COMMITTEE ON PAYMENT AND SETTLEMENT SYSTEMS

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STATISTICS ON PAYMENT SYSTEMS IN THE GROUP OF TEN COUNTRIES

figures for 1998

Prepared by the Committee on Payment and Settlement Systems of the central banks of the Group of Ten countries

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Explanatory note

This edition of Statistics on Payment Systems in the Group of Ten Countries (the "Red Book" statistical update) includes, for the first time, a standard methodology explaining what is included in the data in the country tables. It is important that the country tables are read in conjunction with this methodology. Where the data provided are an exception to the methodology, this is indicated by a footnote in the table concerned.

This edition also includes new notation as follows:

- n.a. not available
- . not applicable
- neg. the data are very small (relative to other relevant data in the table concerned)
- 0 exactly zero (not a very small number rounded to zero)

Country tables

Table 1 Basic statistical data					
	1994	1995	1996	1997	1998
Population (millions):					
average	10.12	10.14	10.16	10.18	10.20
GDP (BEF billions)	7,678	7,936	8,305	8,661	9,064
GDP per capita (BEF)	758,696	782,642	817,421	850,786	888,627
Exchange rate (domestic currency vis-à-vis USD):					
year-end average	31.84 33.45	29.44 29.49	32.01 30.96	36.92 35.85	34.58 36.31

Table 2
Settlement media used by non-banks
(at year-end in billions of Belgian francs)

(at year-end	i, in dimons of Do	signali francs)

	1994	1995	1996	1997	1998
Notes and coin	396.3	416.2	435.8	441.3	438.8
Transferable deposits ¹	1,066.9	1,111.3	1,150.1	1,225.5	1,405.6
Other		•	•	•	•
Narrow money supply (M1)	1,463.2	1,527.5	1,585.9	1,666.8	1,844.5
Memorandum item:					
Broad money supply (M3) ²	6,621.4	6,615.1	7,228.2	7,499.3	7,949.4

¹ Sight deposits in BEF of companies and private persons held with the Postcheque Office and credit institutions. ² EC harmonised concept; money stock held by companies and individuals; all assets except currency are held with all domestic credit institutions.

Table 3Settlement media used by banks

(in billions of Belgian francs)¹

	1994	1995	1996	1997	1998
Balances held at central bank	2.1	1.9	2.4	1.2	34.0
of which: required reserves ² free reserves	• 2.1	1.9	• 2.4	1.2	33.1 0.9
Transferable deposits at other banks ³	113.1	128.9	164.7	182.1	185.5
Other	•	•	•	•	
Memorandum item:					
Institutions' borrowing from central bank	3.1	4.1	1.2	4.4	4.8

¹ Average of end of month figures. ² In preparation for the introduction of the euro, the NBB introduced reserve requirements in September. ³ Payment media held by Belgian credit institutions with other credit institutions (sight accounts, BEF and foreign currencies, in Belgium and abroad).

Table 4Banknotes and coin

(at year-end, in billions of Belgian francs)

	•		-		
	1994	1995	1996	1997	1998
Total banknotes and coin issued	431.4	465.9	486.2	501.1	505.9
Denomination of banknotes:					
10,000 francs	182.6	206.1	225.7	220.1	230.4
<i>5,000 francs</i> ¹	6.1	0.8	•	•	
$2,000 \text{ francs}^2$	100.3	124.2	134.6	159.2	155.6
1,000 francs	95.6	86.2	75.0	68.6	65.7
500 francs	13.1	13.5	13.6	14.3	14.7
$200 francs^3$		•	4.9	5.6	6.0
100 francs	14.5	15.0	10.9	10.8	10.5
Denomination of coin:					
500 francs	0.2	0.2	0.2	0.2	0.2
250 francs	0.0	0.1	0.1	0.1	0.1
50 francs	7.8	8.1	8.7	9.1	9.3
20 francs	6.9	7.2	7.6	7.9	8.0
5 francs	2.7	2.8	3.0	3.2	3.3
1 franc	1.3	1.4	1.6	1.7	1.8
0.5 francs	0.3	0.3	0.3	0.3	0.3
Banknotes and coin held by					
banks	35.1	49.7	50.4	59.8	67.1
Banknotes and coin in					
circulation outside banks	396.3	416.2	435.8	441.3	438.8

 1 The BEF 5,000 banknotes ceased to be legal tender from 1 December 1994. 2 The issuance of the BEF 2,000 banknote started on 22 April 1994. 3 The issuance of the BEF 200 banknote started on 25 January 1996.

Table 5Institutional framework

(at end-1998)

Categories	Number of institutions	Number of branches	Number of accounts (thousands)	Value of accounts (BEF billions)
Central bank	1	13	2	1.6
Credit institutions* of which: branches of EU-based	120	7,169	12,910	1,390.4
foreign banks branches of other foreign	25	n.a.	<i>n.a.</i>	<i>n.a.</i>
banks	14	n.a.	n.a.	n.a.
Postcheque	1	1,393	1,271	13.5

 Table 6

 Cash dispensers, ATMs and EFTPOS terminals

 1994
 1995
 1996
 1997

	1994	1995	1996	1997	1998
Cash dispensers and ATMs					
Number of networks*	15	15	15	15	15
Number of machines*	3,170	3,654	4,207	5,007	5,732
Volume of transactions (millions)	132.33	144.93	153.80	159.58	159.29
Value of transactions (BEF billions)	533.17	589.28	637.71	673.29	682.80
EFTPOS					
Number of networks*	2	2	2	2	2
Number of terminals*	63,765	72,892	81,331	85,727	93,061
Volume of transactions (millions)	181.96	211.45	243.19	276.68	333.90
Value of transactions (BEF billions)	412.67	482.91	564.84	646.24	764.20

* Year-end.

Table 7Number of payment cards in circulation1

(at year-end, in thousands)					
	1994	1995	1996	1997	1998
Cards with a cash function	8,912	9,461	10,591	11,361	12,014
Cards with debit/credit function ² <i>of which:</i>	8,912	9,461	10,591	11,361	12,014
cards with a debit function cards with a credit function ³	6,780 2,132	7,190 2,271	8,141 2,450	8,748 2,613	9,277 2,737
Cards with a cheque guarantee function	4,660	4,645	4,366	4,767	4,746
Memorandum item:					
Retailer cards	1,089	1,221	1,372	1,428	1,564
Total	14,661	15,327	16,329	17,556	18,324

 1 A card with multiple functions may appear in several categories. It is, therefore, not meaningful to add the figures. 2 Overlaps with the cards with a cash function. 3 Most cards with a credit function are of the delayed debit type.

		(in millions)			
	1994	1995	1996	1997	1998
ELLIPS ¹	•	•	0.21	0.95	1.01
Clearing House	15.88	14.45	11.57	6.78	5.75
Securities clearing balances ²	neg.	neg.	neg.	•	
Postal drafts and money orders	3.76	3.72	3.28	2.85	2.40
Debits	6.25	5.11	4.14	3.57	3.30
Credit transfers	5.87	5.62	4.15	0.36	0.05
CEC	784.33	826.22	867.92	880.60	929.10
Direct debits	66.43	71.95	76.11	84.86	91.90
of which:					
ordinary direct debits	64.07	69.37	73.27	81.56	88.09
refunds	0.52	0.63	0.67	0.65	0.86
unpaid direct debits	1.84	1.95	2.17	2.65	2.95
Other debit operations	322.14	337.06	351.33	334.43	340.79
of which:					
truncated cheques	84.76	77.47	72.08	65.79	61.47
ATMs and POS	237.02	259.21	278.84	268.24	278.96
unpaid cheques	0.36	0.38	0.41	0.40	0.36
Credit transfers	394.64	416.03	439.61	458.38	490.65
of which:					
credit transfers	322.90	337.02	352.67	368.72	388.04
counterparty postal drafts	2.97	2.70	2.48	2.17	1.82
counterparty ATM-POS	49.26	57.01	64.96	67.75	82.93
inpayment transfers	19.51	19.30	19.50	19.74	17.86
Large-value credit transfers	1.12	1.17	0.87	1.84	2.50
Others ³	•	•	•	1.09	3.26

Payment instructions handled by selected payment systems: volume of transactions

(in	mil	lin	ne

¹ ELLIPS, the Belgian RTGS system, went live on 24 September 1996. ² As from 1 October 1996 end-of-day balances of the participants are directly registered on their accounts with NBB. ³ Bills of exchange, including non-financial exchanges.

Payment instructions handled by selected payment systems: value of transactions

(in billions of Belgian francs)								
	1994	1995	1996	1997	1998			
ELLIPS ¹	•	•	72,533	342,688	377,139			
Clearing House	337,567	334,353	243,142	5,413	4,805			
Securities clearing balances ²	11,010	12,522	10,092	•	•			
Postal drafts and money orders	67	40	60	62	50			
Debits	16,862	14,887	15,229	5,031	4,750			
Credit transfers	309,628	306,904	217,761	320	5			
CEC	24,512	26,588	26,662	18,460	19,463			
Direct debits	407	440	478	600	593			
of which: ordinary direct debits	387	419	455	572	560			
refunds unpaid direct debits	5 15	6 15	6 17	7 21	9 24			
Other debit operations	1,830	1,859	1,883	1,884	1,908			
of which:								
truncated cheques	1,148	1,123	1,091	1,044	992			
ATMs and POS	671	724	779	828	905			
unpaid cheques	11	12	13	12	11			
Credit transfers	10,255	10,373	10,583	10,667	11,464			
of which:								
ordinary credit transfers	9,386	9,438	9,592	9,626	10,369			
counterparty postal drafts	39	37	35	30	25			
counterparty ATM-POS	663	719	773	828	905			
inpayment transfers	167	179	183	183	165			
Large-value credit transfers	12,020	13,916	13,718	5,145	4,922			
Others ³		•	•	163	579			

 1 ELLIPS, the Belgian RTGS system, went live on 24 September 1996. 2 As from 1 October 1996 end-of-day balances of the participants are directly registered on their accounts with NBB. 3 Bills of exchange, including non-financial exchanges.

Table 10Transfer instructions handled by securities settlement systems:volume of transactions

(in thousands)

	1994	1995	1996	1997	1998
NBB Clearing	188,258	198,608	229,798	199,807	156,876
CIK (millions)	664	485	735	770	n.a.
BELFOX*	1,915,483	2,164,527	2,635,945	2,527,665	2,175,033

* Total number of contracts (options and futures).

Table 11Transfer instructions handled by securities settlement systems:value of transactions

(in billions of Belgian francs)

	1994	1995	1996	1997	1998
NBB Clearing	66,148	85,050	92,937	103,426	108,994
CIK	553.8	546.7	809	1,229	1,212
BELFOX*	4.4	5.8	9.4	13.4	23.1

* Premium turnover (options).

(in millions)								
	1994	1995	1996	1997	1998			
Cheques issued ¹	124.1	117.1	109.7	95.8	86.9			
Payments by debit and credit cards ²	190.9	218.1	249.3	281.6	342.5			
Paper-based credit transfers	5.9	5.6	4.2	0.3	0.1			
customer initiated interbank	1.8 4.1	1.7 3.9	1.3 2.9	0.3	0.1			
Paperless credit transfers ³	640.9	661.2	690.4	697.0	674.6			
customer initiated interbank	640.9 •	661.2 •	690.2 0.2	695.9 1.1	673.3 1.3			
Direct debits	100.1	104.5	113.5	117.9	117.4			
Electronic money payments by card-based	•	0.7	1.5	10.2	28.2			
products payments by network-based	•	0.7	1.5	10.2	28.2			
products	•	•	•	•	•			
Other	•	•	•	•	•			
Total	1,061.9	1,107.2	1,168.6	1,202.8	1,249.7			

Indicators of use of various cashless payment instruments: volume of transactions

¹ Postal drafts included. ² Payments with retailers' cards included. ³ Inpayment transfers included.

Indicators of use of various cashless payment instruments: value of transactions

(In onitions of Dergran natios)								
	1994	1995	1996	1997	1998			
Cheques issued ¹	13,693	12,287	11,492	11,664	14,456			
Payments by debit and credit cards ²	443	508	591	673	801			
Paper-based credit transfers	309,628	306,904	217,761	320	5			
customer initiated interbank	37,155 272,473	36,828 270,076	26,131 191,630	320	5			
Paperless credit transfers ³	36,829	50,209	131,814	390,908	432,409			
customer initiated interbank	36,829 •	50,209	68,155 63,659	93,217 297,691	107,446 324,963			
Direct debits	885	979	1,102	1,187	1,296			
Electronic money payments by card-based		0.1	0.3	1.6	4.6			
products payments by network-based	•	0.1	0.3	1.6	4.6			
products	•	•	•	•	•			
Other	•	•	•	•	•			
Total	361,478	370,887	362,760	404,754	448,972			

(in billions of Belgian francs)

¹ Postal drafts included. ² Payments with retailers' cards included. ³ Inpayment transfers included.

Participation in S.W.I.F.T. by domestic institutions								
	1994	1995	1996	1997	1998			
Members	34	33	32	32	29			
of which: live	34	32	32	32	28			
Sub-members ¹	37	38	37	39	41			
of which: live	36	37	37	39	41			
Participants ²	3	5	6	6	10			
of which: live	3	3	6	5	10			
Total users	74	76	75	77	80			
of which: live	73	72	75	76	79			
Memorandum items:								
Total S.W.I.F.T. users:	4,866	5,229	5,632	6,165	6,557			
of which:								
members sub-members participants	2,551 2,097 218	2,693 2,259 277	2,874 2,404 354	2,969 2,590 606	2,980 2,720 857			

Table 14

¹ Domestic users sponsored by members abroad. ² Participants are not shareholders in S.W.I.F.T. and their message traffic over the network is restricted. Source: S.W.I.F.T.

Table 15								
S.W.I.F.T. message flows to/from domestic users								
	1994	1995	1996	1997	1998			
Total messages sent	21,233,594	23,796,106	26,928,329	31,355,971	36,454,886			
of which:								
category I^1	6,331,292	6,660,281	6,845,391	7,170,089	7,825,972			
category II ²	5,350,057	5,606,480	6,307,048	7,009,454	6,859,838			
Total messages received	18,910,023	21,003,109	24,324,277	27,950,457	31,617,702			
of which:								
category I ¹	5,835,044	8,197,728	6,441,304	6,665,892	7,108,235			
category II ²	4,198,073	4,457,184	5,202,993	5,771,831	5,715,306			
Domestic traffic ³	3,907,203	4,452,493	5,283,148	6,138,563	6,999,929			
Memorandum item:								
Global S.W.I.F.T. traffic	518,097,873	603,575,374	687,785,294	812,117,556	937,039,995			

Table 15

¹ Category I: customer (funds) transfers. ² Category II: bank (funds) transfers. ³ Messages sent to/received from domestic users. Source: S.W.I.F.T.

Table 1Basic statistical data								
	1994	1995	1996	1997	1998			
Population (millions):								
year-end	29.1	29.4	29.8	30.1	30.4			
average	29.0	29.3	29.6	30.0	30.3			
GDP (CAD billions)	767.5	807.1	833.9	874.0	895.7			
GDP per capita	26,474	27,536	28,145	29,171	29,590			
Exchange rate (domestic currency vis-a-vis USD):								
year-end ¹	1.4018	1.3640	1.3706	1.4305	1.5333			
average ²	1.3659	1.3726	1.3639	1.3844	1.4831			

¹ Closing spot rate for the year. ² Average noon spot rate for the year.

Table 2Settlement media used by non-banks

(at year-end, in millions of Canadian dollars)

	1994	1995	1996	1997	1998
Notes and coin	26,419	27,205	28,023	29,617	31,735
Transferable deposits	122,599	135,065	155,448	171,272	177,149
Narrow money supply ¹	149,018	162,270	183,471	200,889	208,884
Memorandum item:					
Broad money supply M2+ ²	591,679	618,397	639,986	632,007	643,840

¹ This is not equivalent to M1 in Canada. ² M2+ includes the following in addition to narrow money supply: personal savings deposits (i.e. non-chequable deposits) in all deposit-taking institutions; life insurance company individual annuities; money market mutual funds.

Table 3Settlement media used by banks

(at year-end, in millions of Canadian dollars)

					1
	1994	1995	1996	1997	1998
Balances held at central bank	559	359	478	492	575
of which: required reserves ¹ free reserves	559	359	478	. 492	575
Transferable deposits at other banks	1,772	1,801	2,330	3,263	4,168
Other	•	•	•		•
Memorandum item:					
Institutions' borrowing from central bank ²	312	478	543	501	504

 1 The statutory requirement for chartered banks to hold reserves against certain of their deposit liabilities was phased out over a two-year period ended July 1994. 2 Advances to members of the Canadian Payments Association.

Table 4

Banknotes and coin

(at year-end, in thousands of Canadian dollars)

					*	
	1994	1995	1996	1997	1998	
Total banknotes and coin issued	30,874,822	31,395,783	32,317,586	33,869,328	36,048,976	
Denomination of banknotes:						
1,000 dollars	2,344,424	2,510,111	2,780,110	3,107,656	3,409,390	
500 dollars	23	23	23	23	23	
100 dollars	11,121,838	11,431,499	11,809,378	12,450,299	13,252,651	
50 dollars	3,897,707	3,844,013	3,844,436	3,916,443	4,210,957	
25 dollars	46	46	46	46	46	
20 dollars	8,512,078	8,515,415	8,468,612	8,881,353	9,569,673	
10 dollars	1,056,548	1,043,990	993,622	995,189	1,014,074	
5 dollars	762,274	765,042	777,878	778,697	774,833	
2 dollars	456,853	491,594	260,196	238,268	232,613	
1 dollar	163,988	163,050	161,937	161,112	160,370	
other	12,873	12,872	12,871	12,871	12,871	
Total value of coin	2,546,169	2,618,128	3,208,477	3,327,372	3,411,475	
Banknotes and coin held by banks	4,455,787	4,190,645	4,294,452	4,252,645	4,313,339	
Banknotes and coin in circulation outside banks	26,419,035	27,205,138	28,023,134	29,616,683	31,735,637	

Table 5Institutional framework

(at end-1998)

Categories	Number of institutions	Number of branches	Number of transferable deposit accounts (millions)	Value of transferable deposit accounts (CAD millions)
Central bank ¹	1	5	n.a.	•
Chartered banks	61	8,182	n.a.	144,233
Local Credit Unions and Caisses Populaires	2,165	3,703	n.a.	22,140
Trust and loan companies ²	36	1,505	n.a.	8,065
Governmental savings institutions ³	2	167	n.a.	2,711
Post Office	•			•
Memorandum item:				
Branches of foreign banks	•			•

 1 Only one branch offers cashless payments for customers. 2 Only a few operate nationwide. Figures exclude those trust and loan companies that do not accept transferable deposits. 3 Operate only in Alberta or Ontario.

	1994	1995	1996	1997	1998
Cash dispensers and ATMs					
Number of networks ²	40	40	40	40	43
Number of machines ³	16,927	17,670	18,570	19,608	23,506
of which:					
owned by member institutions of the					
Canadian Payments Association	16,927	17,670	18,570	19,608	20,832
owned or operated by other entities	0	0	0	0	2,674
Volume of transactions (millions)	1,197.3	1,364.1	1,481.1	1,603.1	1,609.6
of which:					
withdrawals	877.5	978.9	1,019.0	1,060.9	1,120.0
deposits	143.6	174.4	201.5	234.5	304.5
bill payments	41.7	50.3	56.4	64.3	88.1
inter-account transfers	65.6	76.3	81.9	88.7	97.0
balance inquiries ⁴	68.9	84.2	122.3	154.7	n.a.
Value of transactions (CAD billions)	n.a.	n.a.	n.a.	n.a.	n.a.
of which:					
withdrawals	61.4	68.5	72.3	74.3	103.4
deposits	<i>n.a.</i>	n.a.	n.a.	n.a.	n.a.
bill payments	3.1	3.8	4.3	4.9	6.6
inter-account transfers	<i>n.a.</i>	n.a.	n.a.	n.a.	n.a.
balance inquiries	•	•	•	•	•
EFTPOS					
Number of networks ^{2,5}	11	11	11	22	27
Number of terminals ²	119,733	189,898	253,089	330,530	393,730
Volume of transactions (millions)	185.2	393.8	676.5	1,039.9	1,355.4
Value of transactions (CAD billions)	9.4	18.8	30.2	44.3	58.5

Table 6
Cash dispensers, ATMs and EFTPOS terminals ¹

¹ All figures estimates. ² End-year. ³ As at 31 January of the following year. ⁴ As of 1998, this information is no longer available. ⁵ Includes both shared and proprietary networks.

Table 7Number of payment cards in circulation1

	(at year-end, in millions)							
	1994	1995	1996	1997	1998			
Cards with a cash function	39.6	43.5	47.7	48.9	56.6			
Cards with debit/credit function <i>of which:</i>	53.0	56.2	58.7	64.3	72.3			
cards with a debit function cards with a credit function ^{2,3}	24.0 29.0	25.9 30.3	27.0 31.7	30.8 33.5	35.2 37.1			
Cards with a cheque guarantee function		•	•	•				
Memorandum item: Retailer cards	n.a.	n.a.	n.a.	n.a.	n.a.			

¹ A card with multiple functions may appear in several categories. It is, therefore, not meaningful to add the figures. ² As at 31 October. ³ Figures before 1998 are estimates.

Table 8

Payment instructions handled by selected payment systems: volume of transactions¹

(in millions)

	1994	1995	1996	1997	1998
National Clearing and					
Settlement System	2,430.2	2,616.0	2,875.7	3,206.1	3,608.2
Small cheques	1,665.3	1,596.7	1,521.1	1,425.3	1,380.5
Large cheques ²	6.9	6.2	6.3	6.8	8.6
Unqualified ³	13.5	15.0	15.0	14.8	19.2
Tape clearings ⁴	neg.	neg.	neg.	neg.	2.5
Paper remittances	•	•	1.1	33.6	74.3
Government ⁵		•		41.6	77.9
Electronic remittances			neg.	2.2	17.7
EDI	neg.	neg.	0.2	0.4	0.5
Magnetic tape credits	169.0	211.7	256.1	290.2	293.7
Magnetic tape debits	174.7	198.3	231.8	265.4	301.6
Shared ABM networks	271.0	297.9	306.3	319.6	342.7
Point of sale	129.8	290.2	537.8	806.2	1,089.0
Interbank International					
Payment System ^{6,7}	2.2	2.3	2.4	2.7	3.2

¹ Owing to the rounding of figures, components may not always add to the total shown. ² Defined as all cheques over CAD 50,000 (see also footnote 7). ³ Payment items that have been returned principally because of insufficient funds in the payer's account or because of stop-payment orders, or that do not meet the standards and specifications for MICR-encoded documents of the Canadian Payments Association. ⁴ Payment items that have had the relevant information stripped from them following sorting. The information is exchanged between Direct Clearers on magnetic tape on a bilateral basis at a limited number of Regional Settlement Points. The physical items are exchanged subsequently. ⁵ This stream was initiated in 1997 and was discontinued on 18 June 1998. ⁶ 1998 volume figures are calculated in a different manner than preceding years. ⁷ Figures reflect the gross amount processed. The bilateral net amounts are then calculated in IIPS and entered into the National Clearing and Settlement System (shown in this table under "large cheques").

Payment instructions handled by selected payment systems: value of transactions¹

(in billions of Canadian dollars)							
	1994	1995	1996	1997	1998		
National Clearing and Settlement System	21,196.3	17,240.4	13,658.0	15,964.2	16,645.1		
Small cheques	1,029.5	1,022.6	1,052.0	1,081.9	1,069.7		
Large cheques ² Unqualified ³	19,922.8 14.3	15,912.3 14.5	12,231.1 16.1	14,391.6 17.9	14,949.8 22.6		
Tape clearings ⁴	0	0	0	0	0		
Paper remittances	•	•	0.1	5.6	14.3		
Government ⁵	•	•	•	38.0	72.9		
Electronic remittances	•	•	neg.	0.3	2.3		
EDI	4.3	22.7	39.4	38.2	40.9		
Magnetic tape credits	155.1	177.8	202.5	241.4	288.1		
Magnetic tape debits	44.4	55.4	70.2	89.6	110.5		
Shared ABM networks	19.1	20.9	21.9	23.7	25.9		
Point of sale	6.8	14.2	24.7	36.0	48.1		
Interbank International Payment System ^{6,7}	15,896.0	15,968.0	15,425.0	19,234.0	27,000.0		

¹ Owing to the rounding of figures, components may not always add to the total shown. ² Defined as all cheques over CAD 50,000 (see also footnote 7). ³ Payment items that have been returned principally because of insufficient funds in the payer's account or because of stop-payment orders, or that do not meet the standards and specifications for MICR-encoded documents of the Canadian Payments Association. ⁴ Payment items that have had the relevant information stripped from them following sorting. The information is exchanged between Direct Clearers on magnetic tape on a bilateral basis at a limited number of Regional Settlement Points. The physical items are exchanged subsequently. ⁵ This stream was initiated in 1997 and was discontinued on 18 June 1998. ⁶ 1998 value figures are calculated in a different manner than preceding years. ⁷ Figures reflect the gross amount processed. The bilateral net amounts are then calculated in IIPS and entered into the National Clearing and Settlement System (shown in this table under "large cheques").

Table 10Transfer instructions handled by securities settlement systems:volume of transactions

(for the twelve-month period ended 31 October)

	1994	1995	1996	1997	1998
Number of trades/transactions reported to CDS ^{1,2} (millions)	10.6	10.0	15.0	19.6	21.1
<i>Memorandum item:</i> Value of eligible securities ³ (CAD billions)	699	800	1,106	1,269	1,422

¹ The Canadian Depository for Securities Limited. ² Consists of trades reported from the Toronto Stock Exchange and the Montreal Exchange and transactions between CDS member institutions. ³ Par value of debt securities plus market value of equity securities on deposit at CDS as at 31 October.

Transfer instructions handled by securities settlement systems: value of transactions

(for the twelve-month period ended 31 October, in trillions of Canadian dollars)

	1994	1995	1996	1997	1998
Value of settlement amounts (not nets) of trades ¹	20.5	21.3	39.4	54.7	55.3
of which: Government bonds ²	17.5	19.0	26.0	35.1	39.6
Treasury bills ³ other	3.0	2.3	11.0 2.4	16.5 3.1	12.2 3.5

¹ Consists of trade values reported from the Toronto Stock Exchange and the Montreal Exchange and both sides of transactions between CDS member institutions. ² Government of Canada Domestic Marketable Bonds. ³ Federal Government Treasury Bills were deposited into the DCS at the Canadian Depository for Securities between October 1995 and January 1996.

Table 12

Indicators of use of various cashless payment instruments: volume of transactions¹

(in millions)

	1994	1995	1996	1997	1998
Cheques issued	2,022.8	1,941.5	1,850.9	1,736.3	1,690.0
Payments by credit card ²	784.1	846.5	903.5	956.8	1,008.8
Payments by debit card	185.2	393.8	676.5	1,003.9	1,355.4
Other card payments	n.a.	n.a.	n.a.	n.a.	n.a.
Paper-based credit transfers ^{3,4}	41.7	50.3	56.4	40.3	89.2
Paperless credit transfers	202.8	254.0	307.5	351.3	374.6
customer initiated ⁵			neg.	2.6	21.2
interbank/large-value direct credits	202.8	254.0	307.5	348.7	353.0
Direct debits	209.6	238.0	278.2	318.5	361.9
Total	3,446.2	3,724.1	4,073.0	4,407.1	4,879.9

¹ All figures are estimates except where indicated. ² 1998 figure is actual, not estimated. ³ Bill payments initiated at ATMs and bank tellers. ⁴ The period 1992-1996 is calculated differently than the period 1997 onward due to newly available data. ⁵ Bill payments initiated by electronic home banking systems.

Indicators of use of various cashless payment instruments: value of transactions¹

	1994	1995	1996	1997	1998
Cheques issued	25,159.9	20,339.3	15,959.0	18,589.7	19,250.5
Payments by credit card ²	61.6	68.5	76.4	85.7	98.6
Payments by debit card	9.4	18.8	30.2	44.3	58.5
Other card payments	n.a.	n.a.	n.a.	n.a.	n.a.
Paper-based credit transfers ^{3,4}	3.1	3.8	4.3	6.7	17.2
Paperless credit transfers	186.1	213.4	243.0	335.9	397.6
customer initiated ⁵			neg.	0.4	2.8
interbank/large-value direct credits	186.1	213.4	243.0	335.5	<i>394</i> .8
Direct debits	53.3	66.5	84.2	107.5	132.6
Total	25,473.4	20,710.3	16,397.1	19,169.8	19,955.0

(in billions of Canadian dollars)

¹ All figures are estimates except where indicated. ² 1998 figure is actual, not estimated. ³ Bill payments initiated at ATMs and bank tellers. ⁴ The period 1992-1996 is calculated differently than the period 1997 onward due to newly available data. ⁵ Bill payments initiated by electronic home banking systems.

	1994	1995	1996	1997	1998
Members	14	14	14	15	14
of which: live	14	14	14	15	14
Sub-members ¹	33	33	33	35	34
of which: live	33	32	33	35	34
Participants ²	3	6	6	9	12
of which: live	2	5	6	8	12
Total users	50	53	53	59	60
of which: live	49	51	53	58	60
Memorandum items:					
Total S.W.I.F.T. users:	4,866	5,229	5,632	6,165	6,557
of which:					
members	2,551	2,693	2,874	2,969	2,980
sub-members	2,097	2,259	2,404	2,590	2,720
participants	218	277	354	606	857

Table 14Participation in S.W.I.F.T. by domestic institutions

 1 Domestic users sponsored by members abroad. 2 Participants are not shareholders in S.W.I.F.T. and their message traffic over the network is restricted.

Source: S.W.I.F.T.

Table 15S.W.I.F.T. message flows to/from domestic users							
	1994	1995	1996	1997	1998		
Total messages sent	10,960,197	12,385,962	13,497,483	15,259,702	16,116,931		
of which:							
category I ¹	2,625,746	3,089,574	3,533,941	4,105,848	4,520,627		
category II ²	3,388,084	3,706,456	3,787,370	4,061,848	4,288,250		
Total messages received	9,764,225	11,032,239	11,882,651	13,195,729	14,016,461		
of which:							
category I ¹	3,013,534	3,525,885	4,085,216	4,580,790	5,053,188		
category II ²	3,656,006	3,893,434	3,875,583	4,090,266	4,382,645		
Domestic traffic ³	3,262,525	3,535,839	3,770,608	4,170,195	4,595,636		
Memorandum item:							
Global S.W.I.F.T. traffic	518,097,873	603,575,374	687,785,294	812,117,556	937,039,995		

¹ Category I: customer (funds) transfers. ² Category II: bank (funds) transfers. ³ Messages sent to/received from domestic users. *Source*: S.W.I.F.T.

Table 1Basic statistical data							
	1994	1995	1996	1997	1998		
Population (millions)							
year-end	57.7	57.8	58.5	58.7	58.9		
GDP (FRF billions)	7,376.1	7,663.7	7,861.0	8,136.0	8,564.7		
GDP per capita (FRF)	127,835	132,590	134,376	138,603	145,411		
Exchange rate (domestic currency vis-à-vis USD):							
year-end average	5,416 5,552	4,964 4,991	5,237 5,243	5,988 5,950	5,622 5,600		

Table 2
Settlement media used by non-banks
(at year-end, in billions of French francs)

		•			
	1994	1995	1996	1997	1998
Notes and coin	252.2	255.8	257.8	260.7	264.9
Transferable deposits	1,419.7	1,544.0	1,556.8	1,673.3	1,735.7
Other	0	0	0	0	0
Narrow money supply (M1) ¹	1,671.9	1,799.8	1,814.6	1,934.0	2,000.7
Memorandum item:					
Broad money supply (M3) ²	5,282.2	5,463.4	5,289.9	5,393.1	5,336.3

 1 M1 = notes and coin and sight deposits held by non-banks (overseas territories excluded). 2 M3 = M1 + taxable passbook accounts, Savings Banks "A" passbook deposits and Mutual Credit Bank "blue" books, popular savings books (LEP), industrial development accounts (CODEVI) and housing savings accounts (CEL) + foreign currency denominated assets, time deposits and money market securities issued by credit institutions.

Table 3Settlement media used by banks

(at year-end, in billions of French francs)

		,	,			
	1994	1995	1996	1997	1998	
Balances held at central bank ¹	8.1	7.2	7.3	7.6	31.7	
of which: required reserves free reserves	7. <i>3</i> 0.8	5.8 1.4	6.3 1.0	5.1 2.5	27.4 4.3	
Transferable deposits at other banks	2,839.6	3,189.1	3,260.7	3,609.8	n.a.	
Other		•	•	•	•	
Memorandum item:						
Institutions' borrowing from central bank ²	229.4	n.a.	n.a.	n.a.	n.a.	

¹ Monthly average. ² Net stock; open market operations and repurchase agreements and discounting operations.

Table 4 Banknotes and coin

(at year-end, in billions of French francs)

	1994	1995	1996	1997	1998
Total banknotes and coin issued	297.4	301.1	304.2	309.0	n.a.
Denomination of banknotes: ¹					
500 francs	129.9	124.3	129.2	133.4	143.2
200 francs	81.0	87.3	85.8	85.2	84.1
100 francs	48.3	49.8	48.3	47.1	42.7
50 francs	6.5	6.5	6.1	6.3	6.3
20 francs	1.0	1.0	1.0	1.0	1.0
Total	266.7	268.9	270.4	273.0	277.3
Denomination of coin: ²					
20 francs	0.8	0.9	1.0	1.0	0.9
10 francs	7.5	7.6	7.8	8.2	8.5
5 francs	2.0	2.0	2.1	2.1	2.2
2 francs	0.9	1.0	1.0	1.0	1.1
1 franc	1.8	1.8	1.8	1.8	1.8
1/2 franc	0.7	0.7	0.7	0.7	0.8
20 centimes	0.6	0.6	0.6	0.6	0.7
10 centimes	0.4	0.4	0.4	0.4	0.5
5 centimes	0.2	0.2	0.2	0.2	0.2
Total	14.9	15.2	15.6	16.0	16.7
Banknotes and coin held by banks ³	15.8	17.0	18.2	20.0	n.a.
Banknotes and coin in circulation outside banks ³	252.2	255.8	257.8	260.7	264.9

¹ Including banknotes issued in overseas territories. ² Coin issued in overseas territories is not included. ³ Banknotes issued in overseas territories are not included.

Table 5Institutional framework

(at end-1998) Number of Value of accounts (FRF billions)² Number of Number of Categories accounts¹ institutions branches (thousands) 1 211 81 4.0 Central bank 306^3 Credit insitutions 10,137 19,517 686.6 Savings banks 35 4,220 9,838 169.6 Cooperative and rural banks 145 11,074 25,010 476.9 Post Office 1 17,025 10,089 179.4 Municipal credit banks 21 85 79 n.a. Treasury 1 4,013 820 223.5

¹ Sight deposits. ² Does not correspond exactly to transferable deposits in Table 2. ³ Branches of foreign banks: 89.

Table 6Cash dispensers, ATMs and EFTPOS terminals

	1994	1995	1996	1997	1998
Cash dispensers and ATMs					
Number of networks ¹	1	1	1	1	1
Number of machines ¹	20,533	22,852	24,531	27,077	29,407
Volume of transactions (thousands) ²	822,137	913,444	1,060,494	1,165,225	1,205,868
Value of transactions (FRF millions)	347,031	370,861	430,535	474,724	477,595
EFTPOS					
Number of networks ¹	1	1	1	1	1
Number of machines ^{1,3}	540,000	543,000	546,000	560,000	586,000
Volume of transactions (thousands)	1,672,404	1,866,803	1,894,614	1,922,237	2,164,661
Value of transactions (FRF millions)	534,376	590,214	599,731	589,042	656,893

 1 Year-end. 2 Including intrabank cash withdrawals and cash withdrawals processed through selected interbank payment systems. 3 Estimated. 10% of card payments are still made without using EFTPOS.

Table 7Number of payment cards in circulation*

(at year-end, in thousands)							
	1994	1995	1996	1997	1998		
Cards with a cash function	22,812	24,430	27,219	30,156	33,860		
Cards with debit/credit function <i>of which:</i>	22,240	23,617	25,510	27,703	30,267		
cards with a debit function cards with a credit function	22,240 579	23,617 654	25,510 735	27,703 780	30,267 1,038		
Cards with a cheque guarantee function		•	•		n.a.		
Memorandum item: Retailer cards					n.a.		

* A card with multiple functions may appear in several categories. It is, therefore, not meaningful to add the figures.

Payment instructions handled by selected payment systems: volume of transactions

(in millions)

	1994	1995	1996	1997	1998				
Clearing house	3,659.0	3,588.4	3,633.8	3,623.0	3,600.4				
Cheques	3,650.0	3,582.1	3,630.3	3,620.7	3,599.2				
Credit transfers	2.2	1.6	0.3	0.1	1.1				
Bills of exchange	1.9	0.0	0.0	0.0	0.0				
Avals de trésorerie	0.4	0.3	0.2	0.1	0.0				
Large-value credit transfers	4.5	4.4	3.0	2.1	0.1				
Automated clearing houses	4,364.4	4,744.7	5,008.0	5,204.7	5,707.2				
CREIC (truncated cheques)	259.9	281.8	293.0	285.2	296.7				
Ordinateur de compensation	635.7								
Credit transfers	341.7	•	•	•	•				
LCRs and paperless bills ¹	49.8	•	•	•	•				
Direct debits	156.0	•	•	•	•				
Interbank payment orders	23.0	•	•	•	•				
ATM withdrawals	65.0	•	•	•	•				
Card payments	0.2	•	•	•	•				
Interbank Teleclearing									
System (SIT)	1,791.8	2,590.3	3,940.0	4,919.5	5,410.5				
Credit transfers	679.8	1,081.3	1,166.4	1,242.4	1,322.6				
LCRs and paperless bills ¹	88.7	129.3	129.3	124.8	125.2				
Direct debits	636.5	850.4	927.8	987.2	1,098.9				
Interbank payment orders	55.4	91.1	114.4	122.6	129.7				
Card payments	•	1.9	1,130.1	1,922.2	2,164.7				
ATM withdrawals	331.4	436.3	472.0	520.3	569.4				
Cartes bancaires ²	1,677.0	1,872.6	775.0	0.0	0.0				
ATM withdrawals	4.8	7.7	10.5	0.0	0.0				
Card payments	1,672.2	1,864.9	764.5	0.0	0.0				
Banque de France	34.3	29.4	15.0	1.6	0.4				
Treasury transfers	32.0	27.3	13.8	0.5	0.0				
Interbank credit transfers	0.4	0.4	0.0	0.0	0.0				
BdF large-value transfers ³	0.9	0.9	0.7	0.6	0.1				
Telegraphic credit transfers	1.0	0.8	0.5	0.5	0.3				
Sagittaire large-value credit transfers	4.1	4.5	4.7	4.7	1.3				
TBF				0.1	0.6				
	•		•	0.5	5.5				
SNP	•	•	•	0.5	5.5				

¹ Lettre de change relève and paperless bills of exchange. ² In the course of 1996, the exchange of card payments and ATM withdrawals was transferred to the SIT. ³ Banque de France large-value credit transfers.

Payment instructions handled by selected payment systems: value of transactions

(in billions of French francs)								
	1994	1995	1996	1997	1998			
Clearing house	150,624.1	137,412.8	131,353.9	90,258.0	13,956.6			
Cheques	11,300.9	11,025.3	11,629.9	11,550.4	12,215.5			
Credit transfers	1,244.5	1,312.7	124.0	10.6	197.1			
Bills of exchange	36.3	0.0	0.0	0.0	0.0			
Avals de trésorerie	71,416.5	62,263.3	54,942.0	32,371.0	181.0			
Large-value credit transfers	66,625.9	62,811.5	64,658.0	46,326.0	1,363.0			
Automated clearing houses	9,599.2	10,375.4	12,762.2	13,977.5	14,817.2			
CREIC (truncated cheques)	143.4	155.0	161.3	156.8	164.1			
Ordinateur de compensation	3,463.7		•	•				
Credit transfers	1,913.5	•	•	•	•			
LCRs and paperless bills ¹	1,230.5	•	•	•	•			
Direct debits	267.5	•	•	•				
Interbank payment orders	28.4	•	•					
ATM withdrawals	23.8	•	•		•			
Card payments	0.1	•	•	•	•			
Interbank Teleclearing								
System (SIT)	5,454.5	9,625.6	12,339.7	13,820.7	14,653.1			
Credit transfers	2,518.6	5,158.3	7,345.0	8,519.8	9,039.3			
LCRs and paperless bills ¹	1,825.8	2,950.8	2,948.0	2,868.8	2,950.2			
Direct debits	929.0	1,248.0	1,359.1	1,454.9	1,580.2			
Interbank payment orders	59.1	112.5	179.1	213.0	237.4			
Card payments		0.5	345.4	589.0	656.9			
ATM withdrawals	122.0	155.5	163.1	175.2	189.1			
Cartes bancaires ²	537.6	594.8	261.2	0.0	0.0			
ATM withdrawals	3.3	5.1	6.9	0.0	0.0			
Card payments	534.2	589.7	254.3	0.0	0.0			
Banque de France	41,741.8	36,838.4	34,822.2	27,828.2	3,293.0			
Treasury transfers	429.8	470.5	480.2	213.2	0.0			
Interbank credit transfers	190.5	279.2	0.0	0.0	0.0			
BdF large-value transfers ³	38,107.1	29,645.6	24,532.0	19,597.0	1,475.0			
Telegraphic credit transfers	5,014.4	6,443.1	9,810.0	8,018.0	1,818.0			
Sagittaire large-value credit								
transfers	110,847.0	104,567.0	113,886.0	120,377.0	29,566.0			
TBF	•	•	•	28,713.0	274,321.0			
SNP	•		•	47,608.0	237,207.0			

(in billions of French francs)

 1 Lettre de change relève and paperless bills of exchange. 2 In the course of 1996, the exchange of card payments and ATM withdrawals was transferred to the SIT. 3 Banque de France large-value credit transfers.

Table 10Transfer instructions handled by securities settlement systems:volume of transactions

(in millions)

	1994	1995	1996	1997	1998
\mathbf{RGV}^1					
Treasury bills	182,109	248,056	265,376	248,584	324,641
BMTN ²	7,859	7,687	7,126	6,905	7,808
Other TCN ³	32,642	60,333	68,334	73,029	107,170
RELIT					
Total	15,000,000	12,000,000	13,700,000	17,800,000	21,216,908

¹ Since the launch in 1998 of RGV, the transactions previously settled in Saturne are handled in RGV. ² Medium-term negotiable instruments (transferred through SATURNE for the first time in 1992). ³ Short-term negotiable instruments.

Table 11Transfer instructions handled by securities settlement systems:value of transactions

	1994	1995	1996	1997	1998			
\mathbf{RGV}^1								
Treasury bills	23,306.0	40,042.9	46,441.4	49,718.4	0.0			
Government bills ²	n.a.	n.a.	n.a.	n.a.	85,228.2			
BMTN ³	290.3	269.2	282.7	277.1	931.4			
Other TCN ⁴	2,167.0	3,729.0	5,072.4	5,844.7	9,962.3			
Treasury Bonds	n.a.	n.a.	n.a.	n.a.	87,104.8			
Other bonds	n.a.	n.a.	n.a.	n.a.	3,077.7			
RELIT ⁵								
Treasury bonds	25,250.0	34,203.0	51,838.2	64,670.7	0.0			
French stocks	6,200.0	4,366.0	5,700.1	9,531.9	13,154.7			
Other bonds	4,050.0	3,586.0	3,628.3	3,441.1	0.0			
Others	4,500.0	•	•	•	•			

(in billions of French francs)

¹ Since the launch in 1998 of RGV, the transactions previously settled in Saturne are handled in RGV. ² Treasury bills and Treasury notes. ³ Medium-term negotiable instruments (transferred through SATURNE for the first time in 1992). ⁴ Short-term negotiable instruments. ⁵ The RELIT Delivery Versus Payment System began its full-scale operations in 1992.

Indicators of use of various cashless payment instruments: volume of transactions

(in millions)							
	1994	1995	1996	1997	1998		
Cheques issued	4,876.4	4,844.7	4,952.3	4,903.0	4,825.8		
Payments by debit and credit card	1,672.4	1,866.8	2,084.3	1,922.2	2,164.7		
Paper-based credit transfers	58.2	53.8	33.5	15.6	11.2		
of which: customer initiated interbank/large-value	51.0 7.2	47.0 6.8	29.1 4.4	12.3 3.3	11.2 0.0		
Paperless credit transfers	1,556.5	1,608.5	1,748.2	1,841.8	1,940.3		
of which: customer initiated interbank/large-value	1,552.4 4.1	1,604.0 4.5	1,743.5 4.7	1,836.5 5.3	1,932.4 7.9		
Direct debits	1,155.3	1,205.9	1,343.9	1,430.6	1,578.2		
Bills of exchange	151.2	142.6	142.6	137.6	137.6		
ATM withdrawals	828.1	913.4	1,060.5	1,152.9	1,205.9		
Total	10,298.1	10,635.7	11,365.3	11,403.7	11,863.7		

(in millions)

Table 13

Indicators of use of various cashless payment instruments: value of transactions

(in billions of French francs)

	1994	1995	1996	1997	1998
Cheques issued	14,286	13,904	14,613	14,793	15,075
Payments by debit and credit card	534	590	656	589	657
Paper-based credit transfers	183,850	164,099	155,406	106,768	400
of which: customer initiated interbank/large-value	2,496 181,354	2,656 161,443	1,464 153,942	456 106,312	400 0.0
Paperless credit transfers	119,162	113,332	125,107	208,995	558,685
of which: customer initiated interbank/large-value	8,315 110,847	8,765 104,567	11,221 113,886	12,297 196,698	12,754 545,931
Direct debits	2,554	2,710	3,059	3,438	3.763
Bills of exchange	3,313	3,217	3,211	3,127	3,208
ATM withdrawals	347	371	431	466	478
Total	324,046	298,223	302,483	338,176	582,266

Participation in S. w. 1. F. 1. by domestic institutions							
	1994	1995	1996	1997	1998		
Members	108	111	107	103	102		
of which: live	103	104	101	100	97		
Sub-members ¹	98	97	103	104	100		
of which: live	96	95	100	104	100		
Participants ²	5	8	10	45	54		
of which: live	4	7	7	34	50		
Total users	211	216	220	252	256		
of which: live	203	206	208	238	247		
Memorandum items:							
Total S.W.I.F.T. users:	4,866	5,229	5,632	6,165	6,557		
of which:							
members	2,551	2,693	2,874	2,969	2,980		
sub-members	2,097	2,259	2,404	2,590	2,720		
participants	218	277	354	606	857		

Table 14Participation in S.W.I.F.T. by domestic institutions

¹ Domestic users sponsored by members abroad. ² Participants are not shareholders in S.W.I.F.T. and their message traffic over the network is restricted. *Source*: S.W.I.F.T.

Table 15	
S.W.I.F.T. message flows to/from domestic users	

	1994	1995	1996	1997	1998
Total messages sent	36,494,832	41,003,897	43,779,359	48,756,990	56,257,693
of which:					
category I^1	9,608,391	10,379,951	11,084,517	12,137,346	13,701,758
category II ²	12,253,787	13,937,393	14,291,099	15,400,655	15,345,713
Total messages received	33,446,733	37,786,319	40,737,035	45,940,168	53,393,461
of which:					
category I^1	9,910,743	10,711,093	11,534,499	12,943,528	14,737,823
category II ²	12,224,274	13,895,771	14,011,490	14,688,233	14,872,003
Domestic traffic ³	11,455,375	13,387,410	14,020,407	15,992,898	18,931,262
Memorandum item:					
Global S.W.I.F.T. traffic	518,097,873	603,575,374	687,785,294	812,117,556	937,039,995

¹ Category I: customer (funds) transfers. ² Category II: bank (funds) transfers. ³ Messages sent to/received from domestic users. *Source*: S.W.I.F.T.

	Ba	sic statistical o	lata		
	1994	1995	1996	1997	1998
Population (millions):					
year-end	81.5	81.8	82.0	82.1	82.0
average	81.4	81.4	81.9	82.1	82.0
GDP (DEM billions)*	3,320.3	3,442.7	3,515.3	3,616.2	3,784.2
GDP per capita (DEM)*	40,800	42,300	42,900	44,000	46,100
Exchange rate (domestic currency vis-à-vis USD):					
year-end	1.5488	1.4335	1.5548	1.7921	1.7592
average	1.6218	1.4338	1.5037	1.7348	1.6730

* Until 1997 calculated according to ESA (European System of Account) 79; from 1998 figures calculated according to ESA 95.

Table 2Settlement media used by non-banks

(at year-end, in billions of Deutsche Mark)

	1994	1995	1996	1997	1998
Notes and coin ¹	225.9	237.5	246.8	247.0	242.6
Transferable deposits ²	541.1	580.8	676.8	691.1	800.8
of which held by: households corporate sector other	333.1 174.7 33.3	352.0 197.3 31.5	393.8 246.2 36.8	413.8 245.4 31.9	470.8 292.1 37.9
Narrow money supply (M1) ^{3,4}	764.1	816.1	916.9	938.0	1,042.1
<i>Memorandum item</i> : Broad money supply ³	1,937.0	2,007.4	2,181.8	2,259.7	2,425.7

¹ Excluding credit institutions' cash balances. ² Sight deposits of domestic non-banks (including deposits held at the central bank). ³ M1 = currency in circulation (excluding credit institutions' cash balances) + domestic non-banks' sight deposits (excluding public sector's deposits held at the central bank). M2 = M1 + domestic non-banks' time deposits at less than four years. M3 = M2 + savings deposits of domestic non-banks at statutory notice. ⁴ M1 is less than the sum of notes and coin and transferable deposits because M1 excludes the public sector's deposits held at the central bank while transferable deposits includes these deposits.

Table 3Settlement media used by banks

(at year-end, in billions of Deutsche Mark)

	1994	1995	1996	1997	1998
Balances held at central bank	44.4	37.3	39.5	41.7	46.4
of which:					
required reserves ¹	43.6	36.5	38.7	41.0	45.8
free reserves	0.8	0.8	0.8	0.7	0.6
Transferable deposits at other					
banks	342.8	363.9	401.1	427.6	472.6
Memorandum item:					
Institutions' borrowing from					
central bank ²	9.8	5.5	3.3	2.7	5.1

Table 4Banknotes and coin

(at year-end, in billions of Deutsche Mark)

	1994	1995	1996	1997	1998
Total banknotes and coin issued	250.9	263.5	275.7	276.2	271.0
Denomination of banknotes:					
1,000 Mark	75.0	81.1	86.6	88.5	86.6
500 Mark	25.7	26.1	27.8	27.7	26.5
200 Mark	11.3	10.8	10.1	9.3	8.4
100 Mark	90.7	95.9	100.1	99.5	98.2
50 Mark	20.4	21.1	21.9	21.6	21.4
20 Mark	7.9	8.1	8.5	8.6	8.7
10 Mark	4.8	5.0	5.1	5.2	5.2
5 Mark	0.3	0.2	0.3	0.3	0.3
Total value of coin	14.8	15.2	15.3	15.5	15.7
Banknotes and coin held by					
banks	25.0	26.0	28.9	29.2	28.4
Banknotes and coin in					
circulation outside banks	225.9	237.5	246.8	247.0	242.6

Table 5Institutional framework

(at end-1998)

Categories	Number of institutions	Number of branches	Number of accounts (thousands) ¹	Value of accounts (DEM billions)
Central bank ²	1	148	36	1.2
Commercial banks ³	373	22,190	20,690	329.0
Savings banks	607	19,364	38,326	306.2
Cooperative and rural banks	2,253	18,418	23,000	164.4
<i>Memorandum item:</i> Branches of foreign banks	74	116	n.a.	4.3

¹ Sight accounts of domestic non-banks, partly estimated. ² The Deutsche Bundesbank as a legal entity comprises the Central Office (in Frankfurt am Main) and nine Land Central Banks as well as 147 branches. ³ Including mortgage banks, instalment sales financing institutions, banks with special functions and Deutsche Postbank AG (which commenced operations as a fully-fledged credit institution on 1 January 1995).

	1994	1995	1996	1997	1998
Cash dispensers and ATMs					
Number of networks ²	4	4	4	4	4
Number of machines ²	29,400	35,700	37,600	41,397	45,615
Volume of transactions (millions)	935.0	1,100.0	1,251.8	n.a.	1,405.5
Value of transactions (DEM billions)	238.5	310.0	348.4	n.a.	419.0
EFTPOS					
Number of networks ^{2,3}	18	19	19	22	26
Number of machines ^{2,3}	62,500	70,048	115,000	162,794	230,880
Volume of transactions (millions) ⁴	104.0	149.4	214.2	225.8	363.4
Value of transactions (DEM billions) ⁴	10.8	20.5	32.7	29.0	56.6

Table 6Cash dispensers, ATMs and EFTPOS terminals1

¹ Partly estimated. ² End-year. ³ "Electronic cash" and "POZ procedures" only. ⁴ In 1994 to 1996 and 1998, "electronic cash" and "POZ procedures" only. In 1997 "electronic cash" procedures only.

Table 7Number of payment cards in circulation1

	(at	year-end, in thous	ands)		
	1994	1995	1996	1997	1998
Cards with a cash function	n.a.	n.a.	n.a.	n.a.	n.a.
Cards with a debit/credit function	47,353	74,337	80,454	85,200	91,345
of which: cards with a debit function ² cards with a credit function ³	37,113 10,240	62,597 11,740	66,914 13,540	71,000 14,200	76,145 15,200
Cards with a cheque guarantee function	37,113	38,479	39,937	41,720	43,845
<i>Memorandum item:</i> Retailer cards	4,500	4,800	4,900	5,000	5,000

¹ Partly estimated. A card with multiple functions may appear in several categories. It is, therefore, not meaningful to add the figures. ² Eurocheque cards, eligible for cash and debit functions in association with a Personal Identification Number (PIN). From 1995 onwards, including bank customer cards. ³ Most of the so-called "credit cards" are "delayed debit cards".

Table 8
Payment instructions handled by selected IFTs: ¹
volume of transactions

· ·	• •	1
(1n	mil	lions)

	1994	1995	1996	1997	1998
Maschinell-optische					
Beleglesung (MAOBE) ^{2,3}	248.0	115.3	77.9	27.7	11.1
Collection items	86.0	26.7	20.2	16.8	11.1
Credit transfers	162.0	88.6	57.7	10.9	•
Elektronischer Massen-					
zahlungsverkehr (EMZ) ⁴	2,107.1	2,156.9	2,198.1	2,217.2	2,239.3
Collection items	1,496.9	1,499.1	1,473.3	1,469.9	1,499.6
Credit transfers	610.2	657.8	724.8	747.3	739.7
Elektronischer Schalter (ELS) ⁵	4.0	5.5	7.2	10.6	13.5
Platzüberweisungsverkehr ⁶	30.3	8.1	3.1	0.6	
Konventionelle Abrechnung ^{3,7,8}	430.6	1.7	1.0	0.3	0.1
Collection items ⁹	150.8	0.7	0.5	0.2	0.1
Local credit transfers ⁹	279.8	1.0	0.5	0.1	•
Elektronische Abrechnung					
Frankfurt (EAF) ¹⁰	12.7	17.8	18.8	22.4	22.5
Memorandum items:					
Total retail payments ¹¹	2,355.1	2,272.2	2,276.1	2,244.9	2,250.4
Total large-value payments	477.6	33.1	30.0	33.9	36.1
of which:					
gross settlement procedures ¹²	34.3	13.6	10.3	11.2	13.5
net settlement procedures ¹³	443.3	19.5	19.7	22.7	22.6

¹ Does not include figures relating to IFTs not operated by the Deutsche Bundesbank. ² Machine-optical voucher reading, excluding payments submitted in a paper-based form which were truncated and passed on in a paperless form by the Bank's regional computer centres/payment units (BSE/GSE cheques). ³ Termination of conventional clearing of credit transfers, of the optical character recognition system (OCR) for credit transfers, and the conventional local credit transfer system on 31 May 1997 owing to the introduction of the full EZÜ requirement with effect from 1 June 1997 (see Agreement on credit transfers of 1996). ⁴ (Former: DTA) Paperless exchange of data media, including payments submitted in a paper-based form which were truncated and passed on in a paperless form by the Bank's regional computer centres/payment units (BSE/GSE cheques and EZÜ/BZÜ credit transfers). ⁵ Former: EIL-ZV (express electronic credit transfer system). ⁶ Express paper-based local credit transfer system. Reduction due to shift caused by truncation obligation: previous paper-based payments shifted to ELS and EMZ. System was closed down end of May 1997. ⁷ Daily local clearing system. ⁸ Statistical recording changed in 1995: settled delivery envelopes (clearing items) instead of individual payments therein. ⁹ Conventional items. ¹⁰ Former: EAF2. ¹¹ Includes MAOBE and EMZ. ¹² Includes ELS and Platzüberweisungsverkehr. ¹³ Includes Konventionelle Abrechnung and EAF.

Table 9 Payment instructions handled by selected IFTs:¹ value of transactions

(III DIMONS OF Deutsche Mark)	n billions of Deutsche Mark)
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	1994	1995	1996	1997	1998
Maschinell-optische					
Beleglesung (MAOBE) ^{2,3}	2,307.3	266.9	240.7	218.8	147.8
Collection items	2,203.4	240.0	224.5	215.3	147.8
Credit transfers	103.9	26.9	16.2	3.5	•
Elektronischer Massen-					
zahlungsverkehr (EMZ) ⁴	2,381.4	4,432.5	4,387.7	4,321.7	4,286.4
Collection items	1,313.9	3,277.1	3,173.6	3,044.9	2,978.4
Credit transfers	1,067.5	1,155.4	1,214.1	1,276.8	1,308.0
Elektronischer Schalter (ELS) ⁵	22,772.4	27,007.5	28,743.1	33,395.5	39,369.0
Platzüberweisungsverkehr ⁶	7,570.2	5,189.6	3,870.4	1,977.3	•
Konventionelle Abrechnung ^{3,7,8}	29,409.9	7,382.3	3,929.8	1,077.9	87.0
Collection items ⁹	799.9	669.8	620.8	275.1	87.0
Local credit transfers ⁹	28,610.0	6,712.5	3,309.0	802.8	•
Elektronische Abrechnung					
Frankfurt (EAF) ¹⁰	144,903.5	148,387.4	153,409.5	181,668.6	188,254.9
Memorandum items:					
Total retail payments ¹¹	4,688.7	4,699.4	4,628.4	4,540.5	4,434.2
Total large-value payments	204,656.0	187,966.8	189,952.8	218,119.3	227,710.9
of which:					
gross settlement procedures ¹²	30,342.6	32,197.1	32,613.5	35,372.8	39,369.0
net settlement procedures ¹³	174,313.4	155,769.7	157,339.3	182,746.5	188,341.9

¹ Does not include figures relating to IFTs not operated by the Deutsche Bundesbank. ² Machine-optical voucher reading procedure, excluding payments submitted in a paper-based form which were truncated and passed on in a paperless form by the Bank's regional computer centres/payment units (GSE cheques). ³ Termination of conventional clearing of credit transfers, of the optical character recognition system (OCR) for credit transfers, and the conventional local credit transfer system on 30 May 1997 owing to the introduction of the full EZÜ requirement with effect from 1 June 1997 (see Agreement on credit transfers in 1996). ⁴ Paperless exchange of data media, including payments submitted in a paper-based form which were truncated and passed on in a paperless form by the Bank's regional computer centres/payment units (BSE/GSE cheques and credit transfers), former: DTA. ⁵ Former: EIL-ZV (express electronic credit transfer system). ⁶ Express local credit transfer system. Reduction due to shift caused by truncation obligation: previous paper-based payments shifted to ELS and EMZ, closed end of 1997. ⁷ Daily local clearing system. ⁸ Statistical recording changed in 1995: settled delivery envelopes (clearing items) instead of individual payments therein. ⁹ Conventional items. ¹⁰ Former: EAF2. ¹¹ Includes MAOBE and EMZ. ¹² Includes ELS and Platzüberweisungsverkehr. ¹³ Includes Konventionelle Abrechnung and EAF.

Table 10 Transfer instructions handled by securities settlement systems:¹ volume of transactions

(millions)

	1994	1995	1996 ²	1997 ²	1998 ²
Delivery versus payment	20.5	19.0	17.7	27.5	53.5
Without countervalue + others	4.7	4.4	2.9	3.7	4.5
Total	25.2	23.4	20.6	31.2	58.0

Table 11 Transfer instructions handled by securities settlement systems:* value of transactions

(in billions of Deutsche Mark)

	1994	1995	1996	1997	1998
Delivery versus payment	9,510	11,878	16,040	18,850	25,139

* Source: Deutsche Börse Clearing AG

volume of transactions (in millions) 1994 1995 1996 1997 1998 Cheques issued 903.0 812.0 772.0 729.0 656.1 of which: 650.0 590.5 truncated 722.0 625.0 597.8 Payments by debit² and credit cards³ 350.5 416.1 504.1 529.2 690.8 Paper-based credit transfers⁴ 1,672.2 1,128.8 589.6 615.8 0.2 1,664.7 1,126.8 588.5 customer initiated 615.2 interbank/large-value⁵ 7.5 2.0 1.1 0.6 0.2 Paperless credit transfers 3,899.4 4,527.3 5,317.7 5,562.2 6,904.1 customer initiated 3,884.3 4.507.2 6,879.7 5,296.5 5,536.8 interbank/large-value⁵ 15.1 21.2 25.4 25.3 20.1 Direct debits6 4,607.0 4,704.6 4,828.8 5,393.2 5,391.0 12,012.2 Total 11,432.1 11,588.8 12,829.4 13,643.3

¹ Partly estimated: for 1995 adjustment of volume of transactions via cheque, credit transfer, direct debit. Without adjustment there would have been a steady rise of the volume of cashless payment transactions (of approximately 6%). ² In 1997 only electronic cash (POS-procedure). ³ Most of the so-called "credit cards" are "delayed debit cards". ⁴ Termination of conventional clearing of credit transfers, of the optical character recognition system (OCR) for credit transfers, and the conventional local credit transfer system on 31 May 1997 owing to the introduction of the full EZÜ requirement with effect from 1 June 1997 (see Agreement on credit transfers of 1996). ⁵ Only interbank payments via the Deutsche Bundesbank by Elektronischer Schalter (ELS) (former: EIL-ZV) and/or Elektronische Abrechnung Frankfurt (EAF) (former EAF2).⁶ Including cash dispenser/ATM withdrawals made with eurocheque cards at banks other than the one issuing the card.

Table 12

Indicators of use of various cashless payment instruments:¹

Indicators of use of various cashless payment instruments:¹

value of transactions

	1994	1995	1996	1997	1998
Cheques issued	5,550.0	4,544.0	4,135.0	4,005.0	3,804.8
of which: truncated	662.8	908.8	1,240.5	1,602.0	1,902.4
Payments by debit ² and credit cards ³	57.2	65.6	81.9	81.7	112.5
Paper-based credit transfers ⁴	55,224.8	26,764.2	17,671.7	10,565.9	1,862.7
customer initiated interbank/large-value ⁵	22,908.5 32,316.3	15,743.2 11,021.0	11,206.8 6,464.9	8,032.4 2,533.5	1,862.7
Paperless credit transfers	177,993.7	185,615.2	197,824.3	234,232.1	252,148.1
customer initiated interbank/large-value ⁵	15,528.5 162,465.2	19,634.8 165,980.4	26,149.2 171,675.1	32,129.6 202,102.5	41,910.9 210,237.2
Direct debits ⁶	4,766.8	4,644.5	5,562.3	6,382.0	7,222.8
Total	243,592.5	221,633.5	225,275.2	255,266.7	265,150.9

(in billions of Deutsche Mark)

¹ Partly estimated; for 1995 adjustment of value of transactions via cheque, credit transfer, direct debit. ² In 1997 only electronic cash (POS-procedure). ³ Most of the so-called "credit cards" are "delayed debit cards". ⁴ Termination of conventional clearing of credit transfers, of the optical character recognition system (OCR) for credit transfers, and the conventional local credit transfer system on 31 May 1997 owing to the introduction of the full EZÜ requirement with effect from 1 June 1997 (see Agreement on credit transfers of 1996). ⁵ Only interbank payments via the Deutsche Bundesbank by Elektronischer Schalter (ELS) (former: EIL-ZV) and/or Elektronische Abrechnung Frankfurt (EAF) (former EAF2). ⁶ Including cash dispenser/ATM withdrawals made with eurocheque cards at banks other than the one issuing the card.

	1994	1995	1996	1997	1998
Members	152	157	156	153	154
of which: live	149	152	155	153	154
Sub-members ¹	92	100	100	105	109
of which: live	88	97	94	101	104
Participants ²	6	7	8	12	13
of which: live	3	4	4	8	10
Total users	250	264	264	270	276
of which: live	240	253	253	262	268
Memorandum items:					
Total S.W.I.F.T. users:	4,866	5,229	5,632	6,165	6,557
of which:					
members	2,551	2,693	2,874	2,969	2,980
sub-members	2,097	2,259	2,404	2,590	2,720
participants	218	277	354	606	857

Table 14 Participation in S.W.I.F.T. by domestic institutions

¹ Domestic users sponsored by members abroad. ² Participants are not shareholders in S.W.I.F.T. and their message traffic over the network is restricted. Source: S.W.I.F.T.

S	S.W.I.F.T. messa	ige flows to/fro	om domestic u	sers	
	1994	1995	1996	1997	1998
Total messages sent	38,187,536	43,824,742	47,803,674	55,873,558	61,963,751
of which:					
category I^1	13,843,274	15,580,557	16,493,249	17,731,609	19,351,531
category II^2	7,557,127	8,373,229	8,564,736	9,177,317	9,690,958
Total messages received	51,011,768	56,505,445	59,246,442	66,287,028	72,099,434
of which:					
category I^1	16,438,145	17,759,489	18,627,409	20,146,525	21,958,781
category II ²	21,833,621	24,441,740	25,231,632	28,261,324	29,076,972
Domestic traffic ³	6,310,196	6,734,317	6,834,054	7,396,209	7,572,070
Memorandum item:					
Global S.W.I.F.T. traffic	518,097,873	603,575,374	687,785,294	812,117,556	937,039,995

Table 15

¹ Category I: customer (funds) transfers. ² Category II: bank (funds) transfers. ³ Messages sent to/received from domestic users. Source: S.W.I.F.T.

	Ba	Table 1 sic statistical o	lata		
	1994	1995	1996	1997	1998
Population (millions): year-end	57.2	57.3	57.5	57.5	57.6
GDP (ITL billions)	1,653,402	1,787,278	1,896,022	1,974,618	2,057,731
GDP per capita (ITL millions)	28.7	31.0	32.6	33.9	35.7
Exchange rate (domestic currency vis-à-vis USD):					
year-end average	1,629.7 1,611.8	1,584.7 1,628.9	1,530.6 1,543.0	1,759.2 1,703.4	1,653.1 1,736.2

Table 2Settlement media used by non-banks
(at year-end, in billions of Italian lire)

	1994	1995	1996	1997	1998
Notes and coin	96,221	98,281	100,113	107,433	115,200
Transferable deposits	488,055	490,240	509,035	544,776	590,301
Other ¹	15,702	15,971	13,125	14,095	11,305
Narrow money supply (M1)	599,978	604,492	622,273	666,304	716,806
Memorandum item:					
Broad money supply (M2) ²	847,418	834,148	863,290	930,991	974,688

 1 Bankers' drafts, cashiers' cheques and current accounts at the Treasury. 2 Includes M1, postal and banking saving deposits and certificates of deposits with a maturity less than 18 months.

Table 3Settlement media used by banks

(at year-end, in billions of Italian lire)

	1994	1995	1996	1997	1998
Balances held at central bank ¹ of which:	92,619	73,938	72,202	82,949	19,105
required reserves free reserves	92,468 151	73,736 202	71,958 244	82,626 323	18,701 404
Transferable deposits at other banks ²	56,352	64,156	85,319	97,331	105,572
Memorandum item:					
Institutions' borrowing from central bank ³	1,888	2,636	1,429	1,114	.4

¹ Average required reserves and average free reserves for the period 15 December - 14 January, except for the 1998 (15-31 December).
² Sight interbank deposits and net balances of reciprocal accounts are included. ³ The data comprise institutions' average borrowing through ordinary advances for the period 15 December - 14 January. ⁴ Ordinary advances are no longer provided as from December 1998.

Table 4

Banknotes and coin

(at year-end, in billions of Italian lire)

	1994	1995	1996	1997	1998
Total banknotes and coin issued	101,788	105,146	108,092	116,204	124,898
Denomination of banknotes:					
500,000 lire				3,919	9,972
100,000 lire	72,346	74,815	78,264	81,677	83,227
50,000 lire	21,531	22,177	21,429	21,873	22,469
10,000 lire	3,996	4,077	4,173	4,299	4,438
5,000 lire	905	938	967	1,016	1,096
2,000 lire	333	292	270	255	231
1,000 lire	914	950	1,007	1,035	973
Total value of coin	1,763	1,897	1,982	2,130	2,492
Banknotes and coin held by	5 5 (7	6.965	7.070	0.771	0.000
banks	5,567	6,865	7,979	8,771	9,698
Banknotes and coin in					
circulation outside banks	96,221	98,281	100,113	107,433	115,200

Table 5Institutional framework

		(at end-1998)		
Categories	Number of institutions	Number of branches	Number of accounts (thousands)	Value of accounts (ITL billions)
Central bank	1	99	•	•
Commercial banks	302	19,211	23,341	487,950
Cooperative and rural banks	619	7,047	4,848	102,351
Postal Administration	1	13,956	n.a.	n.a.
Memorandum item:				
Branches of foreign banks	59	84	18	1,879

Table 6
Cash dispensers, ATMs and EFTPOS terminals

	1994	1995	1996	1997	1998
Cash dispensers and ATMs					
Number of networks ¹	1	1	1	1	1
Number of machines ¹	18,672	21,670	24,223	25,644	27,766
Volume of transactions (thousands)	276,928	330,490	367,762	411,643	486,504
Value of transactions (ITL billions)	85,389	106,756	115,051	129,493	151,134
EFTPOS					
Number of networks ¹	1	1	1	1	1
Number of terminals ¹	104,051	153,752	214,705	281,023	344,300
Volume of transactions ² (thousands)	89,190	121,565	169,187	253,696	323,642
Value of transactions ² (ITL billions)	16,808	23,475	30,867	46,162	57,243

¹ Year-end. ² Both with debit and credit cards.

Table 7Number of payment cards in circulation1

(at year-end, in thousands)							
	1994	1995	1996	1997	1998		
Cards with a cash function	12,396	13,824	15,270	17,317	17,989		
Cards with debit/credit function <i>of which:</i>	18,210	20,482	22,549	24,521	27,150		
cards with a debit function cards with a credit function	12,124 6,086	13,791 6,691	14,906 7,643	15,693 8,828	17,000 10,150		
Cards with a cheque guarantee function ²	1,766	1,655	1,151	894	488		
Memorandum item:							
Retailer cards	n.a.	n.a.	n.a.	n.a.	n.a.		

 1 A card with multiple functions may appear in several categories. It is, therefore, not meaningful to add the figures. 2 Includes eurocheque cards.

Payment instructions handled by selected payment systems: volume of transactions

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	1994	1995	1996	1997	1998
Local Clearing	240,675	235,665	225,622	217,577	182,660
cheques	238,504	233,698	223,927	215,827	181,749
of which: out-of-town cheques	85,782	90,259	89,061	91,822	97,774
credit transfers other items ¹	282 1,889	263 1,704	151 1,544	104 1,646	52 859
Electronic Memoranda (ME)	2,084	1,810	1,651	1,452	317
interbank deposits	731	725	776	763	55
foreign operations	562	208	82	41	2
credit transfers	222	285	145	53	14
other items ²	569	592	648	595	246
Ingrosso (SIPS)	3,526	4,462	5,326	6,057	303
Retail	489,582	586,865	664,097	710,609	825,518
truncated cheques	287,179	283,937	287,635	285,659	336,518
Bancomat	61,616	74,383	91,117	103,529	118,751
collection orders	140,333	154,061	170,648	189,529	215,987
credit transfers	454	74,484	114,637	129,169	147,967
other items ³	•	•	60	2,723	6,295
BI-REL (Gross Settlement System) ⁴	1,016	1,027	1,129	2,694	10,840
Credit transfers ^{5,6}				1,566	3,767
GEC ⁷			•	•	4,760
Banks - BdI/Treasury ⁸	973	981	1,079	1,046	1,456
BISS ⁹	43	46	50	82	238
MID ¹⁰	•	•	•	•	619

¹ Includes payments between the banking system and the Treasury, the Banca d'Italia or the Postal Administration and bills of exchange.
² In particular, settlement of securities transactions. Since November 1998, the cash balances of securities transactions have been settled through the RTGS System (BI-REL). ³ Mainly transactions through e-money and interests and dividends on the securities deposited at the central securities depository for shares and corporate bonds (Monte Titoli); transactions with debit cards at the Post Office; electronic notification of unpaid cheques. ⁴ Debits/credits for the settlement of clearing balances are not included. ⁵ Since June 1997.
⁶ Large-value and cross-border credit transfers. ⁷ Since January 1998 has replaced INGROSSO. It handles interbank transfers of external lire/euro and the lire/euro settlement of foreign exchange transactions. ⁸ Payments between banks and Banca d'Italia/Treasury.
⁹ Interbank credit transfers. ¹⁰ Since January 1998 has replaced Electronic Memoranda. It handles the screen-based interbank deposit market transactions.

Payment instructions handled by selected payment systems: value of transactions

	(111				
	1994	1995	1996	1997	1998
Local Clearing	4,255,270	3,574,629	2,897,869	2,561,307	1,911,366
cheques	1,587,415	1,635,293	1,647,404	1,645,946	1,600,361
of which: out-of-town cheques	629,890	659,491	661,971	692,263	827,193
credit transfers	634,657	593,773	254,402	64,600	25,194
other items ¹	2,033,198	1,345,563	996,063	850,761	285,811
Electronic Memoranda (ME)	17,972,187	18,408,052	23,099,794	25,225,920	8,938,910
interbank deposits	11,782,702	11,557,140	15,052,765	16,641,197	1,137,307
foreign operations	894,808	493,336	327,058	224,848	16,891
credit transfers	857,732	1,029,143	796,409	225,524	87,792
other items ²	4,436,945	5,328,433	6,923,562	8,134,351	7,696,920
Ingrosso (SIPS)	25,928,601	27,377,138	34,530,551	41,511,463	2,503,033
Retail	675,298	1,239,833	1,582,504	1,789,819	2,176,587
truncated cheques	286,985	290,343	298,483	299,915	381,251
Bancomat	17,821	21,303	25,818	29,173	33,244
collection orders	367,504	468,342	520,246	570,125	675,939
credit transfers	2,988	459,845	731,562	863,538	1,037,894
other items ³	•	•	6,395	27,068	48,259
BI-REL (Gross Settlement					
System) ⁴	2,428,800	2,737,756	2,719,900	4,374,800	70,931,126
Credit transfers ^{5,6}				1,529,000	3,343,348
GEC^7	•			•	44,037,769
Banks - BdI/Treasury ⁸	2,318,900	2,599,800	2,580,700	2,542,800	6,476,246
BISS ⁹	109,900	137,956	139,200	303,000	1,621,406
MID^{10}	•	•	•	•	15,452,357

(in billions of Italian lire)

¹ Includes payments between the banking system and the Treasury, the Banca d'Italia or the Postal Administration and bills of exchange.
² In particular, settlement of securities transactions. Since November 1998, the cash balances of securities transactions have been settled through the RTGS System (BI-REL). ³ Mainly transactions through e-money and interests and dividends on the securities deposited at the central securities depository for shares and corporate bonds (Monte Titoli); transactions with debit cards at the Post Office; electronic notification of unpaid cheques. ⁴ Debits/credits for the settlement of clearing balances are not included. ⁵ Since June 1997.
⁶ Large-value and cross-border credit transfers. ⁷ Since January 1998 has replaced INGROSSO. It handles interbank transfers of external lire/euro and the lire/euro settlement of foreign exchange transactions. ⁸ Payments between banks and Banca d'Italia/Treasury.
⁹ Interbank credit transfers. ¹⁰ Since January 1998 has replaced Electronic Memoranda. It handles the screen-based interbank deposit market transactions.

Table 10 Transfer instructions handled by securities settlement systems: volume of transactions

	1994	1995	1996	1997	1998
LDT ¹	14,127,128	16,236,625	23,476,342	30,609,421	40,104,473
government securities bonds shares	5,343,790 834,641 7,948,697	8,164,353 931,054 7,141,218	10,637,127 1,357,638 11,481,577	10,816,889 1,657,081 18,135,451	12,644,593 2,199,877 25,260,003
Government Securities Centralised Accounts (CAT)	845,792	960,553	1,004,258	927,001	714,615
Monte Titoli (corporate securites) ²	68,433	79,349	107,400	134,348	188,779

¹ Bilateral balances. ² Transfer instructions carried out directly through the accounts held at the Monte Titoli. The data only refer to bonds.

Table 11

Transfer instructions handled by securities settlement systems: value of transactions

(in billions of Italian lire)

	1994	1995	1996	1997	1998
LDT ¹	12,539,583	15,134,844	29,882,833	42,069,723	53,187,000
government securities bonds shares	12,100,697 37,619 401,267	14,801,877 45,405 287,562	29,344,943 89,648 448,242	41,017,980 84,139 967,604	51,070,000 164,000 1,952,000
Government Securities Centralised Accounts (CAT) ²	1,743,402	1,575,070	1,805,554	2,240,512	2,486,283
Monte Titoli (corporate securites) ³	48,926	31,667	68,619	132,150	101,120

¹ Bilateral balances. ² Figures refer to the nominal value of securities. ³ Transfer instructions carried out directly through the accounts held at the Monte Titoli. The data only refer to the nominal value of the bonds exchanged.

Indicators of use of various cashless payment instruments: volume of transactions¹

(in millions)						
	1994	1995	1996	1997	1998	
Cheques issued	594.3	583.6	696.5	675.9	665.5	
Payments by debit and credit cards	100.6	130.6	190.5	263.9	346.8	
Other card payments ²	•	•	•	0.3	0.3	
Paper-based credit transfers	2.9	2.7	2.6	1.0	1.3	
customer initiated interbank/large-value	• 2.9	2.7	• 2.6	• 1.0	• 1.3	
Paperless credit transfers	892.0	899.1	921.8	955.9	953.3	
customer initiated interbank/large-value	886.6 5.4	893.1 6.0	914.9 6.9	949.3 6.6	947.1 6.2	
Direct debits	78.7	90.9	162.8	200.7	226.4	
Other	153.1	157.3	242.5	249.7	256.4	
paperless collections ³ paper-based collections ⁴	106.6 46.5	124.5 32.8	183.2 59.3	191.1 58.6	209.9 46.5	
Total	1,821.6	1,864.2	2,216.7	2,347.4	2,450.0	

 1 Up to 1995 the figures for payment operations effected by banking instruments were provided by 75 banks accounting for approximately 80% of the current account deposits in all banking systems. Since 1996 figures relate to the entire system. 2 Payments by multipurpose pre-paid cards. 3 Collections of electronic bank receipts (RIBA). 4 Collections of commercial bills and paper-based bank receipts.

Indicators of use of various cashless payment instruments: value of transactions¹

(in billions of Italian lire)

	1994	1995	1996	1997	1998
Cheques issued	2,114,927	2,197,569	2,551,947	2,565,178	2,478,226
Payments by debit and credit cards	19,218	24,718	34,562	47,070	57,870
Other card payments ²	•		•	4	3
Paper-based credit transfers	4,352,098	3,945,363	3,576,763	2,542,800	2,564,775
customer initiated interbank/large-value	4,352,098	3,945,363	3,576,763	2,542,800	2,564,775
Paperless credit transfers	48,116,450	50,161,375	62,796,950	72,645,939	80,652,125
customer initiated interbank/large-value	4,963,463 43,152,987	5,267,372 44,894,003	5,823,814 56,973,136	6,919,758 65,726,181	8,218,632 72,433,493
Direct debits	106,721	116,309	158,429	250,904	279,228
Other	463,821	534,787	777,969	802,781	925,255
paperless collections ³ paper-based collections ⁴	298,930 164,891	400,943 133,844	547,890 230,079	587,922 214,859	737,898 187,357
Total	55,173,235	56,980,121	69,896,620	78,854,676	86,957,482

¹ Up to 1995 the figures for payment operations effected by banking instruments were provided by 75 banks accounting for approximately 80% of the current account deposits in all banking systems. Since 1996 figures relate to the entire system. ² Payments by multipurpose pre-paid cards. ³ Collections of electronic bank receipts (RIBA). ⁴ Collections of commercial bills and paper-based bank receipts.

Га	rucipation in 5.	Participation in S. w. I.F. I. by domestic institutions							
	1994	1995	1996	1997	1998				
Members	189	188	185	183	184				
of which: live	186	182	185	181	182				
Sub-members ¹	32	37	43	45	51				
of which: live	32	36	40	44	50				
Participants ²	0	1	3	4	7				
of which: live	0	1	3	2	6				
Total users	221	226	231	232	242				
of which: live	218	219	228	227	238				
Memorandum items:									
Total S.W.I.F.T. users:	4,866	5,229	5,632	6,165	6,557				
of which:									
members	2,551	2,693	2,874	2,969	2,980				
sub-members	2,097	2,259	2,404	2,590	2,720				
participants	218	277	354	606	857				

Table 14 Participation in S.W.I.F.T. by domestic institutions

¹ Domestic users sponsored by members abroad. ² Participants are not shareholders in S.W.I.F.T. and their message traffic over the network is restricted. Source: S.W.I.F.T.

Table 15 S.W.I.F.T. message flows to/from domestic users							
	1994	1995	1996	1997	1998		
Total messages sent	24,681,961	27,584,947	30,081,128	31,672,855	35,347,305		
of which:							
category I ¹	7,596,603	6,360,220	6,903,858	7,968,583	8,556,232		
category II ²	6,063,052	6,512,180	6,659,465	7,091,972	7,369,906		
Total messages received	25,066,961	28,480,765	31,508,461	32,742,840	34,939,777		
of which:							
category I^1	8,061,681	9,502,849	10,487,061	9,980,426	10,758,471		
category II ²	5,448,679	6,239,393	6,736,480	6,881,867	6,904,785		
Domestic traffic ³	4,235,252	4,959,227	5,419,805	4,127,570	3,906,821		
Memorandum item:							
Global S.W.I.F.T. traffic	518,097,873	603,575,374	687,785,294	812,117,556	937,039,995		

Table 15

¹ Category I: customer (funds) transfers. ² Category II: bank (funds) transfers. ³ Messages sent to/received from domestic users. Source: S.W.I.F.T.

Table 1Basic statistical data							
	1994	1995	1996	1997	1998		
Population (millions)*	125.0	125.6	125.9	126.2	126.5		
GDP (JPY trillions)	479.3	483.2	500.3	507.9	495.2		
GDP per capita (JPY thousands)	3,833.0	3,848.2	3,975.1	4,025.1	3,915.0		
Exchange rate (domestic currency vis-à-vis USD):							
year-end average	99.83 102.18	102.91 93.97	115.98 108.81	129.92 120.92	115.20 131.02		

* As of 1 October.

Source: Economic Statistics Annual and Financial and Economic Statistics Monthly (Bank of Japan).

Table 2Settlement media used by non-banks

(at year-end, in billions of Japanese yen)

	1994	1995	1996	1997	1998
Notes and coin ¹	42,352.9	46,231.0	49,084.0	52,732.8	54,310.6
Transferable deposits ²	109,312.4	125,313.1	139,062.6	151,550.4	160,093.2
Narrow money supply (M1)	151,665.3	171,544.1	188,146.6	204,283.2	214,403.8
Memorandum item:					
Broad money supply (M2+CD) ³	541,419.4	558,804.3	575,298.1	597,493.8	621,636.3

¹ Notes and coin held by corporations, individuals and public sector. ² Demand deposits at the Bank of Japan, city banks, regional banks, regional banks II, trust banks (domestic trust banks, trust banks which started operations in October 1993 and thereafter, and foreign trust banks granted trust banking business licences), long-term credit banks, foreign banks in Japan, The Zenshinren Bank, *shinkin* banks, Norinchukin Bank, Shoko Chukin Bank. The figure does not correspond to the sum of value of accounts in Table 5. (The latter includes data for credit cooperatives, labour credit associations, agricultural cooperatives, fishery cooperatives and Post Office.) ³ M1 + time deposits + foreign currency deposits + non-resident yen deposits + certificates of deposits (CDs).

Source: Financial and Economic Statistics Monthly (Bank of Japan).

Table 3Settlement media used by banks

(in billions of Japanese yen)

	1994	1995	1996	1997	1998
Balances held at central bank ¹	3,038.6	3,239.5	3,404.3	3,602.9	3,822.0
of which: required reserves free reserves	3,035.5 3.1	3,226.1 13.4	3,358.0 46.3	3,553.8 49.1	3,752.9 69.1
Transferable deposits at other banks ²	9,420.2	8,214.9	6,344.1	8,058.3	7,263.9
<i>Memorandum item</i> : Institutions' borrowing from central bank ³	5,991.7	2,390.5	1,983.4	4,634.3	1,878.0

¹ Average for December. ² Demand deposits at city banks, regional banks, regional banks II, trust banks, long-term credit banks and *shinkin* banks; end-March. ³ Banks' total borrowing from the Bank of Japan consisting of (i) discounting of bills and (ii) loans on bills; year-end.

Source: Financial and Economic Statistics Monthly (Bank of Japan).

Table 4 Banknotes and coin

(at year-end, in billions of Japanese yen)

(,,,									
	1994	1995	1996	1997	1998				
Total banknotes and coin issued ¹	46,625.5	50,060.0	54,588.7	58,715.4	59,986.4				
Denomination of banknotes:									
10,000 yen	37,662.7	40,913.1	45,036.6	48,958.2	50,156.1				
5,000 yen	1,947.3	2,007.5	2,146.5	2,191.0	2,208.2				
1,000 yen	3,092.6	3,147.1	3,312.7	3,346.0	3,327.3				
500 yen	127.5	126.3	125.5	124.7	123.8				
Denomination of coin:									
500 yen	1,159.5	1,226.3	1,305.7	1,379.5	1,447.6				
100 yen	921.0	936.4	961.8	978.4	982.0				
50 yen	216.3	220.5	225.8	229.2	229.8				
10 yen	201.7	204.1	206.8	208.3	207.8				
5 yen	60.3	60.7	61.6	62.7	63.0				
1 yen	38.3	38.9	39.9	40.3	40.5				
Banknotes and coin held by									
banks	4,272.6	3,829.0	5,504.7	5,982.6	5,675.8				
Banknotes and coin in									
circulation outside banks	42,352.9	46,231.0	49,084.0	52,732.8	54,310.6				

¹ This does not equal to the sum of *denomination of banknotes* and *denomination of coin*, as memorial coins are not included in the figures for *denomination of coin*.

Source: Financial and Economic Statistics Monthly (Bank of Japan).

Institutional framework

(at end-March 1999, except as noted)

Categories	Number of institutions	Number of branches	Number of accounts (millions)	Value of accounts (JPY billions) ¹
Central bank	1	34	0.002	3,822.0
Commercial banks ²	167	14,242	331.4	146,113.1
Cooperative and rural banks ³	3,335	29,807	n.a.	43,506.4
Branches of foreign banks	89	135	n.a.	864.0
Post Office	1	24,116	108.4	28,408.4

¹ End-December 1998 figures for central bank, commercial banks and cooperative and rural banks. The sum of the value of the amounts shown here does not correspond to that shown in Table 2 (see footnote 2 in Table 2). ² Domestically licensed banks including city banks, regional banks, regional banks II, long-term credit banks and trust banks (domestic trust banks, trust banks which started operations in October 1993 and thereafter, and foreign trust banks granted trust banking business licences). ³ Including *shinkin* banks, credit cooperatives, labour credit associations, agricultural cooperatives, fishery cooperatives, the Norinchukin Bank and the Shoko Chukin Bank.

Sources: Financial and Economic Statistics Monthly, Economic Statistics Annual (Bank of Japan), Center for Financial Industry Information Systems and other national data.

	1994	1995	1996	1997	1998
Cash dispensers and ATMs					
Number of networks ¹	22	21	18	16	16
Number of machines ¹	122,250	127,247	132,330	140,639	142,604
Volume of transactions (thousands) ²	447,381	482,709	514,982	635,165	727,741
Value of transactions (JPY billions) ²	19,193	20,441	21,482	22,183	22,406
EFTPOS					
Number of networks ^{1,3}	271	256	265	252	205
Number of terminals ^{1,3}	28,320	25,061	22,977	19,499	16,042
Volume of transactions (thousands) ⁴	801	n.a.	556	517	489
Value of transactions (JPY billions) ⁴	6.6	n.a.	2.0	3.5	4.0

Table 6Cash dispensers, ATMs and EFTPOS terminals

¹ End-March of the next year. ² Figures represent interbank transactions only and do not include intrabank transactions. ³ Including those for labour credit associations. ⁴ Figures for the year ending March.

Source: Center for Financial Industry Information Systems, Federation of Bankers Associations of Japan and other national data.

Table 7Number of payment cards in circulation

(at end-March except where noted, in thousands)

	1994	1995	1996	1997	1998
Cards with a cash function ¹	244,370	260,830	270,820	283,080	293,340
Cards with debit/credit function	228,705	237,472	234,708	245,413	256,783
of which: cards with a debit function ² cards with a credit function ³	7,965 220,740	9,962 227,510	11,748 222,960	11,743 233,670	11,873 244,910
Cards with a cheque guarantee function ⁴					•
Memorandum item:					
Retailer cards	55,850	59,160	52,340	60,540	63,710

¹ Excludes cards issued by fishery cooperatives and the Post Office. ² Figures at the end of March the next year. ³ Includes retailer cards. ⁴ Cards with a cheque guarantee function do not exist in Japan.

Source: Center for Financial Industry Information Systems.

Table 8Payment instructions handled by selected payment systems:volume of transactions

(in thousands)

	1994	1995	1996	1997	1998
Bill and cheque clearing systems	318,083	305,827	296,030	283,373	260,067
Zengin System	874,291	935,485	995,646	1,056,143	1,094,176
Foreign Exchange (Gaitame) Yen Clearing System	7,078	8,839	9,403	10,434	11,155
BOJ-NET*	4,532	4,512	4,417	5,005	5,307

* Figures are inconsistent with those listed in the previous editions due to the change in the calculation method.

Source: Payment and Settlement Statistics, Financial and Economic Statistics Monthly, Economic Statistics Annual (Bank of Japan) and other national data.

Table 9Payment instructions handled by selected payment systems:value of transactions

(in trillions of Japanese yen)

	1994	1995	1996	1997	1998
Bill and cheque clearing systems	2,770	1,845	1,745	1,585	1,296
Zengin System	1,894	2,067	2,140	2,298	2,270
Foreign Exchange (Gaitame) Yen Clearing System	6,647	7,670	8,573	10,357	10,695
BOJ-NET*	41,748	41,873	39,893	41,493	43,136

* Figures are inconsistent with those listed in the previous editions due to the change in the calculation method.

Source: Payment and Settlement Statistics, Financial and Economic Statistics Monthly, Economic Statistics Annual (Bank of Japan) and other national data.

Table 10Transfer instructions handled by securities settlement systems:volume of transactions

(in thousands)

	1994	1995	1996	1997	1998
Registration system*	439.3	598.3	781.5	1,177.5	1,218.9
Book-entry system	426.0	486.5	480.1	701.6	773.9
Financing bills Treasury bills Government bonds, etc.	122.5 152.0 151.5	112.7 175.2 198.6	81.9 143.3 255.0	99.4 123.1 479.1	7.7 126.2 640.2

* Government bonds only.

Sources: Payment and Settlement Statistics (Bank of Japan) and other national data.

Table 11

Transfer instructions handled by securities settlement systems: value of transactions

(in trillions of Japanese yen)

	1994	1995	1996	1997	1998
Registration system*	1,192.4	1,636.7	2,109.4	3,417.0	4,181.1
Book-entry system	2,182.7	2,511.8	2,567.1	3,616.9	4,297.9
Financing bills Treasury bills Government bonds, etc.	706.0 961.1 515.6	706.7 1,144.2 660.9	683.7 938.3 945.0	687.7 1,003.1 1,926.0	269.9 1,043.6 2,984.5

* Government bonds only.

Sources: Payment and Settlement Statistics (Bank of Japan) and other national data.

Table 12Indicators of use of various cashless payment instruments:

 			1		
	volur	na af trai	isactions		
	voiui	ne or trai	1540110115		

	1994	1995	1996	1997	1998
Bills and cheques cleared ¹	318.1	305.8	296.0	283.4	260.1
Payments by credit card ²	362.8	371.8	494.6	587.1	720.7
Paper-based credit transfers ³	808.6	942.8	993.3	1,030.1	1,001.9
Paperless credit transfers ²	836.5	899.4	962.9	1,020.4	1,056.1
customer initiated ⁴ interbank/large-vaue ⁵	826.2 10.3	887.4 12.0	950.4 12.5	1,006.0 14.4	1,041.1 15.0
Direct debits	n.a.	n.a.	n.a.	n.a.	n.a.
Total	n.a.	n.a.	n.a.	n.a.	n.a.

¹ Transactions cleared through bill and cheque-clearing houses. ² Figures for the year ending March. ³ Comprising paper-based transfers through the Domestic Funds Transfer System and the Post Office. Estimated. ⁴ Transactions through the Zengin System (excluding paper-based transfers). Figures for the year ending March. ⁵ Transactions through BOJ-NET and the Foreign Exchange (Gaitame) Yen Clearing System. Figures for the year ending March.

Sources: Financial and Economic Statistics Monthly, Economic Statistics Annual (Bank of Japan), Federation of Bankers Associations of Japan, Japan Consumer Credit Industry Association and other national data.

Table 13

Indicators of use of various cashless payment instruments: value of transactions

(in trillions of Japanese yen)

	1994	1995	1996	1997	1998
Bills and cheques cleared ¹	2,769.9	1,845.1	1,745.0	1,585.0	1,296.2
Payments by credit card	12.5	13.3	14.3	16.0	17.8
Paper-based credit transfers ²	43.1	50.0	60.6	49.1	45.1
Paperless credit transfers ³	46,967.0	46,968.4	47,837.5	51,261.2	50,477.6
customer initiated ⁴ interbank/large-value ⁵	1,870.5 45,096.5	2,043.9 44,924.5	2,141.6 45,695.9	2,263.9 48,997.3	2,206.3 48,271.3
Direct debits	n.a.	n.a.	n.a.	n.a.	n.a.
Total	n.a.	n.a.	n.a.	n.a.	n.a.

¹ Transactions cleared through bill and cheque-clearing houses. ² Comprising paper-based transfers through the Domestic Funds Transfer System and the Post Office. Estimated. ³ Figures for the year ending March. ⁴ Transactions through the Zengin System (excluding paper-based transfers). Figures for the year ending March. ⁵ Transactions through BOJ-NET and the Foreign Exchange (Gaitame) Yen Clearing System. Figures for the year ending March.

Source: Financial and Economic Statistics Monthly, Economic Statistics Annual (Bank of Japan), Federation of Bankers Associations of Japan, Japan Consumer Credit Industry Association and other national data.

Participation in S.W.I.F.T. by domestic institutions						
	1994	1995	1996	1997	1998	
Members	127	130	133	138	140	
of which: live	127	130	133	136	140	
Sub-members ¹	84	91	91	97	98	
of which: live	83	91	91	96	97	
Participants ²	8	12	15	23	27	
of which: live	7	10	14	21	27	
Total users	219	233	239	258	265	
of which: live	217	231	238	253	264	
Memorandum items:						
Total S.W.I.F.T. users:	4,866	5,229	5,632	6,165	6,557	
of which:						
members sub-members	2,551 2,097	2,693 2,259	2,874 2,404	2,969 2,590	2,980 2,720	
participants	218	277	354	606	857	

Table 14Participation in S.W.I.F.T. by domestic institutions

¹ Domestic users sponsored by members abroad. ² Participants are not shareholders in S.W.I.F.T. and their message traffic over the network is restricted.

Source: S.W.I.F.T.

Table 15S.W.I.F.T. message flows to/from domestic users						
	1994	1995	1996	1997	1998	
Total messages sent	21,843,420	24,748,540	26,798,560	29,937,227	32,047,536	
of which: category I ¹ category II ²	4,728,927 5,023,849	5,253,371 5,374,359	5,474,056 5,326,415	5,543,351 5,581,169	5,632,633 5,898,077	
Total messages received	20,444,154	23,487,782	25,894,551	29,868,982	34,212,891	
of which: category I ¹ category II ²	2,695,175 6,568,628	3,004,009 7,326,157	3,255,693 7,932,287	3,525,671 9,045,326	3,708,359 11,075,669	
Domestic traffic ³	2,562,869	2,989,029	2,996,465	3,446,210	4,433,392	
Memorandum item:						
Global S.W.I.F.T. traffic	518,097,873	603,575,374	687,785,294	812,117,556	937,039,995	

¹ Category I: customer (funds) transfers. ² Category II: bank (funds) transfers. ³ Messages sent to/received from domestic users. *Source*: S.W.I.F.T.

Table 1Basic statistical data							
	1994	1995	1996	1997	1998		
Population (millions):							
year-end	15.4	15.5	15.6	15.7	15.7		
GDP (NLG millions)	613.0	666.1	695.6	738.4	782.0		
GDP per capita (NLG)		42,991	44,681	47,167	49,826		
Exchange rate (domestic currency vis-à-vis USD):							
year-end average	1.74 1.82	1.60 1.61	1.74 1.69	2.02 1.95	1.89 1.98		

 Table 2

 Settlement media used by non-banks

 (at year-end, in billions of Dutch guilders)

	1994	1995	1996	1997	1998	
Notes and coin	38.1	38.2	38.3	38.7	38.0	
Transferable deposits	114.1	134.8	156.4	170.4	218.5	
Other	•	•	•	•		
Narrow money supply (M1)	152.2	173.0	194.7	209.1	256.2	
Memorandum item:						
Broad money supply (M1+M2)	466.0	486.6	515.0	552.7	607.3	

Table 3 Settlement media used by banks

(at year-end, in millions of Dutch guilders)

	1994	1995	1996	1997	1998
Balances held at central bank ¹ of which:	19,408	9,785	16,040	17,399	35,788
required reserves	11,361	0	0	6,112	17,139
free reserves	25	37	59	20	20
Transferable deposits at other banks ²	2,462	3,061	3,116	2,382	n.a.
Other					
Memorandum item:					
Institutions' borrowing from central bank	8,022	9,748	15,981	11,267	18,629

¹ Balances also include "Institutions' borrowing from central bank", although from the adminstrative point of view they are considered to be overdrafts instead of balances. ² Data for 1998 on transferable deposits at other institutions are not available owing to a change in reporting to the Nederlandsche Bank.

(at year-end, in billions of Dutch guilders)					
	1994	1995	1996	1997	1998
Total banknotes and coin issued	40.9	41.3	41.7	42.1	40.9
Denomination of banknotes:					
1,000 guilders	15.8	14.9	14.4	14.5	13.6
250 guilders	5.0	5.2	5.4	5.3	5.0
100 guilders	13.2	13.8	14.6	14.8	14.8
50 guilders	1.8	1.9	1.7	1.8	1.7
25 guilders	1.8	1.8	2.0	2.0	2.1
10 guilders	0.8	0.8	0.8	0.8	0.8
5 guilders	0.1	0.05	0.05	0.05	0.05
Denomination of coin:					
5.00 guilders	0.915	0.936	0.951	0.966	0.976
2.50 guilders	0.482	0.475	0.480	0.482	0.482
1.00 guilders	0.654	0.679	0.689	0.702	0.714
0.25 guilders	0.293	0.299	0.304	0.316	0.327
0.10 guilders	0.200	0.206	0.210	0.213	0.215
0.05 guilders	0.071	0.074	0.076	0.078	0.081
Banknotes and coin held by					
banks	2.8	3.1	3.4	3.4	2.8
Banknotes and coin in					
circulation outside banks	38.1	38.2	38.3	38.7	38.0

Banknotes and coin

Table 5 Institutional framework

(at end-1998)

Categories	Number of institutions	Number of branches	Number of accounts (millions)	Value of accounts (NLG billions)
Central bank	1	9	neg.	0.02
Commercial banks	93	2,707	n.a.	n.a.
Savings banks	24	24	n.a.	n.a.
Cooperative and rural banks	1	1,797	n.a.	n.a.
Postbank	1	2,325	n.a.	n.a.
Total	120	6,862	21.0	218
Memorandum item:				
Branches of foreign banks	26	neg.	n.a.	n.a.

	1994	1995	1996	1997	1998
Cash dispensers and ATMs					
Number of networks ¹	2	2	2	2	1
Number of machines ¹	4,998	5,489	5,793	6,397	6,568
Volume of transactions (millions) ²	299	345	371	396	427
Value of transactions (NLG billions) ²	60	69	74	77	81
EFTPOS					
Number of networks ¹	1	1	1	1	1
Number of machines ¹	47,588	73,376	96,044	120,417	134,479
Volume of transactions (millions)	144	256	371	486	595
Value of transactions (NLG billions)	14	24	35	45	56

Table 6Cash dispensers, ATMs and EFTPOS terminals

¹ End-year. ² Series have been recalculated based on new estimates and data.

Table 7Number of payment cards in circulation1

/ · · · · · · · · · · · · · · · · · · ·		
(at year-end,	ın	thousands)

6 1997	1998
33 22,633	23,168
46 3,800	4,100
46 . . 3,800	4,100
91 411	705
.a. n.a.	n.a.
4	46 3,800 46 3,800 46 3,800 91 411

¹ A card with multiple functions may appear in several categories. It is, therefore, not meaningful to add the figures. ² Most of these cards also have debit and cheque guarantee functions. ³ Only includes cards that can only be used at POS terminals. Such cards were discontinued after 1996. ⁴ Only includes credit cards. Data not available before 1997. ⁵ Only includes cards that have only a cheque guarantee.

Table 8 Payment instructions handled by selected interbank funds transfer systems: volume of transactions

	(in millions)						
	1994	1995	1996	1997	1998		
Interpay of which:	1,241.7	1,407.1	1,588.5	1,782.9	2,012.3		
cheques other	86.3 1,155.4	63.2 1,343.9	50.6 1,537.9	39.9 1,743.0	29.3 1,983.0		
ТОР	2.4	2.5	2.7	3.2	3.5		

Table 9

Payment instructions handled by selected interbank funds transfer systems: value of transactions

(in billions of Dutch guilders)

	1994	1995	1996	1997	1998
Interpay	2,195.0	2,189.1	2,319.5	2,520.0	2,727.9
of which: cheques other	13.4 2,181.6	9.9 2,179.2	8.4 2,311.1	6.5 2,513.5	4.8 2,723.1
ТОР	19,322.2	18,791.0	22,613.8	27,693.0	34,468.7

Table 10

Transfer instructions handled by securities settlement systems: volume of transactions

(in millions)

	1994	1995	1996	1997	1998
NECIGEF	1.061	0.906	1.325	1.685	2.061
of which: deliveries against payment free transfers	1.061	0.906	0.286 1.039	0.529 1.156	0.764 1.297
Clearing institute central bank ¹	0.002	0.003	0.003	0.003	
AEX Effectenclearing	1.155	1.350	2.300	3.800	5.985
AEX Optieclearing ²	13.999	17.163	28.665	48.942	65.115
of which: options, contracts cleared futures, contracts cleared options, contracts exercised futures, contracts exercised	12.604 1.395 1.139 0.056	15.873 1.290 1.343 0.032	26.975 1.690 1.945 0.048	46.166 2.776 2.978 0.074	61.431 3.684 4.281 0.155

¹ Merged with AEX-Clearing & Depository as of 1998; data from 1998 on are consequently included in data AEX Effectenclearing.
² Sum refers to contracts cleared.

Transfer instructions handled by securities settlement systems: value of transactions

	1994	1995	1996	1997	1998
NECIGEF	n.a.	n.a.	295.4	568.8	924.8
of which:					
deliveries against payment	•	•	295.4	568.8	924.8
free transfers	n.a.	n.a.	n.a.	n.a.	n.a.
Clearing institute central bank ¹	79.5	100.1	127.0	186.9	
of which:					
CDs	25.1	49.5	44.8	44.0	
CPs	39.6	37.2	60.1	120.4	
MTNs	14.8	13.4	22.1	22.6	•
AEX Effectenclearing	579.7	680.9	983.7	1,106.7	1,392.9
of which:					
government securities	397.1	432.7	597.5	488.2	514.5
bonds	27.0	48.5	62.9	62.6	70.0
shares	155.6	199.7	323.3	555.9	808.4
AEX Optieclearing ²	106.7	109.7	200.3	504.9	164.0
of which:					
options, contracts cleared	7.9	8.9	19.3	56.4	164.0
futures, contracts cleared	98.7	100.8	181.0	448.5	n.a.
options, contracts exercised	18.8	19.0	34.9	65.6	89.9
futures, contracts exercised	4.8	3.1	5.6	12.6	33.7

(in billions of Dutch guilders)

¹ Merged with AEX-Clearing & Depository as of 1998; data from 1998 on are consequently included in data AEX Effectenclearing/NECIGEF. ² Sum refers to contracts cleared.

Indicators of use of various cashless payment instruments: volume of transactions (in millions) 1994 1995 1996 1997 1998 Cheques issued 177.0 109.9 84.3 64.9 46.6 Payments by debit and credit 125.8 255.9 370.9 485.5 595.0 cards* Paper-based credit transfers 390.5 • • • of which: customer initiated 390.5 • • • • interbank/large-value • Paperless credit transfers 849.9 1,003.3 1,035.8 1,064.6 1,091.0 of which: 1,087.5 847.4 1,000.8 1,033.1 1,061.4 customer initiated interbank/large-value 2.5 2.4 2.7 3.2 3.5 Direct debits 531.0 533.9 587.8 636.1 691.9 Total 2,074.2 1,903.0 2,078.9 2,251.0 2,424.5

Table 12

* Credit card transactions are not included.

Table 13

Indicators of use of various cashless payment instruments: value of transactions

(in billions of Dutch guilders)

	1994	1995	1996	1997	1998		
Cheques issued	25.2	16.1	13.1	10.2	7.6		
Payments by debit and credit cards*	14.4	24.3	35.3	46.2	56.6		
Paper-based credit transfers	145.0				•		
of which: customer initiated interbank/large-value	145.0	•	•	•	•		
Paperless credit transfers	21,953.9	22,842.8	26,799.2	32,524.5	39,851.4		
of which: customer initiated interbank/large-value	2,631.8 19,322.2	4,051.7 18,791.0	4,185.4 22,613.8	4,831.5 27,693.0	5,382.7 34,468.7		
Direct debits	239.8	207.6	224.4	242.6	264.6		
Total	22,378.4	23,090.8	27,072.0	32,823.5	40,180.2		

* Credit card transactions are not included.

	1994	1995	1996	1997	1998
Members	29	30	29	30	28
of which: live	27	28	29	29	27
Sub-members ¹	28	32	34	35	37
of which: live	28	32	34	32	36
Participants ²	0	2	3	5	9
of which: live	0	2	3	4	9
Total users	57	64	66	70	74
of which: live	55	62	65	65	72
Memorandum items:					
Total S.W.I.F.T. users:	4,866	5,229	5,632	6,165	6,557
of which:					
members	2,551	2,693	2,874	2,969	2,980
sub-members	2,097	2,259	2,404	2,590	2,720
participants	218	277	354	606	857

Table 14Participation in S.W.I.F.T. by domestic institutions

¹ Domestic users sponsored by members abroad. ² Participants are not shareholders in S.W.I.F.T. and their message traffic over the network is restricted. *Source*: S.W.I.F.T.

	Table 15							
S.W.I.F.T. message flows to/from domestic users								
1994	1995	1996	1997	1998				
15,253,565	16,903,885	18,667,326	21,967,507	26,868,470				
6,508,032	6,747,310	7,032,141	7,544,714	8,398,068				
3,107,787	3,275,847	3,420,058	3,951,510	4,500,328				
14,538,364	16,027,297	17,802,379	20,199,570	23,965,593				
5,279,922	5,498,322	5,726,242	6,205,747	6,775,293				
2,081,037	2,204,721	2,362,906	2,602,689	2,856,930				
1,750,991	1,870,671	2,052,952	2,456,699	3,051,321				
518,097,873	603,575,374	687,785,294	812,117,556	937,039,995				
	1994 15,253,565 6,508,032 3,107,787 14,538,364 5,279,922 2,081,037 1,750,991	V.I.F.T. message flows to/from 1994 1995 15,253,565 16,903,885 6,508,032 6,747,310 3,107,787 3,275,847 14,538,364 16,027,297 5,279,922 5,498,322 2,081,037 2,204,721 1,750,991 1,870,671	V.I.F.T. message flows to/from domestic u 1994 1995 1996 15,253,565 16,903,885 18,667,326 6,508,032 6,747,310 7,032,141 3,107,787 3,275,847 3,420,058 14,538,364 16,027,297 17,802,379 5,279,922 5,498,322 5,726,242 2,081,037 2,204,721 2,362,906 1,750,991 1,870,671 2,052,952	V.I.F.T. message flows to/from domestic users199419951996199715,253,56516,903,88518,667,32621,967,5076,508,0326,747,3107,032,1417,544,7143,107,7873,275,8473,420,0583,951,51014,538,36416,027,29717,802,37920,199,5705,279,9225,498,3225,726,2426,205,7472,081,0372,204,7212,362,9062,602,6891,750,9911,870,6712,052,9522,456,699				

¹ Category I: customer (funds) transfers. ² Category II: bank (funds) transfers. ³ Messages sent to/received from domestic users. *Source*: S.W.I.F.T.

Table 1Basic statistical data							
	1994	1995	1996	1997	1998		
Population (millions):							
year-end	8.79	8.83	8.84	8.85	8.85		
GDP (SEK billions)	1,571.0	1,626.2	1,677.9	1,745.9	1,872.8		
GDP per capita (SEK)	174,208	186,270	189,830	197,277	211,568		
Exchange rate (domestic currency vis-à-vis USD):							
year-end average	7.4615 7.7126	6.6177 7.1372	6.8859 7.7062	7.9082 7.6364	8.0770 7.9524		

Table 2
Settlement media used by non-banks
(at year-end, in billions of Swedish kronor)

	1004	1005	1007	1007	1000
	1994	1995	1996	1997	1998
Notes and coin	68.8	68.5	72.2	74.4	78.1
Transferable deposits	726.5	753.8	842.4	903.1	926.4
of which held by: households corporate sector other ¹	388.5 178.2 159.8	385.3 204.8 163.7	409.9 236.7 195.9	392.1 250.1 260.9	408.2 268.7 249.5
Other ²	4.7	8.0	13.4	18.6	9.6
Narrow money supply (M1)	•	•	•	•	•
Memorandum item:					
Broad money supply (M3) ³	712.3	731.8	815.8	826.2	843.4

¹ Local government and non-residents. ² Postal giro accounts and certificates of deposit. ³ The money supply M3 is defined as the non-bank sector's holdings of notes and coin (M0), plus the Swedish non-bank sector's bank deposits and holdings of SEK denominated certificates of deposit. Pension savings in banks, IPS, are not included in the money supply.

Table 3Settlement media used by banks

(at year-end, in billions of Swedish kronor)

	1994	1995	1996	1997	1998
Balances held at central bank	1.5	1.3	1.5	2.0	1.7
of which: required reserves free reserves	1.5	1.3	1.5	2.0	1.7
Transferable deposits at other banks	62.3	54.2	73.4	94.5	113.4

Table 4

Banknotes and coin

(at year-end, in millions of Swedish kronor)

	1994	1995	1996	1997	1998
Total banknotes and coin issued	76,442	76,660	80,791	82,795	86,268
Denomination of banknotes:					
1,000 kronor	39,569	37,841	38,636	39,226	40,999
500 kronor	19,903	22,316	25,565	27,157	29,211
100 kronor	11,298	10,649	10,332	9,906	9,431
50 kronor	205	185	913	962	955
20 kronor	1,608	1,679	1,309	1,366	1,355
10 kronor	315	300	286	277	251
5 kronor	94	94	93	92	86
Total value of coin	3,450	3,596	3,657	3,809	3,980
Banknotes and coin held by banks	7,848	8,357	8,774	8,681	8,389
Banknotes and coin in circulation outside banks	68,594	68,303	72,017	74,114	77,879

Table 5Institutional framework

(at end-1998)

Categories	Number of institutions	Number of branches	Number of accounts (millions)	Value of accounts (SEK billions)
Central bank	1	10	n.a.	neg.
Commercial banks*	19	3,334	n.a.	847.8
Savings banks	85	322	n.a.	56.9
Memorandum item: Branches of foreign banks	17	17	n.a.	21.7

* The Postgirot Bank is included. Through an agreement with the Post Office, the Postgirot Bank can use the 1,177 branches of the Post Office for marketing its financial services. They are included in the total.

	1994	1995	1996	1997	1998		
Cash dispensers and ATMs							
Number of networks ¹	2	2	2	2	2		
Number of machines ¹	2,281	2,359	2,379	2,370	2,485		
Volume of transactions (millions)	270	281	297	312	333		
Value of transactions (SEK billions)	218	226	239	249	287		
EFTPOS							
Number of networks ^{1,2}	2	2	2	2	2		
Number of terminals ¹	48,466	54,400	61,400	68,800	74,400		
Volume of transactions (millions)	80	92	111	141	171		
Value of transactions (SEK billions)	46	53	69	84	92		
	1			1			

Table 6Cash dispensers, ATMs and EFTPOS terminals

¹ Year-end. ² Terminals administrated by BABS and SERVO, two bank-owned companies which collect and redeem transactions for card issuers.

Table 7Number of payment cards in circulation1

	(at year-end, in thousands)							
	1994	1995	1996	1997	1998			
Cards with a cash function	6,037	6,171	6,317	6,849	6,950			
Cards with debit/credit function ² <i>of which:</i>	12,076	4,742	5,662	6,111	6,870			
cards with a debit function cards with a credit function	10,379 1,697	3,525 1,217	3,731 1,931	4,188 1,923	5,229 1,641			
Cards with a cheque guarantee function			•					
Memorandum item:								
Retailer cards	9,121	•	•	•	•			

 1 A card with multiple functions may appear in several categories. It is, therefore, not meaningful to add the figures. 2 Total number of payment cards in Sweden up to and including 1994. From 1995, cards issued by oil companies and retail trade companies are not included.

Table 8Payment instructions handled by selected payment systems:volume of transactions

(in	thousands)	
(111	ulousalius)	

	1994	1995	1996	1997	1998
Data Clearing (retail clearing)*	120,957	112,807	105,718	91,485	84,980
truncated cheques other	78,983 41,974	66,619 46,188	57,582 48,136	44,849 46,636	38,000 46,980
The RIX system	84	119	310	326	313
interbank (large-value) third-party ("clearing	21	21	25	24	92
transactions")	63	98	285	302	221

* The Data Clearing is owned by the Swedish Bankers' Association and is managed by the Bank Giro Centre.

Table 9Payment instructions handled by selected payment systems:value of transactions

(in billions of Swedish kronor)

	1994	1995	1996	1997	1998
Data Clearing (retail clearing) ¹ of which:	9,617	3,850	2,330	2,388	2,191
truncated cheques other	9,204 413	3,395 455	1,730 600	1,590 798	1,250 <i>941</i>
The RIX system ²	39,920	53,591	78,189	82,051	91,701
of which: interbank (large-value) transactions third-party transactions	14,101	15,345	17,452	18,906	38,440
("clearing transactions")	25,819	38,246	60,737	63,145	53,261

¹ The Data Clearing is owned by the Swedish Bankers' Association and is managed by the Bank Giro Centre. Settlement of these transactions takes place once daily in the RIX system on a gross bilateral basis. ² Since 1990 RIX has been operating on a gross basis. Total daily payments in the RIX system averaged SEK 365 billion during 1998.

Table 10

Transfer instructions handled by securities settlement systems: volume of transactions

(in thousands)

	1994	1995	1996	1997	1998
VPC:* of which:	3,000	2,912	3,678	5,313	5,780
government securities equities	500 2,500	498 2,414	601 3,077	594 4,719	459 5,321

* Värdepapperscentralen AB (Swedish Securities Register Centre). Government and mortgage securities have been included in the VP book-entry system since mid-1993. The figures include all transactions between accounts within VPC. The number of trades generating these transactions are, however, considerably lower. The number of actual trades in equities and government securities is only about one-sixth and one-half respectively. The figures in the table have been adjusted accordingly. Included under "equities" are also some private and corporate bonds.

Table 11

Transfer instructions handled by securities settlement systems: value of transactions

(in billions of Swedish kronor)

	1994	1995	1996	1997	1998
VPC: ¹	47,055	41,547	67,937	82,618	97,914
of which: government securities ² equities	46,000 1,055	40,428 1,119	66,432 1,505	80,272 2,346	94,782 3,132

¹ Värdepapperscentralen AB (Swedish Securities Register Centre). ² Government and mortgage securities have been included in the VP book-entry system since mid-1993.

Table 12

Indicators of use of various cashless payment instruments: volume of transactions

(in millions)

	1994	1995	1996	1997	1998	
Cheques issued	49	46	40	18	3	
Payments by debit and credit cards	97	111	120	173	204	
Paper-based credit transfers	170	189	196	208	175	
Paperless credit transfers customer initiated interbank/large-value	435	431	441	452	458	
Direct debits	45	50	54	65	74	
Total	796	827	851	916	914	

Table 13

Indicators of use of various cashless payment instruments: value of transactions

	1994	1995	1996	1997	1998
Cheques issued	n.a.	n.a.	n.a.	n.a.	5
Payments by debit and credit cards	79	91	103	127	136
Paper-based credit transfers customer initiated interbank/large-value	1,933	1,946	1,656	1,973	1,407
Paperless credit transfers	4,282	4,405	5,076	5,344	6,091
Direct debits	183	194	202	193	210
Total	6,477	6,636	7,037	7,637	7,849

(in billions of Swedish kronor)

	1994	1995	1996	1997	1998
Members	9	9	9	8	7
of which: live	8	8	8	7	7
Sub-members ¹	9	12	12	12	13
of which: live	9	11	12	12	13
Participants ²	0	2	3	10	9
of which: live	0	1	2	2	9
Total users	18	23	24	30	29
of which: live	17	20	22	21	29
Memorandum items:					
Total S.W.I.F.T. users:	4,866	5,229	5,632	6,165	6,557
of which:					
members	2,551	2,693	2,874	2,969	2,980
sub-members participants	2,097 218	2,259 277	2,404 354	2,590 606	2,720 857

 Table 14

 Participation in S.W.I.F.T. by domestic institutions

¹ Domestic users sponsored by members abroad. ² Participants are not shareholders in S.W.I.F.T. and their message traffic over the network is restricted. *Source*: S.W.I.F.T.

Table 15S.W.I.F.T. message flows to/from domestic users							
	1994	1995	1996	1997	1998		
Total messages sent	8,701,454	10,019,610	11,256,498	12,512,774	14,627,952		
of which:							
category I ¹	3,335,280	3,816,919	4,349,901	4,890,247	5,389,136		
category II ²	2,029,226	2,223,462	2,400,631	2,576,992	2,866,339		
Total messages received	7,021,354	7,971,173	8,992,702	10,296,368	11,844,938		
of which:							
category I ¹	2,427,632	2,833,733	3,167,954	3,649,313	4,122,240		
category II ²	1,925,165	2,104,694	2,357,508	2,635,197	2,942,456		
Domestic traffic ³	1,213,723	1,455,832	1,722,933	2,049,871	2,398,305		
Memorandum item:							
Global S.W.I.F.T. traffic	518,097,873	603,575,374	687,785,294	812,117,556	937,039,995		

¹ Category I: customer (funds) transfers. ² Category II: bank (funds) transfers. ³ Messages sent to/received from domestic users. *Source*: S.W.I.F.T.

Table 1Basic statistical data							
	1994	1995	1996	1997	1998		
Population (millions):							
year-end	7.019	7.062	7.085	7.097	7.124		
average	7.037	7.081	7.108	7.114	7.132		
GDP (CHF billions)	357.4	363.3	365.8	371.6	380.0		
GDP per capita (CHF)	50,927.9	51,445.5	51,636.3	52,360.2	53,345.8		
Exchange rate (domestic currency vis-à-vis USD):							
year-end (December average) average	1.3289 1.3660	1.1639 1.1817	1.3271 1.2351	1.4387 1.4509	1.3588 1.4485		

Table 2
Settlement media used by non-banks

(at year-end	in	billions	of	Swiss	francs)
--------------	----	----------	----	-------	---------

	1994	1995	1996	1997	1998
Notes and coin	27.84	27.89	29.41	28.88	30.17
Transferable deposits	63.42	68.69	77.87	88.55	95.09
Other ¹	50.15	58.66	62.70	67.33	69.27
Narrow money supply (M1) ²	141.40	155.24	169.98	184.76	194.54
<i>Memorandum item:</i> Broad money supply (M3) ³	415.02	427.00	455.65	470.95	472.95

 1 Other accounts which are not normally used for payment purposes. 2 Currency in circulation (i.e. notes and coin) plus sight and other transaction deposits. 3 M1 plus savings deposits (excluding pension savings) plus time deposits.

Table 3Settlement media used by banks

(at year-end, in billions of Swiss francs)

	1994	1995	1996	1997	1998	
Balances held at central bank ^{1,2} of which:	4.2	4.9	5.7	5.4	6.6	
required reserves free reserves	n.a. n.a.	n.a. n.a.	n.a. n.a.	n.a. n.a.	n.a. n.a.	
Transferable deposits at other banks	17.9	19.4	28.1	31.4	47.5	
Transferable deposits at Postfinance	1.5	1.3	1.7	1.3	1.4	
Memorandum item:						
Institutions' borrowing from central bank ³	0.01	0.01	0.76	neg.	neg.	

¹ Figures at year-end are peak-values; average figures are as follows (in billions): 1994: 2.68, 1995: 2.57, 1996: 2.94, 1997: 3.71, 1998:4.07. ² Required reserves may be held as cash and as deposits at the Postfinance as well as in the form of deposits at the central bank. Therefore it is not meaningful to break down balances at the central bank into those that are required reserves and those that are free reserves.³ Lombard credits.

Table 4 Banknotes and coin

(at year-end, in millions of Swiss francs)

	1994	1995	1996	1997	1998
Total banknotes and coin issued	32,634.6	33,009.1	34,598.3	34,316.7	35,423.7
Denomination of banknotes:					
1,000 francs	14,504.6	14,568.5	15,940.8	15,864.8	17,189.3
500 francs	3,835.3	3,848.9	3,912.3	1,768.0	948.4
$200 \ francs^{1}$				3,103.6	4,211.5
100 francs	9,058.6	9,187.1	9,249.2	8,052.7	7,485.3
50 francs	1,463.6	1,586.9	1,594.6	1,627.2	1,655.6
20 francs	1,065.6	1,080.2	1,127.2	1,112.2	1,119.4
10 francs	608.4	611.6	614.5	604.4	600.4
Total value of coin	2,098.5	2,125.9	2,159.7	2,183.9	2,213.9
Banknotes and coin held by banks (incl. Postfinance)	4,815.0	5,125.2	5,216.0	5,515.0	5,321.0
Banknotes and coin in circulation outside banks ²	27,819.6	27,883.9	29,382.3	28,801.7	30,102.8

¹ Introduced in October 1997. ² Does not exactly equal the amount shown in Table 2 due to differences in the way the figures are compiled.

Table 5Institutional framework

(at end-1998)

Categories	Number of institutions	Number of branches	Number of accounts (thousands)	Value of accounts (CHF billions)
Central bank	1	10 ¹	767	6.55 ¹
Credit institutions ²	339	3,147	n.a.	71.00^{2}
Post office	1	3,600	1,970,489	18.96
Memorandum item: Branches of foreign banks	21	29	n.a.	0.62

¹ Including 2 head offices. ² Not included in the figure for transferable deposits in Table 2 (not part of M1). ³ Excludes private banks. The value of accounts shown in the final column is thus less than that included in the figure for transferable deposits in Table 2.

	1994	1995	1996	1997	1998			
Cash dispensers and ATMs								
Number of networks ^{1,2}	2	2	2	2	2			
Number of machines ¹	3,380	3,753	4,160	4,809	5,141			
Volume of transactions ³ (millions)	64.02	70.27	74.82	80.92	80.44			
Value of transactions ³ (CHF billions)	19.05	20.19	20.80	21.91	21.02			
EFTPOS								
Number of networks ^{1,4}	2	2	2	2	2			
Number of terminals: ^{1,5}	_	_	-	_	-			
ec-Direct	16,140	24,191	33,018	41,498	51,053			
Postomat-Plus	16,702	24,703	33,629	41,184	50,578			
Volume of transactions (millions)	39.85	56.73	76.21	96.78	105.97			
Value of transactions (CHF billions)	4.02	6.46	9.06	10.32	9.76			
		1	1	1				

Table 6Cash dispensers, ATMs and EFTPOS terminals

¹ Year-end. ² Bancomat and Postomat systems have been shared since autumn 1997. ³ Only transactions through a central processor ("on them" items). ⁴ Only ec-Direct and Postomat-Plus. ⁵ Most of the terminals can be used by both networks. It is therefore not meaningful to add the figures. (Data on the total number of terminals is not available).

Table 7Number of payment cards in circulation1

(at year-end, in thousands)

	1994	1995	1996	1997	1998			
Cards with a debit/credit/prepaid cash function	5,615	6,064	6,544	7,013	7,550			
of which: cards with a cash function ² cards with a debit function cards with a credit function cards with a prepaid function	4,913 3,454 2,059	5,610 3,716 2,263	5,892 4,023 2,450	6,624 4,298 2,635 2,748	7,104 4,671 2,654 2,953			
Cards with a cheque guarantee function	3,557	3,846	4,094	4,378	4,760			
Memorandum item: Retailer cards	n.a.	n.a.	n.a.	n.a.	n.a.			

 1 A card with multiple functions may appear in several categories. It is, therefore, not meaningful to add the figures. 2 Cash withdrawals at ATMs.

Table 8Payment instructions handled by selected payment systems:volume of transactions

(in millions)

	1994	1995	1996	1997	1998
SIC (Swiss Interbank Clearing)	88.7	96.0	108.0	121.0	134.4
Payments on data carrier or file transfer*	71.8	80.4	85.8	93.5	98.8
Cheques	7.9	6.3	5.2	4.3	3.7

* Includes DTA (data media exchange facility) and LSV (direct debit procedure). Since mid-1998, these have been integrated in SIC.

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Table 9Payment instructions handled by selected payment systems:value of transactions

(in billions of Swiss francs)

	1994	1995	1996	1997	1998
SIC (Swiss Interbank Clearing)	33,254.2	32,184.0	38,032.3	45,792.1	46,341.2
Payments on data carrier or file transfer*	252.5	281.2	294.1	314.1	342.8
Cheques	30.7	25.7	21.5	19.1	16.9

* Includes DTA (data media exchange facility) and LSV (direct debit procedure). Since mid-1998, these have been integrated in SIC.

Table 10 Transfer instructions handled by securities settlement systems: volume of transactions

(in millions)

	1994	1995	1996	1997	1998
SIS:*					
Deliveries against payment	3.89	3.57	4.48	9.49	12.62
Deliveries free of payment	0.41	0.39	0.42	0.45	0.42

* SegaInterSettle Ltd.

Table 11Transfer instructions handled by securities settlement systems:value of transactions

(in billions of Swiss francs)

	1994	1995	1996	1997	1998
SIS*	715.7	888.3	1,180.9	1,696.4	2,896.9

* SegaInterSettle Ltd.

Indicators of use of various cashless payment instruments: volume of transactions (in millions) 1994 1995 1996 1997 1998 Through banks:¹ Cheques issued² 13.1 11.3 10.3 9.3 7.7 Payments by debit, credit and prepaid cards3 75.3 89.4 109.2 133.4 143.0 Paperless credit transfers^{4,5} 144.6 157.6 172.8 189.5 206.3 Direct debits⁶ 16.0 18.8 21.1 25.0 27.0 277.1 313.4 Total 249.0 357.2 384.0 Through the Postfinance: Payments by debit cards⁵ 7.7 25.9 37.1 14.1 21.7 Transfers (paper-based and paperless credit transfers, direct 347.7 debits)⁷ 255.0 276.3 298.6 315.5 Total 262.7 290.4 320.3 384.8 341.4 Grand total 511.7 567.5 633.7 698.6 768.8

Table 12

¹ Intrabank payments are not included. ² Eurocheques; bank cheques and Swiss Bankers Travellers Cheques. ³ Eurocheque card, American Express, Eurocard, VISA, Diners Club and CASH.⁴ SIC and banks' data media exchange facility.⁵ Since mid-1998, the data media exchange facility and direct debits have been inegrated in SIC.⁶ POSTCARD at retail outlets only (i.e. transactions at Post Offices excluded). ⁷ Detailed figures are not published by the Postfinance.

Table 13

Indicators of use of various cashless payment instruments: value of transactions

(in billions of Swiss francs)

	1994	1995	1996	1997	1998		
Through banks: ¹							
Cheques issued ²	31.36	26.34	22.19	19.69	16.91		
Payments by debit, credit and prepaid cards ³	12.74	14.87	17.16	20.35	20.35		
Paperless credit transfers ^{4,5}	33,476.89	32,428.90	38,284.87	46,059.63	46,634.08		
Direct debits ⁵	29.77	36.30	41.56	46.55	49.89		
Total	33,550.76	32,506.41	38,365.78	46,146.22	46,721.23		
Through the Postfinance:							
Payments by debit cards ⁶	0.68	1.76	2.94	2.30	3.18		
Transfers (paper-based and paperless credit transfers, direct debits) ⁷	1,128.85	1,161.67	1,245.73	1,235.03	1,300.47		
Total	1,129.53	1,163.43	1,248.67	1,237.33	1,303.65		
Grand total	34,680.29	33,669.84	39,614.45	47,383.55	48,024.88		

¹ Intrabank payments are not included. ² Eurochque; bank cheques and Swiss Bankers Travellers Cheques. ³ Eurocheque card, American Express, Eurocard, VISA, Diners Club and CASH. ⁴ SIC and banks' data media exchange facility. ⁵ Since mid-1998, the data media exchange facility and direct debits have been integrated in SIC. ⁶ POSTCARD at retail outlets only (i.e. transactions at Post Offices excluded). ⁷ Detailed figures are not published by the Postfinance.

Parucipation in S. W.I.F. 1. by domestic institutions								
	1994	1995	1996	1997	1998			
Members	124	126	125	126	127			
of which: live	122	120	124	123	125			
Sub-members ¹	65	68	72	74	77			
of which: live	62	67	69	73	77			
Participants ²	10	12	13	20	20			
of which: live	8	10	10	17	16			
Total users	199	206	210	220	224			
of which: live	192	197	203	213	229			
Memorandum items:								
Total S.W.I.F.T. users:	4,866	5,229	5,632	6,165	6,557			
of which:								
members	2,551	2,693	2,874	2,969	2,980			
sub-members	2,097	2,259	2,404	2,590	2,720			
participants	218	277	354	606	857			

Table 14 Participation in S.W.I.F.T. by domestic institutions

¹ Domestic users sponsored by members abroad. ² Participants are not shareholders in S.W.I.F.T. and their message traffic over the network is restricted. Source: S.W.I.F.T.

		Table 15					
S.W.I.F.T. message flows to/from domestic users							
	1994	1995	1996	1997	1998		
Total messages sent	33,910,798	35,748,763	38,733,223	42,846,848	45,963,457		
of which:							
category I^1	8,648,770	9,247,470	9,773,822	10,513,965	11,109,326		
category II^2	8,874,142	9,432,351	9,532,780	9,650,554	9,394,947		
Total messages received	30,405,937	31,829,507	35,222,140	39,773,888	43,824,500		
of which:							
category I^1	5,931,601	6,251,734	6,593,731	7,207,202	7,720,351		
category II ²	4,830,139	4,848,735	5,253,289	6,093,729	6,025,642		
Domestic traffic ³	6,520,135	5,676,737	6,084,984	6,939,049	8,762,597		
Memorandum item:							
Global S.W.I.F.T. traffic	518,097,873	603,575,374	687,785,294	812,117,556	937,039,995		

Table 15

¹ Category I: customer (funds) transfers. ² Category II: bank (funds) transfers. ³ Messages sent to/received from domestic users. Source: S.W.I.F.T.

	Ba	sic statistical o	lata		
	1994	1995	1996	1997	1998
Population (millions):					
mid-year	58.4	58.4	58.8	59.0	59.2
GDP (GBP millions)*	668.9	700.9	734.5	785.8	826.4
GDP per capita (GBP)	11,453	12,002	12,491	13,319	13,959
Exchange rate (domestic currency vis-a-vis USD):					
year-end	0.6392	0.6450	0.5841	0.6078	0.6010
average	0.6524	0.6336	0.6403	0.6104	0.6034

Table 2Settlement media used by non-banks

(at year-end, in billions of pounds sterling)

	1994	1995	1996	1997	1998
Notes and coin	18.8	19.9	20.8	22.5	23.3
Transferable deposits*	391.7	417.1	439.5	462.4	492.5
Narrow money supply*	410.5	437.0	460.3	484.9	515.8
Memorandum item:					
Broad money supply (M4) Broad money deposits	568.3 549.5	622.6 602.7	682.9 662.1	722.2 699.7	781.9 758.6
of which held by: persons corporate sector other	375.4 79.6 94.5	402.8 85.0 115.0	425.4 95.4 141.3	431.8 113.1 154.8	460.0 117.0 181.6

* Break in series means that this figure is not comparable with previous figures in the series. The definition of deposits in M2 is altered with effect from December 1992. Previously, bank deposits in M2 comprised all non-interest bearing deposits plus "chequable" sight or time deposits regardless of maturity plus other deposits (excluding certificates of deposit) of less than £100,000 and with less than one month to maturity; building society deposits included in M2 were "transactions accounts" and other deposits of less than £100,000 and up to one month maturity. Banks now define retail deposits as deposits which arise from the customers' acceptance of an adertised rate (including nil). Building societies include all shares or sums deposited by individuals plus sums from contractual savings schemes (but excludes retail issues of subscribed capital, e.g. perpetual interest-bearing shares).

Table 3 Settlement media used by banks¹

(at year-end, in billions of pounds sterling)

	1994	1995	1996	1997	1998		
Balances held at central bank	1.5	1.8	2.4	2.7	1.6		
of which: required reserves free reserves	0 1.5	0 1.8	0 2.4	0 2.7	0 1.6		
Transferable deposits at other banks ²	223.6	224.1	227.6	241.0	232.8		
of which: sight time residual ³	36.5 168.2 18.9	32.9 173.3 17.9	38.9 174.1 14.6	62.4 177.9 0.7	56.8 175.3 0.7		
Institutions' borrowing from central bank	8.2	6.4	9.9	7.3	9.9		

¹ Including building societies and discount houses. ² Including building societies. ³ In respect of deposits which cannot be split between sight and time (e.g. building society deposits with each other).

Table 4Banknotes and coin

(in millions of pounds sterling)

	1994	1995	1996	1997	1998
Total banknotes and coin issued ¹	23,080	24,299	25,959	27,647	29,095
Banknotes and coin held by banks ^{1,2}	4,328	4,403	5,116	5,170	5,777
Banknotes and coin in circulation outside banks ¹	18,752	19,896	20,843	22,477	23,318
Memorandum items:					
Total value of coin	1,958	1,992	2,094	2,244	2,318
Banknotes in circulation ³	18,513	19,605	20,904	22,404	23,663

¹ Average for the month of December. ² Including banknotes and coin held by building societies. ³ Bank of England notes only.

Table 5Institutional framework

(at end-1998)

Categories	Number of institutions	Number of branches	Number of accounts (millions)	Value of accounts (GBP billions) ¹
Central bank	1	1		
Commercial banks	464	13,332	109.8 ²	} 387.4 ³
Building societies	71	2,502	22.1	105.14
Post Office	1	18,863	16.1	1.4 5
Total	537	34,698	148.0	493.9
Memorandum item:				
Branches of foreign banks	259	n.a.	n.a.	n.a.

¹ Figures for value of accounts with banks and building societies are compatible with M4. National Savings Bank accounts are not included in M4. ² Includes estimates. ³ All private sector sterling accounts with UK banks (including the central bank and Girobank). ⁴ Private sector ordinary share and deposit accounts with UK building societies and shares and deposits below GBP 50,000 from corporate bodies. Retail issues of subscribed capital, e.g. perpetual interest-bearing shares, are excluded. ⁵ National Savings Ordinary Accounts only. National Savings Bank facilities are available at Post Offices on an agency basis. (This figure is excluded from the total value of transferable deposits shown in Table 2.)

	1994	1995	1996	1997	1998
Cash dispensers and ATMs					
Number of networks ¹	3	3	3	3	3
Number of machines (thousands) ¹	20.0	20.9	22.1	23.2	24.6
Volume of transactions (millions)	1,335	1,471	1,599	1,745	1,850
Value of transactions (GBP billions) ²	65	72	80	90	98
EFTPOS					
Number of networks ^{1,3}	3	3	3	3	3
Number of terminals (thousands) ^{1,4}	350	505	550	530	610
Volume of transactions (millions)	n.a.	n.a.	n.a.	n.a.	n.a.
Value of transactions (GBP billions)	n.a.	n.a.	n.a.	n.a.	n.a.

Table 6Cash dispensers, ATMs and EFTPOS terminals

¹ Year-end. ² Includes estimated values of building society transactions. ³ VISA, SWITCH and MasterCard only. ⁴ Estimated.

Table 7 Number of payment cards in circulation¹ (at year-end, in millions)

(at year-end, in minions)								
	1994	1995	1996	1997	1998			
Cards with a cash function	77.3	83.7	89.0	96.8	106.1			
Cards with debit/credit function	54.5	59.2	66.6	75.0	84.1			
of which: cards with a debit function cards with a credit function ²	26.0 28.5	28.4 30.8	32.5 34.1	36.6 38.4	42.5 41.6			
Cards with a cheque guarantee function ³	45.5	48.0	50.7	53.3	54.9			
<i>Memorandum item:</i> Retailer cards ⁴	10.3	13.0	15.4	17.6	18.6			

 1 A card with multiple functions may appear in several categories. It is, therefore, not meaningful to add the figures. 2 Bank VISA and MasterCard and travel & entertainment (charge cards) cards only. 3 Includes Eurocheque cards. 4 This figure does not include cards issued by smaller retailers.

Table 8Payment instruments handled by selected payment systems:volume of transactions

(in millions)

	1994	1995	1996	1997	1998
			2000		1,,,0
Large-value systems:					
Town (paper) ¹	neg.	neg.			
CHAPS (automated)	12	13	14	17	18
Retail systems:					
Cheque and credit clearings	2,451	2,377	2,347	2,296	2,242
cheques ^{2,3}	2,278	2,206	2,171	2,115	2,060
paper-based credit transfers ^{2,3}	173	171	176	181	182
BACS	2,058	2,268	2,476	2,682	2,905
credit transfers ²	910	969	1,033	1,098	1,169
direct debits	1,148	1,299	1,443	1,584	1,736

¹ Town Clearing ceased operation on 24 February 1995. ² Inter-branch items are excluded. ³ Includes Northern Ireland and Scotland. (Includes estimates.)

Table 9Payment instructions handled by selected payment systems:value of transactions

	1994	1995	1996	1997	1998
Large-value systems:					
Town (paper) ¹	681	59		•	
CHAPS (automated)	25,053	26,719	28,881	36,032	41,501
Retail systems:					
Cheque and credit clearings	1,311	1,333	1,400	1,453	1,466
cheques ^{2,3} paper-based credit transfers ^{2,3}	1,210 101	1,234 99	1,298 102	1,351 102	1,367 99
BACS	941	1,054	1,251	1,432	1,602
credit transfers ²	657	742	898	1,025	1,147
direct debits	284	312	353	407	455

(in billions of pounds sterling)

¹ Town Clearing ceased operation on 24 February 1995. ² Inter-branch items are excluded. ³ Includes Northern Ireland and Scotland. (Includes estimates.)

Table 10

Transfer instructions handled by securities settlement systems: volume of transactions

(in thousands)

	1994	1995	1996	1997	1998
CGO ¹	768.4	747.5	960.1	949.8	1,114.3
CMO^2	285.3	269.0	268.0	263.1	221.2
CREST ³	•	•	1,598.0	29,005.0	35,801.0

¹ Central Gilts Office. ² Central Moneymarkets Office. ³ CREST commenced operations on 15 July 1996.

Table 11

Transfer instructions handled by securities settlement systems: value of transactions

(in billions of pounds sterling)

	1994	1995	1996	1997	1998
CGO ¹	15,266	16,001	24,288	28,283	32,962
CMO^2	2,547	3,305	3,483	3,842	3,316
CREST ³		•	109	3,996	13,404

¹ Central Gilts Office. ² Central Moneymarkets Office. ³ CREST commenced operations on 15 July 1996.

(in millions)								
	1994	1995	1996	1997	1998			
Cheques issued: ^{1,2}	2,802.3	2,698.7	2,643.1	2,582.0	2,510.0			
large-value (Town) ³ others	neg. 2,802.3	neg. 2,698.7	2,643.1	2,582.0	2,510.0			
Payments by card:	1,623.0	1,907.0	2,305.0	2,631.0	2,960.0			
debit credit ⁴	808.0 815.0	1,004.0 903.0	1,270.0 1,035.0	1,503.0 1,128.0	1,736.0 1,224.0			
Paper-based credit transfers ^{2,5}	414.5	404.8	418.7	419.1	407.0			
Paperless credit transfers:	986.8	1,044.1	1,170.3	1,240.5	1,319.0			
large-value (CHAPS) others ²	11.6 975.2	12.6 1,031.5	14.4 1,155.9	16.5 1,224.0	18.0 1,301.0			
Direct debits	1,148.1	1,299.0	1,442.8	1,583.6	1,736.0			
Total ⁶	6,974.7	7,353.6	7,979.9	8,456.2	8,932.0			

Table 12

Indicators of use of various cashless payment instruments: volume of transactions

¹ Excludes cheques processed at branch level. Includes cheques used to obtain cash.
 ² Includes inter-branch items (values are estimated).
 ³ Town Clearing ceased operation on 24 February 1995.
 ⁴ These figures have been amended to include charge cards.
 ⁵ Excludes items processed at branch level.
 ⁶ Excludes postal orders and government payments in cash from post offices against state benefit vouchers.

Table 13

Indicators of use of various cashless payment instruments: value of transactions

(in billions of pounds sterling)

	1994	1995	1996	1997	1998
Cheques issued: ^{1,2}	2,177.2	1,577.2	1,590.8	1,652.0	1,659.0
large-value (Town) ³ others	681.1 1,496.1	59.3 1,517.9	1,590.8	1,652.0	1,659.0
Payments by card:	59.9	70.8	88.1	103.2	119.0
debit credit ⁴	22.4 37.5	28.5 42.3	37.1 51.0	45.1 58.1	54.0 65.0
Paper-based credit transfers ^{2,5}	397.2	371.2	401.9	394.9	380.0
Paperless credit transfers:	25,733.4	27,485.9	29,832.1	37,124.4	42,728.0
large-value (CHAPS) others ²	25,052.0 681.4	26,719.0 766.9	28,881.2 950.9	36,032.4 1,092.0	41,501.0 1,227.0
Direct debits	283.6	312.3	352.8	407.0	455.0
Total ⁶	28,651.3	29,817.4	32,265.7	39,681.5	45,341.0

¹ Excludes cheques processed at branch level. Includes cheques used to obtain cash. ² Includes inter-branch items (values are estimated).
³ Town Clearing ceased operation on 24 February 1995. ⁴ These figures have been amended to include charge cards. ⁵ Excludes items processed at branch level. ⁶ Excludes postal orders and government payments in cash from post offices against state benefit vouchers.

	1994	1995	1996	1997	1998
Members	60	65	68	65	63
of which: live	59	62	66	63	59
Sub-members ¹	231	236	239	244	253
of which: live	228	235	236	241	250
Participants ²	65	77	91	113	129
of which: live	57	69	80	104	120
Total users	356	378	398	422	445
of which: live	344	366	382	408	429
Memorandum items:					
Total S.W.I.F.T. users:	4,866	5,229	5,632	6,165	6,557
of which:					
members	2,551	2,693	2,874	2,969	2,980
sub-members	2,097	2,259	2,404	2,590	2,720
participants	218	277	354	606	8

Table 14 Participation in S.W.I.F.T. by domestic institutions

¹ Domestic users sponsored by members abroad. ² Participants are not shareholders in S.W.I.F.T. and their message traffic over the network is restricted. Source: S.W.I.F.T.

		Table 15						
S.W.I.F.T. message flows to/from domestic users								
	1994	1995	1996	1997	1998			
Total messages sent	60,967,184	71,035,477	82,578,192	100,441,417	116,671,655			
of which:								
category I ¹	10,352,681	11,181,501	12,312,467	13,797,623	15,438,669			
category II ²	19,379,515	21,654,710	23,419,297	26,714,116	29,200,240			
Total messages received	55,179,903	66,015,464	79,741,899	101,914,835	124,101,890			
of which:								
category I ¹	12,540,347	13,978,532	15,500,253	17,009,249	18,595,169			
category II ²	8,350,297	8,906,827	9,429,168	11,142,323	12,208,457			
Domestic traffic ³	14,154,000	16,386,855	19,335,976	23,902,129	28,685,906			
Memorandum item:								
Global S.W.I.F.T. traffic	518,097,873	603,575,374	687,785,294	812,117,556	937,039,995			

Table 15

¹ Category I: customer (funds) transfers. ² Category II: bank (funds) transfers. ³ Messages sent to/received from domestic users. Source: S.W.I.F.T.

Table 1
Basic statistical data

	1994	1995	1996	1997	1998
Population (millions) ¹	260.7	263.2	265.6	267.9	270.3
GDP (USD billions) ²	7,054.3	7,400.5	7,813.2	8,300.8	8,759.9
GDP per capita (USD)	27,059.1	28,117.2	29,417.2	30,984.7	32,408.1

¹ Data estimated as of 1 July each year. Includes Armed Forces overseas. ² Annual data. Data reflect National Income and Product Account revisions as of August 1999.

Sources: US Department of Commerce; Bureau of the Census and Bureau of Economic Analysis.

Table 2
Settlement media used by non-banks ¹

(in billions of US dollars)

	1994	1995	1996	1997	1998
Notes and coin ²	357.5	376.2	397.9	428.9	464.1
Transferable deposits ³	808.8	767.7	698.7	660.5	648.8
Other ⁴	8.3	8.7	8.5	8.3	8.4
Narrow money supply (M1) ⁵	1,174.6	1,152.6	1,105.1	1,097.7	1,121.3
Memorandum items:					
Broad money supply (M2) ⁵	3,527.0	3,673.8	3,845.1	4,063.9	4,422.2
Broad money supply (M3) ⁵	4,373.1	4,638.8	4,973.4	5,426.1	6,026.5

 1 Averages of daily figures for the month of December. 2 Currency in circulation plus amount of coin outstanding less amount held by the Treasury, Federal Reserve banks, and depository institutions; weekly average for the last week of each year. 3 Transferable deposits consist of demand deposits and other chequable deposits. 4 Travellers' cheques. 5 Composition of money stock measures is as follows: M1: currency and coin + travellers' cheques + demand deposits + other chequable deposits. M2: M1 + money market mutual funds (general purpose and broker dealer only) + money market deposit accounts + savings deposits + small time deposits. M3: M2 + large time deposits (over USD 100,000) + term RPs and euro-dollars + money market funds (institutions only).

Source: Federal Reserve.

Table 3Settlement media used by banks

(in billions of US dollars, except as noted)

	1994	1995	1996	1997	1998	
Balances held at central bank ¹	29.1	25.1	20.2	18.9	16.0	
required reserves ² free reserves	27.5 1.6	23.3 1.8	17.9 2.3	16.4 2.5	13.9 2.1	
Transferable deposits at other banks ³	29.1	32.7	37.8	31.8	38.5	
Memorandum item:						
Bank borrowing from central bank (USD millions) ⁴	223.0	136.0	85.0	2,035.0	17.0	

¹ Year-end balances of depository institutions held at Federal Reserve banks including reserve balances and required clearing balances. ² Includes required clearing balances as well as required reserve balances. ³ Consists of year-end non-interest-bearing balances due from commercial banks in the United States. These transferable balances do not include immediately available funds, such as federal funds sold and securities purchased under agreements to resell (RPs), which together amounted to USD 151.7, 180.9, 164.0, 261.8 and 27.8 billion at year-end 1994, 1995, 1996, 1997 and 1998 respectively. ⁴ Monthly average figures may be significantly different from year-end figures. *Source:* Federal Reserve.

Table 4 Banknotes and coin

(at year-end, in billions of US dollars)

(at year-old, in onions of 05 donals)							
	1994	1995	1996	1997	1998		
Total banknotes and coin							
issued ¹	403.8	424.2	450.7	482.3	517.6		
Denomination of banknotes:							
100 dollars	229.1	241.5	261.4	291.6	320.1		
50 dollars	43.9	46.4	48.6	48.2	50.5		
20 dollars	80.5	84.2	87.1	88.0	90.9		
10 dollars	13.8	14.1	14.3	14.2	14.3		
5 dollars	7.3	7.5	7.8	7.9	8.0		
1 dollar	6.1	6.3	6.6	6.7	7.0		
other ²	1.3	1.4	1.4	1.4	1.5		
Total value of coin	21.8	22.8	23.6	24.3	25.4		
Banknotes and coin held by							
banks ³	46.3	48.0	52.8	53.4	53.5		
Banknotes and coin in							
circulation outside banks	357.5	376.2	397.9	428.9	464.1		
Memorandum item:							
Banknotes and coin held by Treasury and Federal Reserve							
banks	73.8	80.8	101.1	92.8	120.4		

¹ Total currency and coin outstanding. ² Miscellaneous banknotes outstanding. ³ Partly estimated. Banks defined as depository institutions.

Sources: US Treasury; Federal Reserve.

Table 5 Institutional framework

(at end-1998)

	Number of institutions	Number of branches ¹	Number of sight accounts (thousands)	Value of accounts (USD billions)
Central bank ²	1	25	•	
Commercial banks	8.813	63,044	n.a.	542.2 ³
Thrift institutions ⁴	12,867	13,942 5	n.a.	106.6 ³

¹ Number of branches does not include head offices. ² The Federal Reserve is the central bank. The Board of Governors is located in Washington, D.C. and there are 12 District banks located in Atlanta, Boston, Chicago, Cleveland, Dallas, Kansas City, Minneapolis, New York, Philadelphia, Richmond, St. Louis and San Francisco. Eight regional cheque processing centres, one operations centre and a satellite office are not included in the number of branches. ³ Total transactions accounts. ⁴ Includes savings banks, savings and loans associations, cooperative and industrial banks and credit unions at year-end 1998. ⁵ Includes number of savings and loan branches in June 1999 and branches of savings, cooperative and industrial banks at year-end 1998.

Source: Federal Reserve.

Cash dispensers, ATMs and EFTPOS terminals									
	1994	1995	1996	1997	1998				
Cash dispensers and ATMs									
Number of networks ^{1,2}	60	50	52	49	45				
Number of machines ^{2,3}	109,080	122,706	139,134	165,000	187,000				
Volume of transactions ⁴ (billions)	8.3	9.7	10.7	11.0	11.2				
Value of transactions (USD billions)	558.0	656.6	727.6	744.6	761.6				
EFTPOS									
Number of networks ^{5,6}	27	29	27	22	22				
Number of machines ^{6,7}	344,100	528,700	875,400	1,300,000	1,700,000				
Volume of transactions (millions)	1,096	1,599	2,469	3,913	5,731				
of which:									
signature-based	457	824	1,374	2,312	3,731				
PIN-based	639	775	1,096	1,600	2,000				
Value of transactions (USD billions)	33.6	59.1	99.7	162.5	238.5				
of which:									
signature-based	18.0	36.3	65.7	113.5	173.5				
PIN-based	15.6	22.8	34.0	49.0	65.0 ⁸				

Table 6Cash dispensers, ATMs and EFTPOS terminals

¹ The number of networks in 1998 includes eight national ATM networks and 37 regional networks. ² Year-end figure. ³ Does not include card-activated terminals which do not dispense cash. ⁴ Transactions include withdrawals and other transactions. Withdrawals are estimated to be at least 70% of transactions. ⁵ Both shared and proprietary networks are included, as well as both signature- and PIN-based networks. ⁶ End-June figure. ⁷ Represents PIN-based terminals only. ⁸ Includes USD 9.91 billion in cash back.

Sources: H Spencer Nilson (Oxnard, CA); Bank Network News and Debit Card News, Faulkner & Gray (New York, N.Y.).

Table 7
Number of payment cards in circulation ¹
(at year-end, in millions)

	1994	1995	1996	1997	1998		
Cards with a cash function ²	540.1	592.4	654.1	682.6	710.3		
Cards with a debit/credit function ³	590.5	650.8	680.9	714.5	748.0		
of which: cards with a debit function cards with a credit function ⁴	207.5 383.0	211.0 439.8	219.4 461.5	230.5 484.0	242.4 505.6		
Cards with a cheque guarantee function ⁵	n.a.	n.a.	n.a.	n.a.	n.a.		
Memorandum item: Retailer cards	542.6	587.2	601.8	598.3	617.3		
Oil company cards	114.2	115.3	112.0	110.8	113.1		

¹ A card with multiple functions may appear in several categories. It is, therefore, not meaningful to add the figures. ² Estimated. Includes credit and debit cards with a cash function. Excludes prepaid (stored-value) cards. ³ A small number of payment cards have both a debit and credit function. Cards are classified as debit or credit cards according to their primary use. ⁴ Includes VISA, MasterCard, Discover, American Express and Diners Club cards. Number of telephone cards in circulation: 160.5, 166.3, 171.0, 172.9 and 175.0 million for 1994, 1995, 1996, 1997 and 1998 respectively (The Nilson Report). ⁵ Reliable data on cheque guarantee "cards" are not available.

Sources: The Nilson Report (HSN Consultants Inc., Oxnard, CA); Bank Network News and Debit Card News (Faulkner & Gray, New York, N.Y.).

Table 8Payment instructions handled by selected payment systems:volume of transactions

(in millions)

	1994	1995	1996	1997	1998
Large-value systems: ¹					
CHIPS ²	45.5	51.0	53.5	59.0	59.1
Fedwire ³	72.0	75.9	82.6	89.5	98.1
Cheque clearings:					
Private clearing houses and					
direct exchanges ⁴	26,221.0	28,145.0	29,852.0	30,020.0	29,533.2
Federal Reserve ⁵	17,149.0	16,128.0	16,129.0	16,531.0	17,107.0
Automated clearing houses:					
Private ⁶	553.8	682.7	876.0	1,268.6	1,625.0
Federal Reserve ⁷	2,379.2	2,724.3	3,053.0	3,280.4	3,719.0
Memorandum item:					
"On-us" cheques ⁸	18,300.0	18,690.0	18,703.0	19,542.0	20,359.8

¹ Number of originations. Data do not include non-value messages. ² CHIPS, the Clearing House for Interbank Payments System, is operated by the New York Clearing House Association. ³ Fedwire is operated by the Federal Reserve. ⁴ Cheques are processed either "on-us" (about 30%) or by regional private cheque clearing houses (about 45%, which includes direct exchanges) or by the Federal Reserve. Estimate. ⁵ Includes personal, commercial, government and travellers' cheques, and commercial and postal money orders. ⁶ Includes an estimated 1,071 million "on-us" items and 554 million private sector items. ⁷ Includes all government and commercial debits and credits. Beginning with 1997, non-value items are not counted. ⁸ Estimated.

Sources: Federal Reserve; National Automated Clearing House Association.

Table 9

Payment instructions handled by selected payment systems:

value of transactions

(in billions of US dollars)

	1994	1995	1996	1997	1998
Large-value systems:					
CHIPS ¹	295,443.8	310,021.2	331,541.1	362,186.5	350,372.2
Fedwire ²	211,201.5	222,954.1	249,140.0	288,419.8	328,748.9
Cheque clearings:					
Private clearing houses and					
direct exchanges	n.a.	n.a.	n.a.	n.a.	n.a.
Federal Reserve ³	12,607.4	12.083.0	12,072.8	12,597.5	13,448.2
Automated clearing houses:					
Private ⁴	1,730.5	1.905.9	2,102.1	3,289.7	4,073.3
Federal Reserve ⁵	8,369.5	9,194.1	9,997.9	10,710.3	12,326.7

¹ CHIPS, the Clearing House for Interbank Payments System, is operated by the New York Clearing House Association. ² Fedwire is operated by the Federal Reserve. ³ Includes personal, commercial, government and travellers' cheques, and commercial and postal money orders. ⁴ Estimated. ⁵ Includes all government and commercial debits and credits.

Source: Federal Reserve.

Table 10

Transfer instructions handled by securities settlement systems: volume of transactions

(in millions)

	1994	1995	1996	1997	1998
Federal Reserve Government securities ¹	12.6	12.8	13.1	12.9	14.4
Depository Trust Company Corporate and municipal securities ²	106.0	119.0	135.7	151.0	164.0

¹ US Treasury and agency securities transfers processed through the Federal Reserve's Fedwire transfer book-entry security settlement system. Data exclude reversals (i.e. securities sent in error and returned to sender). ² Book-entry securities deliveries processed by the Depository Trust Company's next-day and same-day funds settlement systems. As of 22 February 1996, settlement for all securities deliveries is conducted on a same-day basis.

Table 11Transfer instructions handled by securities settlement systems:value of transactions

(in trillions of US dollars)

	1994	1995	1996	1997	1998
Federal Reserve Government securities ¹	144.7	149.8	160.6	174.9	197.8
Depository Trust Company Corporate and municipal					
securities ²	34.0	41.0	50.2	62.0	77.0

¹ US Treasury and agency securities transfers processed through the Federal Reserve's Fedwire transfer book-entry security settlement system. Data exclude reversals (i.e. securities sent in error and returned to sender). ² Book-entry securities deliveries processed by the Depository Trust Company's next-day and same-day funds settlement systems. As of 22 February 1996, settlement for all securities deliveries is conducted on a same-day basis.

Table 12

Indicators of use of various cashless payment instruments: volume of transactions

(in millions)

	1994	1995	1996	1997	1998
Cheques issued ¹	61,670.0	62,963.0	64,684.0	66,093.0	67,000.0
Payments by card	14,777.3	16,512.6	18,599.2	20,791.0	23,255.4
debit ² credit ³	1,096.3 13,681.0	1,598.9 14,913.7	2,469.4 16,129.8	3,912.5 16,878.5	5,730.7 17,524.7
Paperless credit transfers	1,677.0	1,899.4	2,139.2	2,488.7	2,888.5
CHIPS Fedwire ⁴ Federal Reserve ACH ⁵ Private ACH ⁶	45.5 72.0 1,525.7 33.8	51.0 75.9 1,738.9 33.6	53.5 82.6 1,944.9 58.2	59.0 89.5 2,110.2 230.0	59.1 98.1 2,406.3 325.0
Direct debits	886.0	1,024.3	1,176.2	1,347.2	1,544.7
Federal Reserve ACH ⁵ Private ACH ⁶	847.0 39.0	978.3 46.0	1,100.5 75.7	1,170.2 177.0	1,312.7 232.0
Total	79,010.3	82,399.3	86,598.6	90,719.9	94,688.6
Memorandum item:					
Commercial "on-us" ACH	480.0	595.0	738.0	861.0	1,057.0

¹ Includes personal, commercial, government and travellers' cheques, and commercial and postal money orders. Data for commercial cheques not processed by the Federal Reserve are estimated. ² Includes online (PIN-based) and offline (signature-based) transactions. ³ Includes all types of credit card transactions (i.e. bank, oil company, telephone, retail store, travel and entertainment). Bank cards include VISA and MasterCard credit cards only (excluding debit cards). ⁴ Volume of Fedwire funds transfers. Does not include securities transfers over Fedwire. ⁵ Does not include commercial "on-us" ACH transactions originated and received by the same bank. Beginning in 1997, non-value items are not counted. ⁶ Does not include commercial "on-us" ACH transactions originated and received by the same bank.

Source: The Nilson Report (Oxnard, CA).

Table 13

Indicators of use of various cashless payment instruments: value of transactions

(in billions of US dollars)

Instruments	1994	1995	1996	1997	1998		
Cheques issued ¹	71,500.0	73,515.0	74,879.0	77,811.0	79,000.0		
Payments by card	764.4	938.1	1,082.5	1,233.6	1,395.7		
debit ² credit ³	33.6 730.8	59.1 879.0	99.7 982.8	162.5 1,071.1	238.5 1,157.2		
Paperless credit transfers	510,702.1	537,542.9	586,052.3	657,044.3	686,892.2		
CHIPS Fedwire ⁴ Federal Reserve ACH ⁵ Private ACH ⁶	295,443.8 211,201.5 3,284.8 772.0	310,021.2 222,954.1 3,756.5 811.1	331,541.1 249,140.0 4,235.4 1,135.8	362,186.5 288,419.8 4,843.9 1,594.1	350,372.2 328,748.9 5,750.7 2,020.4		
Direct debits	6,110.5	6,479.5	6,813.9	7,613.4	8,614.3		
Federal Reserve ACH ⁵ Private ACH ⁶	<i>5,084.7</i> 1,025.8	<i>5,437.6</i> 1,041.9	5,762.5 1,051.4	5,866.4 1,747.0	6,576.0 2,038.3		
Total	589,077.0	618,475.5	668,827.7	743,702.3	775,902.2		

¹ Includes personal, commercial, government and travellers' cheques, and commercial and postal money orders. Data for commercial cheques not processed by the Federal Reserve are estimated. ² Includes online (PIN-based) and offline (signature-based) transactions. ³ Includes all types of credit card transactions (i.e. bank, oil company, telephone, retail store, travel and entertainment). Bank cards include VISA and MasterCard credit cards only (excluding debit cards). ⁴ Value of Fedwire funds transfers. Does not include securities transfers over Fedwire. ⁵ Does not include commercial "on-us" ACH transactions originated and received by the same bank. Beginning in 1997, non-value items are not counted. ⁶ Does not include commercial "on-us" ACH transactions originated and received by the same bank.

Source: The Nilson Report (Oxnard, CA).

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Participation in S.W.I.F.I. by domestic institutions							
	1994	1995	1996	1997	1998		
Members	147	156	169	152	140		
of which: live	143	154	157	150	138		
Sub-members ¹	293	313	344	336	323		
of which: live	286	309	332	328	310		
Participants ²	47	73	96	133	154		
of which: live	38	62	81	121	148		
Total users	487	542	599	621	617		
of which: live	467	525	570	599	596		
Memorandum items:							
Total S.W.I.F.T. users:	4,866	5,229	5,632	6,165	6,557		
of which:							
members	2,551	2,693	2,874	2,969	2,980		
sub-members	2,097	2,259	2,404	2,590	2,720		
participants	218	277	354	606	857		

Table 14Participation in S.W.I.F.T. by domestic institutions

¹ Domestic users sponsored by members abroad. ² Participants are not shareholders in S.W.I.F.T. and their message traffic over the network is restricted. *Source*: S.W.I.F.T.

Table 15 S.W.I.F.T. message flows to/from domestic users							
Total messages sent	83,173,828	99,258,753	115,518,434	138,458,554	162,994,946		
of which:							
category I ¹	13,810,761	17,316,090	20,841,198	25,265,791	30,017,880		
category II ²	15,257,951	17,017,438	18,975,068	22,625,585	25,880,916		
Total messages received	93,700,305	111,638,649	128,751,988	152,856,912	175,681,576		
of which:							
category I ¹	20,207,556	24,217,175	27,770,832	31,252,056	35,083,927		
category II ²	41,497,646	46,829,754	49,839,334	56,185,599	59,469,178		
Domestic traffic ³	13,454,096	17,269,612	20,970,071	24,923,744	33,986,784		
Memorandum item:							
Global S.W.I.F.T. traffic	518,097,873	603,575,374	687,785,294	812,117,556	937,039,995		

¹ Category I: customer (funds) transfers. ² Category II: bank (funds) transfers. ³ Messages sent to/received from domestic users. *Source*: S.W.I.F.T.

Comparative tables

	1994	1995	1996	1997	1998				
		USD per inhabitant ²							
Belgium	1,229	1,391	1,340	1,174	1,244				
Canada	647	677	687	688	681				
France	807	891	841	742	800				
Germany	1,790	2,025	1,936	1,679	1,682				
Italy	1,032	1,082	1,138	1,062	1,210				
Japan	3,393	3,578	3,363	3,217	3,727				
Netherlands	1,424	1,537	1,411	1,227	1,283				
Sweden	1,120	1,312	1,327	1,183	1,207				
Switzerland	2,985	3,394	3,127	2,828	3,117				
United Kingdom	504	528	606	627	655				
United States	1,371	1,429	1,498	1,601	1,717				
		As	percentage of Gl	DP					
Belgium	5.2	5.3	5.2	5.1	4.8				
Canada	3.4	3.4	3.4	3.4	3.5				
France	3.4	3.3	3.3	3.2	3.1				
Germany	6.8	6.9	7.0	6.8	6.4				
Italy	5.8	5.5	5.3	5.5	5.6				
Japan	8.8	9.6	9.8	10.4	11.0				
Netherlands	n.a.	5.7	5.5	5.2	4.9				
Sweden	5.0	4.7	4.8	4.7	4.6				
Switzerland	7.8	7.7	8.0	7.8	7.9				
United Kingdom	2.8	2.8	2.8	2.9	2.8				
United States	5.1	5.1	5.1	5.2	5.3				
		As perc	entage of narrow	money ³					
Belgium	27.1	27.2	27.5	26.5	23.8				
Canada	17.7	16.8	15.3	14.7	15.2				
France	15.1	14.2	14.2	13.5	13.2				
Germany	29.6	29.1	26.9	26.3	23.3				
Italy	16.0	16.3	16.1	16.1	16.1				
Japan	27.9	26.9	26.1	25.8	25.3				
Netherlands	25.0	22.1	19.7	18.5	14.9				
Sweden	10.7	10.5	9.9	10.0	10.2				
Switzerland	19.7	18.0	17.3	15.6	15.5				
United Kingdom	4.6	4.6	4.5	4.6	4.5				
United States	30.4	32.6	36.0	39.1	41.4				

Table 1Notes and coin in circulation1

¹ For explanation of figures see relevant country tables. ² Year-end figures converted at end-of-year exchange rates. ³ Narrow money: M1; except for Sweden (M3) and the United Kingdom (M2).

	1994	1995	1996	1997	1998			
	USD per inhabitant							
			_					
Belgium	3,307	3,715	3,536	3,261	3,984			
Canada	3,001	3,362	3,808	3,976	3,803			
France	4,543	5,381	5,082	4,761	5,393			
Germany	4,287	4,953	5,309	4,697	5,551			
Italy	5,236	5,399	5,784	5,386	6,199			
Japan	8,758	9,697	9,526	9,245	10.987			
Netherlands	4,265	5,421	5,763	5,397	7,370			
Sweden	9,811	11,351	11,991	10,476	10,570			
Switzerland	6,799	8,359	8,282	8,673	9,824			
United Kingdom	10,493	11,073	12,797	12,895	13,842			
United States	3,102	2,917	2,631	2,466	2,400			
		As	percentage of G	DP				
Belgium	14.0	14.0	13.8	14.1	15.5			
Canada	16.0	17.0	19.0	20.0	20.0			
France	19.2	20.1	19.8	20.6	20.8			
Germany	16.3	16.8	19.1	19.1	21.2			
Italy	29.5	27.4	26.8	27.6	28.7			
Japan	22.8	25.9	27.8	29.8	32.3			
Netherlands	n.a.	20.2	22.5	23.1	27.9			
Sweden	42.4	40.6	44.3	42.0	40.4			
Switzerland	17.7	18.9	21.3	23.8	25.0			
United Kingdom	58.6	59.5	59.8	58.8	59.6			
United States	11.5	10.4	8.9	8.0	7.4			
		As percentage of narrow money ³						
Belgium	72.9	72.8	72.5	73.5	76.2			
Canada	82.0	83.0	85.0	85.0	85.0			
France	84.9	85.8	85.8	86.5	89.3			
Germany	70.8	71.2	73.8	73.7	76.8			
Italy	81.4	81.1	81.8	81.8	82.4			
Japan	72.1	73.1	73.9	74.2	74.7			
Netherlands	75.0	77.9	80.3	81.5	85.3			
Sweden	90.3	90.6	91.1	88.7	89.6			
Switzerland	44.9	44.2	45.8	47.9	48.9			
United Kingdom	95.4	95.4	95.5	95.4	95.5			
United States	68.9	66.6	63.2	60.2	57.9			

Table 2Transferable deposits held by non-banks1,2

¹ For explanation of figures and definition of transferable deposits, see relevant country tables. ² Year-end figures converted at end-ofyear exchange rates. ³ Narrow money: M1; except for Sweden (M3) and the United Kingdom (M2).

Table 3 Settlement media used by banks¹

		(1998)		
	Banks' reserves at central bank (USD billion) ²	Banks' reserves at central bank in percentage of narrow money ³	Transferable deposits at other banks (USD billion) ²	Transferable deposits at other banks in percentage of narrow money ²
Belgium	1.0	1.8	5.4	10.1
Canada	0.4	0.3	2.7	2.0
France	5.6	1.6	n.a.	n.a.
Germany	26.4	4.4	268.6	45.4
Italy	11.6	2.7	63.9	14.7
Japan	33.2	1.8	54.5 ⁴	3.7 ⁵
Netherlands	18.9	14.0	n.a.	n.a.
Sweden	0.2	0.2	14.0	13.5
Switzerland	4.8	3.4	48.3	33.7
United Kingdom	2.7	0.3	387.4	45.1
United States	19.5	1.7	38.5	3.4

¹ For explanation of figures see relevant country tables. ² Year-end figures converted at end-of-year exchange rates. ³ Narrow money: M1; except for Canada and Sweden (M3) and the United Kingdom (M2). ⁴ End-March figure converted at end-March exchange rate. ⁵ End-March figure.

Institutional framework ¹ (1998)											
	Number of institutions	Number of inhabitants per institution	Number of branches	Number of inhabitants per branch	Number of accounts per inhabitant						
Belgium	122	83,623	8,575	1,191	1.4						
Canada ²	2,265	13,413	13,562	2,240	n.a.						
France	510	115,490	46,765	1,259	1.1						
Germany	3,234	25,355.6	60,120	1,364 ³	1.0						
Italy	923	62,405	40,313	1,429	0.5^{4}						
Japan	3,593	35,205	68,334	1,851	n.a.						
Netherlands	120	130,783	6,862	2,287	1.3						
Sweden	122	72,557	3,683	2,403	n.a.						
Switzerland	341	20,890	6,757	1,054	n.a.						
United Kingdom	537	110,242	34,698	1,706	2.5						
United States ⁵	21,680	12,468	76,986	3,511	n.a.						

Table 4

¹ For explanation of figures see relevant country tables. ² Deposit-taking institutions only. ³ Including post office branches which are entrusted with the execution of semi-cashless payments for Deutsche Postbank AG. ⁴ With reference to banking accounts only. ⁵ Number of branches does not include head offices of any type of institution or branches of credit unions.

Cash dispensers and A Twis										
	1994	1995	1996	1997	1998					
	Number of machines per 1,000,000 inhabitants									
Belgium	313	360	414	492	562					
Canada	581	600	624	651	774					
France	356	395	419	461	499					
Germany	361	436 ⁴	459	504	556					
Italy	326	378	421	446	482					
Japan	978	1,013	1,051	1,115	1,127					
Netherlands	324	354	372	409	419					
Sweden	259	267	269	268	281					
Switzerland	481	532	587	678	722					
United Kingdom	342	358	376	393	416					
United States	418	466	524	616	692					
		Number of	transactions per	r inhabitant						
Belgium	13.1	14.3	15.1	15.7	15.6					
Canada	41.1	46.3	49.7	53.2	53.0					
France	14.2	15.8	18.1	19.9	20.5					
Germany	11.5	13.4 ⁴	15.3	n.a.	17.1					
Italy	4.8	5.8	6.4	7.2	8.4					
Japan	3.6	3.8	4.1	5.0	5.8					
Netherlands	19.4	22.3	23.8	25.3	27.2					
Sweden	30.7	31.8	33.6	35.3	37.6					
Switzerland	9.1	10.0	10.6	11.4	11.3					
United Kingdom	22.9	25.2	27.2	29.6	31.3					
United States	31.8	36.9	40.3	41.1	41.4					
		Average v	alue of transacti	ons (USD) ²						
Belgium	126.5	138.1	129.5	114.3	124.0					
Canada ³	51.2	51.0	52.0	50.6	62.2					
France	76.5	81.3	77.5	68.0	70.7					
Germany	157.6	196.6 ⁴	179.0	n.a.	169.5					
Italy	191.3	198.3	202.7	184.7	178.9					
Japan	419.8	450.6	383.4	288.8	235.0					
Netherlands	110.4	124.5	118.4	99.6	95.7					
Sweden	104.7	112.6	104.4	104.5	108.4					
Switzerland	217.8	246.9	209.5	186.6	180.4					
United Kingdom	74.6	77.3	78.1	84.5	87.8					
United States	67.2	67.7	68.0	67.7	68.0					

Table 5 **Cash dispensers and \mathbf{ATMs}^1**

 1 For explanation of figures see relevant country tables. 2 Converted at yearly average exchange rates. 3 Average value of a cash withdrawal only. 4 Increase partly due to new data source.

	1994	1995	1996	1997	1998				
		Number of ter	minals per 1,000,	000 inhabitants					
Belgium	6,294	7,174	7,997	8,421	9,124				
Canada	4,109	6,448	8,499	10,977	12,960				
France	7,574	9,394	9,333	9,540	9,949				
Germany ³	767	856	1,402	1,983	2,816				
Italy	1,819	2,683	3,734	4,887	5,977				
Japan	227	200	183	155	127				
Netherlands	3,085	4,736	6,170	7,692	8,569				
Sweden	5,514	6,160	6,946	7,774	8,405				
Switzerland	2,379	3,499	4,747	5,803	7,167				
United Kingdom	5,993	8,647	9,354	8,983	10,304				
United States	1,320	2,009	3,296	4,853	6,289				
		Number of	f transactions per	inhabitant					
Belgium	18.0	20.8	23.9	27.2	32.7				
Canada	6.4	13.4	22.7	34.5	44.6				
France	26.1	32.3	32.4	32.7	36.8				
Germany ³	1.3	1.8	2.6	2.8	4.4				
Italy	1.6	2.1	2.9	4.4	5.6				
Japan	0.006	0.007	0.004	0.004	0.004				
Netherlands	9.3	16.5	23.8	31.0	37.9				
Sweden	8.8	10.4	12.6	15.9	19.0				
Switzerland	5.7	8.0	10.8	13.6	14.9				
United Kingdom	n.a.	n.a.	n.a.	n.a.	n.a.				
United States	4.2	6.1	9.3	14.6	21.2				
		Average value of transactions (USD) ²							
Belgium	71.2	77.6	72.6	63.3	66.2				
Canada	37.2	34.8	32.7	30.8	29.1				
France	57.6	63.3	60.4	51.2	54.2				
Germany ³	64.0	95.7	98.2	71.7	88.5				
Italy	119.8	118.6	118.2	106.8	101.9				
Japan	80.2	n.a.	32.4	56.6	62.4				
Netherlands	55.0	59.1	56.5	48.0	48.2				
Sweden	80.8	80.7	80.7	78.0	68.0				
Switzerland	73.8	96.4	96.3	73.5	63.6				
	n.a.	n.a.	n.a.	n.a.	n.a.				
United Kingdom									

Table 6 **FFTPOS terminals**¹

Table 7

Number of cards*

(1998 per 1,000 inhabitants)

	Cards with a cash function	Cards with a debit/credit function	Cards with cheque guarantee function	Retailers' cards
Belgium	1,178	1,178	465	153
Canada	1,863	2,380		n.a.
France	575	514	n.a.	n.a.
Germany	n.a.	1,114	535	61
Italy	312	471	8	n.a.
Japan	2,319	2,030		504
Netherlands	1,476	261	45	n.a.
Sweden	785	776	n.a.	n.a.
Switzerland	997	1,060	668	n.a.
United Kingdom	1,792	1,421	927	314
United States	2,628	2,767	n.a.	2,284

 \ast For explanation of figures, see relevant country tables.

Table 8

Relative importance of cashless payment instruments¹

1994 1995 1996 1997 1998 Cheques Belgium 11.7 10.6 9.4 8.0 7.0 Canada² 58.7 52.1 45.4 39.4 34.6 France 47.4 45.6 43.6 43.0 40.7 Germany 7.0 7.9 6.4 5.7 4.8 Italy³ 34.9 33.7 31.4 28.8 27.2 Japan n.a. n.a. n.a. n.a. n.a. Netherlands 8.5 5.8 4.1 2.9 1.9 Sweden 2.0 0.3 Switzerland⁴ 2.6 2.0 1.6 1.3 1.0 United Kingdom⁵ 40.2 36.7 33.1 30.5 28.1 United States 75.9 70.0 77.6 74.1 72.2 Payment by cards 19.7 27.4 Belgium 18.0 21.4 23.4 44.5 Canada 28.1 33.3 38.8 48.4 France 16.2 17.6 18.3 16.9 18.2 Germany 3.1 3.6 4.2 4.1 5.1 14.2 Italy³ 5.2 8.6 11.2 6.6 Japan n.a. n.a. n.a. n.a. n.a. Netherlands 6.1 13.4 17.8 21.6 24.5 22.3 Sweden 11.6 14.2 14.8 18.9 23.4 Switzerland 16.2 18.4 20.7 22.8 United Kingdom 23.3 25.9 28.9 31.1 33.1 19.9 United States 18.6 21.3 22.7 24.3

(percentage of total volume of cashless transactions)

¹ For explanation of figures see relevant country tables. In some cases the total may not sum to 100% because of other items. ² Includes large-value debit vouchers used to effect the settlements associated with IIPS transactions. ³ The figures for the years 1994-95 differ from those provided in the statistical annex of the Italian chapter as they are estimated for the whole system. ⁴ Postal cheques are not included because detailed figures are not published by the Postfinance. ⁵ Includes Town cheques.

Table 8 (cont.)									
	1994	1995	1996	1997	1998				
	Credit transfers								
Belgium	60.9	60.2	59.5	58.0	54.0				
Canada	7.1	8.2	8.9	8.9	9.5				
France	15.7	15.6	15.7	16.3	16.4				
Germany	48.7	48.8	49.2	48.2	50.6				
Italy ³	45.9	45.0	41.7	40.8	39.0				
Japan	n.a.	n.a.	n.a.	n.a.	n.a.				
Netherlands	59.8	52.7	49.8	47.3	45.0				
Sweden	82.3	79.4	78.5	72.1	69.3				
Switzerland ⁶	78.1	76.3	74.4	72.3	72.1				
United Kingdom ⁷	20.1	19.7	19.9	19.6	19.3				
United States	2.5	2.7	3.0	3.3	3.7				
	Direct debits								
Belgium	9.4	9.5	9.7	9.8	9.4				
Canada	6.1	6.4	6.8	7.2	7.4				
France	11.2	11.3	11.8	12.5	13.3				
Germany	40.3	40.6	40.2	42.0	39.5				
Italy ³	4.7	5.4	7.3	8.5	9.2				
Japan	n.a.	n.a.	n.a.	n.a.	n.a.				
Netherlands	25.6	28.1	28.3	28.3	28.5				
Sweden	6.1	6.4	6.7	7.1	8.1				
Switzerland ⁸	3.1	3.3	3.3	3.6	3.5				
United Kingdom	16.5	17.7	18.1	18.7	19.4				
United States	1.3	1.5	1.7	1.8	2.0				

⁶ All transfers at Postfinance included. ⁷ Paper-based and paperless (includes large-value: CHAPS). ⁸ Without Postfinance direct debits. See footnote 3.

Table 9

Relative importance of cashless payment instruments¹

	1994	1995	1996	1997	1998				
	Cheques								
Belgium	3.8	3.3	3.0	2.9	3.2				
Canada ²	98.8	98.2	97.3	97.0	96.5				
France	4.4	4.7	4.8	4.4	2.6				
Germany	2.3	2.1	1.8	1.6	1.4				
Italy ³	4.5	4.5	3.7	3.3	2.8				
Japan	n.a.	n.a.	n.a.	n.a.	n.a.				
Netherlands	0.1	0.1	0.0	0.0	0.0				
Sweden	n.a.	n.a.	n.a.	n.a.	0.1				
Switzerland ⁴	0.1	0.1	0.1	neg.	neg.				
United Kingdom ⁵	7.6	5.3	4.9	4.2	3.7				
United States	12.1	11.9	11.2	10.5	10.2				
	Payment by cards								
Belgium	0.1	0.1	0.2	0.2	0.2				
Canada	0.3	0.4	0.7	0.7	0.8				
France	0.2	0.2	0.2	0.2	0.1				
Germany	neg.	neg.	neg.	neg.	neg				
Italy ³	neg.	0.1	0.1	0.1	0.1				
Japan	n.a.	n.a.	n.a.	n.a.	n.a				
Netherlands	0.1	0.1	0.1	0.1	0.1				
Sweden	1.0	1.4	1.5	1.7	1.7				
~ · · ·									

¹ For explanation of figures see relevant country tables. In some cases the total may not sum to 100% because of other items. ² Includes large-value debit vouchers used to effect the settlements associated with IIPS transactions. ³ The figures for the years 1994-95 differ from those provided in the statistical annex of the Italian chapter as they are estimated for the whole system. ⁴ Postal cheques are not included because detailed figures are not published by the Postfinance. ⁵ Includes Town cheques.

neg.

0.2

0.2

neg.

0.3

0.2

0.1

0.3

0.2

0.1

0.3

0.2

neg.

0.2

0.1

Switzerland

United States

United Kingdom

		Table 9 (cont.)					
	1994	1995	1996	1997	1998			
	Credit transfers							
Belgium	95.8	96.3	96.6	96.7	96.3			
Canada	0.7	1.0	1.5	1.8	2.1			
France	93.5	93.0	92.7	93.4	96.0			
Germany	95.7	95.8	95.7	95.9	95.8			
Italy ³	94.2	94.1	95.0	95.4	95.7			
Japan	n.a.	n.a.	n.a.	n.a.	n.a.			
Netherlands	98.8	98.9	99.0	99.1	99.2			
Sweden	96.2	95.7	95.6	95.8	96.5			
Switzerland ⁶	99.8	99.8	99.8	99.8	99.8			
United Kingdom ⁷	91.2	93.4	93.7	94.6	95.1			
United States	86.7	86.9	87.6	88.3	88.5			
			Direct debits					
Belgium	0.2	0.3	0.3	0.3	0.3			
Canada	0.2	0.3	0.5	0.6	0.7			
France	0.8	0.9	1.0	1.0	0.6			
Germany	2.0	2.1	2.5	2.5	2.7			
Italy ³	0.2	0.2	0.2	0.3	0.3			
Japan	n.a.	n.a.	n.a.	n.a.	n.a.			
Netherlands	1.1	0.9	0.8	0.7	0.7			
Sweden	2.8	2.9	2.9	2.5	2.7			
Switzerland ⁸	0.1	0.1	0.1	0.1	0.1			
United Kingdom	1.0	1.0	1.1	1.0	1.0			
United States	1.0	1.0	1.0	1.0	1.1			

⁶ All transfers at Postfinance included. ⁷ Paper-based and paperless (includes large-value: CHAPS). ⁸ Without Postfinance direct debits. See footnote 3.

		(lig	ures relate to	5 1998)			
		Owner/	No. of pa	rticipants			Member-
	Type ²	Manager ³		of which direct	Processing ⁴	Settlement ⁵	ship ⁶
Belgium ELLIPS Clearing House CEC	L L+R R	$B + CB \\ B + CB \\ B + CB$	103 103 105	20 23 23	RTT M ACH	RTGS N N	RM O O
Canada IIPS	L	B + AS	63	19		.7	RM
France SAGITTAIRE CH Paris ⁸ CH Provinces ⁹ SIT CREIC Card payments TBF SNP	L L + R R R R L L	CB AS CB CB + B/AS CB B/AS CB B	57 388 38010 311 16 209 216 26	$57 \\ 30 \\ 208^{10} \\ 22 \\ 16 \\ 11 \\ 216 \\ 10$	RTT M M RTT ACH RTT RTT RTT	N N N N RTGS N/BN	RM RM O RM O RM O RM
Germany MAOBE EMZ (former DTA) ELS (former EIL-ZV) Konventionelle Abrechnung EAF (former EAF 2)	R R L L+R L	CB CB CB CB CB	5,202 5,202 2,773 38 66	5,202 ¹¹ 5,202 2,773 38 66	ACH ACH RTT M RTT	GS GS RTGS GS N	O O O RM
Italy Local clearing Retail BI-REL ¹⁴	R R L	CB CB ¹³ CB	n.a. 952 769	130 213 769	RTT ¹² ACH RTT	N N RTGS	0 0 0

Table 10aFeatures of selected interbank funds transfer systems1

(figures relate to 1998)

¹ For additional information see relevant country chapters. ² L = Large-value system, R = Retail system. ³ Owner/Manager: B = Banks, CB = Central Banks, AS = Payment Association. ⁴ Processing method: M = Manual, ACH = Automated Clearing House (offline), RTT = Real-Time Transmission. ⁵ N = multilateral Netting, BN = Bilateral Netting, RTGS = Real-Time Gross Settlement, GS = other Gross Settlement. ⁶ O = Open membership (any bank can apply) or RM = Restricted Membership (subject to criteria). ⁷ Other (see Table 11, Footnote 7). ⁸ Clearing House in Paris. ⁹ Clearing Houses in the provinces. ¹⁰ All institutions on which cheques are drawn or at which bills of exchange are payable are bound by regulations to participate in the local clearing houses, through an agent in certain cases. ¹¹ Number of accounts. ¹² Transactions can also be submitted on floppy disk. ¹³ System managed by the Interbank Society for Automation in the name and on behalf of the Banca d'Italia. ¹⁴ In 1998, BI-REL replaced Electronic Memoranda and Ingrosso (SIPS). The number and the value of transactions include those related to Electronic Memoranda and Ingrosso as long as they had worked.

Table 10a (cont.)										
	Degree of centralisa- tion ¹⁵	Pricing ¹⁶	Closing time for same-day transactions ¹⁷	Number of transactions (thousands)	Value of transactions (USD billions) ¹⁸	Ratio of transactions value to GDP (at annual rate)				
Belgium										
ELLIPS	C	F	16.45	1,005	10,906	41.6				
Clearing House	D	V	15.00	5,750	139	0.5				
CEC	С	F	15.00	929,100	563	2.1				
Canada										
IIPS	D	Ν	16.30	3,200	18,205	30.1				
F				· ·						
France SAGITTAIRE	C	Б	12.00	1 220	5 250	3.5				
CH Paris ⁸	C C	F F	13.00 15.00	1,320	5,259	5.5 0.8				
CH Provinces ⁹	C	F N	15.00	683,890 2 015 415	1,152 1,296	0.8				
SIT	C C	F	13.30	2,915,415 5,410,473	2,606	0.9				
CREIC	C	F	NO	296.671	2,000					
Card payments	C	F	13.30	290,071	19	neg. 19				
TBF	C	F	18.15	569	48,986	32.0				
SNP	C	F	16.00	5,529	42,358	27.7				
	C	1	10.00	5,527	42,550	27.7				
Germany										
MAOBE	D	V	NO	11,100	84	neg.				
EMZ (former DTA)	С	V	NO	2,239,000	2,437	1.1				
ELS (former EIL-ZV)	С	F	15.00	13,500	22,379	10.4				
Konventionelle	D		12.00	100	10					
Abrechnung ²⁰	D	F	13.00	100	49	neg.				
EAF (former EAF 2)	С	F	12.30	22,500	107,012	49.8				
Italy										
Local clearing	D	V	12.30	182,660	1,101	0.9				
Retail	С	F	NO^{21}	825,518	1,254	1.1				
BI-REL ¹⁴	С	V	16.20	11,460	47,444	40.0				

¹⁵ Geographical access to the system: C = Centralised (one processing centre only) or D = Decentralised. ¹⁶ Prices charged to participants: F = Full costs (including investments), V = Variable costs, S = Symbolic costs (below variable costs), N = No costs. ¹⁷ Closing time for same-day transactions (NO = no same-day transactions). ¹⁸ Converted at yearly average exchange rates. ¹⁹ These data are included in the SIT data. ²⁰ Reporting change in 1995: number of delivery envelopes cleared instead of individual payments contained therein. ²¹ Except for the credit transfers entered before 12.00 which are settled on the same day.

]	Table 10t)		
Features of sele	cted int	erbank f	funds tra	ansfer systems ¹	l
		_			

			No. of participants				
	Type ²	Owner/ Manager ³		of which direct	Processing ⁴	Settlement ⁵	Member- ship ⁶
Japan FEYCS BOJ-NET	L L	B CB	264 429	50 429	RTT RTT	N/RTGS RTGS ⁷	RM RM
Netherlands Interpay TOP ⁸	R L	B CB	72 124	72 124	ACH RTT	N RTGS	0 0
Sweden RIX Bank Giro System	L R	CB B	23 19	23 19	RTT ACH	RTGS N	RM O
Switzerland SIC DTA/LSV	L + R R	CB + B B	288 164	288 164	RTT ACH	RTGS GS	RM RM
United Kingdom CHAPS BACS Cheque/credit	L R R	B B B	434 40,000 ⁹ 444	17 16 13	RTGS ACH M	N N N	RM RM RM
United States Fedwire CHIPS	L L	CB B	10,024 ¹⁰ 85	$10,024^{10}$ 85	RTT RTT	RTGS N	O RM

(figures relate to 1998)

¹ For additional information see relevant country chapters. ² L = Large-value system, R = Retail system. ³ Owner/Manager: B = Banks, CB = Central Banks. ⁴ Processing method: M = Manual, ACH = Automated Clearing House (off-line), RTT = Real-Time Transmission. ⁵ N = multilateral Netting, BN = Bilateral Netting, RTGS = Real-Time Gross Settlement, GS = other Gross Settlement. ⁶ O = Open membership (any bank can apply) or RM = Restricted Membership (subject to criteria). ⁷ The system has been designed to allow participants to enter funds transfer instructions continuously, in which case settlement takes place on the central bank's books immediately. It is, however, also used to settle on a net basis. ⁸ Merger of 8007 S.W.I.F.T. and the Central Bank FA System. ⁹ Estimated. ¹⁰ Fedwire participants as of 15 March 1999.

Table 10b (cont.)							
	Degree of centralisa- tion ¹¹	Pricing ¹²	Closing time for same-day transactions ¹³	Number of transactions (thousands)	Value of transactions (USD billions)	Ratio of transactions value to GDP (at annual rate)	
Japan FEYCS BOJ-NET	D D	V^{14} V^{14}	13.45 17.00	11,155 5,307	81,628 329,235	16.5 66.5	
Netherlands Interpay TOP ⁸	C C	F F	11.30 18.00	2,012,300 3,548	1,376 17,386	3.5 44.1	
Sweden RIX Bank Giro System	C C	F F	17.00 NO	313 315,000	11,531 366	49.0 1.6	
Switzerland SIC DTA/LSV	C C	F F	16.15 NO	134,400 98,840	31,993 237	121.9 0.9	
United Kingdom ¹⁵ CHAPS BACS Cheque/credit	D C D	F F F	16.00 NO NO	18,012 2,905,012 2,184,795	68,779 2,655 2,375	50.2 1.9 1.7 ¹⁶	
United States Fedwire CHIPS	C C	F F	18.30 16.30	98,100 59,100	328,749 350,372	37.5 40.0	

¹¹ Geographical access to the system: C = Centralised (one processing centre only) or D = Decentralised. ¹² Prices charged to participants: F = Full costs (including investments), V = Variable costs, S = Symbolic costs (below variable costs), N = No costs. ¹³ Closing time for same-day transactions (NO = no same-day transactions). ¹⁴ Prices are set on the principle that institutions which are to benefit from online processing should pay the relevant charges. ¹⁵ Interbank figures only. ¹⁶ Excludes Northern Ireland.

		(;	as of December	1998)		
System	Gross (G) or net (N)	Opening- closing time for same-day value (local time)	Settlement finality (local time) ²	Cut-off for all third-party payment orders	Cut-off for international correspondents' payment orders	Memo item: Standard money market hours ³ (local time)
Belgium ELLIPS CEC Clearing House	G N N	6.30-16.45 15.01-15.00 ⁴ 8.00-15.00	15.15 15.00	16.30 15.00	15.00 15.00 ⁵	(9.00-16.15)
Canada ⁶ IIPS	N^7	8.00-16.30	11.00 ⁸	16.30 ⁹	16.30 ⁹	
France SAGITTAIRE TBF SNP	N G N	8.00-13.00 ¹⁰ 7.30-18.15 7.30-16.00	18.30 16.15	n.a. 18.15 15.45	8.00^{11} 18.15 15.45	(8.15-17.00)
Germany ELS EAF ¹⁴	G G/N	8.00-15.00 8.00-12.30	14.30 ¹⁵	(12) (12)	8.00^{11} 8.00^{11}	$(9.30-13.00^{13})$ $(9.30-13.00^{13})$
Italy BI-REL ¹⁶	G	8.00-16.20	•	15.50	9.00 ¹¹	(8.30-16.30)
Japan FEYCS BOJ-NET	G/N G ¹⁷	9.00-13.45 9.00-17.00	15.00	10.30^{11} 14.00	10.30 ¹¹ n.a.	(9.00-17.00)
Netherlands						
TOP ¹⁸	G	7.00-18.00 ¹⁹	•	$17.00^{11,20}$	$17.00^{11,20}$	(7.00-18.30)
Sweden RIX	G	8.00-17.00		(21)	8.00^{11}	(9.00-16.15)
Switzerland SIC	G	18.00-16.15 ²²		15.00 ²¹	8.00^{5}	(9.00-16.00)
United Kingdom CHAPS	G	8.30-16.00		none	12.00	(7.30-15.30 ²³)
United States⁶ Fedwire CHIPS	G N	00.30-18.30 00.30-16.30	18.00 ²⁵	18.00 16.30	17.00 16.30	(8.30-18.30 ²⁴)
ECU clearing system	N	14.01-14.00 ²⁶	15.45	none	none	(TOM/NEXT ²⁷)

 Table 11

 Operating hours of selected large-value interbank funds transfer systems¹

 (as of December 1998)

- ¹ Some systems make no explicit distinction between large-value and retail transactions and may be used to settle interbank transfers relating to a variety of underlying transactions. Some systems may also accept payment orders for a number of value days.
- ² For net settlement systems.
- ³ Money market hours indicated refer to the time period in which domestic interbank transactions are normally carried out. They therefore do not relate to particular interbank funds transfer systems.
- ⁴ The CEC transfer system operates round-the-clock, five days a week.
- ⁵ S.W.I.F.T. guideline.
- ⁶ Eastern time.
- ⁷ Settlement typically takes place on the basis of bilateral net positions. The net receiving bank in each pair creates a paper document called an inter-member debit voucher and delivers it to the net sending bank as part of the exchanges covered by the Automated Clearing and Settlement System (ACSS) operated by the Canadian Payments Association. Settlement may also take place on a gross basis or on an item-by-item basis, in each case over the ACSS.
- ⁸ Net settlement at 11.00 the next day (retroactively).
- ⁹ Local time at the receiving IIPS point, or the beneficiary account point, whichever is earlier.
- ¹⁰ SAGITTAIRE'S exchange day, i.e. the period during which orders are recorded by the Bank of France, begins at 8.00 and ends at 17.30. Orders sent after 17.30 are stored by S.W.I.F.T. and processed at the start of the next exchange day. SAGITTAIRE'S accounting day starts at 13.00 on D - 1 and ends at 13.00 on D (transfers sent after 13.00 on D, regardless of whether they are processed during the same exchange day or at the start of the following exchange day, are only entered in the accounts on D + 1). The net positions of members are drawn up after the close of the accounting day.
- ¹¹ S.W.I.F.T. guideline; in practice it may be later.
- ¹² This is subject to arrangements between the correspondent banks.
- ¹³ For settlement purposes it can be later.
- ¹⁴ Electronic netting system in Frankfurt for interbank transfers predominantly relating to international DM transactions.
- ¹⁵ Planned time for communication of completion (positive message) or non-completion (negative message) of settlement.
- ¹⁶ In 1998 BI-REL replaced Electronic Memoranda and Ingrosso (SIPS).
- ¹⁷ The system has been designed to allow participants to enter funds transfer instructions continuously, in which case settlement takes place on the central bank's books immediately. BOJ-NET, however, is also used to settle on a net basis.
- ¹⁸ Merger of 8007 S.W.I.F.T. and the Central Bank FA System.
- ¹⁹ The 8007 S.W.I.F.T. system is, for a given value day, also open on the previous business day.
- ²⁰ Interbank guilder transfers relating to international transactions are sent through the 8007 S.W.I.F.T. system which is operated by the Netherlands Bank; net settlement of these transactions takes place over the Central Bank TOP System.
- ²¹ Participants decide among themselves which cut-off times they will use for different types of third-party orders. Large-value payments can be made during any time of the day.
- ²² 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 18.00 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 (cut-off 1) and 16.00 (cut-off 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 lombard credits (collateralised loans from the Swiss National Bank at a penalty rate).
- ²³ For same-day value: there are no standard money market hours but trading typically takes place between about 7.30 and 15.30. The market is most liquid in the morning. The Bank of England intervenes in the market as necessary between 9.45 and 15.30.
- ²⁴ Trading occurs among dealers for funds on deposit at Federal Reserve Banks (i.e. federal funds) as early as 6.30.
- ²⁵ Payments over CHIPS become final on completion of settlement, which normally occurs between 16.30 and 17.00. Rules are designed to ensure that settlement takes place no later than 18.00.
- ²⁶ ECU payment orders can be sent (for up to 28 forward value days) through S.W.I.F.T. 24 hours a day, seven days a week. At 14.00 (GMT + 1) on each value day the netting computer calculates participants' net net positions. Messages arriving after 14.00 are processed automatically for the next value day(s).
- ²⁷ There is no overnight market for ECU interbank loans. Day-to-day interbank ECU transactions are normally carried out in the Euro-markets on a TOM/NEXT basis.

Table 12Features of selected securities systems

		0	No. of pa	articipants	G.441		
	Type ¹	Owner/ Manager ²	of which direct		Settlement of cash leg ³	Delivery ³	
Belgium NBB Clearing CIK	G,O E,O	CB B	197 128	197 128	G G	G N	
Canada SSS ⁴ DCS ⁵	G,E,O G	B,SE,O B,SE,O	92 63	92 63	N N	G/N G	
France RGV ⁶ RELIT	B,C,G B,G,O,S	0 0	164 371	n.a. n.a.	RTGS N	RT GS	
Germany DBC	G,E,O	SE	385	385	N/G	G	
Italy Securities Settlement Procedures: LDT CAT Monte Titoli	G,E,O G E,O	CB CB Monte Titoli	278 455 426	278 455 426	N 7 7	N G G	
Japan JGB registration JGB book-entry	G G	CB CB	453 383	453 383	G/N G/N	G/N G/N	
Netherlands NECIGEF CB Clearing Institute ⁸	G+E+O •	SE ·	69 •	69 •	G ·	G •	
Sweden VPC OM	G+E+O O	B+O O	57 40	57 40	G/N N	G N	
Switzerland SECOM	G,E,O	В	350	350	G	G	
United Kingdom CGO CMO CREST	G+O O E,O	CB/SE CB B,SE,O	322 84 5,422	322 84 5,422	N N N	G G G	
United States Fedwire DTC (SDFS) ⁹	G E,O	CB B,SE,O	8,081 545	8,081 545	G N	G G	

(figures relate to 1998)

 1 G = Government securities, E = Equity, O = Other. 2 B = Banks, CB = Central Banks, SE = Stock Exchange, O = Other. 3 G = Gross, N = Net. 4 The book-based system of The Canadian Depository for Securities Limited (CDS). 5 The real-time, online debt-clearing service of CDS, which commenced operation during August 1994. 6 In the course of 1998, the operations of the Saturne system have been transferred in RGV system. 7 Deliveries free of payments. 8 Clearing institute central bank stopped its operations in 1998; activities are taken over by AEX-Clearing Depository/NECIGEF. 9 Same-day funds settlement.

Table 12 (cont.)						
	Delivery	Central Securities Depository	Cash Settlement Agent	Number of transactions (thousands)	Value of transactions (USD billions) ¹⁰	Ratio of transactions value to GDP (at annual rate)
Belgium NBB Clearing CIK	${}^{T+2/T+3^{11}}_{T+3^{12}}$	NBB CIK	NBB NBB	157 770,000	3,151.9 31.5	12.02 0.13
Canada SSS ⁴	up to T+3	CDS	B ¹³	$\{21,100^{14}$	{37,287 ¹⁴	{61.7
DCS ⁵	up to T+3	CDS	B^{15}		-	
France RGV ¹⁶ RELIT	T+T100 T+T30 ¹⁷	SICOVAM SICOVAM	CB CB	440 21,216	33,138 2,340	21.8 1.5
Germany DBC	T+0-40	DBC	CD	58,000	14,290	6.64
Italy Securities Settlement Procedures: LDT CAT Monte Titoli	T+2/T+3 T+5 ¹⁸ T T	CAT+ Monte Titoli CAT Monte Titoli	CB .7 .7	40,104 ¹⁹ 715 189	$30,634^{19}$ 1,432 58 ²⁰	25.8 1.2 0.0
Japan JGB registration JGB book-entry	T+3 T+3	CB CB	CB CB	1,218.9 773.9	31,912 32,804	6.4 6.6
Netherlands NECIGEF CB Clearing Institute ¹⁰	T+3	NECIGEF	CB ·	2,061	474 •	1.2
Sweden VPC OM	T+2, T+3 ²¹ T+3	VPC	CB CB	5,780 47,895	12,313	52.3
Switzerland SECOM	T+3	SIS	СВ	12,620	2,132	7.62
United Kingdom CGO ²² CMO CREST	T,T+1 T T+5	CB CB n.a.	CB CB B	1,114 221 35,801	54,627 5,496 22,214	39.9 4.0 16.2
United States Fedwire DTC (SDFS) ⁹	T T+3	CB DTC	CB DTC	14,400 164,000	197,800 77,000	22.6 8.8

¹⁰ Converted at yearly average exchange rate. ¹¹ T+2 for Treasury bills; T+3 for bonds. ¹² The seller retains the responsibility for delivering securities. ¹³ A single chartered bank. ¹⁴ Figures are for the twelve months ended 31 October 1998. ¹⁵ A single chartered bank, though not the same bank as for the SSS. ¹⁶ In the course of 1998 the operations of the Saturne system have been transferred in RGV system. ¹⁷ When processed by the "SLAB" system (special delivery service by bilateral agreements), the delivery occurs same day. ¹⁸ T+2 for government bills; T+3 for government and corporate bonds; T+5 for equities, warrants and convertible bonds. ¹⁹ Bilateral balances. ²⁰ Data only refers to bonds. ²¹ Same-day delivery and settlement is also possible under specific conditions. ²² In September 1998 the Bank to CRESTco during 1999.

(number of messages, in mousands)							
From/To	BE	CA	СН	DE	FR	GB	IT
BE	7,000	200	2,056	2,405	2,602	5,927	1,352
CA	225	4,596	495	507	300	1,446	222
СН	1,449	428	8,763	5,245	2,755	5,086	2,331
DE	1,918	385	4,138	7,572	3,011	8,105	3,557
FR	2,316	321	1,975	3,798	18,931	6,506	2,977
GB	3,618	1,405	5,118	9,490	4,967	28,686	5,195
IT	1,364	194	2,180	3,857	2,845	6,116	3,907
JP	543	267	762	1,192	751	4,440	510
NL	2,604	147	1,498	3,398	1,163	4,019	799
SE	363	56	323	1,357	368	2,788	343
US	2,924	3,703	6,496	8,239	4,345	17,754	3,694
Total G10	24,323	11,702	33,802	47,059	42,038	90,872	24,888
Total non-G10	7,294	2,315	10,022	25,040	11,355	33,230	10,052
Total all countries	31,618	14,016	43,825	72,099	53,393	124,102	34,940

Table 13
S.W.I.F.T. traffic: intra G10 messages flows in 1998

(number of messages, in thousands)

From/To	JP	NL	SE	US	Total G10	Non-G10	All countries
BE	536	2,731	315	3,925	29,049	7,406	36,455
CA	348	139	49	4,898	13,224	2,893	16,117
СН	837	1,254	272	8,051	36,473	9,491	45,963
DE	1,130	2,488	735	8,848	41,887	20,077	61,964
FR	820	1,207	298	6,573	45,724	10,534	56,258
GB	5,469	3,109	1,934	19,264	88,254	28,418	116,672
IT	543	765	224	4,907	26,901	8,446	35,347
JP	4,433	254	103	8,530	21,786	10,261	32,048
NL	312	3,051	243	4,268	21,502	5,366	26,868
SE	129	343	2,398	2,123	10,591	4,037	14,628
US	7,705	3,423	1,436	33,987	93,706	69,289	162,995
Total G10	22,263	18,765	8,008	105,375	429,096	176,219	605,315
Total non-G10	11,950	5,201	3,837	70,307	190,602	141,123	331,725
Total all countries	34,213	23,966	11,845	175,682	619,698	317,342	937,040

Standard methodology for the country tables

General	
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 it is felt appropriate.
Definitions	Definitions in the tables which are not given in this methodology are based on those in the glossary of <i>Payment systems in the Group of Ten</i> <i>countries</i> (December 1993). An abbreviated version of that glossary, containing terms relevant to this methodology, is attached.
	Where necessary, footnotes to individual tables explain the country-specific definitions, e.g. 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, e.g. "credit institutions" in EU countries.)
Intra-bank items	These are included as appropriate except where indicated.
Foreign currency	Foreign currencies are not included in the figures unless otherwise indicated.
Time period	Each table indicates the period (e.g. year) or point of time (e.g. end-year) that the data apply to. Where the data apply to a period, the data are the total for that period unless the table explicitly indicates otherwise (e.g. 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 Tables 12 and 13, where it is taken for granted that the data are estimated).
Seasonal adjustment	Figures are not seasonally adjusted unless otherwise indicated.
"n.a.", " . ", "neg." and "0"	Where data are not available, this is indicated by "n.a.". Where data are not applicable, this is indicated by ".". Where data are very small (relative to other relevant data in the table concerned), this is indicated by "neg.". Where data mean absolutely zero or none, rather than being a small number rounded to zero, this is indicated by "0".

Table 1: Basic statistical data

Population	Figures are averages for the year or at a point in the year as indicated.
GDP	Figures are nominal (not real).
GDP per capita	This figure equals the GDP figure divided by the population figure.

Exchange rate (domestic
currency vis-á-vis USD)The exchange rate of the local currency against the US dollar is provided
both as a year-end value and as an average for the year.year-end

average

Table 2: Settlement media used by non-banks

Notes and coin	<i>Notes and coin</i> represents the value of cash in circulation in the economy. It excludes the value of notes and coin kept in vaults at central banks or at banks (see Table 4) but includes the value held by non-residents.
Transferable deposits	These are transferable deposits which can be used to make cashless payments using one of the instruments mentioned in Tables 12 and 13. They include deposits held by non-residents. In some cases, a breakdown of holders (such as <i>persons</i> , <i>corporate sector</i> or <i>others</i>) is provided.
Others	Included only if narrow money supply includes items other than <i>notes and coin</i> and <i>transferable deposits</i> . A footnote indicates what is included in this item.
Narrow money supply	Notes and coin and transferable deposits (and others, if any) held by non-banks including non-residents.
Memorandum item:	
Broad money supply	Included in some cases. Footnotes to individual tables explain the definition of broad money supply used and how it differs from narrow money supply.

Table 3: Settlement media used by banks

Balances held at central bank	Deposits held by banks at the central bank which can be used for payment purposes, regardless of the type of account (e.g. current account, reserve account, settlement account, clearing account).
of which: required reserves	Banks' deposits held at the central bank to fulfil minimum reserve requirements. 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 deposits at other banks	Deposits held at other banks in the country (not at the central bank) which can be used for payment purposes.
Others	Included only if assets other than <i>balances held at central bank</i> and <i>transferable deposits at other banks</i> are relevant. In some cases, a breakdown is provided. In other cases a footnote indicates what is included in this item.
Memorandum items:	
Institutions' borrowing from central bank	Institutions' borrowing (in the forms defined in a footnote by the respective country) from the central bank which can be used for payment purposes.

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)
Denomination of banknotes	A breakdown by denomination is provided.
Total value of coin	The total value of coin (or a breakdown of coin by denomination) is provided.
	Denomination of banknotes plus total value of coin equals total banknotes and coin issued.
Banknotes and coin held by banks	Banknotes and coin in vaults of banks and thus not in general circulation.
Banknotes and coin in circulation outside banks	Equals total banknotes and coin issued less banknotes and coin held by banks (and identical to notes and coin in Table 2).

Table 5: Institutional framework

Categories	Categories of institutions are based on the individual countries' own financial systems. Particular categories are explained in a footnote where this is felt to be necessary.
Column 1: Number of institutions	Any institution which executes cashless payments for customers is mentioned, even if it does not hold deposits for customers (e.g. because the money transferred is given in cash by the customer to the institution, or debited from a sight account held at another institution).
Column 2: Number of branches	All branches of an institution. As a rule, the head office of the institution is counted as a branch if it offers cashless payment services.
Column 3: Number of accounts	 The accounts which are mentioned here are those which: are held by the institutions for non-banks; can be debited directly using one of the instruments mentioned in Tables 12 and 13.
<i>Column 4:</i> <i>Value of accounts</i>	Aggregate amount of deposits held on accounts mentioned in Column 3. The total value of accounts held at all the categories in this table is identical to <i>transferable deposits</i> in Table 2.
Memorandum item:	
Branches of foreign banks	Branches or agencies of foreign banks. Domestic subsidiaries of foreign banks are not included here.

Table 6: Cash dispensers, ATMs and EFTPOS terminals

All items include systems operated by banks and by non-banks.

Cash dispensers and ATMs	Cash dispensers and ATMs may be operated online (with real-time reference to an authorisation database) or offline.
Number of networks	A network of ATMs is defined as a group of ATMs managed by one or more service providers for a bank or group of banks.
Number of machines	As a rule, each terminal is counted as one machine.
Volume of transactions	_

Value of transactions	-
EFTPOS	A terminal at a retail location which is designed to capture, and in some cases also transmit, debit card transactions by electronic means.
Number of networks	An EFTPOS network is defined as a group of EFTPOS terminals managed by one or more service providers for a bank or group of banks.
Number of machines	As a rule, each EFTPOS terminal is counted as one machine.
Volume of transactions	_
Value of transactions	_

Table 7: Number of payment cards in circulation

A card which has several functions is counted in each relevant line (e.g. a eurocheque card in Europe which can be used to withdraw cash, to make payments and to guarantee cheques is counted in each of the first three main items). Therefore, in general, the figures should not be added.

Cards with a cash function	All cards enabling the holder to withdraw cash from a cash dispenser.
Cards with a debit/credit function	All cards which have a debit function, credit function or both functions.
of which: cards with a debit function cards with a credit	Cards enabling the holder to have his purchases directly charged to funds on his account at a bank. Includes both credit cards and charge cards (charge cards are also
function Cards with a cheque guarantee function	sometimes called delayed debit cards or travel and entertainment cards). Transactions with this card are guaranteed by the issuing bank up to a specific amount.
Memorandum item:	
Retailer cards	Cards issued by non-banking institutions, to be used at specified retail outlets. The holder of the card is usually granted a line of credit. Retailer cards do not allow the holder to make general multi-purpose purchases outside the specified retail outlets, in contrast to credit or charge cards.
Tables 8 and 9: Volume	and value of payment instructions handled by selected payment systems
Payment systems	Major payment systems are mentioned here (both those managed by the central bank and those managed by private operators).
	Figures are provided system by system. A breakdown is sometimes provided according to payment instruction (transaction) type.
	With regard to the volume and value of transactions, each payment instruction is counted once (not twice, i.e. the debit from the payer's account and the credit to payee's account are not counted separately).
Tables 10 and 11: Volu	me and value of transfer instructions handled by securities settlemen

Tables 10 and 11: Volume and value of transfer instructions handled by securities settlement systems

r securities settlement systems are mentioned here (both those
ged by the central bank and those managed by private operators).
es are provided system by system, with categories of various ities (such as government securities, bonds, shares, CDs, futures, ns, etc.) as sub-items in some cases.
a ır r

Transfer instructions comprise all transfer instructions entered in the system (including free deliveries). As regards options, all the contracts settled in the system are included. As far as CDs are concerned, all CDs settled in the system are considered regardless of their issuers (banks, central bank, mortgage institutions).

With regard to the volume and value of transactions, each transaction is counted once (not twice, for sale and purchase orders).

Tables 12 and 13: Indicators of use of various cashless payment instruments

The objective of these tables is to estimate the volume and value of payment instruments used in the country (and to indicate the relative importance of each payment instrument). As a rule, figures concerning only a sample of banks or customers are projected to figures covering the whole volume and value of payment instruments used in the country.

In principle, the term "payment" is defined here to exclude *any* funds transfer in which the originator and the beneficiary are the same. Therefore, any instrument which is used by banks' customers to obtain cash is not counted (e.g. cheques used to obtain cash, or ATM withdrawals - although these operations might be included in Tables 8 and 9, whose focus is different). Likewise, transfers between accounts in the same name in the same institution are excluded (e.g. transfers from a cheque account to a savings account, if both accounts are held at the same bank). However, because in practice it is usually impossible to exclude them from the data, transfers between accounts in the same name but where the accounts are held at *different* institutions are included unless indicated otherwise.

Strictly speaking, "cashless" means without the involvement of cash. Such a narrow definition would exclude money (postal) orders, which involve cash at one or both ends of the transaction, as well as the majority of travellers' cheques, which are often paid in cash. It is not realistic to use such a narrow definition because it is very doubtful whether available statistics would permit a breakdown of the number of money orders or travellers' cheques according to the way they are paid for or settled. Therefore, all payment instruments which involve cashless interbank settlement are included in the statistics.

In the case of cross-border payments, there is a need to avoid double-counting (i.e. in the country of the originator and in the country of the beneficiary). Since comparisons are likely to be made with total population, number of cardholders, etc., cross-border cashless payments are counted in the country of the originator.

The following guidelines are also followed:

- no distinction is made between interbank items (bank A to bank B), inter-branch items (bank A branch to another bank A branch), or intra-branch items (bank A customer to another bank A customer at the same branch): all are included in the statistics;
- funds transfers used to settle credit card balances are included (this is a payment from the user to the issuer);
- Cheques issuedTravellers' cheques, eurocheques, bankers' drafts and money orders are
included under cheques. Commercial bills are included if funds transfers
can be made on the basis of these, without using another medium.Payments by debit and
credit cardsAlso includes charge cards.Other card paymentsPayments made using retailer cards or prepaid cards are shown here if
the data are available. The row label or a footnote indicates the type of
payments included.

Paper-based credit transfers Paperless credit transfers	The distinction between paper-based and paperless credit transfers is based on the interbank exchange: credit transfer orders which are exchanged on a paperless basis between banks are deemed to be paperless even if the originator and/or the beneficiary submitted or received a piece of paper.
Direct debits	Pre-authorised debit on the payer's account by the payee.
Total	The sum of the above items

Table 14 and Table 15: S.W.I.F.T. tables

These figures are provided by S.W.I.F.T.

Sub-members (Table 14)	Domestic users sponsored by members abroad.
Participants (Table 14)	Participants are not shareholders in S.W.I.F.T. and their message traffic over the network is restricted.
Category I (Table 15)	Messages used by banks to transfer funds to an account of a customer (i.e. messages relating to payments that are category I messages, e.g. MT100 messages).
Category II (Table 15)	Messages used by banks to transfer funds to an account of another bank (i.e. messages relating to payments that are category II messages, e.g. MT200 messages).
Domestic traffic (Table 15)	Messages sent to/received from domestic users.

Glossary

Automated clearing house (ACH)	An electronic clearing system in which payment orders are exchanged among financial institutions, primarily via magnetic media or telecommunication networks, and handled by a data-processing centre.
Automated teller machine (ATM)	Electro-mechanical device that permits authorised users, typically using machine-readable plastic cards, to withdraw cash from their accounts and/or access other services, such as balance enquiries, transfer of funds or acceptance of deposits. ATMs may be operated either online with real-time access to an authorisation database or offline.
Bank draft	In Europe, the term generally refers to a draft drawn by a bank on itself. The draft is purchased by the payer and sent to the payee, who presents it to his bank for payment. That bank presents it to the payer's bank for reimbursement. In the United States, the term generally refers to a draft or cheque drawn by a bank on itself or on funds deposited with another bank. In the case of a cashier's cheque, the bank is both the drawer and drawee. In the case of a teller's cheque, one bank is the drawer and a second bank is the drawee. Bank drafts may be written by a bank for its own purposes or may be purchased by a customer and sent to a payee to discharge an obligation. See <i>Draft</i> .
Bill of exchange	A written order from one party (the drawer) to another (the drawee) to pay a specified sum on demand or on a specified date to the drawer or to a third party specified by the drawer. Widely used to finance trade and, when discounted with a financial institution, to obtain credit. See also <i>Draft</i> .
Card	See Cash card, Cheque guarantee card, Credit card, Debit card, Delayed debit card, Prepaid card, Retailer's card, Travel and entertainment card.
Cash card	Card for use only in ATMs or cash dispensers (often, other cards also have a cash function that permits the holder to withdraw cash).
Cash dispenser	Electro-mechanical device that permits consumers, typically using machine-readable plastic cards, to withdraw banknotes (currency) and, in some cases, coins. See also <i>Automated teller machine (ATM)</i> .
Cashier's cheque	See Bank draft.
Charge card	See Delayed debit card and Travel and entertainment card.
Cheque	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. Widely used for settling debts and withdrawing money from banks. See also <i>Bill of exchange</i> .
Cheque guarantee card	A card issued as part of a cheque guarantee system. This function may be combined with other functions in the same card, e.g. those of a cash card or debit card. See also <i>Cheque guarantee system</i> .

- Cheque guarantee A system to guarantee cheques, typically up to a specified amount, that have been validated by the merchant either on the basis of a card issued to the cheque writer or through a central database accessible to merchants. Validated cheques are guaranteed by the issuer of the guarantee card, the drawee bank or the system operator.
- **Credit card** Card indicating that the holder has been granted a line of credit. It enables him to make purchases and/or draw cash up to a prearranged ceiling; the credit granted can be settled in full by the end of a specified period or can be settled in part, with the balance taken as extended credit. Interest is charged on the amount of any extended credit and the holder is sometimes charged an annual fee.
- **Credit card company** A company which owns the trademark of a particular credit card, and may also provide a number of marketing, processing or other services to the members using the card services.
- **Credit transfer** A payment order or possibly a sequence of payment orders made for the purpose of placing funds at the disposal of the beneficiary. Both the payment instructions and the funds described therein move from the bank of the payer/originator to the bank of the beneficiary, possibly via several other banks as intermediaries and/or more than one credit transfer system.

Credit transfer system A system through which payment instructions and the funds described therein may be transmitted for the purpose of effecting credit transfers.

- **Debit card** Card enabling the holder to have his purchases directly charged to funds on his account at a deposit-taking institution (may sometimes be combined with another function, e.g. that of a cash card or cheque guarantee card).
- **Debit transfer system** (or debit collection system) A funds transfer system in which debit collection orders made or authorised by the payer move from the bank of the payee to the bank of the payer and result in a charge (debit) to the account of the payer; for example, cheque-based systems are typical debit transfer systems.
- **Delayed debit card** Card issued by banks indicating that the holder may charge his account up to an authorised limit. It enables him to make purchases but does not offer extended credit, the full amount of the debt incurred having to be settled at the end of a specified period. The holder is usually charged an annual fee.
- **Direct debit** A pre-authorised debit on the payer's bank account initiated by the payee.
- **Draft** A written order from one party (the drawer) to another (the drawee) to pay a party identified on the order (payee) or to bearer a specified sum, either on demand (sight draft) or on a specified date (time draft). See *Cheque, Bank draft, Bill of exchange.*
- **EFTPOS** See Point of sale (POS).
- Giro system See Credit transfer system.

Interbank fundsA funds transfer system in which most (or all) direct participants aretransfer system (IFTS)Financial institutions, particularly banks and other credit institutions.

Money order	An instrument used to remit money to the named payee, often used by persons who do not have a chequing account relationship with a financial institution, to pay bills or to transfer money to another person or to a company. There are three parties to a money order: the remitter (payer), the payee and the drawee. Drawees are usually financial institutions or post offices. Payees can either cash their money orders or present them to their bank for collection.
Offline	In the context of payment and settlement systems, the term may refer to the transmission of transfer instructions by users, through such means as voice, written or telefaxed instructions, that must subsequently be input into a transfer processing system. The term may also refer to the storage of data by the transfer processing system on media such as magnetic tape or disk such that the user may not have direct and immediate access to the data. See <i>Online</i> .
Online	In the context of payment and settlement systems, the term may refer to the transmission of transfer instructions by users, through such electronic means as computer-to-computer interfaces or electronic terminals, that are entered into a transfer processing system by automated means. The term may also refer to the storage of data by the transfer processing system on a computer database such that the user has direct access to the data (frequently real-time) through input/output devices such as terminals. See <i>Offline</i> .
Paperless credit transfers	Credit transfers that do not involve the exchange of paper documents between banks. Other credit transfers are called paper-based.
Payment	The payer's transfer of a monetary claim on a party acceptable to the payee. Typically, claims take the form of banknotes or deposit balances held at a financial institution or at a central bank.
Payment order (or payment instruction)	An order or message requesting the transfer of funds (in the form of a monetary claim on a party) to the order of the payee. The order may relate either to a credit transfer or to a debit transfer.
Payment system	A payment system consists of a set of instruments, banking procedures and, typically, interbank funds transfer systems that ensure the circulation of money.
Point of sale (POS)	This term refers to the use of payment cards at a retail location (point of sale). The payment information is captured either by paper vouchers or by electronic terminals, which, in some cases, are designed also to transmit the information. Where this is so, the arrangement may be referred to as "electronic funds transfer at the point of sale" (EFTPOS).
Prepaid card	A card "loaded" with a given value, paid for in advance.
Retailer's card	A card issued by non-banking institutions, to be used in specified stores. The holder of the card has usually been granted a line of credit.
Retail transfer system	Interbank funds transfer system which handles a large volume of payments of relatively low value in such forms as cheques, credit transfers, direct debits, ATM transactions and EFT at the point of sale.
Settlement	An act that discharges obligations in respect of funds or securities transfers between two or more parties.
Settlement system	A system in which settlement takes place.

S.W.I.F.T. (Society for Worldwide Interbank Financial Telecommunication)	A cooperative organisation created and owned by banks that operates a network which facilitates the exchange of payment and other financial messages between financial institutions (including broker-dealers and securities companies) throughout the world. A S.W.I.F.T. payment message is an instruction to transfer funds; the exchange of funds (settlement) subsequently takes place over a payment system or through correspondent banking relationships.
Teller's cheque	See Bank draft.
Transfer	Operationally, the sending (or movement) of funds or securities or of a right relating to funds or securities from one party to another party by (1) conveyance of physical instruments/money; (2) accounting entries on the books of a financial intermediary; or (3) accounting entries processed through a funds and/or securities transfer system. The act of transfer affects the legal rights of the transferor, transferee and possibly third parties in relation to the money balance, security or other financial instrument being transferred.
Transfer system	A generic term covering interbank funds transfer systems and exchange- for-value systems.
Travel and entertainment (charge) card	Card issued by non-banks indicating that the holder has been granted a line of credit. It enables him to make purchases but does not offer extended credit, the full amount of the debt incurred having to be settled at the end of a specified period. The holder is usually charged an annual fee.

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