP

and not as a bank.

Other Other counterparties, for example dealers and brokers.

Table 15: Number of listed securities

Total number of securities admitted to trading

The number of securities admitted to trading on the reported trading system. Securities are distinguished according to their ISIN code, or any other national code used in the reporting country. The ISIN (International Securities Identification Number) code system is an international standard on many financial markets that facilitates the identification of securities,

particularly in cross-border transactions, since ISIN assigns each security a single number used in all countries.

When countries are only able to provide the number of companies that are listed (and not the number of different codes), this is specified in a footnote.

Debt securities

A debt security is a promise on the part of the issuer (the borrower) to make one or more payment(s) to the holder (the lender) on a specified future date or dates. Such securities usually carry a specific rate of interest (the coupon) and/or are sold at a discount to the amount that will be repaid at maturity. Includes bonds and short-term paper.

The number of securities can be approximated by the number of codes listed.

Equity

Securities representing ownership of a stake in a corporation, ie shares traded on a stock exchange (quoted or listed shares), unquoted or unlisted shares and other forms of equity. Equities usually produce income in the form of dividends. Equity includes investment fund shares and depository receipts.

The number of companies whose shares are listed is reported. A company or investment fund with several classes of shares is counted only once.

Other

Other instruments, for example warrants.

Table 16: Market capitalisation of listed companies

Total market capitalisation

The market value of companies, calculated as the total number of a company's shares outstanding multiplied by the current market price per share. Only domestic equities are included; foreign listings and investment fund shares/units are excluded. If shares are listed on several exchanges they are only taken into account for the calculation of the market capitalisation on the exchange where the shares have been issued. For exchanges that are part of an international group, all securities listed in one of the participating countries are considered.

Tables 17 and 18: Number and value of executed trades

Total number of executed securities trades

Each transaction is counted once, regardless of whether the transaction has been executed on an order-driven or on a quote-driven system (even when exchanges count transactions executed on a quote-driven system twice, once for the buyer and once for the seller).

Total value of executed securities trades

Transactions in debt securities, ie bonds and short-term papers, are valued at nominal value. Transactions in equity securities are valued at market value. The monthly average securities price can be used as market value.

The value of transactions denominated in other than the reporting currency are converted to the reporting currency taking the exchange rate on the day when the transaction takes place (transactions) or the exchange rate of the last business day of the year (stocks). The monthly exchange rate can also be used as a proxy.

Total number of executed derivatives trades

Number of derivatives contracts entered into in the reporting period.

Total value of executed derivatives trades

Gross nominal or notional value of all contracts entered into in the reporting period.

Central counterparties (CCPs) or clearing houses

A CCP is an entity that interposes itself between counterparties to contracts traded in one or more financial markets, becoming the buyer to every seller and the seller to every buyer. A clearing house is a central location or central processing mechanism reconciling and, in some cases, confirming payment orders or securities transfer instructions prior to settlement, possibly including the netting of instructions and the establishment of final positions for settlement. Only entities that do not novate transactions and assume the role of CCP are reported as clearing houses.

The name of the entity is followed, in brackets, by a mention of its function (either CCP or clearing house). When deemed necessary, a footnote provides additional information. When a single entity performs the functions of both clearing house or CCP and central securities depository, Tables 19 to 21 are completed, when relevant, with data on its clearing house or CCP activities.

Table 19: Number of clearing members

Figures are provided separately for each CCP or clearing house with categories of various participants as sub-items. When countries are unable to provide a breakdown, only the total number of participants is reported.

Number of clearing members

All members of the clearing house or CCP. Includes direct clearing members (participants that are able to clear only their own obligations) and general clearing members (participants that are able to clear their own obligations as well as those of clients).

Domestic vs foreign clearing members

Any clearing member that is located in the country of incorporation of the CCP or clearing house (which is also the reporting country) is considered as a domestic clearing member. A footnote specifies whether participants located in some other countries are also counted as domestic. A clearing member who is registered outside the reporting country, but has a branch in this country, is also reported as a domestic clearing member.

When it is not possible to distinguish between the location of the clearing members, then the categories of clearing members appear as sub-items under *Total number of clearing members*, instead of under the two subcategories *Number of domestic clearing members* and *Number of foreign clearing members*.

Central counterparty

(CCP)

CCPs which are clearing members of the reporting CCP or clearing house, and which are also banks, are classified as CCPs and not as banks.

Banks See Country Table 5. If a bank is at the same time a CCP, the institution is

classified as a CCP and not as a bank.

Other Counterparties, for example dealers and brokers.

Tables 20 and 21: Number and value of contracts and transactions cleared

Contracts/transactions denominated in another currency than the reported currency are converted to the reporting currency using the exchange rate on the day at which the transaction takes place. As a proxy, the monthly average exchange rate can be used.

Securities transactions cleared

Includes both outright securities transactions and repurchase transactions.

Number of securities transactions cleared

For CCPs, the number and value of securities transactions is reported on a post-novation basis (counting the transactions with the CCP as it interposes itself as buyer to every seller and seller to every buyer).

Value of securities transactions cleared

Transactions in debt instruments and equity securities are valued at transaction values. When the transactions cleared are free-of-payment, the securities are valued at market value. The monthly average price may be

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used as a proxy for the market value of transactions. When market value is not available, the latest available price is used.

Financial contracts whose value depends on the value of one or more Derivatives contracts

underlying reference assets, rates or indices.

OTC derivatives Derivatives transactions that have not been executed on trading platforms transactions of recognised and/or supervised exchanges or trading systems.

Financial futures Standardised contracts, traded on an exchange, that obligate one party to buy, and the other to sell, an underlying asset at a specific price and date in the future. In the case of financial futures, the underlying can be a

financial instrument (eg securities) or an index (eg interest rates).

Contracts that give the buyer the right, but not the obligation, to buy or sell Financial options

an underlying asset by (or on) a specific date for a specific price. For this right the purchaser pays a premium. In the case of financial options, the

underlying asset is a financial instrument (eg securities).

Other financial Any financial derivatives other than future and option contracts, for derivatives example swaps.

Commodity futures Standardised contracts, traded on an exchange, that obligate one party to

buy, and the other to sell, a commodity (agricultural product, oil etc) at a

specific price and date in the future.

Commodity options Contracts that give the buyer the right, but not the obligation, to buy or sell

a commodity by (or on) a specific date for a specific price. For this right the

purchaser pays a premium.

Other commodity Any commodity derivatives other than future and option contracts. derivatives

Number of derivatives Several contracts may be traded in one transaction. This item does not contracts cleared refer to the number of transactions, but to the number of contracts. For CCPs, contracts are reported on a post-novation basis (counting the contract with the CCP as it interposes itself as buyer to every seller and

seller to every buyer).

Transfers of underlying assets to fulfil obligations from open positions in derivatives at expiration of a derivatives contract are not counted as derivatives transactions. If the underlying is a security, such a transfer is

counted as a securities transaction.

Derivatives transactions are valued at market value. The market value of contracts cleared an option is the actual premium to be paid by the option buyer. The market value of a futures contract is the market value of the underlying or, for futures with notional underlying, the market price of the futures contract

itself.

Value of derivatives

Central securities depositories

A central securities depository (CSD) is a facility (or an institution) for holding securities which enables securities transactions to be processed by book entry. Physical securities may be immobilised by the depository or securities may be dematerialised (ie so that they exist only as electronic records). In addition to safekeeping, a CSD may incorporate comparison, clearing and settlement functions. When a single entity performs the functions of both clearing house or CCP and CSD, Tables 22 to 25 are completed, when relevant, with data on its clearing house or CCP activities.

Table 22: Number of direct participants in CSDs

Figures are provided separately for each CSD, with categories of various participants as sub-items. When countries are unable to provide a breakdown, only the total number of participants is reported.

Direct participants Direct account holders in a tiered system or account operators in a non-

tiered system.

Tiered vs non-tiered system

In a tiered system, custodian banks or other CSDs hold accounts with the CSD. Individual customers will only be allowed to open accounts with a

custodian bank, but not directly with the CSD.

In a non-tiered system, every private individual can have an account with the CSD. However, the accounts are operated by only a few companies,

the account operators.

A company operating the account of (private) customers in non-tiered Account operator

systems. Account operators are typically banks.

Domestic vs foreign

Any participant that is located in the country of incorporation of the CSD (which is also the reporting country) is considered as a domestic participants

participant.

When it is not possible to distinguish between the location of the participants, then the categories of participants appear as sub-items under Total number of participants, instead of under the two sub-categories

Number of domestic participants and Number of foreign participants.

If a bank is at the same time a CCP or a CSD, the institution is classified Banks

as a CCP or a CSD and not as a bank.

Table 23: Number of securities held on accounts at CSDs

Total number of ISIN

codes held

The number of securities (ISIN codes or national codes) held on accounts with the reporting CSD, comprising all securities issued or safe-kept in the

reporting CSD, or transferred into the CSD through a link.

Debt securities A debt security is a promise on the part of the issuer (the borrower) to

make one or more payment(s) to the holder (the lender) on a specified future date or dates. Such securities usually carry a specific rate of interest (the coupon) and/or are sold at a discount to the amount that will be repaid

at maturity.

Non-debt securities All other securities (mainly equities).

Bonds Debt securities (including convertible securities) with an original maturity of

more than one year.

Debt securities (including convertible securities) with an original maturity of Short-term paper

one year or less.

Table 24: Value of securities held on account at CSDs

Total value of securities

held

The value of securities held on accounts with the reporting CSD, comprising all securities issued or safe-kept in the reporting CSD, or transferred into the CSD through a link.

The value of securities denominated in a currency other than the reporting currency is converted to the reporting currency using the exchange rate on

the last business day of the year.

Debt securities

Valued at nominal value.

Equity and other

Valued at market value. The monthly average price may be used as a proxy for market value. When market values are not available, the latest available price is used (as specified in a footnote).

When no price and no recent payment value can be associated with the security (eg in DVP transactions), each security is valued at one unit of national currency.

Securities for which no market price is available

This item aims at providing information about the relative importance of non-debt securities (ISIN or national codes) for which the valuation rule has been applied.

Tables 25 and 26: Number and value of delivery instructions processed

Delivery instructions

All instructions to move securities between accounts.

For trades not cleared by a CCP: data related to delivery instructions are reported on a gross basis. For trades cleared by a CCP: data related to delivery instructions are reported on a post-netting basis.

Delivery instructions reported also include:

- · instructions to block (and de-block) securities for collateralisation purposes on a borrower's securities account with the CSD;
- securities movements due to automatic securities lending or automatic collateralisation (including self-collateralisation);
- delivery instructions to move securities from the participant's own account to his omnibus account and vice versa when there is segregation on a participant's account with the CSD;
- delivery instructions related to the transfer of securities between two accounts of the same account operator in a non-tiered system.

Not reported are instructions:

- related to securities movements due to corporate actions (restructuring the ownership of a company through an action such as a stock split or conversion), new issues and redemptions;
- · related to purely technical bookings such as realignment procedures.

Number of delivery instructions

In principle, only delivery instructions are counted.

An instruction to transfer two or more securities (ISIN or national codes) is counted as two (or more) instructions. When processing an instruction to transfer securities from a seller to a buyer requires two transfers, due to the use of a technical account (that cannot be assigned to a CSD participant), only one transfer is reported. If the CSD receives two instructions regarding the same transaction (eg one from the seller and one from the buyer of the securities), only one instruction is reported.

For transfers through a link between CSDs, only the issuer CSD should report. When the issuing CSD is not involved (eg transfers through the "bridge"), only the delivering CSD reports.

Value of delivery instructions

The value of securities denominated in a currency other than the reporting currency is converted to the reporting currency using the exchange rate on

the day of the transaction. As a proxy, the monthly average exchange rate

can be used.

DVP transactions A mechanism that ensures that the delivery of a security occurs if, and only

if, payment occurs.

Free-of-payment

transactions

Delivery of securities with no corresponding payment of funds

Debt securities Valued at nominal value.

Equity and other Valued at market value. See Table 24.

Statistical methodology for the comparative tables

General

The comparative tables are fully based on the country tables, with the exception, to a certain extent, of the payment, trading and clearing and settlement systems tables (Table PS1 ff). In this methodology, references to both country and other comparative tables are made in brackets, where [CT 1] indicates that the figures used in the comparative table under consideration have been calculated with data from Country Table 1. When figures can either be derived from a country or from a comparative table, only the reference to the country table appears, as the figures presented there are considered to be the source of the comparative tables. In some cases, however, reference is also made to other comparative tables, because of repeated identical calculations. When calculations are identical for all or most items of a table, the full formula is only given once, while repetitions are indicated by "idem".

In all tables, figures are given for individual CPMI countries. A figure for the euro area is added to the individual countries' figure in Table 2. A figure for all CPMI countries is also calculated in Tables 1–15 (where this is statistically not relevant, this is indicated by "nap"). Where applicable, these totals or averages are expressed in or based on USD terms.

Henceforth, comparative tables are simply referred to as tables.

Basic information: banknotes and coin; institutions; transferable deposits

Table 1: Basic statistical data

Based on CT 1.

GDP Nominal figures, expressed in USD by dividing GDP in domestic currency

[CT 1] by the average exchange rate of the domestic currency vis-à-vis the

Average and end-of-year exchange rates (domestic currency vis-à-vis

USD [CT 1].

Population Population [CT 1].

GDP per capita GDP in USD [Table 1] divided by population [CT 1].

Consumer price inflation CPI inflation [CT 1].

Exchange rate (domestic currency

omestic currency USD) [CT 1].

(domestic currency vis-à-vis USD)

Table 2: Banknotes and coin in circulation

Based on CT 4.

Total value Banknotes and coin (including banknotes and coin held at banks) [CT 4],

converted to USD using the end-of-year exchange rate [CT 1].

Value per inhabitant Total value in USD [Table 2] divided by population [CT 1].

Value as a percentage

of GDP

Total value [CT 4] divided by GDP [CT 1].

Value as a percentage

of narrow money

Total value [CT 4] divided by narrow money [CT 2].

Table 3: Transferable deposits held by banks

Based on CT 3.

Transferable balances held at the central bank

Total value Value of transferable balances held at the central bank [CT 3], converted to

USD using the end-of-year exchange rate [CT 1].

Value as a percentage

Value of transferable balances held at the central bank [CT 3], divided by

of GDP

GDP [CT 1].

Transferable balances held at other banks

Total value Value of transferable balances held at other banks [CT 3], converted to

USD using the end-of-year exchange rate [CT 1].

Value as a percentage

Value of transferable balances held at other banks [CT 3], divided by GDP

of GDP

[CT 1].

Table 4: Institutions offering payment services to non-banks

Based on CT 5.

Number of institutions

Total number Total number of institutions offering payment services to non-banks [CT 5].

Number per 1 million

inhabitants

Total number of institutions [CT 5] divided by population [CT 1].

Number of branches or offices

Total number of branches or offices [CT 5].

Number per 1 million

inhabitants

Total number of branches or offices [CT 5] divided by population [CT 1].

Table 5: Transferable deposits held by non-banks

Based on CT 5.

Total number of

Total number of accounts [CT 5].

accounts

Number of accounts per

inhabitant

Number of accounts [CT 5] divided by population [CT 1].

exchange rate [CT 1].

Value per inhabitant Total value of accounts in USD [Table 5] divided by population [CT1].

Value as a percentage

of GDP

Total value of accounts [CT 5] divided by GDP [CT 1].

Retail payment instruments

Table 6: Payment transactions by non-banks: total number of transactions

Based on CT 7.

Total number of Total number of transactions with payment instruments [CT 7]. This is

transactions equal to the sum of the sub-items of Table 7.

Increase in the number Difference between total number of transactions with payment instruments of transactions

[CT 7] in the current and previous year, divided by that number for the

previous year, in per cent.

Number per inhabitant Total number of transactions with payment instruments [CT 7] divided by

population [CT 1]. This is equal to the sum of the sub-items of Table 7c.

Number per deposit account held by non-banks

Total number of transactions with payment instruments [CT 7] divided by

transferable deposits [CT 2].

Table 7: Use of payment instruments by non-banks: number of transactions per payment

Tables 7 and 7a-c are based on CT 7. The objective of these tables is to compare the volume of cashless payment instruments used in the countries concerned.

Credit transfers Credit transfers [CT 7]. Direct debits Direct debits [CT 7]. Cheques Cheques [CT 7].

E-money payment

transactions

E-money payment transactions [CT 7].

Card payments Card payments with cards issued in the country [CT 7].

... by cards with a debit

function

Payments by card with a debit function [CT 7].

... by cards with a delayed debit function

Payments by card with a delayed debit function [CT 7].

... by cards with a credit

Payments by card with a credit function [CT 7].

function

Table 7a: Use of payment instruments by non-banks: relative importance of payment instruments, in number of transactions

This table is based on CT 7 or on Table 7, in that it takes the figures concerning the use of payment instruments, in volume terms, and expresses them as a percentage of the total volume of payment instruments used by non-banks.

Credit transfers [CT 7] expressed as a percentage of total number of Credit transfers

transactions with payment instruments [CT 7].

Direct debits Idem for direct debits [CT 7]. Cheques Idem for cheques [CT 7].

E-money payment

transactions

Idem for e-money payment transactions [CT 7].

Card payments Idem for card payments with cards issued in the country [CT 7]. ... by cards with a debit

Idem for payments by card with a debit function [CT 7].

function

... by cards with a delayed debit function Idem for payments by card with a delayed debit function [CT 7].

... by cards with a credit

Idem for payments by card with a credit function [CT 7].

function

Table 7b: Use of payment instruments by non-banks: increase in the number of transactions

This table is based on CT 7 or on Table 7, in that it takes the figures concerning the use of payment instruments, in volume terms, and calculates the year-on-year growth rate.

Credit transfers Difference between the volume of credit transfers [CT 7] in the current and

previous year, divided by that number for the previous year, in per cent.

Direct debits Idem for direct debits [CT 7]. Cheaues Idem for cheques [CT 7].

E-money payment

Card payments

Idem for e-money payment transactions [CT 7].

transactions Idem for card payments with cards issued in the country [CT 7].

... by cards with a debit

Idem for payments by card with a debit function [CT 7].

function

... by cards with a delayed debit function Idem for payments by card with a delayed debit function [CT 7].

.... by cards with a credit function

Idem for payments by card with a credit function [CT 7].

Table 7c: Use of payment instruments by non-banks: number of transactions per inhabitant

This table is based on CT 7 or on Table 7, in that it takes the figures concerning the use of payment instruments, in volume terms, and expresses them as the number of transactions per inhabitant.

Credit transfers Credit transfers [CT 7] divided by population [CT 1].

Direct debits Idem for direct debits [CT 7]. Cheques Idem for cheques [CT 7].

E-money payment transactions

Idem for e-money payment transactions [CT 7].

Card payments Idem for card payments with cards issued in the country [CT 7].

... by cards with a debit

function

Idem for payments by card with a debit function [CT 7].

Idem for payments by card with a delayed debit function [CT 7].

delayed debit function

... by cards with a

... by cards with a credit

Idem for payments by card with a credit function [CT 7].

function

Table 8: Payment transactions by non-banks: total value of transactions

Based on CT 8.

Total value of Total value of transactions with payment instruments [CT 8], converted to transactions

USD using the average exchange rate [CT 1]. This is equal to the sum of

the sub-items of Table 9.

Increase in the real Difference between total value of transactions with payment instruments [CT 8] in the current and previous year, divided by that number for the value of transactions

previous year, deflated by CPI inflation in the current year [CT 1], in per

cent.

Average value per

transaction

Total value of transactions with payment instruments in USD [Table 8] divided by total number of transactions with payment instruments [CT 7].

Average value per

inhabitant

Total value of transactions with payment instruments in USD [Table 8] divided by population [CT 1].

Total value of transactions [CT 8] divided by GDP [CT 1]. Value as a ratio to GDP

Value as a ratio to deposits held by

Total value of transactions [CT 8] divided by total value of deposit accounts

[CT 5].

non-banks

Table 9: Use of payment instruments by non-banks: value of transactions per payment instrument

Tables 9 and 9a-e are based on CT 8. The objective of these tables is to compare the value of cashless payment instruments used in the countries concerned. These tables are based on the same general methodological guidance as Tables 7 and 7a-c.

Credit transfers Credit transfers [CT 8], converted to USD using the average exchange rate

[CT 1].

Direct debits Direct debits [CT 8]. Cheques Cheques [CT 8].

E-money payment transactions

E-money payment transactions [CT 8].

Card payments with cards issued in the country [CT 8]. Card payments

... by cards with a debit

function

Payments by card with a debit function [CT 8].

... by cards with a delayed debit function Payments by card with a delayed debit function [CT 8].

... by cards with a credit

Payments by card with a credit function [CT 8].

function

Table 9a: Use of payment instruments by non-banks: relative importance of payment instruments, in value of transactions

This table is based on CT 8 or on Table 9, in that it takes the figures concerning the use of payment instruments, in value terms, and expresses them as a percentage of the total value of payment instruments used by non-banks.

Credit transfers Value of credit transfers [CT 8] expressed as a percentage of total value of

transactions with payment instruments [CT 8].

Direct debits Idem for direct debits [CT 8]. Cheques Idem for cheques [CT 8].

E-money payment

transactions

Idem for e-money payment transactions [CT 8].

Card payments Idem for card payments with cards issued in the country [CT 8].

... by cards with a debit

function

Idem for payments by card with a debit function [CT 8].

... by cards with a

Idem for payments by card with a delayed debit function [CT 8].

delayed debit function

... by cards with a credit

Idem for payments by card with a credit function [CT 8].

function

Table 9b: Use of payment instruments by non-banks: increase in the real value of transactions

This table is based on CT 8 or on Table 9, in that it takes the figures concerning the use of payment instruments, in value terms and in domestic currency, and calculates the year-on-year growth rate, deflated by CPI inflation.

Credit transfers Difference between the value of credit transfers [CT 8] in the current and

previous year, divided by that number for the previous year, deflated by

CPI inflation in the current year [CT 1], in per cent.

Direct debits Idem for direct debits [CT 8].

Idem for cheques [CT 8]. Cheques

E-money payment

transactions

Idem for e-money payment transactions [CT 8].

Card payments Idem for card payments with cards issued in the country [CT 8].

... by cards with a debit

function

Idem for payments by card with a debit function [CT 8].

... by cards with a

delayed debit function

Idem for payments by card with a delayed debit function [CT 8].

... by cards with a credit

function

Idem for payments by card with a credit function [CT 8].

Table 9c: Use of payment instruments by non-banks: average value per transaction

This table is based on CTs 7 and 8 or on Tables 7 and 9, in that it takes the figures concerning the use of payment instruments, in value terms, and divides them by the volume of this use.

Value of credit transfers [CT 8], converted to USD using the average Credit transfers

exchange rate [CT 1], divided by the volume of credit transfers [CT 7].

Direct debits Idem for direct debits [CT 8]. Cheques Idem for cheques [CT 8].

E-money payment

transactions

Idem for e-money payment transactions [CT 8].

Card payments Idem for card payments with cards issued in the country [CT 8].

... by cards with a debit

function

Idem for payments by card with a debit function [CT 8].

... by cards with a Idem for payments by card with a delayed debit function [CT 8].

delayed debit function

... by cards with a credit

Idem for payments by card with a credit function [CT 8].

function

Table 9d: Use of payment instruments by non-banks: value of transactions per inhabitant

This table is based on CT 8 or on Table 9, in that it takes the figures concerning the use of payment instruments, in value terms, and expresses them as a value of transactions per inhabitant.

Credit transfers Value of credit transfers [CT 8], converted to USD using the average

exchange rate [CT 1], divided by population [CT 1].

Direct debits Idem for direct debits [CT 8].

Cheques Idem for cheques [CT 8].

E-money payment transactions

Idem for e-money payment transactions [CT 8].

Card payments Idem for card payments with cards issued in the country [CT 8].

... by cards with a debit

function

Idem for payments by card with a debit function [CT 8].

... by cards with a

Idem for payments by card with a delayed debit function [CT 8].

delayed debit function
... by cards with a credit

Idem for payments by card with a credit function [CT 8].

function

Table 9e: Use of payment instruments by non-banks: value of transactions as a ratio to GDP

This table is based on CT 8 or on Table 9, in that it takes the figures concerning the use of payment instruments, in value terms, and expresses them as a percentage of GDP.

Credit transfers Value of credit transfers [CT 8] divided by GDP [CT 1].

Direct debits Idem for direct debits [CT 8].

Cheques Idem for cheques [CT 8].

E-money payment

transactions

Idem for e-money payment transactions [CT 8].

... by cards with a debit

function

Idem for payments by card with a debit function [CT 8].

... by cards with a delayed debit function

Idem for payments by card with a delayed debit function [CT 8].

... by cards with a credit

Idem for payments by card with a credit function [CT 8].

function

Cards and terminals

Table 10: Cards issued in the country: number of cards

Based on CT 6.

Cards with a cash

function

Cards with a cash function [CT 6].

Cards with an e-money function which have

been loaded at least

Cards with an e-money function which have been loaded at least once

[CT 6].

Cards with a payment

function

once

Sum of cards with a debit function, cards with a delayed debit function and

cards with a credit function [CT 6].

Cards with a debit function [CT 6]. ... debit function

... delayed debit

function

Cards with a delayed debit function [CT 6].

If no distinction is possible between cards with a credit and/or debit function and those with a delayed debit function, they are presented under

this item.

... credit function Cards with a credit function [CT 6].

Table 10a: Cards issued in the country: increase in the number of cards

This table is based on CT 6, in that it takes the figures concerning the number of cards and calculates the year-on-year growth rate.

Cards with a cash

function

Difference between cards with a cash function [CT 6] in the current and previous year, divided by that number for the previous year, in per cent.

Cards with an e-money function which have

been loaded at least

once

Idem for cards with an e-money function which have been loaded at least

once [CT 6].

Cards with a payment

function

Idem for the sum of cards with a debit function, cards with a delayed debit

function and cards with a credit function [CT 6].

... debit function

Idem for cards with a debit function [CT 6].

... delayed debit

function

Idem for cards with a delayed debit function [CT 6].

... credit function Idem for cards with a credit function [CT 6].

Table 10b: Cards issued in the country: number of cards per inhabitant

This table is based on CT 6, in that it takes the number of cards and divides them by the country's population. It gives an indication of the penetration of cards in the population of different countries.

Cards with a cash

function

Cards with a cash function [CT 6] divided by population [CT 1].

Cards with an e-money function which have

been loaded at least once

Idem for cards with an e-money function which have been loaded at least

once [CT 6].

Cards with a payment

Idem for the sum of cards with a debit function, cards with a delayed debit

function

function and cards with a credit function [CT 6].

... debit function

Idem for cards with a debit function [CT 6].

... delayed debit function

it Idem for cards with a delayed debit function [CT 6].

Table 11: Terminals located in the country: number of terminals

Based on CT 6.

ATMs ATMs [CT 6].

POS terminals POS terminals [CT 6].

E-money E-money loading/unloading terminals [CT 6].

loading/unloading

terminals

E-money card payment

E-money card payment terminals [CT 6].

terminals

Table 11a: Terminals located in the country: increase in the number of terminals

This table is based on CT 6, in that it takes the figures concerning the number of terminals and calculates the year-on-year growth rate.

ATMs Difference between ATMs [CT 6] in the current and previous year, divided

by that number for the previous year, in per cent.

POS terminals Idem for POS terminals [CT 6].

E-money Idem for e-money loading/unloading terminals [CT 6].

loading/unloading

terminals

E-money card payment

terminals

Idem for e-money card payment terminals [CT 6].

Table 11b: Terminals located in the country: number of terminals per million inhabitants

This table is based on CT 6, in that it takes the number of terminals and divides them by the country's population. It shows the density of terminals, expressed in terms of population, in the different countries.

ATMs [CT 6] divided by population.

POS terminals Idem for POS terminals [CT 6].

E-money Idem for e-money loading/unloading terminals [CT 6].

loading/unloading

terminals

E-money card payment

terminals

Idem for e-money card payment terminals [CT 6].

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Table 12: Transactions at terminals: number of cash withdrawals and loading transactions

This table is based on CT 7. It gives an indication of the number of transactions conducted at terminals located in and outside the country with cards issued in and outside the country.

Cash withdrawals at ATMs located in the country

with cards issued outside the country

Transactions at terminals in the country by cards issued outside the

country: ATM cash withdrawals [CT 7].

with cards issued in the country

Transactions at terminals in the country by cards issued in the country:

ATM cash withdrawals [CT 7].

Cash withdrawals at ATMs located outside the country

with cards issued in the country

Transactions at terminals outside the country by cards issued in the

country: ATM cash withdrawals [CT 7].

E-money loading/unloading transactions at terminals in the country

with cards issued in the country

Transactions at terminals in the country by cards issued in the country:

e-money loading/unloading transactions [CT 7].

Table 12a: Transactions at terminals: increase in the number of cash withdrawals and loading transactions

This table is based on CT 7 or on Table 12, in that it takes the figures concerning the use of cards, in volume terms, and calculates the year-on-year growth rate.

Cash withdrawals at ATMs located in the country

with cards issued outside the country

Difference between the number of *transactions at terminals in the country* by cards issued outside the country: ATM cash withdrawals [CT 7] in the current and previous year, divided by that number for the previous year, in per cent.

with cards issued in the country

Idem for transactions at terminals in the country by cards issued in the country: ATM cash withdrawals [CT 7].

Cash withdrawals at ATMs located outside the country

with cards issued in the country

Idem for transactions at terminals outside the country by cards issued in the country: ATM cash withdrawals [CT 7].

E-money loading/unloading transactions at terminals in the country

with cards issued in the country

Idem for transactions at terminals in the country by cards issued in the country: e-money loading/unloading transactions [CT 7].

Table 13: Transactions at terminals: value of cash withdrawals and loading transactions

This table is based on CT 8 (the amounts have been converted to USD using the *average exchange rate* [CT 1]). It gives an indication of the value of card transactions conducted at terminals located in the country, either with cards issued in the country or with cards issued outside the country.

Cash withdrawals at ATMs located in the country

with cards issued outside the country

Transactions at terminals in the country by cards issued outside the country: ATM cash withdrawals [CT 8].

with cards issued in the country

Transactions at terminals in the country by cards issued in the country: ATM cash withdrawals [CT 8].

Cash withdrawals at ATMs located outside the country

with cards issued in the country

Transactions at terminals outside the country by cards issued in the country: ATM cash withdrawals [CT 8].

E-money loading/unloading transactions at terminals in the country

with cards issued in the country

Transactions at terminals in the country by cards issued in the country:

e-money loading/unloading transactions [CT 8].

Table 13a: Transactions at terminals: increase in the real value of cash withdrawals and loading transactions

This table is based on CT 8 or on Table 13, in that it takes the figures concerning the use of cards, in value terms, and calculates the year-on-year growth rate, deflated by CPI inflation.

Cash withdrawals at ATMs located in the country

with cards issued outside the country Difference between the value of transactions at terminals in the country by cards issued outside the country: ATM cash withdrawals [CT 8] in the current and previous year, divided by that number for the previous year, deflated by CPI inflation in the current year [CT 1], in per cent.

with cards issued in the country

Idem for transactions at terminals in the country by cards issued in the country: ATM cash withdrawals [CT 8].

Cash withdrawals at ATMs located outside the country

with cards issued in the country

Idem for transactions at terminals outside the country by cards issued in the country: ATM cash withdrawals [CT 8].

E-money loading/unloading transactions at terminals in the country

with cards issued in the country

Idem for transactions at terminals in the country by cards issued in the country: e-money loading/unloading transactions [CT 8].

Table 14: Transactions at terminals: number of payment transactions

This table is based on CT 7. It gives an indication of card payments conducted at terminals located in the country, either with cards issued in the country or with cards issued outside the country.

POS transactions at terminals located in the country

with cards issued outside the country Transactions at terminals in the country by cards issued outside the country: POS payment transactions [CT 7].

with cards issued in the country

Transactions at terminals in the country by cards issued in the country:

POS payment transactions [CT 7].

POS transactions at terminals located outside the country

with cards issued in the country

Transactions at terminals outside the country by cards issued in the country: POS payment transactions [CT 7].

E-money payment transactions at terminals in the country

with cards issued in the country

E-money payment transactions by cards with an e-money function [CT 7].

Table 14a: Transactions at terminals: increase in the number of payment transactions

This table is based on CT 7 or on Table 14, in that it takes the figures concerning the use of payment and e-money cards, in volume terms, and calculates the year-on-year growth rate.

POS transactions at terminals located in the country

with cards issued outside the country

Difference between the number of transactions at terminals in the country by cards issued outside the country: POS payment transactions [CT 7] in the current and previous year, divided by that number for the previous year, in per cent.

with cards issued in the ldem for transactions at terminals in the country by cards issued in the country: POS payment transactions [CT 7].

POS transactions at terminals located outside the country

with cards issued in the ldem for transactions at terminals outside the country by cards issued in the country: POS payment transactions [CT 7].

E-money payment transactions at terminals in the country

with cards issued in the dom for transactions e-money payment transactions by cards with an e-money function [CT 7].

Table 15: Transactions at terminals: value of payment transactions

This table is based on CT 8 (the amounts have been converted to USD using the *average exchange rate* [CT 1]). It gives an indication of the value of card payments conducted at terminals located in the country, either with cards issued in the country or with cards issued outside the country.

POS transactions at terminals located in the country

with cards issued Transactions at terminals in the country by cards issued outside the outside the country: POS payment transactions [CT 8].

with cards issued in the Transactions at terminals in the country by cards issued in the country: POS payment transactions [CT 8].

POS transactions at terminals located outside the country

with cards issued in the Transactions at terminals outside the country by cards issued in the country: POS payment transactions [CT 8].

E-money payment transactions at terminals in the country

with cards issued in the E-money payment transactions by cards with an e-money function [CT 8]. country

Table 15a: Transactions at terminals: increase in the real value of payment transactions

This table is based on CT 8 or on Table 15, in that it takes the figures concerning the use of payment and e-money cards, in value terms, and calculates the year-on-year growth rate, deflated by CPI inflation.

POS transactions at terminals located in the country

with cards issued outside the country by cards issued outside the country: POS payment transactions [CT 7] in the current and previous year, divided by that number for the previous year, deflated by CPI inflation in the current year [CT 1], in per cent.

with cards issued in the country ldem for transactions at terminals in the country by cards issued in the country: POS payment transactions [CT 7].

POS transactions at terminals located outside the country

with cards issued in the country ldem for transactions at terminals outside the country by cards issued in the country: POS payment transactions [CT 7].

E-money payment transactions at terminals in the country

with cards issued in the country Idem for e-money payment transactions by cards with an e-money function [CT 8].

Interbank funds transfer systems (IFTSs)

Table PS1: Features of selected interbank funds transfer systems

Figures are new and are not presented in the CTs. The first category, *System*, is presented in all payment systems (PS) tables.

System All systems presented in CT 9.

Type Large-value payment system (L); retail payment system (R); foreign

exchange settlement system (FX).

If the IFTS processes large-value and retail payments, it is shown as L+R.

Settlement Real-time gross settlement (RTGS).

Net (N), of which multilateral netting (MN) and bilateral netting (BN).

Gross (*G*): other gross settlement.

Batch settlement (BA): settlement of batches in gross value without netting.

Owner/manager Central bank (CB), commercial banks (B) or a payment association (PA).

Processing Manual (M), automated clearing house (offline, via an electronic clearing

system in which payment orders are exchanged among financial institutions and handled by a data processing centre; ACH) or real-time transmission (the transmission of funds transfer instructions on an

individual basis at the time they are initiated; RTT).

Membership Open (any bank can apply; O) or restricted (subject to criteria; R).

Degree of centralisation Centralised (one processing centre where all settlement instructions are

processed; C) or decentralised (more than one processing centre; D).

Pricing Costs passed on to payment system participants: full cost (F), including

investments with a view to cost recovery, variable cost (V), with a view to recovering the costs of transactions, symbolic cost (S), below variable cost,

or no cost (0).

Closing time for same

day transactions

Latest time of the day at which transactions can be sent to the system for

settlement on the same day; in local time.

Settlement finality Real time in RTGS systems.

Intraday in prefunded net systems. Intraday finality is settlement finality achieved continuously or several times throughout the settlement day. It can be provided through real-time settlement procedures and/or the settlement of the results of multiple batch processing during the settlement

day.

At specific times of the day (in local time) in other net and gross systems.

Cufoff third-party orders Latest time of the day at which transactions can be sent by third-party or

indirect participants to the system for settlement on the same day; in local

time.

Standard money market

hours

Opening and closing expressed in local time.

Table PS2: Payments processed by selected interbank funds transfer systems: number of transactions

Based on CT 10.

Number of transactions Total number of transactions per system [CT 10].

Increase in the number

of transactions

Difference between the total number of transactions per system [CT 10]. for the current and previous year, divided by that number for the previous

year, in per cent.

Table PS3: Payments processed by selected interbank funds transfer systems: value of transactions

Based on CTs 10 and 11.

Value of transactions Total value of transactions per system [CT 11], converted to USD using the

average exchange rate [CT 1].

Average value per

transaction

Total value of transactions per system [CT 11], converted to USD using the average exchange rate [CT 1], divided by total number of transactions per

system [CT 10].

Increase in the real

value of transactions

Difference between the total value of transactions per system [CT 10] in the current and previous year, divided by that number for the previous

year, deflated by CPI inflation in the current year [CT 1], in per cent.

Value of transactions as

a percentage of GDP

Total value of transactions per system [CT 11], divided by GDP [CT 1], in

per cent.

Table PS4: Participation in selected interbank funds transfer systems

Figures concerning participation in payment systems.come from CT 9 and concentration ratios from CTs 10 and 11.

Total number of

participants

Total number of participants [CT 9].

... of which: direct

participants

Direct participants [CT 9].

Concentration ratio in

terms of volume

Concentration ratio in terms of volume [CT 10], in per cent.

Concentration ratio in

terms of value

Concentration ratio in terms of value [CT 11], in per cent.

Securities trading, clearing and settlement

Table TRS1: Features of selected exchanges and trading systems

Figures are new and are not presented in the CTs. The first category, Exchange/system, is presented in all trading systems (TRS) tables.

Exchange/system All exchanges and trading systems presented in CTs 14–18.

Owner/manager Central bank (CB), commercial banks (B), a stock exchange (SE) or other

If owner and manager differ, both are provided. If (fully or partially) owned by another exchange, the name of that exchange is provided, as well as

the share of its ownership rights.

Markets/products Securities (SEC): bonds (B), certificates of deposit (C), government

securities (G), equity (E) and/or other (O); derivatives (DER).

Floor trading (FLT) or electronic trading (ELT). Trading

Operating times Opening and closing time of the exchange/system; in local time.

Relationship with the

central counterparty (CCP)

The CCP belongs to the same entity as the exchange = internal (int); is a subsidiary of the exchange = parental (par); or is independent from the

exchange (indep). The name of the CCP is provided.

Table TRS2: Trades executed on selected exchanges and trading systems: number of transactions

Based on CT 17.

Number of transactions Total number of transactions per system [CT 17].

Increase in the number

of transactions

Difference between the total number of transactions [CT 17] per system in the current and previous year, divided by that number for the previous

year, in per cent.

Table TRS3: Transactions processed by selected exchanges and trading systems: value of transactions

Based on CTs 17 and 18.

Total value of transactions per system [CT 18], converted to USD using the Value of transactions

average exchange rate [CT 1].

Average value per

transaction

Total value of transactions per system [CT 18], converted to USD using the average exchange rate [CT 1], divided by total number of transactions per

system [CT 17].

Increase in the real

value of transactions

Difference between the total value of transactions per system [CT 18] in the current and the previous year, divided by the total value of transactions

[CT 18] in the previous year, deflated by CPI inflation in the current year

[CT 1], in per cent.

Value of transactions as

a percentage of GDP

Total value of transactions per system [CT 18], divided by GDP [CT 1], in

per cent.

Table TRS4: Participation in selected exchanges and trading systems

Based on CT 14.

Total number of participants

Number of participants in trading systems – total [CT 14].

Table TRS5: Securities listed on selected exchanges and trading systems

Based on CTs 15 and 16.

Number of securities

Total number of securities listed [CT 15].

listed

Market capitalisation Total market capitalisation [CT 16], converted to USD using the end-of-

year exchange rate [CT 1].

Table CCP1: Features of selected central counterparties and clearing houses

Figures are new and are not presented in the CTs. The first category, *Entity,* is presented in all CCP tables.

Entity All CCPs presented in CTs 19–21.

CCP or clearing house The entity is a central counterparty (CCP) or a clearing house (CH).

Owner/manager Central bank (CB), commercial banks (B), a stock exchange (SE), another

CCP (CCP) or clearing house (CH) or other (O).

If owner and manager differ, both are provided. If (fully or partially) owned by an exchange, a CCP or a clearing house, the name of that entity is

provided, as well as the share of its ownership rights.

Relationship with

exchange

The CCP belongs to the same entity as the exchange = internal (*int*); is a subsidiary of the exchange = parental (*par*); or is independent from the

exchange (indep). The name of the CCP is provided.

Relationship with CSD The CCP belongs to the same entity as the CSD = internal (int); is a

subsidiary of the CSD = parental (par); or is independent from the CSD

(indep). The name of the CSD is provided.

Intraday margining Routine and/or event-driven. When event-driven, price-driven (P) or size-

driven (S).

Products/markets

cleared

Securities (SEC), derivatives (DER) and/or repos (REP).

Currencies ISO code of the cleared currencies.

Securities settlement

agent

The securities settlement agent (CSD (the name of the CSD is provided), central bank (CB), commercial banks (B) or other (O)) settles the securities leg of the transaction. The information is given per product and per

currency.

Cash settlement agent The cash settlement agent (central bank (CB), commercial banks (B) or

other (O)) settles the cash leg of the securities transaction. The information

is given per product and per currency.

Links to other CCPs Such links can be based on cross-participation or on common systems.

The number of links is provided per currency area.

Table CCP2: Transactions cleared by selected central counterparties and clearing houses: number of transactions

Based on CT 20.

Number of transactions Total number of transactions per CCP or clearing house [CT 20].

Increase in the number

of transactions

Difference between the total number of transactions [CT 20] per CCP or clearing house in the current and previous year, divided by that number for the previous year, in per cent.

Table CCP3: Transactions cleared by selected central counterparties and clearing houses: value of transactions

Based on CTs 20 and 21.

Value of transactions Total value of transactions per CCP or clearing house [CT 21], converted

to USD using the average exchange rate [CT 1].

Average value per

transaction

Total value of transactions per CCP or clearing house [CT 21], converted to USD using the average exchange rate [CT 1], divided by total number of

transactions per system [CT 20].

Increase in the real value of transactions Difference between the total value of transactions per system [CT 21] in the current and the previous year, divided by the total value of transactions [CT 21] in the previous year, deflated by CPI inflation in the current year [CT 1], in per cent.

Value of transactions as a percentage of GDP

Total value of transactions CCP or clearing house [CT 21], divided by GDP

[CT 1], in per cent.

Table CCP4: Participation in selected central counterparties and clearing houses

Based on CT 19.

Total number of participants

Number of participants in CCPs and clearing houses – total [CT 19].

Table CSD1: Features of selected central securities depositories

Figures are new and are not presented in the CTs. The first category, CSD, is presented in all central securities depositories (CSDs) tables.

CSD All CSDs presented in CTs 22-26.

Type of securities held Domestic securities (DOM) and/or international securities (INT). Bonds (B),

certificates of deposit (C), government securities (G), equity (E) and/or

other (O).

Owner/manager Central bank (CB), commercial banks (B), the stock exchange (SE) or

other (O).

Securities settlement

system

Name of the settlement system(s). If more than one system is in operation during the reporting period for the statistical tables, information and data

can be sent separately for each settlement system.

Closing time for same

day transactions

Latest time of the day at which transactions can be sent to the system for settlement on the same day; in local time.

Links to other CSDs Such links can be direct (based on cross-participation), or indirect (through

local agents). They can allow FoP or DVP settlement. The number of links

and their category is provided per currency area.

Delivery lag (T+n) Time lag between entering into a trade/bargain and its discharge by the

final exchange of a financial asset for payment.

Intraday finality Settlement finality achieved continuously or several times throughout the

settlement day. Intraday finality can be provided through real-time settlement procedures and/or the settlement of the results of multiple batch processing during the settlement day (yes if the system offers intraday

finality; no otherwise).

DVP (delivery versus payment) mechanism

A link between a securities transfer system and a funds transfer system that ensures that delivery occurs if, and only if, payment occurs.

In *DVP model 1*, transfer instructions for both securities and funds are settled on a trade-by-trade basis, with final transfer of securities from the seller to the buyer (delivery) occurring at the same time as final transfer of the funds from the buyer to the seller (payment).

In *DVP model 2*, securities transfer instructions are settled on a gross basis, with final transfer of securities from the seller to the buyer (delivery) occurring throughout the processing cycle, but funds transfer instructions are settled on a net basis, with final transfer of the funds from the buyer to the seller (payment) occurring at the end of the processing cycle.

In *DVP model 3*, transfer instructions for both securities and funds are settled on a net basis, with final transfer of both securities and funds accurring at the and of the processing cycle.

occurring at the end of the processing cycle.

Currencies For domestic CSDs, ISO code of the currencies in which settlement can be

done; for international CSDs, number of currencies in which settlement can

be done.

stock exchange (SE) or other (the name of the cash settlement agent is provided)) settles the cash leg of the securities transactions. The

information is provided per currency, when relevant.

Table CSD2: Transactions processed by selected central securities depositories: number of transactions

Based on CT 25.

Number of transactions Total number of transactions per CSD [CT 25].

Increase in the number of transactions

Difference between the *total number of transactions* [CT 25] per CSD in the current and previous year, divided by that number for the previous

year, in per cent.

Table CSD3: Transactions processed by selected central securities depositories: value of transactions

Based on CTs 25 and 26.

Value of transactions Total value of transactions per CSD [CT 26], converted to USD using the

average exchange rate [CT 1].

Average value per

transaction

Total value of transactions per CSD [CT 26], converted to USD using the average exchange rate [CT 1], divided by total number of transactions per

CSD [CT 25].

Increase in the real value of transactions

Difference between the *total value of transactions* per CSD [CT 26] in the current and the previous year, divided by the *total value of transactions* [CT 26] in the previous year, deflated by *CPI inflation* in the current year [CT 1],

in per cent.

Value of transactions as a percentage of GDP

Total value of transactions per CSD [CT 126], divided by GDP [CT 1], in

GDP per cent.

Table CSD4: Participation in selected central securities depositories

Based on CT 22.

Total number of participants

Number of participants in CSDs - total [CT 22].

Table CSD5: Securities held on account at selected central securities depositories

Based on CTs 23 and 24.

Number of securities

Total number of securities held [CT 23].

held

Value of securities held
Total value of securities held [CT 24], converted to USD using the average

exchange rate [CT 1].

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