

**BANK FOR INTERNATIONAL SETTLEMENTS**

**STATISTICS ON  
PAYMENT SYSTEMS IN  
THE GROUP OF TEN COUNTRIES**

**figures for 1996**

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

**Basle  
December 1997**

The present publication is also available on the BIS World Wide Web site (<http://www.bis.org>).

© *Bank for International Settlements 1998. All rights reserved. Brief excerpts may be reproduced or translated provided the source is stated.*

ISSN 1024-3380

# TABLE OF CONTENTS

	<b>Page</b>
<b>Country tables</b>	
Belgium .....	1
Canada .....	11
France .....	23
Germany .....	35
Italy .....	45
Japan .....	55
Netherlands .....	65
Sweden .....	73
Switzerland .....	81
United Kingdom .....	89
United States .....	99
<b>Comparative tables.....</b>	<b>111</b>



## **COUNTRY TABLES**



Table 1  
Basic statistical data

	1992	1993	1994	1995	1996
Population (millions) .....	10.05	10.09	10.12	10.14	10.17
GDP (BEF billions) .....	7,142	7,316	7,678	7,936	8,190
GDP per capita (BEF) .....	710,646	725,074	758,696	782,642	805,151
Exchange rate (domestic currency vis-à-vis USD):					
<i>year-end</i> .....	<i>33.18</i>	<i>36.11</i>	<i>31.84</i>	<i>29.44</i>	<i>32.01</i>
<i>average</i> .....	<i>32.12</i>	<i>34.55</i>	<i>33.45</i>	<i>29.49</i>	<i>30.96</i>

Table 2  
Settlement media used by non-banks

(at year-end, not seasonally adjusted, in billions of Belgian francs)

	1992	1993	1994	1995	1996
Notes and coin .....	414.1	424.7	396.3	416.2	435.8
Transferable deposits <sup>1</sup> .....	902.0	1,008.2	1,066.9	1,111.3	1,150.1
Other .....	.	.	.	.	.
Narrow money supply .....	1,316.1	1,432.9	1,463.2	1,527.5	1,585.9
<i>Memorandum item:</i>					
Broad money supply .....	6,061.2	7,110.9	6,621.4	6,615.1	7,228.2

<sup>1</sup> Sight deposits in BEF of companies and private persons held with the Postcheque Office and credit institutions.

Table 3  
**Settlement media used by banks**  
 (in billions of Belgian francs)

	1992	1993	1994	1995	1996
Reserve balances held at central bank <sup>1</sup> .....	2.09	1.41	2.05	1.86	2.09
Transferable deposits at other institutions <sup>2</sup> .....	199.5	103.5	113.1	128.9	199.5
Other .....	.	.	.	.	.
<i>Memorandum items:</i>					
Required reserves .....	.	.	.	.	.
Institutions' borrowing from central bank <sup>1,3</sup> .....	3.74	9.01	3.13	4.13	1.24

<sup>1</sup> Average of end-of-month figures. <sup>2</sup> Payment media held by Belgian credit institutions with other credit institutions (sight accounts, BEF and foreign currencies, in Belgium and abroad). <sup>3</sup> Current account advances.



Table 4

**Banknotes and coin**

(at year-end, not seasonally adjusted, in billions of Belgian francs)

	1992	1993	1994	1995	1996
Total banknotes and coin issued.....	448.1	459.3	431.4	465.9	486.2
Denominations:					
Notes:					
10,000 francs <sup>1</sup> .....	15.3	80.6	182.6	206.1	225.7
5,000 francs <sup>2</sup> .....	279.1	220.8	6.1	0.8	.
2,000 francs <sup>3</sup> .....	.	.	100.3	124.2	134.6
1,000 francs .....	109.1	111.9	95.6	86.2	75.0
500 francs .....	12.6	12.9	13.1	13.5	13.6
200 francs <sup>4</sup> .....					4.9
100 francs .....	14.1	14.4	14.5	15.0	10.9
Coin:					
500 francs .....	0.2	0.2	0.2	0.0	0.2
250 francs .....	.	.	0.0	0.1	0.1
50 francs .....	7.1	7.6	7.8	8.1	8.7
20 francs .....	6.7	6.8	6.9	7.2	7.6
5 francs .....	2.5	2.6	2.7	2.8	3.0
1 franc .....	1.1	1.2	1.3	1.4	1.6
0.5 francs .....	0.3	0.3	0.3	0.3	0.3
Banknotes and coin held by credit institutions .....	34.0	34.6	35.1	49.7	50.4
Total banknotes and coin outside credit institutions .....	414.1	424.7	396.3	416.2	435.8

<sup>1</sup> Notes with a denomination of BEF 10,000 have only been issued since 11th December 1992. <sup>2</sup> The BEF 5,000 banknote ceased to be legal tender from 1st December 1994. <sup>3</sup> A new banknote with a denomination of BEF 2,000 was issued on 22nd April 1994. <sup>4</sup> Issuance of the BEF 200 banknote started on 25th January 1996.

Table 5  
**Institutional framework**  
 (at end-1996)

Categories	Number of institutions	Number of branches	Number of accounts (thousands)	Value of accounts (BEF billions)
Central bank .....	1	14 <sup>1</sup>	.	.
Credit institutions .....	141	7,601 <sup>2</sup>	10,487	1,082.0
Postcheque .....	1	1,706	1,223	68.0
Branches of banks incorporated under foreign law .....	40	.	.	.
<i>of which EU-based</i> .....	25	.	.	.

<sup>1</sup> Nine of the 23 branches became representation offices, in which no transactions with credit institutions take place. <sup>2</sup> Non-full-size branches excluded.

Table 6  
**Cash dispensers, ATMs and EFTPOS terminals**

	1992	1993	1994	1995	1996
<b>Cash dispensers and ATMs:<sup>1</sup></b>					
<i>Number of networks</i> .....	3	15	15	15	15
<i>Number of machines</i> .....	1,096	2,819	3,170	3,654	4,207
<i>Volume of transactions (millions)</i> .....	88.33	115.65	132.33	144.93	153.80
<i>Value of transactions (BEF billion)</i> .....	331.67	458.18	533.17	589.28	637.71
<b>EFTPOS:</b>					
<i>Number of networks</i> .....	2	2	2	2	2
<i>Number of terminals</i> .....	40,627	52,984	63,765	72,892	81,331
<i>Volume of transactions (millions)</i> .....	131.44	157.81	181.96	211.45	243.19
<i>Value of transactions (BEF billions)</i> .....	276.85	344.43	412.67	482.91	564.84

<sup>1</sup> As from 1993 the ATMs and the transactions at ATMs which are reserved exclusively for the use of a particular bank's customers are added.

Table 7  
**Number of payment cards in circulation**  
 (in thousands)

	1992	1993	1994	1995	1996
Cards with a cash function .....	7,792	8,316	8,912	9,461	10,591
Cards with a debit/credit function <sup>1</sup> .....	7,907	8,431	8,912	9,461	10,591
<i>of which:</i>					
<i>cards with a debit function</i>	6,101	6,434	6,780	7,190	8,141
<i>cards with a credit function<sup>2</sup></i> .....	1,806	1,997	2,132	2,271	2,450
Cards with a cheque guarantee function .....	4,598	4,856	4,660	4,645	4,366
Retailer cards .....	913	1,002	1,089	1,221	1,372

<sup>1</sup> Overlaps with the cards with a cash function. <sup>2</sup> Most cards with a credit function are of the delayed debit type.

Table 8

**Payment instructions handled by selected payment systems:  
volume of transactions**  
(in millions)

	1992	1993	1994	1995	1996
ELLIPS <sup>1</sup> .....	.	.	.	.	0.21
Clearing House .....	24.67	22.52	15.88	14.45	11.57
<i>Securities clearing</i>					
<i>balances</i> .....	.	.	.	.	.
<i>Postal drafts and money order</i>					
.....	2.21	2.19	3.76	3.72	3.28
<i>Non-resident transactions</i> <sup>2</sup> ...	0.46	0.94	1.15	1.37	1.08
<i>Debits</i> .....	5.55	4.82	6.25	5.11	4.14
<i>Ordinary credits</i> .....	3.35	2.46	3.01	2.67	1.84
<i>Bilaterally exchanged credits</i> <sup>2</sup>					
.....	7.65	7.16	1.71	1.58	1.23
<i>Provinces</i> <sup>3</sup> .....	5.45	4.95	.	.	.
<i>Others</i> .....	0.00	0.00	.	.	.
CEC .....	695.20	740.25	784.33	826.22	867.92
Direct debits .....	56.53	61.94	66.43	71.95	76.11
of which:					
<i>ordinary direct debits</i> .....	54.71	59.89	64.07	69.37	73.27
<i>refunds</i> .....	0.49	0.51	0.52	0.63	0.67
<i>unpaid direct debits</i> .....	1.33	1.54	1.84	1.95	2.17
Other debit operations .....	290.43	306.33	322.14	337.06	351.33
of which:					
<i>truncated cheques</i> .....	98.85	91.35	84.76	77.47	72.08
<i>ATMs and POS</i> .....	191.31	214.61	237.02	259.21	278.84
<i>unpaid cheques</i> <sup>4</sup> .....	0.27	0.37	0.36	0.38	0.41
Credit transfers .....	348.08	371.21	394.64	416.03	439.61
of which:					
<i>ordinary credit transfers</i> .....	294.68	308.10	322.90	337.02	352.67
<i>counterparty postal</i>					
<i>drafts</i> .....	3.52	3.34	2.97	2.70	2.48
<i>counterparty ATM-POS</i> .....	29.97	40.09	49.26	57.01	64.96
<i>inpayment transfers</i> .....	19.91	19.68	19.51	19.30	19.50
Large-value credit transfers .....	0.16	0.77	1.12	1.17	0.87

<sup>1</sup> ELLIPS, the Belgian RTGS system, went live on 24th September 1996. <sup>2</sup> As from 1st October 1996 the statistics on the gross volume of transactions are no longer available. <sup>3</sup> Since 1994, the volume of transactions in the province has been split up and classified in the relevant groups.

Table 9

**Payment instructions handled by selected payment systems:  
value of transactions**  
(in billions of Belgian francs)

	1992	1993	1994	1995	1996
ELLIPS <sup>1</sup>	.	.	.	.	72,533
Clearing House .....	203,067	298,952	337,567	334,353	243,142
<i>Securities clearing balances</i> <sup>2</sup>	5,531	8,651	11,010	12,522	10,092
<i>Postal drafts and money orders</i>	43	42	67	40	60
<i>Non resident transactions</i> <sup>3</sup>	21,970	71,951	104,193	119,679	96,263
<i>Debits</i> .....	18,482	18,632	16,862	14,887	15,229
<i>Ordinary credits</i> .....	150,273	191,268	205,305	187,110	121,413
<i>Bilaterally exchanged credits</i> <sup>3</sup>	250	234	130	115	85
<i>Provinces</i> <sup>4</sup> .....	6,518	8,174	.	.	.
CEC .....	15,928	21,827	24,512	26,588	26,662
Direct debits .....	341	367	407	440	478
<i>of which:</i>					
<i>ordinary direct debits</i> .....	324	350	387	419	455
<i>refunds</i> .....	5	5	5	6	6
<i>unpaid direct debits</i> .....	12	12	15	15	17
Other debit operations .....	1,699	1,787	1,830	1,859	1,883
<i>of which:</i>					
<i>truncated cheques</i> .....	1,158	1,166	1,148	1,123	1,091
<i>ATMs and POS</i> .....	541	610	671	724	779
<i>unpaid cheques</i> <sup>2</sup> .....	7	11	11	12	13
Credit transfers .....	9,322	9,733	10,255	10,373	10,583
<i>of which:</i>					
<i>ordinary credits transfers</i> .....	8,606	8,937	9,386	9,438	9,592
<i>counterparty postal drafts</i> .....	44	43	39	37	35
<i>counterparty ATM-POS</i> .....	532	599	663	719	773
<i>inpayment transfers</i> .....	140	154	167	179	183
Large-value credit transfers .....	4,566	9,940	12,020	13,916	13,718

<sup>1</sup> ELLIPS, the Belgian RTGS system went live on 24th September 1996. <sup>2</sup> As from 1st October 1996 end-of-day balances of the participants are directly registered on their accounts with the NBB. <sup>3</sup> As from 1st October 1996 end-of-day balances of the participants are directly settled via ELLIPS. <sup>4</sup> Since 1994, the value of transactions in the local branches has been split up and classified in the relevant groups.

Table 10

**Transfer instructions handled by securities settlement systems:  
volume of transactions**

	1992	1993	1994	1995	1996
NBB clearing:					
<i>Government securities</i> .....	80,287	147,180	188,258	198,608	229,798
CIK:					
<i>Shares (millions)</i> <sup>1</sup> .....	253.1	566.0	664.2	485.2	735.0

<sup>1</sup> The volume of shares refers to the number of shares and not to the number of transactions.

Table 11

**Transfer instructions handled by securities settlement systems:  
value of transactions**  
(in billions of Belgian francs)

	1992	1993	1994	1995	1996
Securities Clearing System of the NBB:					
<i>Government securities</i> .....	18,261	35,805	66,148	85,050	92,937
CIK:					
<i>Shares</i> .....	315.6	494.4	553.8	546.7	809.0

Table 12  
**Indicators of use of various cashless payment instruments:  
 volume of transactions**  
 (in millions)

Instruments	1992	1993	1994	1995	1996
Cheques issued <sup>1</sup> .....	174.2	139.1	124.1	117.1	109.7
Payments by debit and credit cards <sup>2</sup> .....	144.7	169.2	190.9	218.1	249.3
Paper-based credit transfers .....	4.6	3.4	3.0	2.7	1.8
Paperless credit transfers <sup>3</sup> .....	524.0	586.9	642.7	662.9	691.6
Direct debits .....	81.3	88.5	100.1	104.5	113.5
Other .....	.	.	.	.	.
<b>Total</b> .....	<b>928.8</b>	<b>987.1</b>	<b>1,060.8</b>	<b>1,105.3</b>	<b>1,165.9</b>

<sup>1</sup> Postal drafts included; until 1992 the figures include partly data relating to cheques used for cash withdrawals. <sup>2</sup> Payments with retailers' cards included. <sup>3</sup> In-payment transfers included.

Table 13  
**Indicators of use of various cashless payment instruments:  
 value of transactions**  
 (in billions of Belgian francs)

Instruments	1992	1993	1994	1995	1996
Cheques issued <sup>1</sup> .....	12,460	13,246	13,693	12,287	11,492
Payments by debit and credit cards <sup>2</sup> .....	331	388	443	508	591
Paper-based credit transfers .....	153,511	196,896	205,305	187,110	121,413
Paperless credit transfers <sup>3</sup> .....	35,284	58,709	73,984	87,037	167,317
Direct debits .....	485	787	885	979	1,102
Other .....	.	.	.	.	.
<b>Total</b> .....	<b>202,071</b>	<b>270,026</b>	<b>294,310</b>	<b>287,921</b>	<b>301,915</b>

<sup>1</sup> Postal drafts included; until 1992 the figures include partly data relating to cheques used for cash withdrawals. <sup>2</sup> Payments with retailers' cards included. <sup>3</sup> In-payment transfers included.

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

	1992	1993	1994	1995	1996
Members .....	35	34	34	33	32
<i>of which: live</i> .....	35	33	34	32	32
Sub-members <sup>1</sup> .....	39	35	37	38	37
<i>of which: live</i> .....	32	33	36	37	37
Participants <sup>2</sup> .....	2	2	3	5	6
<i>of which: live</i> .....	1	2	3	3	6
Total users .....	76	71	74	76	75
<i>of which: live</i> .....	68	68	73	72	75
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i> .....	2,074	2,244	2,551	2,693	2,874
<i>sub-members</i> .....	1,738	1,887	2,097	2,259	2,404
<i>participants</i> .....	91	125	218	277	354
<i>users</i> .....	3,903	4,256	4,866	5,229	5,632

<sup>1</sup> Domestic users sponsored by members abroad. <sup>2</sup> 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**

	1992	1993	1994	1995	1996
Total messages sent .....	18,097,152	19,828,726	21,233,594	23,796,106	26,928,329
<i>of which:</i>					
<i>category I</i> <sup>1</sup> .....	5,751,632	6,145,021	6,331,292	6,660,281	6,845,391
<i>category II</i> <sup>2</sup> .....	5,030,069	5,233,779	5,350,057	5,606,480	6,307,048
Total messages received .....	15,086,640	17,234,167	18,910,023	21,003,109	24,324,277
<i>of which:</i>					
<i>category I</i> <sup>1</sup> .....	5,171,658	5,556,991	5,835,044	8,197,728	6,441,304
<i>category II</i> <sup>2</sup> .....	3,596,967	4,073,542	4,198,073	4,457,184	5,202,993
Domestic traffic <sup>3</sup> .....	2,920,427	3,604,238	3,907,203	4,452,493	5,283,148
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic .....	405,540,962	457,218,200	518,097,873	603,575,374	687,785,294

<sup>1</sup> Category I: customer (funds) transfers. <sup>2</sup> Category II: bank (funds) transfers. <sup>3</sup> Messages sent to/received from domestic users.

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



Table 1  
Basic statistical data

	1992	1993	1994	1995	1996
Population (millions):					
<i>year-end</i> .....	28.7	29.1	29.4	29.7	30.1
<i>average</i> .....	28.5	28.9	29.2	29.6	29.9
GDP (CAD billions) .....	696.5	724.5	762.8	781.6	812.9
GDP per capita .....	24,439	25,069	26,123	26,405	27,187
Exchange rate (domestic currency vis-à-vis USD):					
<i>year-end</i> <sup>1</sup> .....	1.2709	1.3217	1.4018	1.3640	1.3706
<i>average</i> <sup>2</sup> .....	1.2083	1.2898	1.3659	1.3726	1.3639

<sup>1</sup> Closing spot rate for the year. <sup>2</sup> Average noon spot rate for the year.

Table 2  
Settlement media used by non-banks  
(at year-end, not seasonally adjusted, in millions of Canadian dollars)

	1992	1993	1994	1995	1996
Notes and coin .....	22,790	24,400	26,152	26,835	27,862
Transferable deposits <sup>1</sup> .....	108,625	117,554	122,599	135,065	155,448
Narrow money supply (M <sub>1</sub> ) .....	48,433	55,428	59,112	62,688	73,613
<i>Memorandum item:</i>					
Broad money supply (M <sub>2</sub> +) <sup>1</sup> .....	559,348	577,843	591,679	618,397	639,986

<sup>1</sup> Canadian dollar deposit liabilities consist of demand deposits and other chequable deposits.

Table 3

**Settlement media used by credit/deposit-taking institutions**

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

	1992	1993	1994	1995	1996
Reserve or settlement balances held at central bank .....	1,201	1,295	559	359	478
Reserve or settlement balances held at other deposit-taking institutions <sup>1</sup> .....	112	123	. <sup>3</sup>	. <sup>3</sup>	. <sup>3</sup>
<i>Memorandum items:</i>					
Required reserves .....	5,225	4,981	. <sup>3</sup>	. <sup>3</sup>	. <sup>3</sup>
Institutions' borrowing from central bank <sup>2</sup> .....	155	214	312	478	543

<sup>1</sup> Statutory reserves held by chartered banks at other chartered banks under the terms of reserve-holding agreements. Excludes settlement balances held by non-bank Indirect Clearers at their clearing agents. <sup>2</sup> Advances to members of the Canadian Payments Association. <sup>3</sup> 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.

Table 4

**Banknotes and coin**

(at year-end, not seasonally adjusted, in thousands of Canadian dollars)

	1992	1993	1994	1995	1996
Total banknotes and coin outstanding .....	27,955,285	29,697,946	30,863,452	31,404,902	32,346,345
Coinage .....	2,369,102	2,461,277	2,534,800	2,627,247	3,237,236
Denomination of banknotes: <sup>1</sup>					
1,000 dollars .....	1,764,341	2,080,675	2,344,424	2,510,111	2,780,110
500 dollars .....	23	23	23	23	23
100 dollars .....	9,446,389	10,395,069	11,121,838	11,431,499	11,809,378
50 dollars .....	3,768,243	3,862,611	3,897,707	3,844,013	3,844,436
25 dollars .....	46	46	46	46	46
20 dollars .....	8,117,219	8,433,602	8,512,078	8,515,415	8,468,612
10 dollars .....	1,104,404	1,075,244	1,056,548	1,043,990	993,622
5 dollars .....	798,979	767,715	762,274	765,042	777,878
2 dollars .....	430,334	443,765	456,853	491,594	260,196
1 dollar .....	166,383	165,046	163,988	163,050	161,937
Other .....	12,873	12,873	12,873	12,872	12,871
Banknotes and coin held by chartered banks <sup>2</sup> .....	4,763,101	4,830,868	4,455,787	4,190,645	4,294,452
Total banknotes and coin outside chartered banks <sup>3</sup> .....	23,192,184	24,867,078	26,407,665	27,214,257	28,051,893

<sup>1</sup> Value of all notes outstanding at the end of the year. <sup>2</sup> Note that the variable previously published here was "Banknotes held by chartered banks". All figures, therefore, are revised. <sup>3</sup> Note that the variable previously published here was "Total banknotes outside chartered banks". All figures, therefore, are revised.

Table 5  
**Institutional framework**  
 (at end-1996)

Categories	Number of institutions	Number of branches	Number of transferable deposit accounts (millions)	Value of transferable deposit accounts <sup>1</sup> (CAD millions)
Central bank .....	1	11	.	.
Chartered banks .....	60	8,125	.	124,889
Local credit unions and caisses populaires .....	2,398	3,840	.	19,426
Trust and loan companies <sup>2</sup> .....	37	1,577	.	8,690
Governmental savings institutions <sup>3</sup> ....	2	170	.	2,443
Post Office .....	.	.	.	.
<i>Memorandum item:</i>				
Branches of foreign deposit-taking institutions .....	.	.	.	.

<sup>1</sup> Household sector only. <sup>2</sup> Only a few operate nationwide. Figure excludes those trust and loan companies that do not accept transferable deposits. <sup>3</sup> Operate only in Alberta or Ontario.

Table 6  
Cash dispensers, ATMs and EFTPOS terminals<sup>1</sup>

	1992	1993	1994	1995	1996
<b>Cash dispensers and ATMs:</b>					
Number of networks .....	40	40	40	40	40
Number of machines <sup>2</sup> .....					
<b>Total</b> .....	<b>14,596</b>	<b>16,078</b>	<b>16,927</b>	<b>17,670</b>	<b>18,570</b>
<i>of which:</i>					
<i>Owned by member institutions of the Canadian Payments Association</i>					
	14,576	16,058	16,927	17,670	18,570
<i>Owned or operated by other entities</i>					
	20	20	0	0	0
<b>Volume of transactions (millions)</b>					
<b>Total</b> .....	<b>1,024.8</b>	<b>1,084.8</b>	<b>1,197.3</b>	<b>1,364.1</b>	<b>1,481.1</b>
<i>of which:</i>					
<i>Withdrawals</i> .....	757.4	796.4	877.5	978.9	1,019
<i>Deposits</i> .....	124.0	130.5	143.6	174.4	201.5
<i>Bill payments</i> .....	32.6	36.1	41.7	50.3	56.4
<i>Inter-account transfers</i> .....	50.6	56.8	65.6	76.3	81.9
<i>Balance inquiries</i> .....	60.2	65.0	68.9	84.2	122.3
<b>Value of transactions (CAD billions)</b>					
<i>Withdrawals</i> .....	50.7	55.0	61.4	68.5	72.3
<i>Deposits</i> .....	.	.	.	.	.
<i>Bill payments</i> .....	2.4	2.7	3.1	3.8	4.3
<i>Inter-account transfers</i> .....	.	.	.	.	.
<i>Balance inquiries</i> .....	.	.	.	.	.
<b>EFTPOS:</b>					
<i>Number of networks</i> <sup>3</sup> .....	11	10	11	11	11
<i>Number of terminals</i> .....	29,600	61,900	119,733	189,898	253,089
<i>Volume of transactions (millions)</i> .....	30.3	74.0	185.2	393.8	676.5
<i>Value of transactions (CAD billions)</i> .....	1.6	3.7	9.4	18.8	30.2

<sup>1</sup> All figures, other than those for the number of cash dispensers and ATMs owned by member institutions of the Canadian Payments Association, are estimates. <sup>2</sup> As at 31st January of the following year. <sup>3</sup> Includes both shared and proprietary networks.

Table 7  
**Number of payment cards in circulation**  
 (at year-end, in millions<sup>1</sup>)

	1992	1993	1994	1995	1996
Debit cards issued by deposit-taking institutions .....	18.5	22.5	24.0	25.9	27.0
Credit cards issued by deposit-taking institutions <sup>2,3</sup> .....	24.4	25.0	27.5	28.8	30.2
Cheque guarantee cards issued by deposit-taking institutions .....	.	.	.	.	.
Cheque guarantee cards issued by retailers or by third parties .....	.	.	.	.	.
Credit cards issued by retailers or by third parties .....	125.0	125.0	125.0	125.0	125.0

<sup>1</sup> All figures, other than those for credit cards issued by deposit-taking institutions, are estimates. <sup>2</sup> As at 31st October.

<sup>3</sup> Between 50 and 60% of the credit cards issued by deposit-taking institutions can also be used by eligible cardholders to obtain cash from either their deposit or credit card accounts at automated banking machines.

Table 8

**Payment instructions handled by selected payment systems:  
volume of transactions<sup>1</sup>**  
(in millions)

	1992	1993	1994	1995	1996
National clearing and settlement system:					
<i>Small cheques</i> .....	1,758.4	1,737.8	1,665.3	1,596.7	1,521.1
<i>Large cheques (over CAD 50,</i>					
.....	6.8	7.5	6.9	6.2	6.3
<i>Unqualified</i> <sup>2</sup> .....	12.2	12.8	13.5	15.0	15.0
<i>Tape clearings</i> <sup>3,4</sup> .....	3.2	0.0	0.0	0.0	0.0
<i>EDI</i> <sup>4</sup> .....	0.0	0.0	0.0	0.0	0.2
<i>Magnetic tape credits</i> .....	98.7	127.2	169.0	211.7	256.1
<i>Magnetic tape debits</i> .....	122.1	149.0	174.7	198.3	231.8
<i>Shared ABM networks</i> .....	201.4	236.2	271.0	297.9	306.3
<i>Point of sale</i> .....	6.0	40.7	129.8	290.2	537.8
<b>Total</b> .....	<b>2,208.8</b>	<b>2,311.2</b>	<b>2,430.2</b>	<b>2,616.0</b>	<b>2,874.6</b>
Interbank International Payment System .....	1.8	2.1	2.2	2.3	2.4

<sup>1</sup> Owing to the rounding of figures, components may not always add to the total shown. <sup>2</sup> Payment items either 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. <sup>3</sup> 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. <sup>4</sup> "0.0" indicates an insignificant figure. The volume recorded reflects the end-of-day gross settlement of EDI payment items exchanged between participating institutions.

Table 9

**Payment instructions handled by selected payment systems:  
value of transactions<sup>1</sup>**

(in billions of Canadian dollars)

	1992	1993	1994	1995	1996
National clearing and settlement system:					
<i>Small cheques</i> .....	1,014.6	1,026.3	1,029.5	1,022.6	1,052.0
<i>Large cheques (over CAD 50,</i>					
.....	17,125.0	19,209.7	19,922.8	15,912.3	12,231.1
<i>Unqualified</i> <sup>2</sup> .....	18.0	26.8	14.3	14.5	16.1
<i>Tape clearings</i> <sup>3,4</sup> .....	3.7	0.0	0.0	0.0	0.0
<i>EDI</i> .....	0.2	2.4	4.3	22.7	39.4
<i>Magnetic tape credits</i> .....	126.4	141.9	155.1	177.8	202.5
<i>Magnetic tape debits</i> .....	31.9	37.9	44.4	55.4	70.2
<i>Shared ABM networks</i> .....	13.4	16.3	19.1	20.9	21.9
<i>Point of sale</i> .....	0.5	2.3	6.8	14.2	24.7
<b>Total</b> .....	<b>18,333.7</b>	<b>20,463.6</b>	<b>21,196.3</b>	<b>17,240.4</b>	<b>13,657.9</b>
Interbank International Payment System .....	10,100.0	12,977.4	15,896.0	15,968.0	15,425.0

<sup>1</sup> Owing to the rounding of figures, components may not always add to the total shown. <sup>2</sup> Payment items either 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. <sup>3</sup> 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. <sup>4</sup> "0.0" indicates an insignificant figure.

Table 10

**Transfer instructions handled by securities settlement systems:  
volume of transactions**

(for the twelve-month period ended 31st October)

	1992	1993	1994	1995	1996
Number of trades/transactions reported to CDS <sup>1,2</sup> (millions) .....	6.7	9.9	10.6	10.0	15.0
<i>Memorandum item:</i>					
Value of eligible securities <sup>3</sup> (CAD billions) .....	465	594	699	800	1,106

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



Table 11

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

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

	1992	1993	1994	1995	1996
Value of settlement amounts (not nets) of trades <sup>1</sup>					
<b>Total</b> .....	.	15.9	20.5	21.3	39.4
<i>of which:</i>					
<i>Government of Canada domestic marketable bonds</i> .....	.	13.7	17.5	19.0	26.0
<i>Federal Government Treasury Bills</i> <sup>2</sup> .....	.	.	.	.	11.0
<i>other</i> .....	.	2.2	3.0	2.3	2.4

<sup>1</sup> Consists of trade values reported from the Toronto Stock Exchange and the Montreal Exchange and both sides of transactions between CDS member institutions. <sup>2</sup> 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 transactions**

(in millions; all figures are estimates)

Instruments	1992	1993	1994	1995	1996
Cheques and other paper payment instruments issued .....	2,136.7	2,109.7	2,022.8	1,941.5	1,850.9
Payments by credit card .....	959.0	1,043.7	1,167.2	1,260.0	1,344.9
Payments by debit card at the point of sale (EFTPOS) .....	30.3	74.0	185.2	393.8	676.5
Paper-based credit transfers .....	.	.	.	.	.
Paperless credit transfers .....	151.0	188.7	244.5	304.3	363.7
<i>customer initiated</i> <sup>1</sup> .....	32.6	36.1	41.7	50.3	56.4
<i>interbank/large-value</i> .....	.	.	.	.	.
<i>direct credits</i> .....	118.4	152.6	202.8	254.0	307.3
Direct debits .....	146.5	178.8	209.6	238.0	278.2
<b>Total</b> .....	<b>3,423.5</b>	<b>3,594.9</b>	<b>3,829.3</b>	<b>4,137.6</b>	<b>4,514.2</b>

<sup>1</sup> Bill payments initiated at automated teller machines.

Table 13

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

(in billions of Canadian dollars; all figures are estimates)

<b>Instruments</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>
Cheques and other paper payment instruments issued .....	21,793.6	24,315.4	25,159.9	20,339.3	15,959.0
Payments by credit card .....	66.4	73.6	84.5	93.9	104.6
Payments by debit card at the point of sale (EFTPOS) .....	1.6	3.7	9.4	18.8	30.2
Paper-based credit transfers .....	.	.	.	.	.
Paperless credit transfers .....	154.1	173.0	189.2	217.2	247.3
<i>customer initiated</i> <sup>1</sup> .....	2.4	2.7	3.1	3.8	4.3
<i>interbank/large-value</i> .....	.	.	.	.	.
<i>direct credits</i> .....	151.7	170.3	186.1	213.4	243.0
Direct debits .....	38.3	45.5	53.3	66.5	84.2
<b>Total</b> .....	<b>22,054.0</b>	<b>24,611.2</b>	<b>25,496.3</b>	<b>20,735.7</b>	<b>16,425.3</b>

<sup>1</sup> Bill payments initiated at automated teller machines.

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

	1992	1993	1994	1995	1996
Members .....	15	14	14	14	14
<i>of which: live</i> .....	13	14	14	14	14
Sub-members <sup>1</sup> .....	28	31	33	33	33
<i>of which: live</i> .....	27	30	33	32	33
Participants <sup>2</sup> .....	1	2	3	6	6
<i>of which: live</i> .....	1	1	2	5	6
Total users .....	44	47	50	53	53
<i>of which: live</i> .....	41	45	49	51	53
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i> .....	2,074	2,244	2,551	2,693	2,874
<i>sub-members</i> .....	1,738	1,887	2,097	2,259	2,404
<i>participants</i> .....	91	125	218	277	354
<i>users</i> .....	3,903	4,256	4,866	5,229	5,632

<sup>1</sup> Domestic users sponsored by members abroad. <sup>2</sup> 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**

	1992	1993	1994	1995	1996
Total messages sent .....	9,200,133	9,883,583	10,960,197	12,385,962	13,497,483
<i>of which:</i>					
<i>category I</i> <sup>1</sup> .....	1,971,465	2,334,799	2,625,746	3,089,574	3,533,941
<i>category II</i> <sup>2</sup> .....	3,241,260	3,218,948	3,388,084	3,706,456	3,787,370
Total messages received .....	8,541,677	8,872,447	9,764,225	11,032,239	11,882,651
<i>of which:</i>					
<i>category I</i> <sup>1</sup> .....	2,463,012	2,657,324	3,013,534	3,525,885	4,085,216
<i>category II</i> <sup>2</sup> .....	3,444,189	3,496,285	3,656,006	3,893,434	3,875,583
Domestic traffic <sup>3</sup> .....	2,808,125	2,927,646	3,262,525	3,535,839	3,770,608
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic .....	405,540,962	457,218,200	518,097,873	603,575,374	687,785,294

<sup>1</sup> Category I: customer (funds) transfers. <sup>2</sup> Category II: bank (funds) transfers. <sup>3</sup> Messages sent to/received from domestic users.

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



Table 1  
Basic statistical data

	1992	1993	1994	1995	1996
Population:					
<i>year-end (millions) .....</i>	57.2	57.7	57.7	57.8	58.5
GDP (FRF billions) .....	7,010.5	7,082.8	7,376.1	7,663.7	7,861.0
GDP per capita .....	122,561	122,752	127,835	132,590	134,376
Exchange rate (domestic currency vis-à-vis USD):					
<i>year-end .....</i>	5.393	5.849	5.416	4.964	5,237
<i>average .....</i>	5.294	5.663	5.552	4,991	5,243

Table 2  
Settlement media used by non-banks  
(at year-end, not seasonally adjusted, in billions of French francs)

	1992	1993	1994	1995	1996
Notes and coin .....	255.5	249.4	252.2	255.8	257.8
Transferable deposits <sup>1</sup> .....	1,351.6	1,376.9	1,419.7	1,544.0	1,551.0
<i>of which held by:</i>					
<i>corporate sector .....</i>	352.8	381.7	414.7	433.4	453.2
<i>households .....</i>	743.7	742.2	748.0	822.4	795.3
<i>others .....</i>	255.2	252.0	257.0	288.2	302.5
Narrow money supply (M <sub>1</sub> ) <sup>2</sup> .....	1,607.1	1,626.3	1,671.9	1,799.8	1,808.8
Broad money supply (M <sub>3</sub> ) <sup>3</sup> .....	5,312.4	5,162.3	5,282.2	5,463.4	5,289.0

<sup>1</sup> Excluding foreign currency deposits. <sup>2</sup> M<sub>1</sub> = notes and coin and French franc denominated sight deposits held by non-banks (overseas territories excluded). <sup>3</sup> M<sub>3</sub> = M<sub>1</sub> + 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 3

**Settlement media used by banks**

(at year-end, not seasonally adjusted, in billions of French francs)

	1992	1993	1994	1995	1996
Reserve balances held at central bank <sup>1</sup> .....	7.5	8.3	8.1	7.2	7.3
Transferable deposits at other institutions .....	2,482.9	2,631.5	2,839.6	3,189.1	3,260.7
Accounts at the Post Office .....	1.4	.	.	.	.
Accounts at the Treasury .....	4.7	.	.	.	.
<i>Memorandum items:</i>					
Required reserves .....	7.0	7.4	7.3	5.8	6.3
Institutions' borrowing from central bank <sup>2</sup> .....	321.0	392.5	229.4	.	.

<sup>1</sup> Monthly average. <sup>2</sup> Net stock; open market operations, repurchase agreements and discounting operations.

Table 4

**Banknotes and coin**

(at year-end, not seasonally adjusted, in billions of French francs)

	1992	1993	1994	1995	1996
Total banknotes and coin issued <sup>1</sup> .....	283.5	280.7	284.5	287.1	288.9
Denomination of banknotes: <sup>1</sup>					
500 francs .....	134.1	133.8	129.9	124.3	129.2
200 francs .....	73.4	74.5	81.0	87.3	85.8
100 francs .....	50.6	47.8	48.3	49.8	48.3
50 francs .....	6.0	6.5	6.5	6.5	6.1
20 francs .....	1.1	1.0	1.0	1.0	1.0
10 francs .....	.	.	.	.	.
Banknotes and coin held by credit institutions <sup>2</sup> .....	15.6	14.8	15.8	17.0	18.2
Total banknotes and coin outside credit institutions <sup>2</sup>	255.5	249.4	252.2	255.8	257.8
<i>Memorandum item:</i>					
Banknotes held in overseas territories	12.4	16.5	16.5	14.3	12.9

<sup>1</sup> Including banknotes issued in overseas territories. <sup>2</sup> Banknotes issued in overseas territories are not included.

Table 5  
**Institutional framework**  
 (at end-1996)

Categories	Number of institutions	Number of branches	Number of accounts <sup>1</sup> (thousands)	Value of accounts (FRF billions)
Central bank .....	1	211	63	3.5
Commercial banks .....	359 <sup>2</sup>	10,386	20,789	570.6
Savings banks .....	35	4,223	9,289	170.0
Cooperative and rural banks .....	129	10,751	23,955	440.7
Post Office .....	1	16,988	9,950	176.8
Municipal credit banks .....	21	77	80	0.8
Treasury .....	1	4,080	912	172.1

<sup>1</sup> Sight deposits. <sup>2</sup> Branches of foreign banks: 89; foreign-owned banks: n.a.

Table 6  
**Cash dispensers, ATMs and EFTPOS terminals**

	1992	1993	1994	1995	1996
<b>Cash dispensers and ATMs:</b>					
<i>Number of networks</i> .....	1	1	1	1	1
<i>Number of machines</i> .....	17,432	18,735	20,533	22,852	24,531
<i>Volume of transactions (thousands)</i> <sup>1</sup> .....	694,364	765,734	822,137	913,444	1,065,254
<i>Value of transactions (FRF million)</i> .....	316,492	334,083	347,031	370,861	432,820
<b>EFTPOS:</b>					
<i>Number of networks</i> .....	1	1	1	1	1
<i>Number of machines</i> <sup>2</sup> .....	520,000	530,000	540,000	543,000	546,000
<i>Volume of transactions (thousand)</i> .....	1,442,487	1,564,462	1,672,404	1,866,803	2,084,284
<i>Value of transactions (FRF million)</i> .....	475,234	511,289	534,376	590,214	656,037

<sup>1</sup> Including intrabank cash withdrawals and cash withdrawals processed through selected interbank payment systems. <sup>2</sup> Estimated. 10% of card payments are still made without using EFTPOS.



Table 7  
**Number of payment cards in circulation**  
 (in thousands)

	1992	1993	1994	1995	1996
Cards with a cash function .....	21,072	21,812	22,812	24,430	27,219
Cards with a debit/credit function .....	20,892	21,466	22,240	23,617	25,510
<i>of which:</i>					
<i>cards with a debit function</i>	20,892	21,466	22,240	23,617	25,510
<i>cards with a credit function</i>	453	512	579	654	735
Cards with a cheque guarantee function .....	192	193	.	.	.
Retailer cards (estimated) .....	20,000	.	.	.	.

Table 8  
**Payment instructions handled by selected payment systems:  
 volume of transactions**  
 (in millions)

	1992	1993	1994	1995	1996
Clearing houses .....	3,652.0	3,677.4	3,659.0	3,588.4	3,633.8
<i>of which:</i>					
<i>cheques</i> .....	3,633.4	3,663.5	3,650.0	3,582.1	3,630.3
<i>credit transfers</i> .....	3.8	2.8	2.2	1.6	0.3
<i>bills of exchange</i> .....	9.5	6.0	1.9	0.0	0.0
<i>avals de trésorerie</i> .....	0.4	0.5	0.4	0.3	0.2
<i>large-value credit transfers</i>	4.9	4.6	4.5	4.4	3.0
Automated clearing houses .....	3,740.6	4,038.9	4,364.4	4,744.7	5,197.7
CREIC (truncated cheques system) .....	230.8	252.6	259.9	281.8	293.0
Ordinateur de compensation .....	1,811.0	1,467.8	635.7	.	.
<i>of which:</i>					
<i>credit transfers</i> .....	781.4	657.0	341.7	.	.
<i>LCRs and paperless bills of ex</i>	124.3	102.1	49.8	.	.
<i>direct debits</i> .....	588.1	455.8	156.0	.	.
<i>interbank payment orders</i> ....	41.2	47.1	23.0	.	.
<i>ATM withdrawals</i> .....	229.2	192.7	65.0	.	.
<i>card payments</i> .....	46.8	13.1	0.2	.	.
Interbank Teleclearing System (SIT) .....	301.8	764.5	1,791.8	2,590.3	3,940.0
<i>of which:</i>					
<i>credit transfers</i> .....	107.5	292.3	679.8	1,081.3	1,166.4
<i>LCRs and paperless bills of ex</i>	10.5	30.5	88.7	129.3	129.3
<i>direct debits</i> .....	90.3	258.2	636.5	850.4	927.8
<i>interbank payment orders</i> ....	2.5	20.0	55.4	91.1	114.4
<i>card payments</i> .....	.	.	.	1.9	1,130.1
<i>ATM withdrawals</i> .....	91.0	163.5	331.4	436.3	472.0
Cartes bancaires .....	1,397.0	1,554.0	1,677.0	1,872.6	964.7
<i>ATM withdrawals</i> .....	1.3	2.6	4.8	7.7	10.5
<i>card payments</i> .....	1,395.7	1,551.4	1,672.2	1,864.9	954.2
Banque de France .....	42.7	37.6	34.3	29.4	15.3
<i>of which:</i>					
<i>Treasury transfers</i> .....	39.6	34.9	32.0	27.3	13.8
<i>interbank credit transfers</i> .....	0.9	0.4	0.4	0.4	0.3
<i>Banque de France large-value</i>	1.3	1.1	0.9	0.9	0.7
<i>telegraphic credit transfers</i>	0.9	1.2	1.0	0.8	0.5
Sagittaire large-value credit transfers .....	3.3	3.9	4.1	4.5	4.7

Table 9  
**Payment instructions handled by selected payment systems:  
value of transactions**  
(in billions of French francs)

	1992	1993	1994	1995	1996
Clearing houses .....	128,371.3	156,778.5	150,624.1	137,412.8	131,353.9
<i>of which:</i>					
<i>cheques</i> .....	11,582.0	11,130.4	11,300.9	11,025.3	11,629.9
<i>credit transfers</i> .....	1,275.5	1,277.5	1,244.5	1,312.7	124.0
<i>bills of exchange</i> .....	316.1	199.0	36.3	0.0	0.0
<i>avals de trésorerie</i> .....	73,179.0	79,277.8	71,416.5	62,263.3	54,942.0
<i>large-value credit transfers</i>	42,018.7	64,893.8	66,625.9	62,811.5	64,658.0
Automated clearing houses .....	8,491.3	9,000.2	9,599.2	10,375.4	12,818.5
CREIC (truncated cheques system) .....	129.1	140.6	143.4	155.0	161.3
Ordinateur de compensation .....	7,661.6	6,731.4	3,463.7	.	.
<i>of which:</i>					
<i>credit transfers</i> .....	3,458.6	3,292.5	1,913.5	.	.
<i>LCRs and paperless bills of exchange</i>	3,065.5	2,521.6	1,230.5	.	.
<i>direct debits</i> .....	991.2	786.3	267.5	.	.
<i>interbank payment orders</i> .....	47.2	54.1	28.4	.	.
<i>ATM withdrawals</i> .....	88.7	73.9	23.8	.	.
<i>card payments</i> .....	10.4	3.0	0.1	.	.
Interbank Teleclearing System (SIT) .....	234.9	1,618.2	5,454.5	9,625.6	12,339.7
<i>of which:</i>					
<i>credit transfers</i> .....	103.8	783.1	2,518.6	5,158.3	7,345.0
<i>LCRs and paperless bills of exchange</i>	23.9	434.7	1,825.8	2,950.8	2,948.0
<i>direct debits</i> .....	69.0	320.6	929.0	1,248.0	1,359.1
<i>interbank payment orders</i> .....	2.6	15.3	59.1	112.5	179.1
<i>card payments</i> .....	.	.	.	0.5	345.4
<i>ATM withdrawals</i> .....	35.6	61.5	122.0	155.5	163.1
Cartes bancaires .....	465.7	510.0	537.6	594.8	317.5
<i>ATM withdrawals</i> .....	0.8	1.7	3.3	5.1	6.9
<i>card payments</i> .....	464.9	508.3	534.2	589.7	310.6
Banque de France .....	42,547.8	44,346.3	41,741.8	36,838.4	35,092.7
<i>of which:</i>					
<i>Treasury transfers</i> .....	467.8	457.8	429.8	470.5	480.2
<i>interbank credit transfers</i> .....	131.3	199.8	190.5	279.2	270.5
<i>Banque de France large-value credit transfers</i>	34,466.4	36,022.6	38,107.1	29,645.6	24,532.0
<i>telegraphic credit transfers</i>	7,482.3	7,666.1	5,014.4	6,443.1	9,810.0
Sagittaire large-value credit transfers .....	59,219.0	108,750.0	110,847.0	104,567.0	113,886.0

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

	1992	1993	1994	1995	1996
<b>SATURNE:</b>					
<i>Treasury bills</i> .....	126,904	172,254	182,109	248,056	265,376
<i>BMTN</i> <sup>1</sup> .....	3,639	9,542	7,859	7,687	7,126
<i>Other TCN</i> <sup>2</sup> .....	6,160	15,809	32,642	60,333	68,334
<b>RELIT</b> .....	.	13,000,000	15,000,000	12,000,000	13,700,000

<sup>1</sup> Medium-term negotiable instruments (transferred through SATURNE for the first time in 1992). <sup>2</sup> Short-term negotiable instruments.

Table 11  
**Transfer instructions handled by securities settlement systems:  
 value of transactions**  
 (in billions of French francs)

	1992	1993	1994	1995	1996
<b>SATURNE:</b>					
<i>Treasury bills</i> .....	10,199.8	19,673.2	23,306.0	40,042.9	46,441.4
<i>BMTN</i> <sup>1</sup> .....	174.8	436.7	290.3	269.2	282.7
<i>Other TCN</i> <sup>2</sup> .....	342.9	1,169.1	2,167.0	3,729.0	5,072.4
<b>RELIT:</b> <sup>3</sup>					
<i>Bonds</i> .....	11,400	21,600	25,250	34,203	51,838
<i>French stocks</i> .....	2,600	5,100	6,200	4,366	5,700
<i>Mutual bonds</i> .....	.	.	4,050	3,586	3,628
<i>Others</i> .....	3,800	5,300	4,500	.	.

<sup>1</sup> Medium-term negotiable instruments (transferred through SATURNE for the first time in 1992). <sup>2</sup> Short-term negotiable instruments. <sup>3</sup> The RELIT DVP system began full-scale operation in 1992.

Table 12  
**Indicators of use of various cashless payment instruments:  
 volume of transactions**  
 (in millions)

<b>Instruments</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>
Cheques issued .....	4,868.7	4,908.9	4,876.4	4,844.7	4,960.1
Payments by debit and credit card .....	1,442.5	1,564.5	1,672.4	1,866.8	2,084.3
Paper-based credit transfers .....	77.0	66.4	58.2	53.8	33.8
<i>of which:</i>					
<i>customer initiated</i> .....	68.6	58.6	51.0	47.0	29.1
<i>interbank/large-value</i> .....	8.4	7.8	7.2	6.8	4.7
Paperless credit transfers	1,404.0	1,472.8	1,556.5	1,608.5	1,748.2
<i>of which:</i>					
<i>customer initiated</i> .....	1,400.7	1,468.9	1,552.4	1,604.0	1,743.5
<i>interbank/large-value</i> .....	3.3	3.9	4.1	4.5	4.7
Direct debits .....	919.5	999.4	1,155.3	1,205.9	1,343.9
Bills of exchange .....	159.3	154.2	151.2	142.6	142.6
ATM withdrawals .....	694.4	765.7	828.1	913.4	1,065.3
<b>Total</b> .....	<b>9,565.4</b>	<b>9,931.9</b>	<b>10,298.1</b>	<b>10,635.7</b>	<b>11,378.2</b>

Table 13  
**Indicators of use of various cashless payment instruments:  
value of transactions**  
(in billions of French francs)

<b>Instruments</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>
Cheques issued .....	16,099	15,291	14,286	13,904	14,616
Payments by debit and credit card .....	475	511	534	590	656
Paper-based credit transfers .....	160,075	191,426	183,850	164,099	155,677
<i>of which:</i>					
<i>customer initiated</i> .....	2,797	3,366	2,496	2,656	1,464
<i>interbank/large-value</i> .....	157,278	188,060	181,354	161,443	154,213
Paperless credit transfers .....	66,280	117,013	119,162	113,332	125,107
<i>of which:</i>					
<i>customer initiated</i> .....	7,061	8,263	8,315	8,765	11,221
<i>interbank/large-value</i> .....	59,219	108,750	110,847	104,567	113,886
Direct debits .....	1,874	2,314	2,554	2,710	3,062
Bills of exchange .....	3,690	3,445	3,313	3,217	3,211
ATM withdrawals .....	316	334	347	371	433
<b>Total</b> .....	<b>248,809</b>	<b>330,334</b>	<b>324,046</b>	<b>298,223</b>	<b>302,762</b>

Table 14  
Participation in S.W.I.F.T. by domestic institutions<sup>1</sup>

	1992	1993	1994	1995	1996
Members .....	109	105	108	111	107
<i>of which: live</i> .....	101	98	103	104	101
Sub-members <sup>2</sup> .....	87	93	98	97	103
<i>of which: live</i> .....	80	91	96	95	100
Participants <sup>3</sup> .....	4	4	5	8	10
<i>of which: live</i> .....	3	3	4	7	7
Total users .....	200	202	211	216	220
<i>of which: live</i> .....	184	192	203	206	208
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i> .....	2,074	2,244	2,551	2,693	2,874
<i>sub-members</i> .....	1,738	1,887	2,097	2,259	2,404
<i>participants</i> .....	91	125	218	277	354
<i>users</i> .....	3,903	4,256	4,866	5,229	5,632

<sup>1</sup> Data for France include Monaco, Guadeloupe, Martinique and La Réunion. <sup>2</sup> Domestic users sponsored by members abroad. <sup>3</sup> 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<sup>1</sup>

	1992	1993	1994	1995	1996
Total messages sent .....	30,310,818	34,258,946	36,494,832	41,003,897	43,779,359
<i>of which:</i>					
<i>category I</i> <sup>2</sup> .....	8,533,000	8,966,621	9,608,391	10,379,951	11,084,517
<i>category II</i> <sup>3</sup> .....	10,450,100	11,843,080	12,253,787	13,937,393	14,291,099
Total messages received .....	28,460,152	31,838,047	33,446,733	37,786,319	40,737,035
<i>of which:</i>					
<i>category I</i> <sup>2</sup> .....	8,753,700	9,216,560	9,910,743	10,711,093	11,534,499
<i>category II</i> <sup>3</sup> .....	10,472,800	12,163,096	12,224,274	13,895,771	14,011,490
Domestic traffic <sup>4</sup> .....	9,386,200	10,963,677	11,455,375	13,387,410	14,020,407
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic .....	405,540,962	457,218,200	518,097,873	603,575,374	687,785,294

<sup>1</sup> Data for France include Monaco, Guadeloupe, Martinique and La Réunion. <sup>2</sup> Category I: customer (funds) transfers. <sup>3</sup> Category II: bank (funds) transfers. <sup>4</sup> Messages sent to/received from domestic users.

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





Table 1  
Basic statistical data

	1992	1993	1994	1995	1996
Population (millions):					
<i>year-end</i> .....	81.0	81.3	81.5	81.8	82.0
<i>average</i> .....	80.6	81.2	81.4	81.4	81.9
GDP (DEM billions) .....	3,075.6	3,159.1	3,320.3	3,457.4	3,541.0
GDP per capita (DEM thousands) .....	38.2	38.9	40.8	42.3	43.2
Exchange rate (domestic currency vis-à-vis USD):					
<i>year-end</i> .....	1.6140	1.7263	1.5488	1.4335	1.5548
<i>average</i> .....	1.5595	1.6544	1.6218	1.4338	1.5037

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

	1992	1993	1994	1995	1996
Notes and coin <sup>1</sup> .....	200.5	212.0	225.9	237.5	246.8
Narrow money supply (M <sub>1</sub> ) <sup>2</sup> .....	669.6	726.3	764.1	816.1	916.9
<i>Memorandum item:</i>					
Broad money supply (M <sub>3</sub> ) <sup>2</sup> .....	1,718.7	1,906.6	1,937.0	2,007.4	2,181.8
Transferable deposits <sup>3</sup> .....	469.5	527.8	541.1	580.8	676.8
<i>of which held by:</i>					
<i>households</i> .....	288.5	327.3	333.1	352.0	393.8
<i>corporate sector</i> .....	152.1	158.8	174.7	197.3	246.2
<i>other</i> .....	28.9	41.7	33.3	31.5	36.8

<sup>1</sup> Excluding credit institutions' cash balances. <sup>2</sup> M<sub>1</sub> = currency in circulation (excluding credit institutions' cash balances) + domestic non-banks' sight deposits (excluding public sector's deposits held at the central bank). M<sub>2</sub> = M<sub>1</sub> + domestic non-banks' time deposits at less than four years. M<sub>3</sub> = M<sub>2</sub> + savings deposits of domestic non-banks at statutory notice. <sup>3</sup> Sight deposits of domestic non-banks (including deposits held at the central bank).

Table 3  
**Settlement media used by banks**  
 (at year-end, in billions of Deutsche Mark)

	1992	1993	1994	1995	1996
Reserve balances held at central bank <sup>1</sup> .....	86.4	60.4	44.4	37.3	39.5
<i>of which:</i>					
<i>required reserves</i> <sup>2</sup> .....	85.2	59.6	43.6	36.5	38.7
Transferable deposits held at other institutions .....	301.2	380.2	342.8	363.9	401.1
<i>Memorandum item:</i>					
Institutions' borrowing from c	1.6	14.8	9.8	5.5	3.3

<sup>1</sup> "Actual reserves". <sup>2</sup> For 1992-1994, after deduction of deductible cash balances. <sup>3</sup> Lombard loans.

Table 4  
**Banknotes and coin**  
 (at year-end, in billions of Deutsche Mark)

	1992	1993	1994	1995	1996
Total banknotes and coin outstanding <sup>1</sup> .....	227.3	238.6	250.9	263.5	275.7
Denomination of banknotes:					
1,000 Mark .....	64.3	68.5	75.0	81.1	86.6
500 Mark .....	24.0	24.3	25.7	26.1	27.8
200 Mark .....	11.5	11.6	11.3	10.8	10.1
100 Mark .....	82.1	86.8	90.7	95.9	100.1
50 Mark .....	19.4	20.3	20.4	21.1	21.9
20 Mark .....	7.4	7.7	7.9	8.1	8.5
10 Mark .....	4.4	4.7	4.8	5.0	5.1
5 Mark .....	0.3	0.3	0.2	0.3	0.3
Banknotes and coin held by credit institutions .....	26.8	26.7	25.0	26.0	28.9
Total banknotes and coin outside credit institutions <sup>2</sup> .....	200.5	212.0	225.9	237.5	246.8

<sup>1</sup> Including credit institutions' cash balances. <sup>2</sup> Identical with Table 2, "Notes and coin".

Table 5  
**Institutional framework**  
 (at end-1996)

Categories	Number of institutions	Number of branches <sup>1</sup>	Number of accounts (thousands) <sup>2</sup>	Value of accounts (DEM billions)
Central bank <sup>3</sup> .....	1	168	36	1.7
Commercial banks <sup>4</sup> .....	378	26,961	20,400	270.4
Savings banks .....	620	19,951	37,500	264.6
Cooperative and rural banks .....	2,510	19,529	22,500	140.1
<i>Memorandum item:</i>				
Branches of foreign banks .....	74	116	24	3.0

<sup>1</sup> Branches = number of bank offices. <sup>2</sup> Sight accounts of domestic non-banks, partly estimated. <sup>3</sup> The Bundesbank as a legal entity comprises the Central Office (in Frankfurt am Main) and nine Land Central Banks with 167 branches. <sup>4</sup> 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 1st January 1995).

Table 6  
**Cash dispensers, ATMs and EFTPOS terminals<sup>1</sup>**

	1992	1993	1994	1995	1996
<b>Cash dispensers and ATMs:</b>					
<i>Number of networks</i> .....	4	4	4	4	4
<i>Number of machines</i> .....	19,000	25,000	29,400	35,700	37,600
<i>Volume of transactions (millions)</i>	.	.	935	1,100	1,251.8
<i>Value of transactions (DEM billions)</i> .....	.	.	238.5	310.0	348.4
<b>EFTPOS:</b>					
<i>Number of networks</i> <sup>2</sup> .....	19	18	18	19	19
<i>Number of machines</i> <sup>2</sup> .....	51,806	28,000	62,500	70,048	115,000
<i>Volume of transactions (millions)</i> <sup>3</sup> .....	28.0	69.1	104.0	149.4	214.2
<i>Value of transactions (DEM billions)</i> <sup>3</sup> .....	1.9	6.2	10.8	20.5	32.7

<sup>1</sup> Partly estimated. <sup>2</sup> From 1993 on, electronic cash and POZ procedures only. <sup>3</sup> From 1993 on, electronic cash and POZ procedures only. In 1992, electronic cash and other debit card procedures.

Table 7  
**Number of payment cards in circulation<sup>1</sup>**  
 (at year-end, in thousands)

	1992	1993	1994	1995	1996
Cards with a cash function .....	.	.	.	.	.
Cards with a debit/credit function .....	39,272	44,842	47,353	74,337	80,454
<i>of which:</i>					
<i>cards with a debit function<sup>2</sup></i>	31,863	35,901	37,113	62,597	66,914
<i>cards with a credit function</i>	7,409	8,941	10,240	11,740	13,540
Cards with a cheque guarantee function .....	31,863	35,901	37,113	38,479	39,937
Retailer cards .....	3,000	.	4,500	4,800	4,900

<sup>1</sup> Partly estimated. <sup>2</sup> Eurocheque cards, eligible for cash and debit functions in association with a Personal Identification Number (PIN). From 1995 onwards, including bank customer cards.

Table 8  
**Payment instructions handled by selected IFTs:<sup>1</sup>**  
**volume of transactions**  
(in millions)

	1992	1993	1994	1995	1996
Retail payments .....	2,649.5	2,613.5	2,355.1	2,272.2	2,276.1
Maschinell-optische Beleglesung (MAOBE) <sup>2</sup> .....	511.7	393.5	248.0	115.3	77.9
<i>Collection items</i> .....	214.9	155.5	86.0	26.7	20.2
<i>Credit transfers</i> .....	296.8	238.0	162.0	88.6	57.7
Belegloser Datenträgeraustausch (DTA) <sup>3</sup> ....	2,137.8	2,220.0	2,107.1	2,156.9	2,198.1
<i>Collection items</i> .....	1,693.3	1,702.2	1,496.9	1,499.1	1,473.3
<i>Credit transfers</i> .....	444.5	517.8	610.2	657.8	724.8
Large-value payments .....	463.5	483.8	477.6	33.1	30.0
Gross settlement procedures .....	74.5	56.5	34.3	13.6	10.3
<i>of which:</i>					
<i>Eiliger Zahlungsverkehr (EIL)</i>	2.6	3.4	4.0	5.5	7.2
<i>Platzüberweisungsverkehr</i> <sup>5</sup>	71.9	53.1	30.3	8.1	3.1
Net settlement procedures .....	389.0	427.3	443.3	19.5	19.7
Konventionelle Abrechnung <sup>6,7</sup>	381.2	416.4	430.6	1.7	1.0
<i>Collection items (conventional)</i>	57.2	95.4	150.8	0.7	0.5
<i>Local credit transfers (conventional)</i>	324.0	321.0	279.8	1.0	0.5
Elektronische Abrechnung Frankfurt (EAF) <sup>8</sup> .....	7.8	10.9	12.7	17.8	18.8

<sup>1</sup> Does not include figures relating to IFTs not operated by the Deutsche Bundesbank. <sup>2</sup> Machine-optical voucher reading procedure, excluding payments submitted in a paper-based form which have been converted and passed on in a paperless form by the Bank's regional computer centres/payment units (BSE/GSE cheques and EZÜ/BZÜ credit transfers). <sup>3</sup> Paperless exchange of data media, including payments submitted in a paper-based form which have been converted and passed on in a paperless form by the Bank's regional computer centres/payment units (BSE/GSE cheques and EZÜ/BZÜ credit transfers). <sup>4</sup> Express electronic credit transfer system. <sup>5</sup> Express paper-based local credit transfer system. Decrease due to conversion requirement, resulting in a switch of previously paper-based payments to EIL-ZV and DTA. <sup>6</sup> Daily local clearing system. <sup>7</sup> Reporting change in 1995: number of delivery envelopes cleared instead of individual payments contained therein. <sup>8</sup> Electronic clearing with file transfer (EAF), from 8th March 1996 onwards EAF2.

Table 9  
**Payment instructions handled by selected IFTs:<sup>1</sup>**  
**value of transactions**  
(in billions of Deutsche Mark)

	1992	1993	1994	1995	1996
Retail payments .....	4,846.1	4,822.1	4,688.7	4,699.4	4,628.4
Maschinell-optische Beleglesung (MAOBE) <sup>2</sup> .....	3,112.9	2,814.4	2,307.3	266.9	240.7
<i>Collection items</i> .....	2,924.8	2,666.5	2,203.4	240.0	224.5
<i>Credit transfers</i> .....	188.1	147.9	103.9	26.9	16.2
Belegloser Datenträgeraustausch (DTA) <sup>3</sup> ....	1,733.2	2,007.7	2,381.4	4,432.5	4,387.7
<i>Collection items</i> .....	907.4	1,063.8	1,313.9	3,277.1	3,173.6
<i>Credit transfers</i> .....	825.8	943.9	1,067.5	1,155.4	1,214.1
Large-value payments .....	160,441.4	195,455.3	204,656.0	187,966.8	189,952.8
Gross settlement procedures .....	22,041.2	27,661.8	30,342.6	32,197.1	32,613.5
<i>of which:</i>					
<i>Eiliger Zahlungsverkehr (EIL)</i>					
<i>Platzüberweisungsverkehr</i> <sup>5</sup>	13,611.0	18,874.6	22,772.4	27,007.5	28,743.1
<i>Platzüberweisungsverkehr</i> <sup>5</sup>	8,430.2	8,787.2	7,570.2	5,189.6	3,870.4
Net settlement procedures .....	138,400.2	167,793.5	174,313.4	155,769.7	157,339.3
Konventionelle Abrechnung <sup>6</sup> ....	55,377.1	38,488.5	29,409.9	7,382.3	3,929.8
<i>Collection items</i> <i>(conventional)</i> .....	818.9	827.6	799.9	669.8	620.8
<i>Local credit transfers</i> <i>(conventional)</i> .....	54,558.2	37,660.9	28,610.0	6,712.5	3,309.0
Elektronische Abrechnung Frankfurt (EAF) <sup>7</sup> .....	83,023.1	129,305.0	144,903.5	148,387.4	153,409.5

<sup>1</sup> Does not include figures relating to IFTs not operated by the Deutsche Bundesbank. <sup>2</sup> Machine-optical voucher reading procedure, excluding payments submitted in a paper-based form which have been converted and passed on in a paperless form by the Bank's regional computer centres/payment units (BSE/GSE cheques and EZÜ/BZÜ credit transfers). <sup>3</sup> Paperless exchange of data media, including payments submitted in a paper-based form which have been converted and passed on in a paperless form by the Bank's regional computer centres/payment units (BSE/GSE cheques and EZÜ/BZÜ credit transfers). <sup>4</sup> Express electronic credit transfer system. <sup>5</sup> Express paper-based local credit transfer system. Decrease due to conversion requirement, resulting in a switch of previously paper-based payments to EIL-ZV and DTA. <sup>6</sup> Daily local clearing system. <sup>7</sup> Electronic clearing with file transfer (EAF), from 8th March 1996 onwards EAF2.

Table 10  
**Transfer instructions handled by securities settlement systems:<sup>1</sup>**  
**volume of transactions**  
 (in millions)

	1992	1993	1994	1995	1996 <sup>2</sup>
<b>Total</b> .....	<b>22.6</b>	<b>27.8</b>	<b>25.2</b>	<b>23.4</b>	<b>20.6</b>
<i>Delivery versus payment</i> .....	<i>16.5</i>	<i>21.9</i>	<i>20.5</i>	<i>19.0</i>	<i>17.7</i>
<i>Without countervalue</i> .....	<i>6.1</i>	<i>5.9</i>	<i>4.7</i>	<i>4.4</i>	<i>2.9</i>

<sup>1</sup> Source: Deutscher Kassenverein AG. <sup>2</sup> In 1996 interregional transactions calculated in a new procedure; only chargeable transactions.

Table 11  
**Transfer instructions handled by securities settlement systems:<sup>1</sup>**  
**value of transactions**  
 (in billions of Deutsche Mark)

	1992	1993	1994	1995	1996
Delivery versus payment .....	4,663.5	9,417.8	9,510.5	11,878.7	16,040

<sup>1</sup> Source: Deutscher Kassenverein AG.

Table 12

**Indicators of use of various cashless payment instruments:  
volume of transactions<sup>1</sup>**

(in millions)

<b>Instruments</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>
Cheques issued .....	902.0	934.0	903.0	812.0	772.0
<i>of which:</i>					
<i>truncated</i> <sup>2</sup> .....	658.0	730.0	722.0	650.0	625.0
Payments by credit and debit cards <sup>3</sup> .....	214.0	293.5	350.5	416.1	504.1
Paper-based credit transfers .....	1,991.2	1,959.1	1,672.2	1,128.8	589.6
<i>customer initiated</i> .....	1,971.0	1,947.8	1,664.7	1,126.8	588.5
<i>interbank/large-value</i> <sup>4</sup> .....	20.2	11.3	7.5	2.0	1.1
Paperless credit transfers .....	3,092.4	3,294.3	3,899.4	4,527.3	5,317.7
<i>customer initiated</i> .....	3,083.0	3,281.2	3,884.3	4,507.2	5,296.5
<i>interbank/large-value</i> <sup>4</sup> .....	9.4	13.1	15.1	20.1	21.2
Direct debits <sup>5</sup> .....	4,016.0	4,286.9	4,607.0	4,704.6	4,828.8
<b>Total</b> .....	<b>10,215.6</b>	<b>10,767.8</b>	<b>11,432.1</b>	<b>11,588.8</b>	<b>12,012.2</b>

<sup>1</sup> Partly estimated; for 1995, adjusted volume of cheque, credit transfer and direct debit transactions. Without adjustment, cashless payment transactions would show a steady increase in volume (of approximately 6%). <sup>2</sup> Not included in direct debits in order to avoid double-counting. <sup>3</sup> Excluding retailer cards. Credit cards: the card companies' settlements with the retailers (normally credit transfers) and payment of the monthly totals by card holders to card issuers by credit transfer, direct debit or cheque are contained in the corresponding items. Debit cards: not included in item "direct debits". <sup>4</sup> Only interbank payments via the Bundesbank in Konventionelle Abrechnung in Frankfurt, EAF/EAF2, Eiliger Zahlungsverkehr and Platzüberweisungsverkehr. <sup>5</sup> Including cash dispenser/ATM withdrawals made with eurocheque cards at banks other than that issuing the card.



Table 13

**Indicators of use of various cashless payment instruments:  
value of transactions<sup>1</sup>**

(in billions of Deutsche Mark)

<b>Instruments</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>
Cheques issued .....	4,583.0	5,343.0	5,550.0	4,544.0	4,135.0
<i>of which:</i>					
<i>truncated</i> <sup>2</sup> .....	261.0	583.0	662.8	908.8	1,240.5
Payments by credit and debit cards <sup>3</sup> .....	35.7	48.3	57.2	65.6	81.9
Paper-based credit transfers .....	76,837.7	65,984.4	55,224.8	26,764.2	17,671.7
<i>customer initiated</i> .....	19,303.0	24,418.6	22,908.5	15,743.2	11,206.8
<i>interbank/large-value</i> <sup>4</sup> .....	57,534.7	41,565.8	32,316.3	11,021.0	6,464.9
Paperless credit transfers .....	103,156.0	155,854.9	177,993.7	185,615.2	197,824.3
<i>customer initiated</i> .....	9,508.0	11,333.4	15,528.5	19,634.8	26,149.2
<i>interbank/large-value</i> <sup>4</sup> .....	93,648.0	144,521.5	162,465.2	165,980.4	171,675.1
Direct debits <sup>5</sup> .....	3,906.1	4,481.7	4,766.8	4,644.5	5,562.3
<b>Total</b> .....	<b>188,518.5</b>	<b>231,712.3</b>	<b>243,592.5</b>	<b>221,633.5</b>	<b>225,275.2</b>

<sup>1</sup> Partly estimated; for 1995, adjusted value of cheque, credit transfer and direct debit transactions. <sup>2</sup> Not included in direct debits in order to avoid double-counting. <sup>3</sup> Excluding retailer cards. Credit cards: the card companies' settlements with the retailers (normally credit transfers) and payment of the monthly totals by card holders to card issuers by credit transfer, direct debit or cheque are contained in the corresponding items. Debit cards: not included in item "direct debits". <sup>4</sup> Only interbank payments via the Bundesbank in Konventionelle Abrechnung in Frankfurt, EAF/EAF2 Eiliger Zahlungsverkehr and Platzüberweisungsverkehr. <sup>5</sup> Including cash dispenser/ATM withdrawals made with eurocheque cards at banks other than that issuing the card.

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

	1992	1993	1994	1995	1996
Members .....	152	153	152	157	156
<i>of which: live</i> .....	148	150	149	152	155
Sub-members <sup>1</sup> .....	84	82	92	100	100
<i>of which: live</i> .....	79	78	88	97	94
Participants <sup>2</sup> .....	2	2	6	7	8
<i>of which: live</i> .....	1	2	3	4	4
Total users .....	238	237	250	264	264
<i>of which: live</i> .....	228	230	240	253	253
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i> .....	2,074	2,244	2,551	2,693	2,874
<i>sub-members</i> .....	1,738	1,887	2,097	2,259	2,404
<i>participants</i> .....	91	125	218	277	354
<i>users</i> .....	3,903	4,256	4,866	5,229	5,632

<sup>1</sup> Domestic users sponsored by members abroad. <sup>2</sup> 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**

	1992	1993	1994	1995	1996
Total messages sent .....	32,585,476	35,359,560	38,187,536	43,824,742	47,803,674
<i>of which:</i>					
<i>category I</i> <sup>1</sup> .....	11,997,937	12,842,381	13,843,274	15,580,557	16,493,249
<i>category II</i> <sup>2</sup> .....	6,747,897	7,245,703	7,557,127	8,373,229	8,564,736
Total messages received .....	44,887,628	48,149,365	51,011,768	56,505,445	59,246,442
<i>of which:</i>					
<i>category I</i> <sup>1</sup> .....	14,832,041	15,490,352	16,438,145	17,759,489	18,627,409
<i>category II</i> <sup>2</sup> .....	18,220,015	20,424,752	21,833,621	24,441,740	25,231,632
Domestic traffic <sup>3</sup> .....	5,527,524	6,056,083	6,310,196	6,734,317	6,834,054
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic .....	405,540,962	457,218,200	518,097,873	603,575,374	687,785,294

<sup>1</sup> Category I: customer (funds) transfers. <sup>2</sup> Category II: bank (funds) transfers. <sup>3</sup> Messages sent to/received from domestic users.

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

Table 1  
**Basic statistical data**

	1992	1993	1994	1995	1996
Population (millions):					
<i>year-end</i> .....	56.9	57.2	57.2	57.3	57.5
GDP (ITL billions) .....	1,504,003	1,550,150	1,641,105	1,770,949	1,873,664
GDP per capita (ITL millions) .....	26.5	27.3	28.7	31.0	32.6
Exchange rate (domestic currency vis-à-vis USD):					
<i>year-end</i> .....	1,470.9	1,704.0	1,629.7	1,584.7	1,530.6
<i>average</i> .....	1,232.3	1,573.7	1,611.8	1,628.9	1,543.0

Table 2  
**Settlement media used by non-banks**  
(at year-end, not seasonally adjusted, in billions of Italian lire)

	1992	1993	1994	1995	1996
Notes and coin .....	85,617	89,769	96,221	98,281	100,113
Narrow money supply (M <sub>1</sub> ) .....	544,046	578,472	599,978	604,492	622,273
Transferable deposits .....	442,418	473,943	488,055	490,240	509,035
Other .....	16,011	14,760	15,702	15,971	13,125
<i>Memorandum item:</i>					
Broad money supply <sup>1</sup> .....	920,026	986,268	1,085,278	1,112,168	1,128,261

<sup>1</sup> Since 1994 includes certificates of deposit issued by the former special credit institutions.

Table 3  
**Settlement media used by credit/deposit-taking institutions**  
 (at year-end, in billions of Italian lire)

	1992	1993	1994	1995	1996
Reserve balances held at central bank <sup>1</sup> .....	130,054	105,917	92,619	73,938	72,202
<i>of which:</i>					
<i>required reserves</i> .....	129,927	105,796	92,468	73,736	71,958
Transferable deposits at other institutions <sup>2</sup> .....	46,407	52,455	56,352	64,156	85,319
<i>Memorandum item:</i>					
Institutions' borrowing from c	1,235	1,906	1,888	2,636	1,429

<sup>1</sup> The data comprise average required reserves and average free reserves for the period 15th December - 14th January. <sup>2</sup> Sight interbank deposits and net balances of reciprocal accounts are included. <sup>3</sup> The data comprise institutions' average borrowing through ordinary advances for the period 15th December - 14th January.

Table 4  
**Banknotes and coin**  
 (at year-end, not seasonally adjusted, in billions of Italian lire)

	1992	1993	1994	1995	1996
Total banknotes and coin outstanding .....	90,859	95,230	101,788	105,146	108,876
Denomination of banknotes:					
100,000 lire .....	63,205	66,862	72,346	74,815	78,264
50,000 lire .....	20,018	20,662	21,531	22,177	21,429
10,000 lire .....	3,929	3,903	3,996	4,077	4,173
5,000 lire .....	827	848	905	938	967
2,000 lire .....	298	346	333	292	270
1,000 lire .....	945	887	914	950	1,003
Banknotes and coin held by credit institutions .....	5,242	5,461	5,567	6,865	8,763
Total banknotes and coin outside credit institutions .....	85,617	89,769	96,221	98,281	100,113

Table 5  
**Institutional framework**  
 (at end-1996)

Categories	Number of institutions	Number of branches	Number of accounts (thousands)	Value of accounts (ITL billions)
	Central bank .....	1	98	.
Commercial banks .....	266	17,713	20,917	411,332
Cooperative and rural banks .....	671	6,693	5,162	94,600
Postal Administration .....	1	14,587	543	3,103
<i>Memorandum item:</i>				
Branches of foreign banks .....	51	75	10	2,123

Table 6  
**Cash dispensers, ATMs and EFTPOS terminals**

	1992	1993	1994	1995	1996
<b>Cash dispensers and ATMs:</b>					
<i>Number of networks</i> .....	1	1	1	1	1
<i>Number of machines</i> .....	13,917	15,227	18,672	21,670	24,161
<i>Volume of transactions (thousand)</i>	162,583	187,407	211,247	244,655	369,144
<i>Value of transactions<sup>1</sup> (ITL billion)</i>	49,168	58,050	66,537	77,480	115,635
<b>EFTPOS:</b>					
<i>Number of networks</i> .....	.	.	.	.	.
<i>Number of terminals</i> .....	62,251	77,206	104,051	153,752	216,093
<i>Volume of transactions (thousand)</i>	12,681	17,774	26,095	37,895	74,493
<i>Value of transactions<sup>1</sup> (ITL billion)</i>	2,526	3,398	4,943	7,158	13,054

<sup>1</sup> Up to 1995 data relating to a sample group of 75 banks accounting for approximately 80% of current account deposits of the entire banking system. For 1996 data relate to the whole system.

Table 7  
**Number of payment cards in circulation<sup>1</sup>**  
 (in thousands)

	1992	1993	1994	1995	1996
Cards with a cash function .....	10,606	11,295	12,396	13,824	15,270
Cards with a debit/credit function .....	14,858	16,279	18,210	20,482	22,549
<i>of which:</i>					
<i>cards with a debit function</i>	9,494	10,555	12,124	13,791	14,906
<i>cards with a credit function</i>	5,364	5,724	6,086	6,691	7,643
Cards with a cheque guarantee function <sup>2</sup> .....	2,187	1,674	1,766	1,655	1,151
Retailer cards .....	.	.	.	.	.

<sup>1</sup> A card with multiple functions may appear in several categories. It is, therefore, not meaningful to add the figures. <sup>2</sup> Includes eurocheque cards and, up to 1992, cheque guarantee cards usable only in Italy.

Table 8  
**Payment instructions handled by selected payment systems:  
 volume of transactions**  
 (in thousands)

	1992	1993	1994	1995	1996
Clearing sub-systems:					
Local clearing .....	292,129	253,189	240,675	235,665	225,622
<i>of which:</i>					
<i>cheques</i> .....	288,458	250,617	238,504	233,698	223,927
<i>of which: out-of-town cheques</i> .....	96,062	85,703	85,782	90,259	89,061
<i>bills of exchange</i> <sup>1</sup> .....	1,430	1,019	.	.	.
<i>credit transfers</i> .....	441	325	282	263	151
<i>other items</i> <sup>2</sup> .....	1,800	1,228	1,889	1,704	1,544
Electronic Memoranda .....	1,804	1,896	2,084	1,810	1,651
<i>of which:</i>					
<i>interbank deposits</i> .....	1,020	1,005	731	725	776
<i>foreign operations</i> .....	542	533	562	208	82
<i>credit transfers</i> .....	147	187	222	285	145
<i>other items</i> <sup>3</sup> .....	95	171	569	592	648
SIPS .....	2,780	3,111	3,526	4,462	5,326
Retail .....	361,783	451,171	489,582	586,865	664,097
<i>of which:</i>					
<i>cheque truncation</i> .....	317,970	321,354	287,179	283,937	287,635
<i>Bancomat</i> .....	43,813	56,114	61,616	74,383	91,117
<i>collection orders</i> .....	.	73,703	140,333	154,061	170,648
<i>credit transfers</i> .....	.	.	454	74,484	114,637
<i>other items</i> <sup>4</sup> .....	.	.	.	.	60
Centralised accounts <sup>5</sup> .....	1,136	1,056	1,016	1,027	1,129
<i>of which:</i>					
<i>payments between banks and the Treasury</i> .....	1,116	1,013	973	981	1,079
<i>BISS</i> .....	20	43	43	46	50

<sup>1</sup> From 1994 onwards, bills of exchange are included in "other items". <sup>2</sup> Includes settlement of securities transactions (only for 1992); payments between the banking system and the Treasury, the Banca d'Italia or the Postal Administration; and from 1994, bills of exchange. <sup>3</sup> From 1993, the settlement of securities transactions in particular. <sup>4</sup> Mainly transactions through e-money and interests and dividends on the securities deposited at the Italian central securities depository for shares and corporate bonds (Monte Titoli). <sup>5</sup> Debits/credits for the settlement of clearing balances are not included.

Table 9

**Payment instructions handled by selected payment systems:  
value of transactions**

(in billions of Italian lire)

	1992	1993	1994	1995	1996
Clearing sub-systems:					
Local clearing	6,345,384	4,622,317	4,255,270	3,574,629	2,897,869
<i>of which:</i> .....					
<i>cheques</i> .....	1,605,684	1,583,041	1,587,415	1,635,293	1,647,404
<i>of which: out-of-town cheques</i> .....	606,197	622,365	629,890	659,491	661,971
<i>bills of exchange</i> <sup>1</sup> .....	45,193	40,394	.	.	.
<i>credit transfers</i> .....	1,024,169	732,001	634,657	593,773	254,402
<i>other items</i> <sup>2</sup> .....	3,670,338	2,266,881	2,033,198	1,345,563	996,063
Electronic Memoranda .....	10,450,000	17,067,600	17,972,187	18,408,052	23,099,794
<i>of which:</i>					
<i>interbank deposits</i> .....	8,772,000	11,698,000	11,782,702	11,557,140	15,052,765
<i>foreign operations</i> .....	782,000	987,000	894,808	493,336	327,058
<i>credit transfers</i> .....	539,000	716,000	857,732	1,029,143	796,409
<i>other items</i> <sup>3</sup> .....	357,000	3,666,600	4,436,945	5,328,433	6,923,562
SIPS .....	11,994,531	18,293,744	25,928,601	27,377,138	34,530,551
Retail .....	262,740	492,310	675,298	1,239,833	1,582,504
<i>of which:</i>					
<i>check truncation</i> .....	251,554	288,342	286,985	290,343	298,483
<i>Bancomat</i> .....	11,186	16,152	17,821	21,303	25,818
<i>collection orders</i> .....	.	187,816	367,504	468,342	520,246
<i>credit transfers</i> .....	.	.	2,988	459,845	731,562
<i>other items</i> <sup>4</sup> .....	.	.	.	.	6,395
Centralised accounts <sup>5</sup> .....	2,873,100	2,619,500	2,428,800	2,737,756	2,719,900
<i>of which:</i>					
<i>payments between banks and     the Treasury</i> .....	2,775,000	2,538,300	2,318,900	2,599,800	2,580,700
<i>BISS</i> .....	98,100	81,200	109,900	137,956	139,200

<sup>1</sup> From 1994 onwards, bills of exchange are included in "other items". <sup>2</sup> Includes settlement of securities transactions (only for 1992); payments between the banking system and the Treasury, the Banca d'Italia or the Postal Administration; and from 1994, bills of exchange. <sup>3</sup> From 1993, the settlement of securities transactions in particular. <sup>4</sup> Mainly transactions through e-money and interests and dividends on the securities deposited at the Italian central securities depository for shares and corporate bonds (Monte Titoli). <sup>5</sup> Debits/credits for the settlement of clearing balances are not included.



Table 11

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

(in billions of Italian lire)

	1992	1993	1994	1995	1996
Securities Settlement Procedures:	4,187,516	9,562,669	12,539,583	15,134,844	29,882,833
<i>government securities</i> .....	4,053,516	9,264,315	12,100,697	14,801,877	29,344,943
<i>bonds</i> .....	25,125	55,547	37,619	45,405	89,648
<i>shares</i> .....	108,875	242,807	401,267	287,562	448,242
Government Securities Centralised Accounts (CAT) <sup>1</sup> ...	586,274	1,884,042	1,743,402	1,575,070	1,805,554
Monte Titoli <sup>2</sup> .....	8,704	51,880	48,926	31,667	68,619

<sup>1</sup> Net balances resulting from the securities settlement procedures are not included. The number of transfer instructions handled through the CAT procedure amounted to 561,200 in 1993, 845,800 in 1994, 960,500 in 1995 and 1,004,258 in 1996. <sup>2</sup> 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.

Table 12  
**Indicators of use of various cashless payment instruments:  
 volume of transactions<sup>1</sup>**  
 (in millions)

Instruments	1992	1993	1994	1995	1996
Cheques issued .....	674.5	621.6	574.8	563.6	650.1
Payments by debit and credit cards .....	74.8	81.7	100.6	130.6	190.5
Paper-based credit transfers .....	660.9	697.7	706.0	707.0	717.8
<i>customer initiated</i> <sup>2</sup> .....	658.0	695.5	703.1	704.3	715.2
<i>interbank/large-value</i> .....	2.9	2.2	2.9	2.7	2.6
Paperless credit transfers .....	172.5	178.5	208.4	214.8	226.2
<i>customer initiated</i> .....	167.9	173.6	203.0	208.8	219.3
<i>interbank/large-value</i> .....	4.6	4.9	5.4	6.0	6.9
Direct debits .....	69.0	73.2	78.7	90.9	162.8
Others .....	167.5	159.0	153.1	157.3	242.5
<i>paperless collections</i> <sup>3</sup> .....	95.7	99.9	106.6	124.5	183.2
<i>paper-based collections</i> <sup>4</sup> .....	71.8	59.1	46.5	32.8	59.3
<b>Total</b> .....	<b>1,819.2</b>	<b>1,811.7</b>	<b>1,821.6</b>	<b>1,864.2</b>	<b>2,189.9</b>

<sup>1</sup> Up to 1995 the figures for payment operations effected by banking instruments have been provided by 75 banks accounting for approximately 80% of the current account deposits in all banking system. For 1996 the figures relate to the entire system. <sup>2</sup> Customer initiated paper-based transfers include postal money orders and inpayments to postal current accounts that are processed automatically within the Postal System but originate from cash payments at post offices. <sup>3</sup> Collections of electronic bank receipts (RIBA). <sup>4</sup> Collections of commercial bills and paper-based bank receipts.

Table 13  
**Indicators of use of various cashless payment instruments:  
value of transactions<sup>1</sup>**  
(in billions of Italian lire)

Instruments	1992	1993	1994	1995	1996
Cheques issued .....	2,223,172	2,170,124	2,108,124	2,190,634	2,385,118
Payments by debit and credit cards .....	14,291	15,671	19,218	24,718	34,562
Paper-based credit transfers .....	7,191,203	5,596,276	4,709,208	4,331,379	3,944,420
<i>customer initiated</i> <sup>2</sup> .....	745,865	791,095	357,110	386,016	367,657
<i>interbank/large-value</i> .....	6,445,338	4,805,181	4,352,098	3,945,363	3,576,763
Paperless credit transfers	26,236,791	38,812,084	47,766,143	49,782,294	63,549,443
<i>customer initiated</i> .....	4,223,160	4,085,540	4,613,156	4,888,291	6,576,307
<i>interbank/large-value</i> .....	22,003,630	34,726,544	43,152,987	44,894,003	56,973,136
Direct debits .....	73,741	89,095	106,721	116,309	158,429
Others .....	468,069	452,127	463,821	534,787	777,969
<i>paperless collections</i> <sup>3</sup> .....	249,762	265,398	298,930	400,943	547,890
<i>paper-based collections</i> <sup>4</sup> .....	218,307	186,729	164,891	133,844	230,079
<b>Total</b> .....	<b>36,207,267</b>	<b>47,135,377</b>	<b>55,173,235</b>	<b>56,980,121</b>	<b>70,849,941</b>

<sup>1</sup> Up to 1995 the figures for payment operations effected by banking instruments have been provided by 75 banks accounting for approximately 80% of the current account deposits in all banking system. For 1996 the figures relate to the entire system. <sup>2</sup> Customer initiated paper-based transfers include postal money orders and inpayments to postal current accounts that are processed automatically within the Postal System but originate from cash payments at post offices. <sup>3</sup> Collections of electronic bank receipts (RIBA). <sup>4</sup> Collections of commercial bills and paper-based bank receipts.

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

	1992	1993	1994	1995	1996
Members	188	190	189	188	185
<i>of which: live</i> .....	186	187	186	182	185
Sub-members <sup>1</sup> .....	30	29	32	37	43
<i>of which: live</i> .....	30	28	32	36	40
Participants <sup>2</sup> .....	0	0	0	1	3
<i>of which: live</i> .....	0	0	0	1	3
Total users .....	218	219	221	226	231
<i>of which: live</i> .....	216	215	218	219	228
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i> .....	2,074	2,244	2,551	2,693	2,874
<i>sub-members</i> .....	1,738	1,887	2,097	2,259	2,404
<i>participants</i> .....	91	125	218	277	354
<i>users</i> .....	3,903	4,256	4,866	5,229	5,632

<sup>1</sup> Domestic users sponsored by members abroad. <sup>2</sup> 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**

	1992	1993	1994	1995	1996
Total messages sent .....	21,144,390	22,572,543	24,681,961	27,584,947	30,081,128
<i>of which:</i>					
<i>category I</i> <sup>1</sup> .....	6,695,298	6,845,876	7,596,603	6,360,220	6,903,858
<i>category II</i> <sup>2</sup> .....	5,783,865	5,904,935	6,063,052	6,512,180	6,659,465
Total messages received .....	20,008,765	22,189,826	25,066,961	28,480,765	31,508,461
<i>of which:</i>					
<i>category I</i> <sup>1</sup> .....	6,101,945	6,930,817	8,061,681	9,502,849	10,487,061
<i>category II</i> <sup>2</sup> .....	4,240,352	4,758,663	5,448,679	6,239,393	6,736,480
Domestic traffic <sup>3</sup> .....	3,465,396	3,751,213	4,235,252	4,959,227	5,419,805
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic .....	405,540,962	457,218,200	518,097,873	603,575,374	687,785,294

<sup>1</sup> Category I: customer (funds) transfers. <sup>2</sup> Category II: bank (funds) transfers. <sup>3</sup> Messages sent to/received from domestic users.

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

Table 1  
Basic statistical data

	1992	1993	1994	1995	1996
Population (millions) <sup>1</sup> .....	124.5	124.8	125.0	125.6	125.9
GDP (nominal; JPY trillions) .....	471.1	475.4	479.3	483.0	500.3
GDP per capita (JPY thousands)	3,785.1	3,810.2	3,833.0	3,845.9	3,975.2
Exchange rate (domestic currency vis-à-vis USD):					
<i>year-end</i> .....	<i>124.65</i>	<i>111.89</i>	<i>99.83</i>	<i>102.91</i>	<i>115.98</i>
<i>average</i> .....	<i>126.62</i>	<i>111.06</i>	<i>102.18</i>	<i>93.97</i>	<i>108.81</i>

<sup>1</sup> As of 1st October.

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

Table 2  
Settlement media used by non-banks<sup>1</sup>  
(in billions of Japanese yen)

	1992	1993	1994	1995	1996
Notes and coin <sup>2</sup> .....	36,865.8	39,506.0	40,982.4	44,772.3	47,268.3
Narrow money supply (M <sub>1</sub> ) <sup>2</sup> .....	136,138.0	145,614.6	151,665.3	171,544.1	188,144.6
Broad money supply (M <sub>2</sub> + CDs) <sup>2</sup> .....	515,484.3	526,839.6	541,419.4	559,283.3	576,977.1
Transferable deposits <sup>3</sup> .....	118,279.6	117,463.6	121,117.0	122,464.1	142,380.6
<i>of which held by:</i>					
<i>households</i> .....	<i>44,209.5</i>	<i>45,240.5</i>	<i>48,507.3</i>	<i>53,023.4</i>	<i>65,800.8</i>
<i>corporate sector</i> .....	<i>68,094.2</i>	<i>66,228.9</i>	<i>66,158.0</i>	<i>63,575.9</i>	<i>69,662.9</i>
<i>other</i> <sup>4</sup> .....	<i>5,975.9</i>	<i>5,994.2</i>	<i>6,451.7</i>	<i>5,864.8</i>	<i>6,916.9</i>
Postal deposits <sup>5</sup> .....	12,162.8	12,483.2	13,927.1	15,802.7	19,109.9

<sup>1</sup> Not seasonally adjusted. <sup>2</sup> End-year. <sup>3</sup> Demand deposits in yen at city banks, regional banks, regional banks II, trust banks, long-term credit banks and Shinkin banks; end-March. <sup>4</sup> Public sector. <sup>5</sup> Transferable deposits only; end-March.

Sources: Economic Statistics Annual, Economic Statistics Monthly (Bank of Japan) and other national data.

Table 3  
**Settlement media used by banks<sup>1</sup>**  
 (in billions of Japanese yen)

	1992	1993	1994	1995	1996
Reserve balances held at central bank <sup>2</sup> .....	2,892.5	2,959.8	3,038.6	3,239.5	3,404.3
<i>of which:</i>					
<i>required reserves</i> .....	2,889.7	2,956.9	3,035.5	3,226.1	3,358.0
Transferable deposits at banks <sup>3</sup>	9,752.1	8,987.7	9,420.2	8,214.9	6,344.1
Banks' borrowing from central bank <sup>4</sup> .....	7,218.4	6,070.0	5,991.7	2,390.5	1,983.4

<sup>1</sup> Not seasonally adjusted. <sup>2</sup> End-year. <sup>3</sup> Demand deposits in yen at city banks, regional banks, regional banks II, trust banks, long-term credit banks and Shinkin banks; end-March. <sup>4</sup> Banks' total borrowing from the Bank of Japan consisting of (i) discounting of bills and (ii) loans on bills; end-year.

Source: Economic Statistics Annual (Bank of Japan).

Table 4  
**Banknotes and coin**  
 (at year-end, not seasonally adjusted, in billions of Japanese yen)

	1992	1993	1994	1995	1996
Total banknotes and coin in circulation .....	42,511	45,279	46,626	50,060	54,589
Denomination of banknotes:					
10,000 yen .....	33,971	36,475	37,663	40,913	45,037
5,000 yen .....	1,853	1,912	1,947	2,008	2,147
1,000 yen .....	3,021	3,060	3,093	3,147	3,313
500 yen .....	130	129	128	126	126

Source: Economic Statistics Annual (Bank of Japan).

Table 5  
**Institutional framework<sup>1</sup>**

Categories	Number of institutions	Number of branches	Number of transferable accounts (millions)	Value of transferable accounts (JPY billions)
Central bank .....	1	34	0.002	3,404.3
Commercial banks <sup>2</sup> .....	164	15,119	320.7	121,480.8
Cooperative and rural banks <sup>3</sup> .....	4,377	32,496	.	38,269.0
Branches of foreign banks .....	92	142	.	338.2
Post Office .....	1	24,587	95.6	19,109.9

<sup>1</sup> Figures at end-1996 or at end-March 1997 for the institutions other than the Post Office. Figures at end-March 1996 for the Post Office. <sup>2</sup> Domestically licenced 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). For the number of transferable accounts, the figures exclude data on the trust banks operating from October 1993 and the foreign trust banks. <sup>3</sup> Including Shinkin banks, credit cooperatives, labour credit associations, agricultural cooperatives, fishery cooperatives, the Norinchukin Bank and the Shoko Chukin Bank.

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

Table 6  
Cash dispensers, ATMs and EFTPOS terminals

	1992	1993	1994	1995	1996
Cash dispensers and ATMs:					
<i>Number of networks</i> .....	26	23	22	21	18
<i>Number of machines</i> <sup>1</sup> .....	108,275	116,732	122,250	127,247	132,330
<i>Volume of transactions (thousand)</i>	356,897	407,083	447,381	482,709	514,982
<i>Value of transactions (JPY billion)</i>	16,235	17,874	19,193	20,441	21,482
EFTPOS:					
<i>Number of networks</i> <sup>3</sup> .....	240	266	271	256	265
<i>Number of terminals</i> <sup>3</sup> .....	32,816	21,010	28,320	25,061	22,977
<i>Volume of transactions (thousand)</i>	695	599	801	.	556
<i>Value of transactions (JPY billion)</i>	8.6	12.3	6.6	.	2.0

<sup>1</sup> End-March. <sup>2</sup> Figures represent interbank transactions only and do not include intrabank transactions. <sup>3</sup> End-March figures include those for labour credit associations. <sup>4</sup> End-March.

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



Table 7  
**Number of payment cards in circulation**  
 (in thousands)

	1992	1993	1994	1995	1996
Cards with a cash function <sup>1</sup> .....	219,930	231,750	244,370	260,830	270,820
Cards with a debit/credit function .....	209,218	220,738	228,705	237,472	234,708
<i>of which:</i>					
<i>cards with a debit function</i> <sup>2</sup>	5,712	6,218	7,965	9,962	11,748
<i>cards with a credit function</i> <sup>3</sup>	203,000	214,520	220,740	227,510	222,960
Cards with a cheque guarantee function <sup>4</sup> .....	.	.	.	.	.
Retailer cards <sup>3</sup> .....	49,600	53,020	55,850	59,160	52,340

<sup>1</sup> Excludes cards issued by fishery cooperatives and the Post Office; end-March. <sup>2</sup> End-March. The figure for 1992 is estimated from the data available, end-year. <sup>3</sup> End-March. <sup>4</sup> Cards with a cheque guarantee function do not exist in Japan.

Source: Center for Financial Industry Information Systems.

Table 8  
**Payment instructions handled by selected payment systems:  
 volume of transactions**  
 (in thousands)

	1992	1993	1994	1995	1996
Bill and cheque clearing systems .....	350,245	327,866	318,083	305,827	296,030
Zengin System .....	779,083	826,386	874,290	935,485	995,646
Foreign Exchange (Gaitame) Yen Clearing System .....	6,118	6,577	7,078	8,839	9,403
BOJ-NET .....	3,710	3,771	3,854	3,849	3,781

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

Table 9

**Payment instructions handled by selected payment systems:  
value of transactions**

(in trillions of Japanese yen)

	1992	1993	1994	1995	1996
Bill and cheque clearing systems .....	3,563	3,262	2,770	1,845	1,745
Zengin System .....	1,725	1,793	1,894	2,067	2,140
Foreign Exchange (Gaitame) Yen Clearing System .....	6,208	5,951	6,647	7,670	8,573
BOJ-NET .....	35,892	39,295	40,705	40,847	38,882

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

Table 10

**Transfer instructions handled by securities settlement systems:  
volume of transactions**

(in thousands)

	1992	1993	1994	1995	1996
Registration system <sup>1</sup> .....	275.6	368.0	439.3	598.3	781.5
Book-entry system .....	391.9	395.9	426.0	486.5	480.1
<i>Financing bills</i> .....	131.6	126.3	122.5	112.7	81.9
<i>Treasury bills</i> .....	173.4	159.2	152.0	175.2	143.3
<i>Government bonds, etc.</i> .....	87.0	110.4	151.5	198.6	255.0

<sup>1</sup> 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)

	1992	1993	1994	1995	1996
Registration system <sup>1</sup> .....	876.8	1,116.1	1,192.4	1,636.7	2,109.4
Book-entry system .....	2,021.3	2,504.9	2,182.7	2,511.8	2,567.1
<i>Financing bills</i> .....	710.8	797.1	706.0	706.7	683.7
<i>Treasury bills</i> .....	1,035.3	1,303.4	961.1	1,144.2	938.3
<i>Government bonds, etc.</i> .....	275.2	404.4	515.6	660.9	945.0

<sup>1</sup> Government bonds only.

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

Table 12

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

(in millions)

Instruments	1992	1993	1994	1995	1996
Bills and cheques cleared <sup>1</sup> .....	350.2	327.9	318.1	305.8	296.0
Payments by credit card .....	366.2	362.8	371.8	423.8	.
Paper-based credit transfers <sup>2</sup> .....	693.1	751.4	808.6	942.8	993.3
Paperless credit transfers .....	740.6	788.0	836.5	899.4	962.9
<i>customer initiated</i> <sup>3</sup> .....	731.7	778.3	826.2	887.4	950.4
<i>interbank/large-value</i> <sup>4</sup> .....	8.9	9.7	10.3	12.0	12.5
Direct debits .....	.	.	.	.	.
<b>Total</b> .....	.	.	.	.	.

<sup>1</sup> Transactions cleared through bill and cheque-clearing houses. <sup>2</sup> Comprising paper-based transfers through the Domestic Funds Transfer System and the Post Office. Estimated. <sup>3</sup> Transactions through the Zengin System (excluding paper-based transfers). <sup>4</sup> Transactions through BOJ-NET and the Foreign Exchange (Gaitame) Yen Clearing System.

Sources: 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)

Instruments	1992	1993	1994	1995	1996
Bills and cheques cleared <sup>1</sup> .....	3,563.5	3,262.4	2,769.9	1,845.1	1,745.0
Payments by credit card .....	12.8	12.6	12.5	13.3	14.3
Paper-based credit transfers <sup>2</sup> .....	47.7	44.4	43.1	50.0	60.6
Paperless credit transfers .....	39,979.9	43,894.9	46,967.0	46,968.4	47,837.5
<i>customer initiated</i> <sup>3</sup> .....	1,667.3	1,794.1	1,870.5	2,043.9	2,141.6
<i>interbank/large-value</i> <sup>4</sup> .....	38,312.6	42,100.8	45,096.5	44,924.5	45,695.9
Direct debits .....	.	.	.	.	.
<b>Total</b> .....	.	.	.	.	.

<sup>1</sup> Transactions cleared through bill and cheque-clearing houses. <sup>2</sup> Comprising paper-based transfers through the Domestic Funds Transfer System and the Post Office. Estimated. <sup>3</sup> Transactions through the Zengin System (excluding paper-based transfers). <sup>4</sup> Transactions through BOJ-NET and the Foreign Exchange (Gaitame) Yen Clearing System.

Sources: Economic Statistics Annual (Bank of Japan), Federation of Bankers Associations of Japan, Ministry of International Trade and Industry and other national data.

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

	1992	1993	1994	1995	1996
Members .....	112	116	127	130	133
<i>of which: live</i> .....	110	114	127	130	133
Sub-members <sup>1</sup> .....	73	78	84	91	91
<i>of which: live</i> .....	70	76	83	91	91
Participants <sup>2</sup> .....	8	7	8	12	15
<i>of which: live</i> .....	7	6	7	10	14
Total users .....	193	201	219	233	239
<i>of which: live</i> .....	187	196	217	231	238
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i> .....	2,074	2,244	2,551	2,693	2,874
<i>sub-members</i> .....	1,738	1,887	2,097	2,259	2,404
<i>participants</i> .....	91	125	218	277	354
<i>users</i> .....	3,903	4,256	4,866	5,229	5,632

<sup>1</sup> Domestic users sponsored by members abroad. <sup>2</sup> 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

	1992	1993	1994	1995	1996
Total messages sent .....	17,794,807	19,566,216	21,843,420	24,748,540	26,798,560
<i>of which:</i>					
<i>category I</i> <sup>1</sup> .....	4,206,763	4,462,919	4,728,927	5,253,371	5,474,056
<i>category II</i> <sup>2</sup> .....	4,923,671	4,963,253	5,023,849	5,374,359	5,326,415
Total messages received .....	17,244,547	18,812,497	20,444,154	23,487,782	25,894,551
<i>of which:</i>					
<i>category I</i> <sup>1</sup> .....	2,263,207	2,498,926	2,695,175	3,004,009	3,255,693
<i>category II</i> <sup>2</sup> .....	5,739,005	6,182,981	6,568,628	7,326,157	7,932,287
Domestic traffic <sup>3</sup> .....	2,363,060	2,519,129	2,562,869	2,989,029	2,996,465
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic .....	405,540,962	457,218,200	518,097,873	603,575,374	687,785,294

<sup>1</sup> Category I: customer (funds) transfers. <sup>2</sup> Category II: bank (funds) transfers. <sup>3</sup> Messages sent to/received from domestic users.

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



Table 1  
Basic statistical data

	1992	1993	1994	1995	1996
Population (millions):					
<i>year-end</i> .....	15.2	15.3	15.4	15.5	15.5
GDP (NLG billions) .....	566.1	581.5	613.0	635.0	661.5
GDP per capita .....	37,288	38,029	39,854	41,082	42,603
Exchange rate (domestic currency vis-à-vis USD):					
<i>year-end</i> .....	1.81	1.94	1.74	1.60	1.74
<i>average</i> .....	1.76	1.86	1.82	1.61	1.69

Table 2  
Settlement media used by non-banks  
(at year-end, not seasonally adjusted, in billions of Dutch guilders)

	1992	1993	1994	1995	1996
Notes and coin .....	37.0	37.6	38.1	38.2	38.3
Transferable deposits .....	98.1	112.1	114.1	134.7	155.6
<i>of which held by:</i>					
<i>persons</i> .....	41.6	45.6	47.0	51.7	58.6
<i>corporate sector</i> .....	45.1	53.9	54.5	65.2	77.5
<i>other</i> .....	11.3	12.6	12.6	17.8	19.5
Narrow money supply (M <sub>1</sub> ) .....	135.1	149.7	152.2	172.9	193.9
Broad money supply .....	431.5	464.5	466.0	486.6	515.0

Table 3  
**Settlement media used by banks**  
 (at year-end, in millions of Dutch guilders)

	1992	1993	1994	1995	1996
Reserve balances held at central bank <sup>1</sup> .....	17,557	19,985	19,408	9,785	16,040
Transferable deposits at other institutions (thousands) .....	1,906	3,118	2,462	3,061	3,116
<i>Memorandum items:</i>					
Required reserves .....	12,484	15,783	11,361	0	0
Institutions' borrowing from central bank .....	5,161	4,160	8,022	9,748	15,981

<sup>1</sup> Reserve balances also include "Required reserves" and "Institutions borrowing from central bank", although from the administrative point of view they are considered to be overdrafts instead of balances.

Table 4  
**Banknotes and coin**  
 (at year-end, not seasonally adjusted, in billions of Dutch guilders)

	1992	1993	1994	1995	1996
Total banknotes and coin issued	39.9	40.4	40.9	41.3	41.7
Denomination of banknotes:					
1,000 guilders .....	15.1	15.5	15.8	14.9	14.4
250 guilders .....	4.3	4.7	5.0	5.2	5.4
100 guilders .....	13.8	13.4	13.2	13.8	14.6
50 guilders .....	1.6	1.7	1.8	1.9	1.7
25 guilders .....	1.7	1.7	1.8	1.8	2.0
10 guilders .....	0.7	0.8	0.8	0.8	0.8
5 guilders .....	0.1	0.1	0.1	0.0	0.0
Banknotes held by credit institutions .....	2.9	2.8	2.8	3.1	3.4
Total banknotes outside credit institutions .....	37.0	37.6	38.1	38.2	38.3



Table 5  
**Institutional framework**  
 (at end-1996)

Categories	Number of institutions	Number of branches	Number of accounts (thousands)	Value of accounts (NLG billions)
Central bank .....	1	11	.	.
Commercial banks .....	97	2,517	.	.
Savings banks .....	26	26	.	.
Cooperative and rural banks .....	1	1,854	.	.
Postbank .....	1	2,286	.	.
<b>Total</b>	<b>126</b>	<b>6,694</b>	<b>19,800</b>	<b>156</b>
<i>Memorandum item:</i>				
Branches of foreign banks .....	24	.	.	.

Table 6  
**Cash dispensers, ATMs and EFTPOS terminals**

	1992	1993	1994	1995	1996
<b>Cash dispensers and ATMs:</b>					
<i>Number of networks</i> .....	2	2	2	2	2
<i>Number of machines</i> .....	3,964	4,461	4,995	5,532	5,793
<i>Volume of transactions (millions)</i> .....	262	314	367	425	456
<i>Value of transactions (NLG billion)</i> .....	45	56	65	74	81
<b>EFTPOS:</b>					
<i>Number of networks</i> .....	2	1	1	1	1
<i>Number of terminals</i> .....	11,440	24,549	47,588	73,376	96,044
<i>Volume of transactions (millions)</i> .....	47	67	126	256	371
<i>Value of transactions (NLG billions)</i> .....	3.8	7.3	14.4	24.3	35.3

Table 7  
**Number of payment cards in circulation<sup>1</sup>**  
 (at year-end, in thousands)

	1992	1993	1994	1995	1996
Cards with a cash function .....	12,538	13,107	13,988	16,419	18,933
Cards with a debit/credit function .....	1,500	1,257	1,257	1,493	1,846
<i>of which:</i>					
<i>cards with a debit function</i>	1,500	1,257	1,257	1,493	1,846
<i>cards with a credit function</i>	.	.	.	.	.
Cards with a cheque guarantee function .....	1,765	1,796	1,297	724	591
Retailer cards .....	.	.	.	.	.

<sup>1</sup> A multi-function card may appear in several categories. It is, therefore, not meaningful to add the figures.

Table 8  
**Payment instructions handled by selected payment systems:  
 volume of transactions**  
 (in millions)

	1992	1993	1994	1995	1996
Interpay <sup>1</sup> .....	1,045.8	1,130.5	1,225.4	1,410.9	1,586.1
<i>of which:</i>					
<i>cheques</i> .....	91.7	71.9	55.8	40.5	30.9
<i>other</i> .....	954.1	1,058.6	1,169.6	1,370.4	1,555.2
8007 S.W.I.F.T. ....	1.8	1.9	2.0	2.1	2.1
Central bank current account system (FA) .....	0.5	0.4	0.4	0.4	0.6

<sup>1</sup> Former BankGiroCentrale.

Table 9

**Payment instructions handled by selected payment systems:  
value of transactions**

(in billions of Dutch guilders)

	1992	1993	1994	1995	1996
Interpay <sup>1</sup> .....	1,942.0	2,207.4	2,195.0	2,189.1	2,319.5
<i>of which:</i>					
<i>cheques</i> .....	15.0	11.7	9.2	6.7	5.6
<i>other</i> .....	1,927.0	2,195.7	2,185.8	2,182.4	2,313.9
8007 S.W.I.F.T. ....	6,718.9	9,011.0	10,139.7	10,340.7	13,674.2
Central bank current account system (FA) .....	7,658.5	9,300.1	9,182.5	8,450.4	8,939.7

<sup>1</sup> Former BankGiroCentrale.

Table 10

**Transfer instructions handled by securities settlement systems:  
volume of transactions**

(in millions)

	1992	1993	1994	1995	1996
NECIGEF .....	1.193	1.323	1.145	1.028	1.481
Central bank clearing institute ...	0.003	0.002	0.002	0.003	0.003
Effectenclearing .....	0.938	1.195	1.155	1.350	1.951

Table 11  
**Transfer instructions handled by securities settlement systems:  
value of transactions**  
(in billions of Dutch guilders)

	1992	1993	1994	1995	1996
NECIGEF .....	.	.	.	.	.
Central bank clearing institute ...	49.4	49.0	79.5	100.1	127.0
CDs .....	12.3	16.0	25.1	49.5	44.8
CPs .....	21.0	17.1	39.6	37.2	60.1
MTNs .....	16.1	15.9	14.8	13.4	22.1
Effectenclearing <sup>1</sup> .....	303.7	509.4	580.1	680.9	983.7
Government securities .....	207.2	355.8	397.1	432.7	597.5
Bonds .....	16.2	28.2	27.0	48.5	62.9
Shares .....	80.3	125.4	156.0	199.7	323.3

<sup>1</sup> The figures show the turnover of ASE.

Table 12  
**Indicators of use of various cashless payment instruments:  
volume of transactions**  
(in millions)

Instruments	1992	1993	1994	1995	1996
Cheques .....	221.9	180.5	144.8	109.9	84.3
Credit and debit cards .....	46.6	91.7	192.7	373.3	535.6
Paper-based credit transfers .....	105.0	101.4	79.1	76.1	74.4
<i>customer initiated</i> .....	105.0	101.4	79.1	76.1	74.4
<i>interbank/large value</i> .....	0.0	0.0	0.0	0.0	0.0
Paperless credit transfers .....	1,003.1	1,355.2	1,450.5	1,238.7	1,274.0
<i>customer initiated</i> .....	1,000.8	1,353.1	1,448.1	1,236.2	1,271.5
<i>interbank/large value</i> .....	2.3	2.1	2.4	2.5	2.5
Direct debits .....	431.4	479.5	531.0	597.5	658.9
<b>Total</b> .....	<b>1,808.0</b>	<b>2,208.3</b>	<b>2,398.1</b>	<b>2,395.5</b>	<b>2,627.2</b>

Table 13  
**Indicators of use of various cashless payment instruments:  
value of transactions**  
(in billions of Dutch guilders)

<b>Instruments</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>
Cheques issued .....	32.0	25.9	21.0	16.1	13.1
Payments by debit and credit cards .....	3.8	10.0	21.6	36.3	51.8
Paper-based credit transfers .....	48.0	36.5	26.4	24.8	23.6
<i>customer initiated</i> .....	48.0	36.5	26.4	24.8	23.6
<i>interbank/large value</i> .....	0.0	0.0	0.0	0.0	0.0
Paperless credit transfers .....	18,741.2	21,102.6	22,105.3	21,496.2	22,877.7
<i>customer initiated</i> .....	3,027.7	2,791.5	2,783.1	2,705.1	3,597.3
<i>interbank/large value</i> .....	15,713.5	18,311.1	19,322.2	18,791.1	19,280.4
Direct debits .....	226.0	229.8	239.8	259.8	281.3
<b>Total</b> .....	<b>19,051.0</b>	<b>21,404.8</b>	<b>22,414.1</b>	<b>21,833.2</b>	<b>23,247.5</b>

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

	1992	1993	1994	1995	1996
Members .....	29	30	29	30	29
<i>of which: live</i> .....	29	29	27	28	29
Sub-members <sup>1</sup> .....	25	28	28	32	34
<i>of which: live</i> .....	23	26	28	32	34
Participants <sup>2</sup> .....	1	1	0	2	3
<i>of which: live</i> .....	0	0	0	2	3
Total users .....	55	59	57	64	66
<i>of which: live</i> .....	52	55	55	62	65
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i> .....	2,074	2,244	2,551	2,693	2,874
<i>sub-members</i> .....	1,738	1,887	2,097	2,259	2,404
<i>participants</i> .....	91	125	218	277	354
<i>users</i> .....	3,903	4,256	4,866	5,229	5,632

<sup>1</sup> Domestic users sponsored by members abroad. <sup>2</sup> 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**

	1992	1993	1994	1995	1996
Total messages sent .....	13,547,572	14,543,442	15,253,565	16,903,885	18,667,326
<i>of which:</i>					
<i>category I</i> <sup>1</sup> .....	6,310,685	6,474,480	6,508,032	6,747,310	7,032,141
<i>category II</i> <sup>2</sup> .....	2,733,648	2,912,403	3,107,787	3,275,847	3,420,058
Total messages received .....	12,865,625	13,983,712	14,538,364	16,027,297	17,802,379
<i>of which:</i>					
<i>category I</i> <sup>1</sup> .....	4,941,606	5,169,497	5,279,922	5,498,322	5,726,242
<i>category II</i> <sup>2</sup> .....	1,921,436	2,066,993	2,081,037	2,204,721	2,362,906
Domestic traffic <sup>3</sup> .....	1,763,389	1,996,747	1,750,991	1,870,671	2,052,952
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic .....	405,540,962	457,218,200	518,097,873	603,575,374	687,785,294

<sup>1</sup> Category I: customer (funds) transfers. <sup>2</sup> Category II: bank (funds) transfers. <sup>3</sup> Messages sent to/received from domestic users.

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

Table 1  
Basic statistical data

	1992	1993	1994	1995	1996
Population (millions):					
<i>average</i> .....	8.67	8.72	8.79	8.83	8.84
GDP (SEK billions) .....	1,441.9	1,442.2	1,571.0	1,626.2	1,677.9
GDP per capita .....	166,236	165,903	174,208	186,270	189,830
Exchange rate (domestic currency vis-à-vis USD):					
<i>year-end</i> .....	7.0500	8.3325	7.4615	6.6177	6.8859
<i>average</i> .....	5.8123	7.8015	7.7126	7.1372	7.7062

Table 2  
Settlement media used by non-banks  
(at year-end, not seasonally adjusted, in billions of Swedish kronor)

	1992	1993	1994	1995	1996
Notes and coin .....	64.3	67.1	68.8	68.5	72.2
Transferable deposits .....	589.2	612.5	638.8	655.3	730.2
<i>of which held by:</i>					
<i>households</i> .....	374.2	376.4	388.5	385.3	409.9
<i>corporate sector</i> .....	199.9	213.9	229.8	252.9	300.2
<i>other</i> <sup>1</sup> .....	15.1	22.2	20.5	17.1	20.1
Other <sup>2</sup> .....	29.3	30.5	4.7	8.0	13.4
Narrow money supply (M <sub>1</sub> ) .....	.	.	.	.	.
<i>Memorandum item:</i>					
Broad money supply (M <sub>3</sub> ) ...	682.8	710.1	712.3	731.8	815.8

<sup>1</sup> Local government. <sup>2</sup> Postal giro accounts and certificates of deposit.

Table 3  
**Settlement media used by credit/deposit-taking institutions**  
(in billions of Swedish kronor)

	1992	1993	1994	1995	1996
Reserve balances held at central bank .....	9.3	17.4	1.5	1.3	1.5
<i>of which:</i>					
<i>required reserves</i> .....	2.8	5.3	.	.	.
Transferable deposits at other institutions .....	34.1	34.2	45.4	52.8	70.6
Other <sup>1</sup> .....	1.5	1.1	.	.	.
<i>Memorandum item:</i>					
Institutions' borrowing from central bank .....	0.0	0.0	0.0	0.0	0.0

<sup>1</sup> Deposits on postal giro accounts.

Table 4  
**Banknotes and coin**  
(in millions of Swedish kronor)

	1992	1993	1994	1995	1996
Total banknotes and coin outstanding .....	73,945	75,722	76,442	76,660	80,790
Denomination of banknotes:					
10,000 kronor .....	19	0	0	0	0
1,000 kronor .....	39,299	39,803	39,569	37,841	38,636
500 kronor .....	15,711	18,384	19,903	22,316	25,565
100 kronor .....	13,354	12,001	11,298	10,649	10,332
50 kronor .....	817	261	205	185	913
20 kronor .....	1,011	1,525	1,608	1,679	1,309
10 kronor .....	433	345	315	300	286
5 kronor .....	96	95	94	94	93
Banknotes held by credit institutions .....	9,894	8,919	7,848	8,357	8,774
Total banknotes outside credit institutions .....	60,846	63,495	65,144	64,707	68,360



Table 5  
**Institutional framework**  
 (at end-1996)

Categories	Number of institutions	Number of branches	Number of accounts (millions)	Value of accounts (SEK billions)
Central bank .....	1	11	.	.
Commercial banks <sup>1</sup> .....	21	3,400	.	802.4
Savings banks .....	87	307	.	58.6
<i>Memorandum item:</i>				
Branches of foreign banks .....	16	16	.	9.8

<sup>1</sup> The Postgirot Bank is included from March 1994. 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.

Table 6  
**Cash dispensers, ATMs and EFTPOS terminals**

	1992	1993	1994	1995	1996
<b>Cash dispensers and ATMs:</b>					
<i>Number of networks</i> .....	2	2	2	2	2
<i>Number of machines</i> .....	2,203	2,226	2,281	2,359	2,379
<i>Volume of transactions (millions)</i>					
	218	247	270	281	297
<i>Value of transactions (SEK billion)</i>					
	163	195	218	226	239
<b>EFTPOS:</b>					
<i>Number of networks</i> <sup>1</sup> .....	2	2	2	2	2
<i>Number of terminals</i> .....	14,276	26,634	48,466	54,389	67,000
<i>Volume of transactions (millions)</i>					
	46	57	80	92	111
<i>Value of transactions (SEK billion)</i>					
	27	38	46	53	69

<sup>1</sup> Terminals administrated by BABS and SERVO, two bank-owned companies which collect and redeem transactions for card issuers.

Table 7  
**Number of payment cards in circulation<sup>1</sup>**  
 (in thousands)

	1992 <sup>2</sup>	1993	1994	1995	1996
Cards with a cash function .....	4,960	5,162	6,037	6,171	6,288
Cards with a debit/credit function <sup>3</sup> .....	10,463	11,412	12,076	4,742	5,759
<i>of which:</i>					
<i>cards with a debit function</i>	8,946	9,937	10,379	3,525	3,811
<i>cards with a credit function</i> .....	1,517	1,475	1,697	1,217	1,948
Cards with a cheque guarantee function .....					
Retailer cards .....	7,245	7,961	9,121	.	.

<sup>1</sup> A card with multiple functions may appear in several categories. It is, therefore, not meaningful to add the figures. <sup>2</sup> From 1992, new source of statistics. <sup>3</sup> 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 8  
**Payment instructions handled by selected payment systems:  
 volume of transactions**  
 (in thousands)

	1992	1993	1994	1995	1996
Data Clearing (retail clearing) <sup>1</sup>	141,436	127,784	120,957	112,807	105,718
<i>of which:</i>					
<i>truncated cheques</i> .....	98,972	86,100	78,983	66,619	57,582
<i>other</i> .....	42,464	41,684	41,974	46,188	48,136
The RIX system <sup>2</sup> .....	79	78	84	119	310
<i>of which:</i>					
<i>interbank (large-value) transa</i>	28	24	21	21	25
<i>third-party transactions ("clea</i>	51	54	63	98	285

<sup>1</sup> The Data Clearing is owned by the Swedish Bankers' Association and is managed by the Bank Giro Centre. <sup>2</sup> Since 1990 RIX has been operating on a gross basis.

Table 9

**Payment instructions handled by selected payment systems:  
value of transactions**

(in billions of Swedish kronor)

	1992	1993	1994	1995	1996
Data Clearing (retail clearing) <sup>1</sup>	17,920	20,510	9,617	3,850	2,330
<i>of which:</i>					
<i>truncated cheques</i> .....	17,546	20,120	9,204	3,395	1,730
<i>other</i> .....	374	390	413	455	600
The RIX system <sup>2</sup> .....	44,520	40,898	39,920	53,591	78,189
<i>of which:</i>					
<i>interbank (large-value) transa</i>	23,461	16,836	14,101	15,345	17,452
<i>third-party transactions ("clea</i>	21,059	24,062	25,819	38,246	60,737

<sup>1</sup> 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. <sup>2</sup> Since 1990 RIX has been operating on a gross basis. Total daily payments in the RIX system averaged SKr 300 billion during 1996.

Table 10

**Transfer instructions handled by securities settlement systems:  
volume of transactions**

(in thousands)

	1992	1993	1994	1995	1996
VPC: <sup>1</sup>					
<i>of which:</i>					
<i>government securities</i> .....	.	149	500	498	601
<i>equities</i> .....	.	2,000	2,500	2,414	3,077

<sup>1</sup> Värdepapperscentralen AB (Swedish Securities Register Centre). Government and mortgage securities have been included in the VP book-entry system since mid-1993. Therefore the figures refer to the second half of 1993 only. 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)

	1992	1993	1994	1995	1996
VPC: <sup>1</sup>					
<i>of which:</i>					
<i>government securities</i> <sup>2</sup> .....	.	.	46,000	40,428	66,432
<i>equities</i> .....	.	.	1,055	1,119	1,505

<sup>1</sup> Värdepapperscentralen AB (Swedish Securities Register Centre). <sup>2</sup> Government and mortgage securities have been included in the VP book-entry system since mid-1993. Therefore the figures refer to the second half of 1993 only.

Table 12

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

(in millions)

Instruments	1992	1993	1994	1995	1996
Cheques issued <sup>1</sup> .....	76	.	.	.	.
Payments by debit and credit cards .....	62	68	97	111	120
Paper-based credit transfers .....	165	161	170	189	196
<i>customer initiated</i> .....					
<i>interbank/large-value</i> .....					
Paperless credit transfers .....	425	428	435	431	441
<i>customer initiated</i> .....					
<i>interbank/large-value</i> .....					
Direct debits .....	37	40	45	50	54
<b>Total</b> .....	<b>765</b>	<b>697</b>	<b>747</b>	<b>781</b>	<b>811</b>

<sup>1</sup> From 1993 no data available.

Table 13  
**Indicators of use of various cashless payment instruments:  
value of transactions**  
(in billions of Swedish kronor)

<b>Instruments</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>
Cheques issued <sup>1</sup> .....	675	.	.	.	.
Payments by debit and credit cards .....	44	53	79	91	103
Paper-based credit transfers .....	2,115	2,230	1,933	1,946	1,656
<i>customer initiated</i> .....					
<i>interbank/large-value</i> .....					
Paperless credit transfers .....	3,380	3,587	4,282	4,405	5,076
Direct debits .....	152	205	183	194	202
<b>Total</b> .....	<b>6,366</b>	<b>6,075</b>	<b>6,477</b>	<b>6,636</b>	<b>7,037</b>

<sup>1</sup> From 1993 no data available.

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

	1992	1993	1994	1995	1996
Members .....	11	10	9	9	9
<i>of which: live</i> .....	10	10	8	8	8
Sub-members <sup>1</sup> .....	9	9	9	12	12
<i>of which: live</i> .....	9	9	9	11	12
Participants <sup>2</sup> .....	0	0	0	2	3
<i>of which: live</i> .....	0	0	0	1	2
Total users .....	20	19	18	23	24
<i>of which: live</i> .....	19	19	17	20	22
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i> .....	2,074	2,244	2,551	2,693	2,874
<i>sub-members</i> .....	1,738	1,887	2,097	2,259	2,404
<i>participants</i> .....	91	125	218	277	354
<i>users</i> .....	3,903	4,256	4,866	5,229	5,632

<sup>1</sup> Domestic users sponsored by members abroad. <sup>2</sup> 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<sup>1</sup>**

	1992	1993	1994	1995	1996
Total messages sent .....	7,088,941	7,447,346	8,701,454	10,019,610	11,256,498
<i>of which:</i>					
<i>category I<sup>1</sup></i> .....	2,810,225	2,915,188	3,335,280	3,816,919	4,349,901
<i>category II<sup>2</sup></i> .....	1,797,251	1,863,230	2,029,226	2,223,462	2,400,631
Total messages received .....	5,879,573	6,040,394	7,021,354	7,971,173	8,992,702
<i>of which:</i>					
<i>category I<sup>1</sup></i> .....	1,980,723	2,136,086	2,427,632	2,833,733	3,167,954
<i>category II<sup>2</sup></i> .....	1,482,130	1,566,639	1,925,165	2,104,694	2,357,508
Domestic traffic <sup>3</sup> .....	994,931	984,831	1,213,723	1,455,832	1,722,933
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic .....	405,540,962	457,218,200	518,097,873	603,575,374	687,785,294

<sup>1</sup> Category I: customer (funds) transfers. <sup>2</sup> Category II: bank (funds) transfers. <sup>3</sup> Messages sent to/received from domestic users.

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

Table 1  
Basic statistical data

	1992	1993	1994	1995	1996
Population (thousands):					
<i>year-end</i> .....	6,908.0	6,968.6	7,019.0	7,062.4	7,108.3
<i>average</i> .....	6,943.0	6,989.0	7,036.9	7,080.9	7,084.8
GDP (CHF billions) .....	342.4	349.8	357.2	364.6	363.7
GDP per capita .....	49,560.5	50,196.5	50,893.9	51,620.1	51,160.3
Exchange rate (domestic currency vis-à-vis USD):					
<i>year-end</i> ( <i>December average</i> ).....	1.4220	1.4640	1.3289	1.1639	1.3271
<i>average</i> .....	1.4036	1.4775	1.3660	1.1817	1.2351

Table 2  
Settlement media used by non-banks  
(at year-end, not seasonally adjusted, in billions of Swiss francs)

	1992	1993	1994	1995	1996
Notes and coin .....	26.85	26.96	27.84	27.89	29.41
Transferable deposits <sup>1</sup> .....	54.04	59.57	63.42	68.69	78.06
Narrow money supply (M <sub>1</sub> ) <sup>2</sup> .....	124.06	136.59	141.40	155.24	170.30
<i>Memorandum item:</i>					
Broad money supply (M <sub>3</sub> ) <sup>2</sup>	381.11	400.11	415.02	427.00	457.04

<sup>1</sup> Sight deposits in Swiss francs. <sup>2</sup> Definition 1995.

Table 3  
**Settlement media used by credit/deposit-taking institutions**  
 (at year-end, in billions of Swiss francs)

	1992	1993	1994	1995	1996
Reserve balances held at central bank <sup>1</sup> .....	4.54	4.73	4.20	4.87	5.69
Transferable deposits at other institutions .....	18.29	22.82	17.93	19.44	28.06
Transferable deposits at PTT (Post Office) .....	1.78	1.71	1.45	1.33	1.66
<i>Memorandum items:</i>					
Required reserves <sup>2</sup> .....	5.81	5.81	5.75	5.82	6.35
Institutions' borrowing from central bank <sup>3</sup> .....	0.03	0.01	0.01	0.01	0.76

<sup>1</sup> Figures at year-end are peak values; average figures are as follows (in billions): 1992: 2.55, 1993: 2.65, 1994: 2.68, 1995: 2.67, 1996: 3.00. <sup>2</sup> Cash liquidity (cash, deposits with the Swiss National Bank and the PTT). <sup>3</sup> Lombard credits.

Table 4  
**Banknotes and coin**  
 (at year-end, not seasonally adjusted, in millions of Swiss francs)

	1992	1993	1994	1995	1996
Total banknotes and coin issued .....	31,359.6	31,374.8	32,634.6	33,009.1	34,598.3
<i>Denomination of banknotes:</i>					
1,000 francs .....	13,501.9	13,584.9	14,504.6	14,568.5	15,940.8
500 francs .....	3,782.5	3,748.0	3,835.3	3,848.9	3,912.3
100 francs .....	9,059.0	8,926.8	9,058.6	9,187.1	9,249.2
50 francs .....	1,401.9	1,425.1	1,463.6	1,586.9	1,594.6
20 francs .....	1,017.9	1,044.9	1,065.6	1,080.2	1,127.2
10 francs .....	581.3	596.9	608.4	611.6	614.5
Coin .....	2,015.1	2,048.2	2,098.5	2,125.9	2,159.7
Banknotes held by credit institutions (including PTT) .....	4,375.6	4,462.5	4,815.0	5,125.2	5,216.0
Total banknotes and coin outside credit institutions .....	26,984.0	26,912.3	27,819.6	27,883.9	29,382.3



Table 5  
**Institutional framework**  
 (at end-1996)

Categories	Number of institutions	Number of branches	Number of accounts	Value of accounts (CHF billions)
Central bank .....	1	10 <sup>1</sup>	739	5.69
Credit institutions .....	370	3,600	.	59.14
Post office .....	1	3,530	1,710,043	17.41
<i>Memorandum item:</i>				
Foreign banks .....	16	25	.	0.24

<sup>1</sup> Including two head offices.

Table 6  
**Cash dispensers, ATMs and EFTPOS terminals**

	1992	1993	1994	1995	1996
<b>Cash dispensers and ATMs:</b>					
<i>Number of networks</i> <sup>1</sup> .....	2	2	2	2	2
<i>Number of machines</i> .....	2,669	3,062	3,380	3,753	4,160
<i>Volume of transactions</i> <sup>2,3</sup> .....	51.50	57.67	64.02	70.27	74.82
<i>Value of transactions</i> <sup>2,4</sup> .....	16.27	17.71	19.05	20.19	20.80
<b>EFTPOS:</b>					
<i>Number of networks</i> <sup>5</sup> .....	2	2	2	2	2
<i>Number of terminals:</i> <sup>6</sup>					
<i>EC-Direct</i> .....	7,054	9,989	16,140	24,191	33,018
<i>Postomat-Plus</i> .....	4,273	8,367	16,702	24,703	33,629
<i>Volume of transactions</i> <sup>3</sup> .....	19.40	27.95	39.85	56.73	76.21
<i>Value of transactions</i> <sup>4</sup> .....	1.41	2.43	4.02	6.46	9.06

<sup>1</sup> Bancomat and Postomat system. <sup>2</sup> Only transactions through a central processor. <sup>3</sup> In millions. <sup>4</sup> In billions of Swiss francs. <sup>5</sup> ec-Direct and Postomat-Plus. <sup>6</sup> Most of the terminals can be used by both networks.

Table 7  
**Number of payment cards in circulation**  
 (at year-end, in thousands)

	1992	1993	1994	1995	1996
Cards with a debit/credit function .....	4,547	5,115	5,615	6,064	6,544
<i>of which:</i>					
<i>cards with a debit function</i>	2,691	3,165	3,454	3,716	4,023
<i>cards with a credit function</i> .....	1,706	1,828	2,059	2,263	2,450
<i>cards with a cash function</i> <sup>1</sup> .....	3,783	4,359	4,913	5,610	5,892
Cards with a cheque guarantee function .....	2,840	3,286	3,557	3,846	4,094
Retailer cards .....	.	.	.	.	.

<sup>1</sup> Cash withdrawals at ATMs.

Table 8  
**Payment instructions handled by selected interbank payment systems:  
 volume of transactions**  
 (in millions)

	1992	1993	1994	1995	1996
SIC (Swiss Interbank Clearing) .....	64.3	67.4	88.7	96.0	108.0
Payments on data carrier or file transfer <sup>1</sup> .....	56.7	65.5	71.8	80.4	85.8
Cheques.....	13.0	9.8	7.9	6.3	5.2

<sup>1</sup> Includes DTA (data carrier exchange facility) and LSV (direct debit procedure).

Table 9

**Payment instructions handled by selected interbank payment systems:  
value of transactions**  
(in billions of Swiss francs)

	1992	1993	1994	1995	1996
SIC (Swiss Interbank Clearing) .....	33,369.0	34,126.0	33,254.2	32,184.0	38,032.3
Payments on data carrier or file transfer <sup>1</sup> .....	.	.	252.5	281.2	294.1
Cheques.....	46.9	36.5	30.7	25.7	21.5

<sup>1</sup> Includes DTA (data carrier exchange facility) and LSV (direct debit procedure).

Table 10

**Transfer instructions handled by securities settlement systems:  
volume of transactions**  
(in millions)

	1992	1993	1994	1995	1996
SEGA: <sup>1</sup>					
Deliveries against payment .....	3.38	4.20	3.89	3.57	4.48
Deliveries free of payment ...	0.44	0.42	0.41	0.39	0.42

<sup>1</sup> The Swiss Securities Clearing Company.

Table 11

**Transfer instructions handled by securities settlement systems:  
value of transactions**  
(in billions of Swiss francs)

	1992	1993	1994	1995	1996
SEGA <sup>1</sup> .....	385.8	654.0	715.7	888.3	1,180.9

<sup>1</sup> The Swiss Securities Clearing Company.

Table 12  
**Indicators of use of various cashless payment instruments:  
 volume of transactions**  
 (in millions)

Instruments	1992	1993	1994	1995	1996
Through banks: <sup>1</sup>					
Cheques issued <sup>2</sup> .....	19.2	15.4	13.1	11.3	10.3
Payments by debit and credit cards <sup>3</sup> .....	49.4	60.9	75.3	89.4	109.2
Paperless credit transfers <sup>4</sup> .....	110.0	119.8	144.6	157.6	172.8
Direct debits .....	11.0	13.2	16.0	18.8	21.1
<b>Total</b> .....	<b>189.5</b>	<b>209.3</b>	<b>249.0</b>	<b>277.1</b>	<b>313.4</b>
Through the PTT:					
Payments by debit cards <sup>5</sup> .....	2.1	4.4	7.7	14.1	21.7
Transfers (paper-based ... and electronic) <sup>6</sup> .....	245.6	258.7	255.0	276.3	298.6
<b>Total</b> .....	<b>247.7</b>	<b>263.1</b>	<b>262.7</b>	<b>290.4</b>	<b>320.3</b>
<b>Grand total</b> .....	<b>437.2</b>	<b>472.4</b>	<b>511.7</b>	<b>567.5</b>	<b>633.7</b>

<sup>1</sup> Intrabank payments are not included. <sup>2</sup> Eurocheques, bank cheques and Swiss Bankers Travellers Cheques. <sup>3</sup> Eurocheque card, American Express, Eurocard, VISA and Diners Club; partly estimated. <sup>4</sup> SIC and banks' data media exchange system. <sup>5</sup> POSTCARD. <sup>6</sup> Detailed figures are not published by the PTT.

Table 13  
**Indicators of use of various cashless payment instruments:  
value of transactions**  
(in billions of Swiss francs)

Instruments	1992	1993	1994	1995	1996
Through banks: <sup>1</sup>					
Cheques issued <sup>2</sup> .....	47.71	37.21	31.36	26.34	22.19
Payments by debit and credit cards <sup>3</sup> .....	8.43	10.57	12.74	14.87	17.16
Paperless credit transfers <sup>4</sup> .....	33,369.00	34,126.00	33,476.89	32,428.90	38,284.87
Direct debits .....	.	.	29.77	36.30	41.56
<b>Total</b> .....	<b>33,425.14</b>	<b>34,173.78</b>	<b>33,550.76</b>	<b>32,506.41</b>	<b>38,365.78</b>
Through the PTT:					
Payments by debit cards <sup>5</sup> .....	0.13	0.30	0.68	1.76	2.94
Transfers (paper-based ... and electronic) <sup>6</sup> .....	1,107.25	1,124.47	1,128.85	1,161.67	1,245.73
<b>Total</b> .....	<b>1,107.38</b>	<b>1,124.77</b>	<b>1,129.53</b>	<b>1,163.43</b>	<b>1,248.67</b>
<b>Grand total</b> .....	<b>34,532.52</b>	<b>35,298.55</b>	<b>34,680.29</b>	<b>33,669.84</b>	<b>39,614.45</b>

<sup>1</sup> Intrabank payments are not included. <sup>2</sup> Eurocheques, bank cheques and Swiss Bankers Travellers Cheques. <sup>3</sup> Eurocheque card, American Express, Eurocard, VISA and Diners Club; partly estimated. <sup>4</sup> Until 1993, only SIC; since 1994, SIC and banks' data media exchange system. <sup>5</sup> POSTCARD. <sup>6</sup> Detailed figures are not published by the PTT.

Table 14  
**Participation in S.W.I.F.T. by domestic institutions<sup>1</sup>**

	1992	1993	1994	1995	1996
Members .....	117	119	124	126	125
<i>of which: live</i> .....	113	115	122	120	124
Sub-members <sup>2</sup> .....	57	61	65	68	72
<i>of which: live</i> .....	53	60	62	67	69
Participants <sup>3</sup> .....	5	6	10	12	13
<i>of which: live</i> .....	2	3	8	10	10
Total users .....	179	186	199	206	210
<i>of which: live</i> .....	168	178	192	197	203
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i> .....	2,074	2,244	2,551	2,693	2,874
<i>sub-members</i> .....	1,738	1,887	2,097	2,259	2,404
<i>participants</i> .....	91	125	218	277	354
<i>users</i> .....	3,903	4,256	4,866	5,229	5,632

<sup>1</sup> Data for Switzerland and Liechtenstein. <sup>2</sup> Domestic users sponsored by members abroad. <sup>3</sup> 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<sup>1</sup>**

	1992	1993	1994	1995	1996
Total messages sent .....	28,835,267	30,961,709	33,910,798	35,748,763	38,733,223
<i>of which:</i>					
<i>category I<sup>2</sup></i> .....	7,912,899	8,024,796	8,648,770	9,247,470	9,773,822
<i>category II<sup>3</sup></i> .....	8,424,164	8,639,285	8,874,142	9,432,351	9,532,780
Total messages received .....	25,805,430	27,264,322	30,405,937	31,829,507	35,222,140
<i>of which:</i>					
<i>category I<sup>2</sup></i> .....	5,364,953	5,526,472	5,931,601	6,251,734	6,593,731
<i>category II<sup>3</sup></i> .....	4,655,906	4,665,332	4,830,139	4,848,735	5,253,289
Domestic traffic <sup>4</sup> .....	4,977,941	5,435,479	6,520,135	5,676,737	6,084,984
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic .....	405,540,962	457,218,200	518,097,873	603,575,374	687,785,294

<sup>1</sup> Data for Switzerland and Liechtenstein. <sup>2</sup> Category I: customer (funds) transfers. <sup>3</sup> Category II: bank (funds) transfers. <sup>4</sup> Messages sent to/received from domestic users.

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

Table 1  
Basic statistical data

	1992	1993	1994	1995	1996
Population (millions):					
<i>mid-year</i> .....	57.8 <sup>1</sup>	58.2 <sup>1</sup>	58.4 <sup>1</sup>	58.4	58.8
GDP (GBP billions) <sup>2</sup> .....	594.9	630.0	668.9	700.9	742.3
GDP per capita .....	10,292	10,825	11,453	12,002	12,624
Exchange rate (domestic currency vis-à-vis USD):					
<i>year-end</i> .....	0.6601	0.6766	0.6392	0.6450	0.5841
<i>average</i> .....	0.5661	0.6660	0.6524	0.6336	0.6403

<sup>1</sup> Estimated. <sup>2</sup> Nominal at market prices.

Table 2  
Settlement media used by non-banks  
(at year-end, not seasonally adjusted, in billions of pounds sterling)

	1992	1993 <sup>2</sup>	1994	1995	1996
Notes and coin .....	17.0	17.9	18.8	19.9	20.8
Narrow money deposits <sup>1</sup> .....	357.0 <sup>1</sup>	377.6	391.7	417.1	439.4
Narrow money supply <sup>1</sup> .....	374.0 <sup>1</sup>	395.5	410.5	437.0	460.2
<i>Memorandum items:</i>					
Broad money supply (M <sub>4</sub> ) ...	519.4	546.8	568.3	622.6	682.5
Broad money deposits .....	502.4	528.9	549.5	602.7	661.7
<i>of which held by:</i>					
<i>persons</i> .....	354.2	366.7	375.4	402.8	425.5
<i>corporate sector</i> .....	69.3	75.6	79.6	85.0	95.3
<i>other</i> .....	78.9	86.6	94.5	115.0	140.9

<sup>1</sup> Break in series means that this figure is not comparable with previous figures in the series. The definition of deposits in M<sub>2</sub> is altered with effect from December 1992. Previously, bank deposits in M<sub>2</sub> 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 M<sub>2</sub> were "transactions accounts" and other deposits of less than £100,000 and up to one month's maturity. Banks now define retail deposits as deposits which arise from the customers' acceptance of an advertised rate (including nil). Building societies include all shares or sums deposited by individuals plus sums from contractual savings schemes (but exclude retail issues of subscribed capital, e.g. perpetual interest-bearing shares). <sup>2</sup> Data for 1993 calculated on a new definition of M<sub>4</sub>.

Table 3

**Settlement media used by banks, building societies and discount houses**

(at year-end, not seasonally adjusted, in billions of pounds sterling)

	1992	1993 <sup>2</sup>	1994	1995	1996
Reserve balances held at central bank .....	1.4	1.4	1.5	1.8	2.4
Sight and time deposits with other banks, building societies, discount houses .....	210.3	204.5	223.6	224.1	227.6
<i>of which:</i>					
<i>sight</i> .....	31.6	30.6	36.5	32.9	38.9
<i>time</i> .....	157.2	154.9	168.2	173.3	174.1
<i>residual</i> <sup>1</sup> .....	21.5	19.0	18.9	17.9	14.6
<i>Memorandum items:</i>					
Required reserves .....	0	0	0	0	0
Discount houses' borrowing fr	0	0.33	0	0	0

<sup>1</sup> In respect of deposits which cannot be split between sight and time (e.g. building society deposits with each other). <sup>2</sup> Data for 1993 calculated on a new definition of M<sub>4</sub>.

Table 4

**Banknotes and coin**

(in millions of pounds sterling)

	1992	1993	1994	1995	1996
Total banknotes and coin outstanding <sup>1,2</sup> .....	20,445	21,559	23,080	24,299	25,959
Denomination of banknotes in circulation: <sup>3</sup>					
50 pounds .....	2,801	2,996	2,989	3,205	3,368
20 pounds .....	6,498	7,337	8,362	9,098	10,021
10 pounds .....	5,856	5,714	5,945	6,111	6,340
5 pounds .....	1,232	1,211	1,160	1,135	1,119
1 pound .....	58	57	57	56	56
Total .....	16,445	17,315	18,513	19,605	20,904
Banknotes held by credit institutions <sup>1,2,4</sup> .....	3,613	3,662	4,328	4,403	5,147
Total banknotes outside credit institutions <sup>1,2,4</sup> .....	16,832	17,897	18,752	19,896	20,812

<sup>1</sup> Not seasonally adjusted. <sup>2</sup> Average for the month of December. <sup>3</sup> Bank of England notes only. <sup>4</sup> Figures include coin.



Table 5  
**Institutional framework**  
 (at end-1996)

Categories	Number of institutions	Number of branches	Number of accounts	Value of accounts (GBP billions) <sup>1</sup>
			(millions)	
Central bank .....	1	5	} 74.4 <sup>2</sup>	} 230.4 <sup>3</sup>
Commercial banks .....	482	12,033		
Building societies .....	77	4,616	44.7	208.6 <sup>4</sup>
Post Office .....	1	19,292	16.0	1.4 <sup>5</sup>
<b>Total</b> .....	<b>561</b>	<b>35,946</b>	<b>135.1</b>	<b>440.4</b>
<i>Memorandum item:</i>				
Branches of foreign banks .....	265	.	.	.

<sup>1</sup> Figures for value of accounts with banks and building societies are compatible with the retail element of M<sub>4</sub>. National Savings Bank (NSB) accounts are not included in M<sub>4</sub>. <sup>2</sup> Includes estimates. <sup>3</sup> All private sector sterling accounts with UK banks (including the central bank and Girobank). <sup>4</sup> Private sector ordinary share and deposit accounts with UK building societies and shares and deposits below £50,000 from corporate bodies. Retail issues of subscribed capital, e.g. Perpetual Interest Bearing Shares, are excluded. <sup>5</sup> National Savings Ordinary Accounts only. NSB facilities are available at post offices on an agency basis.

Table 6  
**Cash dispensers, ATMs and EFTPOS terminals**

	1992	1993	1994	1995	1996
Cash dispensers and ATMs:					
<i>Number of networks</i> .....	3	3	3	3	3
<i>Number of machines (thousands)</i>	18.7	19.1	20.0	20.9	22.1
<i>Volume of transactions (millions)</i>	1,169	1,242	1,335	1,471	1,599
<i>Value of transactions (GBP billion)</i>	56	60	65	72	80
EFTPOS:					
<i>Number of networks</i> <sup>2</sup> .....	3	3	3	3	3
<i>Number of terminals (thousands)</i> <sup>3</sup>	220	270	350	505	550
<i>Volume of transactions (millions)</i>	.	.	.	.	.
<i>Value of transactions (GBP billion)</i>	.	.	.	.	.

<sup>1</sup> Includes estimated values of building society transactions. <sup>2</sup> VISA, SWITCH and MasterCard only. <sup>3</sup> Estimated.

Table 7  
**Number of payment cards in circulation<sup>1</sup>**  
 (at year-end, in millions)

	1992	1993	1994	1995	1996
Cards with a cash function .....	74.0	75.0	77.3	83.7	89.0
Cards with a debit/credit function:					
<i>of which:</i>					
<i>cards with a debit .. function<sup>3</sup></i>	22.6	24.1	26.0	28.4	32.5
<i>cards with a credit function<sup>2</sup></i>	28.6	27.6	28.5	30.8	34.1
Cards with a cheque guarantee function <sup>3</sup> .....	44.4	44.0	45.5	48.0	50.7
Retailer cards <sup>4</sup> .....	8.9	8.5	10.3	13.0	15.4

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

Table 8

**Payment instructions handled by selected payment systems:  
volume of transactions**  
(in millions)

	1992	1993	1994	1995	1996
Large-value systems:					
<i>Town (paper)</i> <sup>1,3</sup> .....	0.1	0.1	<0.1	0.0	.
<i>CHAPS (automated)</i> .....	9	11	12	13	14
Cheque and credit clearings:					
<i>cheques</i> <sup>1,2</sup> .....	2,395	2,323	2,278	2,206	2,171
<i>paper-based credittransfers</i> <sup>1,2</sup> .....	182	173	173	171	176
BACS:					
<i>credit transfers</i> <sup>1</sup> .....	819	858	910	969	1,033
<i>direct debits</i> .....	1,001	1,045	1,148	1,299	1,443
<b>Total</b> .....	<b>4,406.1</b>	<b>4,410.1</b>	<b>4,521.0</b>	<b>4,658.0</b>	<b>4,837</b>

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

Table 9

**Payment instructions handled by selected payment systems:  
value of transactions**  
(in billions of pounds sterling)

	1992	1993	1994	1995	1996
Large-value systems:					
<i>Town (paper)</i> <sup>1,3</sup> .....	1,387	1,069	681	59	.
<i>CHAPS (automated)</i> .....	20,928	23,545	25,053	26,719	28,881
Cheque and Credit Clearings:					
<i>cheques</i> <sup>1,2</sup> .....	1,175	1,194	1,210	1,234	1,298
<i>paper-based credittransfers</i> <sup>1,2</sup> .....	110	106	101	99	102
BACS:					
<i>credit transfers</i> <sup>1</sup> .....	519	574	657	742	898
<i>direct debits</i> .....	284	262	284	312	353
<b>Total</b> .....	<b>24,403</b>	<b>26,750</b>	<b>27,986</b>	<b>29,165</b>	<b>31,532</b>

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

Table 10

**Transfer instructions handled by securities settlement systems:  
volume of transactions**

(in thousands)

	1992	1993	1994	1995	1996
CGO <sup>1</sup> .....	678.2	736.8	768.4	747.5	960.1
CMO <sup>2</sup> .....	247.6	267.6	285.3	269.0	268.0

<sup>1</sup> Central Gilts Office. <sup>2</sup> Central Moneymarkets Office.

Table 11

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

(in billions of pounds sterling)

	1992	1993	1994	1995	1996
CGO <sup>1</sup> .....	6,862	11,725	15,266	16,001	24,288
CMO <sup>2</sup> .....	2,054	2,344	2,547	3,305	3,483

<sup>1</sup> Central Gilts Office. <sup>2</sup> Central Moneymarkets Office.

Table 12  
**Indicators of use of various cashless payment instruments:  
 volume of transactions**  
 (in millions)

Instruments	1992	1993	1994	1995	1996
Cheques issued: <sup>1,2</sup>					
<i>large-value (Town)</i> <sup>3</sup> .....	<0.1	<0.1	<0.1	0.0	.
<i>others</i> .....	3,005.0	2,886.1	2,802.3	2,698.7	2,643.1
Payments by card:					
<i>debit</i> .....	522.0	659.0	808.0	1,004.0	1,270.0
<i>credit</i> <sup>4</sup> .....	724.0	748.0	815.0	903.0	1,035.0
Paper-based credit transfers <sup>2,5</sup>	462.0	432.2	414.5	404.8	418.7
Paperless credit transfers:					
<i>large-value (CHAPS)</i> .....	9.0	11.0	11.6	12.6	14.4
<i>others</i> <sup>2</sup> .....	892.0	924.7	975.2	1,031.5	1,155.9
Direct debits .....	1,001.0	1,046.0	1,148.1	1,299.0	1,442.8
<b>Total</b> <sup>6</sup> .....	<b>6,615.0</b>	<b>6,707.1</b>	<b>6,974.7</b>	<b>7,353.6</b>	<b>7,979.9</b>

<sup>1</sup> Excludes cheques processed at branch level. Includes cheques used to obtain cash. <sup>2</sup> Includes inter-branch items (values are estimated). <sup>3</sup> Town Clearing ceased operation on 24th February 1995. <sup>4</sup> These figures have been amended to include charge cards. <sup>5</sup> Excludes items processed at branch level. <sup>6</sup> 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)

Instruments	1992	1993	1994	1995	1996
Cheques issued: <sup>1,2</sup>					
<i>large-value (Town)</i> <sup>3</sup> .....	1,451.0	1,094.6	681.1	59.3	.
<i>others</i> .....	1,483.0	1,492.0	1,496.1	1,517.9	1,345.2
Payments by card:					
<i>debit</i> .....	13.8	17.9	22.4	28.5	37.1
<i>credit</i> <sup>4</sup> .....	30.7	33.3	37.5	42.3	51.0
Paper-based credit transfers <sup>2,5</sup>	489.5	457.2	397.2	371.2	401.9
Paperless credit transfers:					
<i>large-value (CHAPS)</i> .....	20,928.0	23,545.0	25,052.0	26,719.0	28,881.2
<i>others</i> <sup>2</sup> .....	542.0	598.0	681.4	766.9	950.9
Direct debits .....	284.0	262.0	283.6	312.3	352.8
<b>Total</b> <sup>6</sup> .....	<b>25,222.0</b>	<b>27,500.0</b>	<b>28,651.3</b>	<b>29,817.4</b>	<b>32,020.1</b>

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

Table 14  
**Participation in S.W.I.F.T. by domestic institutions<sup>1</sup>**

	1992	1993	1994	1995	1996
Members .....	57	59	60	65	68
<i>of which: live</i> .....	56	57	59	62	66
Sub-members <sup>2</sup> .....	210	219	231	236	239
<i>of which: live</i> .....	197	214	228	235	236
Participants <sup>3</sup> .....	28	46	65	77	91
<i>of which: live</i> .....	23	38	57	69	80
Total users .....	295	324	356	378	398
<i>of which: live</i> .....	276	309	344	366	382
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i> .....	2,074	2,244	2,551	2,693	2,874
<i>sub-members</i> .....	1,738	1,887	2,097	2,259	2,404
<i>participants</i> .....	91	125	218	277	354
<i>users</i> .....	3,903	4,256	4,866	5,229	5,632

<sup>1</sup> Data for the United Kingdom and the Isle of Man. <sup>2</sup> Domestic users sponsored by members abroad. <sup>3</sup> 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<sup>1</sup>**

	1992	1993	1994	1995	1996
Total messages sent .....	48,167,743	54,796,966	60,967,184	71,035,477	82,578,192
<i>of which:</i>					
<i>category I<sup>2</sup></i> .....	8,851,050	9,537,290	10,352,681	11,181,501	12,312,467
<i>category II<sup>3</sup></i> .....	16,109,002	18,110,333	19,379,515	21,654,710	23,419,297
Total messages received .....	42,182,121	48,734,436	55,179,903	66,015,464	79,741,899
<i>of which:</i>					
<i>category I<sup>2</sup></i> .....	10,212,447	11,316,746	12,540,347	13,978,532	15,500,253
<i>category II<sup>3</sup></i> .....	7,863,519	8,284,102	8,350,297	8,906,827	9,429,168
Domestic traffic <sup>4</sup> .....	11,538,743	12,838,570	14,154,000	16,386,855	19,335,976
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic .....	405,540,962	457,218,200	518,097,873	603,575,374	687,785,294

<sup>1</sup> Data for the United Kingdom and the Isle of Man. <sup>2</sup> Category I: customer (funds) transfers. <sup>3</sup> Category II: bank (funds) transfers. <sup>4</sup> Messages sent to/received from domestic users.

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





Table 1  
Basic statistical data

	1992	1993	1994	1995	1996
Population (millions) <sup>1</sup> .....	255.4	258.1	260.7	263.0	265.5
GDP (USD billions) <sup>2</sup> .....	6,244.4	6,553.0	6,935.7	7,253.8	7,576.1
GDP per capita (in USD) .....	24,449.5	25,389.4	26,604.1	27,581.0	28,535.2

<sup>1</sup> Data estimated as of 1st July each year. Includes Armed Forces overseas. <sup>2</sup> Annual data. Data reflect National Income and Product Account revisions as of November 1996.

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

Table 2  
Settlement media used by non-banks<sup>1</sup>  
(in billions of US dollars)

	1992	1993	1994	1995	1996
Notes and coin held by public <sup>2</sup>	298.1	328.3	361.0	379.6	400.0
Transferable deposits <sup>3</sup> .....	743.3	821.2	808.9	768.1	696.8
Narrow money supply (M <sub>1</sub> ) <sup>4</sup> .....	1,046.0	1,153.7	1,174.4	1,152.8	1,103.0
<i>Memorandum item:</i>					
Broad money supply: <sup>4</sup>					
M <sub>2</sub> .....	3,455.1	3,506.6	3,522.5	3,675.3	3,851.5
M <sub>3</sub> .....	4,205.3	4,274.8	4,348.8	4,614.3	4,944.3

<sup>1</sup> Averages of daily figures for the month of December. <sup>2</sup> Currency in circulation plus amounts of coin outstanding less amounts held by the Treasury, Federal Reserve banks and depository institutions; weekly average for the last week of each year. <sup>3</sup> Transferable deposits consist of demand deposits and other chequable deposits. <sup>4</sup> Composition of money stock measures is as follows: M<sub>1</sub>: currency and coin + travellers' cheques + demand deposits + other chequable deposits. M<sub>2</sub>: M<sub>1</sub> + overnight Euro-dollars and RPs + money market mutual funds (general purpose and broker dealer only) + money market deposit accounts + savings time accounts. M<sub>3</sub>: M<sub>2</sub> + large time deposits (over US\$ 100,000) + term RPs and Euro-dollars + money market funds (institutions only). Data not seasonally adjusted.

Source: Federal Reserve.

Table 3  
**Settlement media used by banks**  
(in billions of US dollars, except as noted)

	1992	1993	1994	1995	1996
Balances held at central bank <sup>1</sup> ...	32.1	35.0	30.8	29.6	24.5
Balances due from commercial banks <sup>2</sup> .....	33.1	29.0	29.1	32.7	37.8
<i>Memorandum items:</i>					
Banks' borrowing from central bank (USD millions) <sup>3</sup> .....	675.0	94.0	223.0	136.0	85.0
Required reserves <sup>4</sup> .....	55.4	61.9	60.3	56.5	50.6

<sup>1</sup> Year-end balances of depository institutions held at Federal Reserve banks including reserve balances and required clearing balances. Data not seasonally adjusted. <sup>2</sup> 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 US\$ 162.8, 154.7, 151.7, 180.9 and 164.0 billion at year-end 1992, 1993, 1994, 1995 and 1996 respectively. Data not seasonally adjusted. <sup>3</sup> Monthly average figures may be significantly different from year-end figures. Data not seasonally adjusted. <sup>4</sup> Required reserves are biweekly averages of daily figures for weeks ending 23rd December 1992, 22nd December 1993, 21st December 1994, 20th December 1995 and 25th December 1996. Vault cash used to satisfy required reserves in December (average of daily figures, not seasonally adjusted) amounted to US\$ 31.4, 33.8, 37.1 38.1 and 38.1 billion for 1992, 1993, 1994, 1995 and 1996 respectively.

Source: Federal Reserve.

Table 4  
**Value of banknotes in circulation**  
 (at year-end, in billions of US dollars)

	1992	1993	1994	1995	1996
Total banknotes and coin outstanding <sup>1</sup> .....	384.9	431.4	477.6	505.0	551.8
Banknotes and coin held by depository institutions <sup>2</sup> .....	36.6	37.0	42.8	44.6	50.7
Banknotes and coin held by Treasury and Federal Reserve banks .....	50.2	66.1	73.8	80.8	101.1
Banknotes and coin outside Treasury and Federal Reserve banks .....	334.7	365.3	403.8	424.2	450.7
<i>of which:</i>					
100 dollars .....	177.1	201.5	229.1	241.5	261.4
50 dollars .....	38.0	41.0	43.9	46.4	48.6
20 dollars .....	73.3	74.9	80.5	84.2	87.1
10 dollars .....	13.0	13.2	13.8	14.1	14.3
5 dollars .....	6.7	6.9	7.3	7.5	7.8
1 dollar .....	5.5	5.7	6.1	6.3	6.6
other <sup>3</sup> .....	1.2	1.3	1.3	1.4	1.4
coin .....	19.9	20.8	21.8	22.8	23.6
Total banknotes and coin held by public .....	298.1	328.3	361.0	379.6	400.0

<sup>1</sup> Total currency and coin outstanding. <sup>2</sup> Partly estimated. <sup>3</sup> Miscellaneous banknotes outstanding.

Sources: US Treasury and Federal Reserve.

Table 5  
**Institutional framework**  
 (at end-1996)

Categories	Number of institutions	Number of branches <sup>1</sup>	Number of accounts (thousands, sight)	Value of accounts (billions, sight)
Central bank <sup>2</sup> .....	1(12)	25	9.8 <sup>3</sup>	19.7 <sup>4</sup>
Commercial banks .....	9,531	60,093	.	798.6 <sup>5</sup>
Thrift institutions <sup>6</sup> .....	1,988	12,561 <sup>7</sup>	.	45.4 <sup>5</sup>
Credit unions .....	11,604	.	.	32.6 <sup>5</sup>

<sup>1</sup> Number of branches does not include head offices. <sup>2</sup> The Federal Reserve is the central bank. The Board of Governors is located in Washington, D.C. and there are twelve District banks located in Atlanta, Boston, Chicago, Cleveland, Dallas, Kansas City, Minneapolis, New York, Philadelphia, Richmond, St. Louis and San Francisco. Nine regional cheque processing centres, one operations centre and a satellite office are not included in the number of branches. <sup>3</sup> Number of depository institution accounts at the central bank. <sup>4</sup> Consists of deposits by depository institutions at the central bank. <sup>5</sup> Total transactions accounts. Data not seasonally adjusted. <sup>6</sup> Includes savings banks, savings and loan associations, cooperative and industrial banks at year-end 1996. <sup>7</sup> Includes number of savings and loan branches in June 1996 and branches of savings, cooperative and industrial banks at year-end 1996.

Source: Federal Reserve.

Table 6  
Cash dispensers, ATMs and EFTPOS terminals

	1992	1993	1994	1995	1996
Cash dispensers and ATMs:					
<i>Number of networks</i> <sup>1</sup> .....	73	65	60	50	52
<i>Number of machines</i> <sup>2</sup> .....	87,330	94,822	109,080	122,706	139,134
<i>Volume of transactions (billions)</i> .....	7.2	7.7	8.3	9.7	10.7
<i>Value of transactions (USD billion)</i> .....	482.0	525.0	558.0	656.6	727.6
EFTPOS: <sup>3</sup>					
<i>Number of networks</i> <sup>4</sup> .....	26	26	25	27	25
<i>Number of terminals</i> .....	94,100	155,000	344,100	528,700	875,400
<i>Volume of transactions (millions)</i> .....	289.0	429.6	624.0	775.2	1,146.0
<i>Value of transactions (USD billions)</i> .....	8.0	10.3	15.6	22.8	34.0

<sup>1</sup> The number of networks in 1996 includes 7 national ATM networks and 45 regional networks. <sup>2</sup> Does not include card-activated terminals which do not dispense cash. <sup>3</sup> Volume and value of EFTPOS transactions includes only Personal Identification Number (PIN)-based debit EFTPOS. Does not include off-line (signature-based) transactions. <sup>4</sup> Both shared and proprietary networks are included.

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

Table 7  
**Number of payment cards in circulation**  
 (in millions)

	1992	1993	1994	1995	1996
Cards with a cash function <sup>1</sup> .....	449.1	483.3	540.1	592.4	654.1
Cards with a cheque guarantee function <sup>2</sup> .....	.	.	.	.	.
Cards with a debit/credit function <sup>3</sup> .....	517.2	531.7	590.5	650.8	678.7
<i>of which:</i>					
<i>cards with a debit function</i>	204.7	206.1	207.5	211.0	217.2
<i>cards with a credit function<sup>4</sup></i>	312.5	325.6	383.0	439.8	461.5
Retailer cards .....	470.0	505.0	542.6	587.2	601.8
Oil company cards .....	119.7	117.7	114.2	115.3	112.0

<sup>1</sup> Estimated. Includes credit and debit cards with a cash function. Excludes prepaid (stored value) cards. <sup>2</sup> Reliable data on cheque guarantee "cards" are not available. <sup>3</sup> 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. <sup>4</sup> Includes VISA, MasterCard, Discover and American Express cards as well as travel and entertainment cards. Number of telephone cards in circulation: 149.9, 155.1, 160.5, 166.3 and 171.0 million for 1992, 1993, 1994, 1995 and 1996 respectively (The Nilson Report).

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

Table 8  
**Payment instructions handled by selected payment systems:  
 volume of transactions**  
 (in millions)

	1992	1993	1994	1995	1996
Large-value systems: <sup>1</sup>					
<i>CHIPS</i> <sup>2</sup> .....	39.1	42.2	45.5	51.0	53.5
<i>Fedwire</i> <sup>3</sup> .....	67.6	69.7	72.0	75.9	82.6
Cheque clearings:					
<i>private clearing houses and d</i>					
<i>Federal Reserve</i> <sup>5</sup> .....	21,024.0	22,527.0	26,221.0	28,145.0	29,852.0
<i>Federal Reserve</i> <sup>5</sup> .....	19,727.0	19,681.0	17,149.0	16,128.0	16,129.0
Automated clearing houses:					
<i>private</i> <sup>6</sup> .....	642.7	684.9	746.8	761.7	932.0
<i>Federal Reserve</i> <sup>7</sup> .....	1,843.3	2,085.1	2,379.2	2,724.3	3,053.0
Memorandum item:					
"On-us" cheques <sup>8</sup> .....	17,648.0	18,089.0	18,300.0	18,690.0	18,703.0

<sup>1</sup> Number of originations. Data do not include non-value messages. <sup>2</sup> CHIPS, the Clearing House Interbank Payments System, is operated by the New York Clearing House Association. <sup>3</sup> Fedwire is operated by the Federal Reserve. <sup>4</sup> 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. <sup>5</sup> Includes personal, commercial, government and travellers' cheques and commercial and postal money orders. <sup>6</sup> Includes an estimated 743 million "on-us" items and 187 million private sector items. <sup>7</sup> Includes all government and commercial debits and credits. <sup>8</sup> Estimated.

Sources: Federal Reserve and National Automated Clearing House Association.

Table 9  
**Payment instructions handled by selected payment systems:  
 value of transactions**  
 (in billions of US dollars)

	1992	1993	1994	1995	1996
Large-value systems:					
<i>CHIPS</i> <sup>1</sup> .....	238,255.5	262,256.4	295,443.8	310,021.2	331,541.1
<i>Fedwire</i> <sup>2</sup> .....	199,175.0	207,629.8	211,201.5	222,954.1	249,140.0
Cheque clearings:					
<i>private clearing houses and              direct exchanges</i> .....	.	.	.	.	.
<i>Federal Reserve</i> <sup>3</sup> .....	13,850.3	14,623.0	12,607.4	12,083.0	12,072.8
Automated clearing houses:					
<i>private</i> <sup>4</sup> .....	.	.	.	.	1,574.0
<i>Federal Reserve</i> <sup>5</sup> .....	7,390.5	7,595.1	8,369.5	9,194.1	9,997.9

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

Table 10  
**Transfer instructions handled by securities settlement systems:  
 volume of transactions**  
 (in millions)

	1992	1993	1994	1995	1996
Federal Reserve:					
<i>Government securities</i> <sup>1</sup> .....	11.8	12.0	12.6	12.8	13.1
Depository Trust Company:					
<i>Corporate and municipal securities</i> .....	83.3	98.3	106.0	119.0	135.7

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



Table 11  
**Transfer instructions handled by securities settlement systems:  
 value of transactions**  
 (in trillions of US dollars)

	1992	1993	1994	1995	1996
Federal Reserve:					
<i>Government securities</i> <sup>1</sup> .....	139.7	146.2	144.7	149.8	160.6
Depository Trust Company:					
<i>Corporate and municipal securities</i>	19.4	27.8	34.0	41.0	50.2

<sup>1</sup> US Treasury and agency securities transfers processed through the Federal Reserve's book-entry securities settlement system. Data exclude reversals (i.e. securities sent in error and returned to sender). <sup>2</sup> Book-entry securities deliveries processed by the Depository Trust Company's next-day and same-day funds settlement systems.

Table 12  
**Indicators of use of various cashless payment instruments:  
 volume of transactions**  
 (in millions)

Instruments	1992	1993	1994	1995	1996
Cheques issued <sup>1</sup> .....	58,399.0	60,297.0	61,670.0	62,963.0	64,684.0
Payments by card:					
<i>debit</i> <sup>2</sup> .....	493.4	708.9	1,096.3	1,598.9	2,596.6
<i>credit</i> <sup>3</sup> .....	11,700.0	12,516.0	13,681.0	14,913.7	16,129.8
Paperless credit transfers:					
<i>CHIPS</i> .....	39.1	42.2	45.5	51.0	53.5
<i>Fedwire</i> <sup>4</sup> .....	67.6	69.7	72.0	75.9	82.6
<i>Federal Reserve ACH</i> <sup>5</sup> .....	1,189.5	1,345.8	1,525.7	1,738.9	1,944.9
Direct debits:					
<i>Federal Reserve ACH</i> <sup>6</sup> .....	653.8	739.3	847.0	978.3	1,100.5
<b>Total</b> .....	<b>72,542.4</b>	<b>75,718.9</b>	<b>78,937.5</b>	<b>82,319.7</b>	<b>86,591.9</b>

<sup>1</sup> 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. <sup>2</sup> Includes on-line (PIN-based) and off-line (signature-based) transactions. <sup>3</sup> Includes all types of credit card transactions (i.e. bank, oil company, telephone, retail store, travel and entertainment, etc.). Bank cards include VISA and MasterCard credit cards only (excluding debit cards). <sup>4</sup> Volume of Fedwire funds transfers. Does not include securities transfers over Fedwire. <sup>5</sup> Does not include commercial "on-us" ACH credit transactions originated and received by the same bank. <sup>6</sup> Does not include commercial "on-us" items or debit items with no value.

Sources: The Nilson Report (HSN Consultants Inc., Oxnard, CA) and Federal Reserve.

Table 13  
**Indicators of use of various cashless payment instruments:  
 value of transactions**  
 (in billions of US dollars)

Instruments	1992	1993	1994	1995	1996
Cheques issued <sup>1</sup> .....	67,000.0	69,160.7	71,500.0	73,515.0	74,879.0
Payments by card:					
<i>debit</i> <sup>2</sup> .....	15.6	20.6	33.6	59.1	96.8
<i>credit</i> <sup>3</sup> .....	529.1	620.6	730.8	879.0	982.8
Paperless credit transfers:					
<i>CHIPS</i> .....	238,255.5	262,256.4	295,443.8	310,021.2	331,541.1
<i>Fedwire</i> <sup>4</sup> .....	199,175.0	207,629.8	211,201.5	222,954.1	249,140.0
<i>Federal Reserve ACH</i> <sup>5</sup> .....	2,411.7	2,698.9	3,284.8	3,756.5	4,235.4
Direct debits:					
<i>Federal Reserve ACH</i> <sup>5</sup> .....	4,978.8	4,896.3	5,084.7	5,437.6	5,762.5
<b>Total</b> .....	<b>512,365.6</b>	<b>547,283.3</b>	<b>587,279.2</b>	<b>616,622.5</b>	<b>666,637.6</b>

<sup>1</sup> 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. <sup>2</sup> Includes on-line (PIN-based) and off-line (signature-based) values. <sup>3</sup> Includes all types of credit card transactions (i.e. bank, oil company, telephone, retail store, travel and entertainment, etc.). Bank cards include VISA and MasterCard credit cards only (excluding debit cards). <sup>4</sup> Value of funds transfers only. Does not include securities transfers over Fedwire. <sup>5</sup> Does not include commercial "on-us" ACH credit or debit transactions originated and received by the same bank or transfers by private sector ACH providers.

*Sources:* The Nilson Report (HSN Consultants Inc., Oxnard, CA) and Federal Reserve.

Table 14  
Participation in S.W.I.F.T. by domestic institutions<sup>1</sup>

	1992	1993	1994	1995	1996
Members .....	154	147	147	156	169
<i>of which: live</i> .....	151	146	143	154	157
Sub-members <sup>2</sup> .....	242	267	293	313	344
<i>of which: live</i> .....	230	257	286	309	332
Participants <sup>3</sup> .....	23	26	47	73	96
<i>of which: live</i> .....	17	23	38	62	81
Total users .....	419	440	487	542	599
<i>of which: live</i> .....	398	426	467	525	570
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i> .....	2,074	2,244	2,551	2,693	2,874
<i>sub-members</i> .....	1,738	1,887	2,097	2,259	2,404
<i>participants</i> .....	91	125	218	277	354
<i>users</i> .....	3,903	4,256	4,866	5,229	5,632

<sup>1</sup> Data for the United States and Puerto Rico. <sup>2</sup> Domestic users sponsored by members abroad. <sup>3</sup> 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<sup>1</sup>

	1992	1993	1994	1995	1996
Total messages sent .....	64,993,013	72,629,616	83,173,828	99,258,753	115,518,434
<i>of which:</i>					
<i>category I</i> <sup>2</sup> .....	9,466,437	11,230,055	13,810,761	17,316,090	20,841,198
<i>category II</i> <sup>3</sup> .....	12,243,759	13,760,056	15,257,951	17,017,438	18,975,068
Total messages received .....	70,982,141	80,281,134	93,700,305	111,638,649	128,751,988
<i>of which:</i>					
<i>category I</i> <sup>2</sup> .....	15,225,444	17,043,643	20,207,556	24,217,175	27,770,832
<i>category II</i> <sup>3</sup> .....	35,433,454	37,604,439	41,497,646	46,829,754	49,839,334
Domestic traffic <sup>4</sup> .....	10,948,963	11,782,604	13,454,096	17,269,612	20,970,071
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic	405,540,962	457,218,200	518,097,873	603,575,374	687,785,294

<sup>1</sup> Data for the United States and Puerto Rico. <sup>2</sup> Category I: customer (funds) transfers. <sup>3</sup> Category II: bank (funds) transfers. <sup>4</sup> Messages sent to/received from domestic users.

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

# **COMPARATIVE TABLES**



Table 1  
Notes and coin in circulation<sup>1</sup>

	1992	1993	1994	1995	1996
	<b>USD per inhabitant<sup>2</sup></b>				
Belgium .....	1,239	1,164	1,229	1,391	1,339
Canada .....	625	634	635	662	675
France .....	828	739	807	891	841
Germany .....	1,534	1,511	1,790	2,025	1,936
Italy .....	1,023	921	1,032	1,082	1,138
Japan .....	2,739	3,243	3,736	3,873	3,738
Netherlands .....	1,343	1,267	1,428	1,540	1,413
Sweden .....	1,207	1,042	1,120	1,312	1,327
Switzerland .....	2,748	2,638	2,985	3,394	3,117
United Kingdom .....	446	455	504	528	606
United States .....	1,167	1,272	1,385	1,443	1,507
	<b>As percentage of GDP</b>				
Belgium .....	5.9	6.0	5.2	5.3	5.3
Canada .....	3.3	3.4	3.4	3.4	3.4
France .....	3.6	3.5	3.4	3.3	3.3
Germany .....	6.5	6.7	6.8	6.9	7.0
Italy .....	5.7	5.8	5.9	5.5	5.3
Japan .....	9.0	9.5	9.7	10.4	10.9
Netherlands .....	6.5	6.5	6.2	6.0	5.8
Sweden .....	5.1	5.3	5.0	4.7	4.8
Switzerland .....	8.0	7.9	7.9	7.7	8.1
United Kingdom .....	2.9	2.8	2.8	2.8	2.8
United States .....	4.8	5.0	5.2	5.2	5.3
	<b>As percentage of narrow money<sup>3</sup></b>				
Belgium .....	31.5	29.6	27.1	27.2	27.5
Canada .....	47.1	44.0	44.2	42.8	37.8
France .....	15.9	15.3	15.1	14.2	14.3
Germany .....	29.9	29.2	29.6	29.1	26.9
Italy .....	15.7	15.5	16.0	16.3	16.1
Japan .....	31.2	31.1	30.7	29.2	29.0
Netherlands .....	27.4	25.1	25.0	22.1	19.7
Sweden .....	10.8	10.7	10.7	10.5	9.9
Switzerland .....	21.6	19.7	19.7	18.0	17.3
United Kingdom .....	4.5	4.5	4.6	4.6	4.5
United States .....	28.5	28.5	30.7	32.9	36.3

<sup>1</sup> For explanation of figures see relevant country tables. <sup>2</sup> Year-end figures converted at end-of-year exchange rates. <sup>3</sup> Narrow money: M<sub>1</sub>; except for Sweden (M<sub>3</sub>) and the United Kingdom (M<sub>2</sub>).

Table 2

**Transferable deposits held by non-banks<sup>1</sup>**

	1992	1993	1994	1995	1996
	<b>USD per inhabitant<sup>2</sup></b>				
Belgium .....	2,700	2,764	3,307	3,715	3,533
Canada .....	2,978	3,056	2,975	3,334	3,768
France .....	4,381	4,080	4,543	5,381	5,062
Germany .....	3,591	3,761	4,287	4,953	5,309
Italy .....	5,286	4,863	5,236	5,399	5,784
Japan <sup>3</sup> .....	7,141	8,160	9,425	11,032	10,620
Netherlands .....	3,562	3,777	4,275	5,431	5,749
Sweden .....	10,119	8,850	9,811	11,351	12,216
Switzerland .....	5,601	5,839	6,799	8,359	8,275
United Kingdom .....	9,357	9,589	10,493	11,073	12,793
United States .....	2,910	3,182	3,103	2,921	2,624
	<b>As percentage of GDP</b>				
Belgium .....	12.8	14.0	14.0	14.0	14.0
Canada .....	15.6	16.2	16.1	17.3	19.1
France .....	19.3	19.4	19.2	20.1	19.7
Germany .....	15.3	16.7	16.3	16.8	19.1
Italy .....	29.4	30.4	29.8	27.6	27.2
Japan <sup>3</sup> .....	25.0	24.6	25.3	25.1	28.3
Netherlands .....	17.3	19.3	18.6	21.2	23.5
Sweden .....	43.0	44.6	42.4	40.6	44.3
Switzerland .....	16.3	17.4	18.0	19.0	21.5
United Kingdom .....	60.0	60.0	58.6	59.5	59.2
United States .....	11.9	12.5	11.7	10.6	9.2
	<b>As percentage of narrow money<sup>4</sup></b>				
Belgium .....	68.5	70.0	72.9	72.8	72.5
Canada .....	224.3	212.1	207.4	215.5	211.2
France .....	84.1	84.7	84.9	85.8	85.7
Germany .....	70.1	72.7	70.8	71.2	73.8
Italy .....	81.3	81.9	81.4	81.1	81.8
Japan <sup>5</sup> .....	91.5	86.5	85.3	82.7	81.6
Netherlands .....	72.6	74.9	75.0	77.9	80.3
Sweden .....	90.6	90.6	90.3	90.6	91.1
Switzerland .....	43.6	43.6	44.9	44.2	45.8
United Kingdom .....	95.5	95.5	95.4	95.4	95.5
United States .....	71.1	71.2	68.9	66.6	63.2

<sup>1</sup> For explanation of figures and definition of transferable deposits, see relevant country tables. <sup>2</sup> Year-end figures converted at end-of-year exchange rates. <sup>3</sup> End-March figure converted at end-March exchange rate. <sup>4</sup> Narrow money: M<sub>1</sub>; except for Sweden (M<sub>3</sub>) and the United Kingdom (M<sub>2</sub>). <sup>5</sup> End-March figure.



Table 3  
**Settlement media used by banks<sup>1</sup>**  
 (1996)

	<b>Banks' reserves at central bank (USD billion)<sup>2</sup></b>	<b>Banks' reserves at central bank in percentage of narrow money<sup>3</sup></b>	<b>Transferable deposits at other banks (USD billion)<sup>2</sup></b>	<b>Transferable deposits at other banks in percentage of narrow money<sup>2</sup></b>
Belgium .....	0.065	0.13	6.23	12.58
Canada .....	0.3	0.65	.	.
France .....	1.4	0.40	623.0	180.3
Germany .....	25.4	4.3	258.0	43.7
Italy .....	47.2	11.6	55.7	13.7
Japan .....	29.4	1.8	59.6	3.6
Netherlands .....	9.199	8.27	1.787	1.6
Sweden .....	0.22	0.18	10.3	8.7
Switzerland .....	4.3	3.3	21.1	16.5
United Kingdom .....	4.1	0.5	389.7	49.5
United States .....	24.5	2.2	37.8	3.4

<sup>1</sup> For explanation of figures see relevant country tables. <sup>2</sup> Year-end figures converted at end-of-year exchange rates. <sup>3</sup> Narrow money: M<sub>1</sub>; except for Sweden (M<sub>3</sub>) and the United Kingdom (M<sub>2</sub>). <sup>4</sup> End-March figure converted at end-March exchange rate. <sup>5</sup> End-March figure.

Table 4  
**Institutional framework<sup>1</sup>**  
 (1996)

	<b>Number of institutions</b>	<b>Number of inhabitants per institution</b>	<b>Number of branches</b>	<b>Number of inhabitants per branch</b>	<b>Number of accounts per inhabitant</b>
Belgium .....	143	71,119	9,321	1,091	1.15
Canada <sup>2</sup> .....	2,497	12,054	13,712	2,195	.
France .....	547	106,947	46,716	1,252	1.1
Germany .....	3,509	23,368	66,609 <sup>3</sup>	1,231	1.0
Italy .....	939	61,235	39,091	1,471	0.5
Japan .....	4,635	27,154	72,378	1,739	.
Netherlands .....	126	123,230	6,694	2,320	1.3
Sweden .....	125	70,720	3,734	2,367	.
Switzerland .....	372	19,108	7,140	996	.
United Kingdom .....	561	104,813	35,946	1,636	2.3
United States <sup>4</sup> .....	23,123	11,482	72,654	3,654	.

<sup>1</sup> For explanation of figures see relevant country tables. <sup>2</sup> Deposit-taking institutions only. <sup>3</sup> Including post office branches which are entrusted with the execution of semi-cashless payments for Deutsche Postbank AG. <sup>4</sup> Number of branches does not include head offices of any type of institution.

Table 5  
Cash dispensers and ATMs<sup>1</sup>

	1992	1993	1994	1995	1996
<b>Number of machines per 1,000,000 inhabitants</b>					
Belgium .....	109	119	313	360	414
Canada .....	509	553	576	595	617
France .....	305	325	356	395	419
Germany .....	235	308	361	436 <sup>5</sup>	459
Italy .....	245	266	326	378	420
Japan .....	870	935	978	1,013	1,051
Netherlands .....	261	292	325	358	373
Sweden .....	254	255	259	267	269
Switzerland .....	387	439	481	532	585
United Kingdom .....	324	328	342	358	376
United States .....	342	367	418	467	524
<b>Number of transactions per inhabitant</b>					
Belgium .....	8.8	9.1	13.1	14.3	15.1
Canada .....	35.7	37.3	40.7	45.9	49.2
France .....	12.0	13.3	14.2	15.8	18.2
Germany .....	.	.	11.5	13.4 <sup>5</sup>	15.3
Italy <sup>2</sup> .....	3.6	4.1	4.6	5.3	6.4
Japan .....	2.9	3.3	3.6	3.8	4.1
Netherlands .....	17.3	20.5	23.9	27.5	29.4
Sweden .....	25.1	28.3	30.7	31.8	33.6
Switzerland .....	7.4	8.3	9.1	10.3	10.9
United Kingdom .....	20.2	21.3	22.9	25.2	27.2
United States .....	28.2	29.8	31.8	36.9	40.3
<b>Average value of transactions (USD)<sup>3</sup></b>					
Belgium .....	113.2	110.3	126.5	138.1	129.5
Canada <sup>4</sup> .....	55.4	53.5	51.2	51.0	52.0
France .....	86.1	77.0	76.5	81.3	77.5
Germany .....	.	.	157.6	196.6 <sup>5</sup>	179.0
Italy .....	245.4	196.8	195.3	194.4	203.0
Japan .....	359.3	395.4	419.8	450.6	383.4
Netherlands .....	97.8	95.9	97.4	108.4	105.6
Sweden .....	128.6	101.2	104.7	112.6	104.4
Switzerland .....	225.1	207.8	217.8	242.1	209.5
United Kingdom .....	84.6	72.5	74.6	77.3	78.1
United States .....	66.9	68.2	67.2	67.7	68.0

<sup>1</sup> For explanation of figures see relevant country tables. <sup>2</sup> For the years 1992-1995 the figures are estimated and differ from those provided in the statistical annex of the Italian chapter that do not refer to the whole system. <sup>3</sup> Converted at yearly average exchange rates. <sup>4</sup> Average value of a cash withdrawal only. <sup>5</sup> Increase partly due to new data source.

Table 6  
EFTPOS terminals<sup>1</sup>

	1992	1993	1994	1995	1996
<b>Number of terminals per 1,000,000 inhabitants</b>					
Belgium .....	4,034	5,246	6,294	7,174	7,997
Canada .....	1,031	2,127	4,073	6,394	8,408
France .....	5,594	7,435	7,574	9,394	9,333
Germany .....	640	344	767	856	1,402
Italy .....	1,094	1,350	1,819	2,683	3,758
Japan .....	264	168	227	200	183
Netherlands .....	754	1,606	3,094	4,747	6,186
Sweden .....	1,647	3,054	5,514	6,160	7,579
Switzerland .....	1,022	1,433	2,379	3,499	4,731
United Kingdom .....	3,806	4,639	5,993	8,647	9,354
United States .....	368	601	1,320	2,010	3,297
<b>Number of transactions per inhabitant</b>					
Belgium .....	12.0	14.2	18.0	20.8	23.9
Canada .....	1.1	2.5	6.3	13.3	22.5
France .....	22.7	24.3	26.1	32.3	35.6
Germany .....	0.35	0.85	1.28	1.83	2.61
Italy <sup>2</sup> .....	0.28	0.39	0.57	0.83	1.3
Japan .....	0.006	0.005	0.006	0.007	0.004
Netherlands .....	3.1	4.4	8.2	16.6	23.9
Sweden .....	5.3	6.5	8.8	10.4	12.6
Switzerland .....	2.8	4.0	5.7	8.0	10.7
United Kingdom .....	.	.	.	.	.
United States .....	1.1	1.7	2.4	2.9	4.3
<b>Average value of transactions (USD)<sup>3</sup></b>					
Belgium .....	57.7	63.2	71.2	77.6	72.6
Canada .....	43.7	38.8	37.2	34.8	32.7
France .....	62.5	58.0	57.6	63.3	60.0
Germany .....	43.5	54.2	64.0	95.7	98.2
Italy .....	161.6	121.5	117.5	116.0	113.6
Japan .....	97.7	184.9	80.2	.	32.4
Netherlands .....	46.0	58.6	62.9	59.1	56.4
Sweden .....	101.0	85.5	80.8	80.7	80.7
Switzerland .....	51.8	58.8	73.8	96.4	89.6
United Kingdom .....	.	.	.	.	.
United States .....	27.7	24.0	25.0	29.4	29.7

<sup>1</sup> For explanation of figures see relevant country tables. <sup>2</sup> For the years 1992-1995 the figures are estimated and differ from those provided in the statistical annex of the Italian chapter that do not refer to the whole system. <sup>3</sup> Converted at yearly average exchange rates.

Table 7  
**Number of cards<sup>1</sup>**  
 (1996 per 1,000 inhabitants)

	<b>Cards with a cash function</b>	<b>Cards with a debit/credit function</b>	<b>Cards with cheque guarantee function</b>	<b>Retailers' cards</b>
Belgium .....	1,041	1,041	429	135
Canada .....	1,449	552	.	4,153
France .....	465	436	.	.
Germany .....	.	981	487	60
Italy .....	266	392	20	.
Japan .....	2,152	1,864	.	416
Netherlands .....	1,219	119	38	.
Sweden .....	711	651	.	.
Switzerland .....	829	921	576	.
United Kingdom .....	1,514	1,133	862	262
United States .....	2,464	2,556	.	2,267

<sup>1</sup> For explanation of figures, see relevant country tables.

Table 8  
**Relative importance of cashless payment instruments<sup>1</sup>**  
 (percentage of total volume of cashless transactions)

	1992	1993	1994	1995	1996
<b>Cheques</b>					
Belgium .....	18.8	16.0	11.7	10.6	9.4
Canada .....	62.4	58.7	52.8	46.9	41.0
France .....	50.6	49.1	47.4	45.6	43.6
Germany .....	8.8	8.1	7.9	7.0	6.4
Italy <sup>2</sup> .....	40.0	37.2	34.0	32.8	29.7
Japan .....	·	·	·	·	·
Netherlands .....	12.3	8.2	6.0	4.6	3.2
Sweden <sup>5</sup> .....	9.3	·	·	·	·
Switzerland <sup>3</sup> .....	4.4	3.3	2.6	2.0	1.6
United Kingdom <sup>4</sup> .....	45.4	43.0	40.2	36.7	33.1
United States .....	80.5	79.6	78.1	76.5	74.7
<b>Payment by cards</b>					
Belgium .....	15.6	16.5	18.0	19.7	21.4
Canada .....	28.9	31.1	35.3	40.0	44.8
France .....	15.0	15.7	16.2	17.6	18.3
Germany .....	2.1	2.6	3.1	3.6	4.2
Italy <sup>2</sup> .....	3.7	4.1	5.2	6.6	8.7
Japan .....	·	·	·	·	·
Netherlands .....	2.6	4.2	8.0	15.6	20.4
Sweden <sup>5</sup> .....	8.2	9.8	11.6	14.2	14.8
Switzerland .....	11.8	13.8	16.2	18.4	20.7
United Kingdom .....	18.8	21.0	23.3	25.9	28.9
United States .....	16.8	17.5	18.7	20.1	21.6

<sup>1</sup> For explanation of figures see relevant country tables. In some cases the total may not sum to 100% because of other items. <sup>2</sup> For the years 1992-1995 the figures are estimated and differ from those provided in the statistical annex of the Italian chapter that do not refer to the whole system. <sup>3</sup> Postal cheques are not included because detailed figures were no longer published by the PTT after 1992. <sup>4</sup> Includes Town cheques. <sup>5</sup> Statistics on the volume and value of cheque payments are not available from 1993 onwards. The percentage figures for these years therefore do not include cheques.

Table 8 (cont.)

	1992	1993	1994	1995	1996
<b>Credit transfers</b>					
Belgium .....	56.9	58.5	60.9	60.2	59.5
Canada .....	4.4	5.2	6.4	7.4	8.1
France .....	15.4	15.4	15.7	15.6	15.7
Germany .....	49.8	45.6	48.7	48.8	49.2
Italy <sup>2</sup> .....	42.1	44.6	46.8	45.9	43.1
Japan .....	.	.	.	.	.
Netherlands .....	61.3	66.0	63.8	54.9	51.3
Sweden .....	77.6	84.5	82.3	79.4	78.5
Switzerland .....	81.3	80.1	78.1	76.3	74.4
United Kingdom <sup>6</sup> .....	20.6	20.4	20.1	19.7	19.9
United States .....	1.8	1.9	2.1	2.3	2.4
<b>Direct debits</b>					
Belgium .....	8.8	9.0	9.4	9.5	9.7
Canada .....	4.3	5.0	5.5	5.8	6.2
France .....	10.2	10.6	11.2	11.3	11.8
Germany .....	39.3	43.7	40.3	40.6	40.2
Italy <sup>2</sup> .....	4.1	4.4	4.7	5.4	7.4
Japan .....	.	.	.	.	.
Netherlands .....	23.9	21.7	22.1	24.9	25.1
Sweden .....	4.9	5.7	6.1	6.4	6.7
Switzerland <sup>7</sup> .....	2.5	2.8	3.1	3.3	3.3
United Kingdom .....	15.1	15.6	16.5	17.7	18.1
United States .....	0.9	1.0	1.1	1.1	1.3

<sup>6</sup> Paper-based and paperless (includes large-value: CHAPS). <sup>7</sup> Without PTT. See footnote 3.

Table 9

**Relative importance of cashless payment instruments<sup>1</sup>**

(percentage of total value of cashless transactions)

	1992	1993	1994	1995	1996
<b>Cheques</b>					
Belgium .....	6.2	5.4	4.6	4.3	3.6
Canada .....	98.8	98.8	98.7	98.1	97.2
France .....	6.4	4.6	4.4	4.7	4.8
Germany .....	2.4	2.3	2.3	2.1	1.8
Italy <sup>2</sup> .....	7.1	5.4	4.5	4.5	3.4
Japan .....	.	.	.	.	.
Netherlands .....	0.2	0.1	0.1	0.1	0.1
Sweden .....	10.6	.	.	.	.
Switzerland <sup>3</sup> .....	0.1	0.1	0.1	0.1	0.1
United Kingdom <sup>4</sup> .....	11.6	9.4	7.6	5.3	4.2
United States .....	13.1	12.6	12.2	11.9	11.2
<b>Payment by cards</b>					
Belgium .....	0.2	0.1	0.1	0.2	0.2
Canada .....	0.3	0.3	0.4	0.5	0.8
France .....	0.2	0.2	0.2	0.2	0.2
Germany .....	0.02	0.02	0.02	0.03	0.04
Italy <sup>2</sup> .....	0.04	0.03	0.04	0.05	0.05
Japan .....	.	.	.	.	.
Netherlands .....	0.0	0.0	0.1	0.2	0.2
Sweden .....	0.7	0.9	1.0	1.4	1.5
Switzerland <sup>5</sup> .....	.	.	.	.	.
United Kingdom .....	0.2	0.2	0.2	0.2	0.3
United States .....	0.1	0.1	0.1	0.2	0.2

<sup>1</sup> For explanation of figures see relevant country tables. In some cases the total may not sum to 100% because of other items. <sup>2</sup> For the years 1992-1995 the figures are estimated and differ from those provided in the statistical annex of the Italian chapter that do not refer to the whole system. <sup>3</sup> Postal cheques are not included because detailed figures were no longer published by the PTT after 1992. <sup>4</sup> Includes Town cheques. <sup>5</sup> Below 0.1%.



Table 9 (cont.)

	1992	1993	1994	1995	1996
<b>Credit transfers</b>					
Belgium .....	93.4	94.2	94.7	95.2	95.6
Canada .....	0.7	0.7	0.7	1.0	1.5
France .....	91.2	93.4	93.5	93.0	92.7
Germany .....	95.5	95.7	95.7	95.8	95.7
Italy <sup>2</sup> .....	91.1	93.2	94.2	94.1	95.4
Japan .....	.	.	.	.	.
Netherlands .....	98.6	98.8	98.7	98.6	98.5
Sweden .....	86.3	95.8	96.2	95.7	95.6
Switzerland .....	99.9	99.9	99.8	99.8	99.8
United Kingdom <sup>6</sup> .....	87.1	89.5	91.2	93.4	94.4
United States .....	85.8	86.4	86.8	87.0	87.7
<b>Direct debits</b>					
Belgium .....	0.2	0.3	0.5	0.3	0.4
Canada .....	0.2	0.2	0.2	0.3	0.5
France .....	0.6	0.7	0.8	0.9	1.0
Germany .....	2.1	2.0	2.0	2.1	2.5
Italy <sup>2</sup> .....	0.2	0.2	0.2	0.2	0.2
Japan .....	.	.	.	.	.
Netherlands .....	1.2	1.1	1.1	1.2	1.2
Sweden .....	2.4	3.3	2.8	2.9	2.9
Switzerland <sup>7</sup> .....	.	.	0.1	0.1	0.1
United Kingdom .....	1.1	1.0	1.0	1.0	1.1
United States .....	1.0	0.9	0.9	0.9	0.9

<sup>6</sup> Paper-based and paperless (includes large-value: CHAPS). <sup>7</sup> Without PTT. See footnote 3.

Table 10a  
**Features of selected interbank funds transfer systems<sup>1</sup>**  
 (figures relate to 1996)

	Type <sup>2</sup>	Owner/ Manager <sup>3</sup>	No. of participants		Processing <sup>4</sup>	Settlement <sup>5</sup>	Membership <sup>6</sup>
				of which direct			
<b>Belgium</b>							
ELLIPS .....	L	B + CB	122	22	RTT	RTGS	RM
Clearing House .....	L + R	B + CB	126	60	M	N	O
CEC .....	R	B + CB	65	.	ACH	N	O
<b>Canada</b>							
IIPS .....	L	B + AS	63	20	.	. <sup>7</sup>	RM
<b>France</b>							
SAGITTAIRE .....	L	CB	57	57	RTT	N	RM
CH Paris <sup>8</sup> .....	L + R	AS	343	32	M	N	RM
CH Provinces <sup>9</sup> .....	R	CB	. <sup>10</sup>	. <sup>10</sup>	M	N	O
SIT .....	R	CB + B/AS	286	23	RTT	N	RM
CREIC .....	R	CB	16	16	ACH	N	O
Card payments .....	R	B/AS	185	11	RTT	N	RM
TBF .....	L	CB	.	.	RTT	RTGS	O
<b>Germany</b>							
MAOBE .....	R	CB	5,404	.	ACH	GS	O
DTA .....	R	CB	5,404	.	ACH	GS	O
EIL-ZV .....	L	CB	5,404	.	RTT	RTGS	O
Platz. überweisungsverkehr	L + R	CB	5,404	.	M	GS	O
Konvent. Abrechnung	L + R	CB	456	.	M	N	O
EAF/EAF 2 .....	L	CB	65	.	RTT	N	RM
<b>Italy</b>							
Local clearing .....	L + R	CB	608	258	RTT <sup>11</sup>	N	O
Retail .....	R	CB <sup>12</sup>	825	124	ACH	N	O
ME <sup>13</sup> .....	L	CB	298	298	RTT	N	O
SIPS .....	L	CB <sup>12</sup>	674	193	RTT	N	O
BISS .....	L	CB	435	435	RTT	RTGS	O

<sup>1</sup> For additional information see relevant country chapters. <sup>2</sup> L = Large-value system, R = Retail system. <sup>3</sup> Owner/Manager: B = Banks, CB = Central Banks, AS = Payment Association. <sup>4</sup> Processing method: M = Manual, ACH = Automated Clearing House (off-line), RTT = Real-Time Transmission. <sup>5</sup> N = multilateral Netting, RTGS = Real-Time Gross Settlement, GS = other Gross Settlement. <sup>6</sup> O = Open membership (any bank can apply) or RM = Restricted Membership (subject to criteria). <sup>7</sup> Other (see Table 11, Footnote 7). <sup>8</sup> Clearing House in Paris. <sup>9</sup> Clearing Houses in the provinces. <sup>10</sup> 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. <sup>11</sup> Transactions can also be submitted on floppy disk. <sup>12</sup> System managed by the Interbank Society for Automation in the name and on behalf of the Banca d'Italia. <sup>13</sup> Electronic memoranda.

Table 10a (cont.)

	Degree of centralisation <sup>14</sup>	Pricing <sup>15</sup>	Closing time for same-day transactions <sup>16</sup>	Number of transactions (thousands)	Value of transactions (USD billions) <sup>17</sup>	Ratio of transactions value to GDP (at annual rate)
<b>Belgium</b>						
ELLIPS .....	C	F	16.45	213	2,266	8.9
Clearing House .....	D	V	15.00	11,310	8,121.1	31.7
CEC .....	C	F	15.15	867,927	833	3.3
<b>Canada</b>						
IIPS .....	D	N	16.30	2,400	11,309	19.0
<b>France</b>						
SAGITTAIRE .....	C	F	13.00	4,668	21,722	14.48
CH Paris <sup>8</sup> .....	C	F	15.00	708,295	23,704	15.80
CH Provinces <sup>9</sup> .....	C	N	11.00	2,925,238	1,326	0.88
SIT .....	D	F	13.30	3,939,996	2,353	1.60
CREIC .....	C	F	NO	293,012	31	0.02
Card payments .....	C	F	13.30	2,084,284	125	0.08
TBF .....	C	F	17.30	.	.	.
<b>Germany</b>						
MAOBE .....	D	V	NO	77,900	155	0.07
DTA .....	D	V	NO	2,198,100	2,822	1.24
EIL-ZV .....	D	V	14.30	7,200	18,487	8.12
Platz. überweisungsverkehr <sup>18</sup>	D	N	12.00	3,100	2,489	1.09
Konvent. Abrechnung <sup>19</sup>	D	N	12.00	1,000	2,528	1.11
EAF/EAF2 .....	C	F + V	12.30	18,800	98,669	43.32
<b>Italy</b>						
Local clearing .....	D	V	9.30	225,622	1,878	1.5
Retail .....	C	F	NO <sup>20</sup>	664,097	1,026	0.8
ME <sup>13</sup> .....	C	V	16.00	1,651	14,971	12.3
SIPS .....	C	F	14.00	5,326	22,379	18.4
BISS .....	C	V	17.00	50	90	0.1

<sup>14</sup> Geographical access to the system: C = Centralised (one processing centre only) or D = Decentralised. <sup>15</sup> Prices charged to participants: F = Full costs (including investments), V = Variable costs, N = No costs. <sup>16</sup> Closing time for same day transactions (NO = no same-day transactions). <sup>17</sup> Converted at yearly average exchange rates. <sup>18</sup> Decrease due to conversion requirement, resulting in a switch of previously paper-based payments to EIL-ZV and DTA. <sup>19</sup> Reporting change in 1995: number of delivery envelopes cleared instead of individual payments contained therein. <sup>20</sup> Except for the credit transfers entered before 12.00 which are settled on the same day.

Table 10b  
**Features of selected interbank funds transfer systems<sup>1</sup>**  
 (figures relate to 1996)

	Type <sup>2</sup>	Owner/ Manager <sup>3</sup>	No. of participants		Processing <sup>4</sup>	Settlement <sup>5</sup>	Membership <sup>6</sup>
				of which direct			
<b>Japan</b>							
FEYCS .....	L	B	266 <sup>7</sup>	266 <sup>7</sup>	RTT	N	RM
BOJ-NET .....	L	CB	426 <sup>7</sup>	426 <sup>7</sup>	RTT	RTGS <sup>8</sup>	RM
<b>Netherlands</b>							
Interpay <sup>9</sup> .....	R	B	66	66	ACH	N	O
8007-S.W.I.F.T.....	L	CB	66	66	ACH + RTT	N	O
FA .....	L	CB	146	146	RTT	N + RTGS	O
<b>Sweden</b>							
RIX .....	L	CB	133	26	RTT	RTGS	RM
Bank Giro System .....	R	B	23	23	ACH	N	O
<b>Switzerland</b>							
SIC .....	L + R	CB + B	218	218	RTT	RTGS	RM
DTA/LSV .....	R	B	162	162	ACH	N	RM
<b>United Kingdom</b>							
CHAPS .....	L	B	423	16	RTGS <sup>10</sup>	N	RM
BACS .....	R	B	37,000	17	ACH	N	RM
Cheque/credit .....	R	B	613	13	M	N	RM
<b>United States</b>							
Fedwire .....	L	CB	9,400	9,400	RTT	RTGS	O
CHIPS .....	L	B	103	103	RTT	N	RM

<sup>1</sup> For additional information see relevant country chapters. <sup>2</sup> L = Large-value system; R = Retail system. <sup>3</sup> Owner/Manager: B = Banks, CB = Central Banks. <sup>4</sup> Processing method: M = Manual, ACH = Automated Clearing House (off-line), RTT = Real-Time Transmission. <sup>5</sup> N = multilateral Netting, RTGS = Real-Time Gross Settlement, GS = other Gross Settlement. <sup>6</sup> O = Open membership (any bank can apply) or RM = Restricted Membership (subject to criteria). <sup>7</sup> As of year-end. <sup>8</sup> 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. <sup>9</sup> Formerly BGC-CH. <sup>10</sup> Changed to an RTGS system on 22nd April 1996.

Table 10b (cont.)

	Degree of centralisation <sup>11</sup>	Pricing <sup>12</sup>	Closing time for same-day transactions <sup>13</sup>	Number of transactions (thousands)	Value of transactions (USD billions)	Ratio of transactions value to GDP (at annual rate)
<b>Japan</b>						
FEYCS .....	D	V <sup>14</sup>	13.45	9,403	78,788	17.1
BOJ-NET .....	D	V <sup>14</sup>	17.00	3,781	357,336	77.7
<b>Netherlands</b>						
Interpay <sup>9</sup> .....	D	F	12.45	1,586,100	1,376	3.5
8007-S.W.I.F.T. ....	C	V	12.45	2,099	8,112	20.7
FA .....	C	V	15.30	600	5,304	13.5
<b>Sweden</b>						
RIX .....	C	F	16.30	310	10,146	46.6
Bank Giro System .....	C	F	NO	264,880	313	1.4
<b>Switzerland</b>						
SIC .....	C	F	16.15	108,407	28,658	104.6
DTA/LSV .....	C	F	NO	85,796	221,611	1.2
<b>United Kingdom<sup>15</sup></b>						
CHAPS .....	D	F	15.45	14,395	45,104	38.9
BACS .....	C	F	NO	2,476,000	1,954	1.7
Cheque/credit .....	D	F	NO	2,136,000 <sup>16</sup>	1,960 <sup>16</sup>	1.7 <sup>16</sup>
<b>United States</b>						
Fedwire .....	C	F	18.30	82,600	249,140	32.9
CHIPS .....	C	F	16.30	53,500	331,541	43.8

<sup>11</sup> Geographical access to the system: C = Centralised (one processing centre only) or D = Decentralised. <sup>12</sup> Prices charged to participants: F = Full costs (including investments), V = Variable costs, N = No costs. <sup>13</sup> Closing time for same-day transactions (NO = no same-day transactions). <sup>14</sup> Prices are set on the principle that institutions which are to benefit from on-line processing should pay the relevant charges. <sup>15</sup> Interbank figures only. <sup>16</sup> Covers England and Wales only.



Table 11  
**Operating hours of selected large-value interbank funds transfer systems<sup>1</sup>**  
**(as of December 1996)**

System	Gross (G) or net (N)	Opening-closing time for same-day value (local time)	Settlement finality (local time)	Cut-off for all third-party payment orders	Cut-off for international correspondents' payment orders	Memo item: Standard money market hours (local time)
<b>Belgium</b>						
ELLIPS	G	6.30-16.45	.	15.00	15.00	(9.00-16.15)
CEC <sup>2</sup> .....	N	15.46-15.45 <sup>3</sup>	15.15	15.00	15.00 <sup>4</sup>	(9.00-16.15)
Clearing House .....	N	8.00-15.00	15.00	.	. <sup>4</sup>	(9.00-16.15 <sup>5</sup> )
<b>Canada<sup>6</sup></b>						
IIPS .....	N <sup>7</sup>	8.00-16.30	11.00 <sup>8</sup>	16.30 <sup>9</sup>	16.30 <sup>9</sup>	
<b>France</b>						
SAGITTAIRE .....	N	8.00-13.00 <sup>10</sup>	18.30	.	8.00 <sup>11</sup>	(8.15-17.00)
TBF <sup>12</sup> .....	G	7.30-18.30	7.30-18.30	17.30	8.00 <sup>11</sup>	
<b>Germany</b>						
Express electronic credit transfer system .....	G	8.15-15.00	8.15-15.00	(13)	8.00 <sup>11</sup>	
Express (paper-based) local credit transfer system .....	G	8.00-12.00	8.00-12.00	(13)	8.00 <sup>11</sup>	(9.30-13.00 <sup>14</sup> )
EAF <sup>15</sup> /EAF2 .....	G + N	8.00-12.30	14.30 <sup>16</sup>	(13)	8.00 <sup>11</sup>	
<b>Italy</b>						
BISS .....	G	8.00-17.00	8.00-17.00	17.00	9.00 <sup>11</sup>	(8.45-16.30 <sup>17</sup> )
SIPS .....	N	8.00-14.00	16.30	14.00	9.00 <sup>11</sup>	
ME .....	N	8.00-16.00	16.30	16.00	9.00 <sup>11</sup>	
<b>Japan</b>						
FEYCS .....	N	9.00-13.45	15.00	10.30 <sup>11</sup>	10.30 <sup>11</sup>	(9.00-17.00)
BOJ-NET .....	G <sup>18</sup>	9.00-17.00	9.00-17.00	14.00	n.a.	
<b>Netherlands</b>						
Central Bank FA System .....	G	8.00-15.30	8.00-15.30	. <sup>19</sup>	. <sup>19</sup>	(9.00-13.00)
8007 S.W.I.F.T. ....	L	8.00-12.00 <sup>20</sup>	13.00	8.00 <sup>11</sup>	8.00 <sup>11</sup>	
<b>Sweden</b>						
RIX .....	G	8.00-16.30	8.00-16.30	(21)	8.00 <sup>11</sup>	(9.00-16.15)
<b>Switzerland</b>						
SIC .....	G	18.00-16.15 <sup>22</sup>	18.00-16.15 <sup>22</sup>	15.00 <sup>22</sup>	8.00 <sup>4</sup>	(9.00-16.00)
<b>United Kingdom</b>						
CHAPS .....	G <sup>23</sup>	8.30-15.45	end of day	none	12.00	(7.30-15.30 <sup>24</sup> )
<b>United States<sup>6</sup></b>						
Fedwire .....	G	8.30-18.30 <sup>25</sup>	8.30-18.30	18.00	18.00	(8.30-18.30 <sup>26</sup> )
CHIPS .....	N	7.00-16.30	18.00 <sup>27</sup>	16.30	16.30	
<b>ECU clearing system .....</b>						
	N	14.01-14.00 <sup>28</sup>	15.45	none	none	(TOM/NEXT <sup>29</sup> )

### Footnotes to Table 11

- <sup>1</sup> 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. 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.
- <sup>2</sup> In June 1990 a special "large-value credit transfer application" was introduced in the C.E.C. All net settlements from the C.E.C. take place at the end of the day at the (manual) Clearing House of Belgium.
- <sup>3</sup> The C.E.C. transfer system operates round-the-clock, five days a week.
- <sup>4</sup> S.W.I.F.T. guideline.
- <sup>5</sup> Luxembourg dealers, who are important operators in Belgian francs, are only active in the market before noon; the central bank conducts its daily fine-tuning operations at about 11.00.
- <sup>6</sup> Eastern time.
- <sup>7</sup> 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.
- <sup>8</sup> Net settlement at 11.00 the next day (retroactively).
- <sup>9</sup> Local time at the receiving IIPS point, or the beneficiary account point, whichever is earlier.
- <sup>10</sup> 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.
- <sup>11</sup> S.W.I.F.T. guideline; in practice it may be later.
- <sup>12</sup> The TBF became operational on 27th October 1997.
- <sup>13</sup> This is subject to arrangements between the correspondent banks.
- <sup>14</sup> For settlement purposes it can be later.
- <sup>15</sup> Electronic netting system in Frankfurt for interbank transfers predominantly relating to international DM transactions.
- <sup>16</sup> Planned time for communication of completion (positive message) or non-completion (negative message) of settlement.
- <sup>17</sup> The money market may continue to operate beyond the standard hours according to the closing times of the clearing and settlement systems.
- <sup>18</sup> 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.
- <sup>19</sup> 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 FA System.
- <sup>20</sup> The 8007 S.W.I.F.T. system is, for a given value day, also open from 15.00 to 17.00 on the previous business day.
- <sup>21</sup> 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 Changed to an RTGS system on 22nd April 1996.
- 24 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.
- 25 On 8th December 1997, the opening time for Fedwire will be changed to 00.30.
- 26 Trading occurs among dealers for funds on deposit at Federal Reserve Banks (i.e. federal funds) as early as 6.30.
- 27 Payments over CHIPS become final on completion of settlement, which normally occurs between 17.00 and 17.30. Rules are designed to ensure that settlement takes place no later than 18.00.
- 28 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).
- 29 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 12  
**Features of selected securities settlement systems**  
 (figures relate to 1996)

	Type <sup>1</sup>	Owner/ Manager <sup>2</sup>	No. of participants		Settlement of cash leg <sup>3</sup>	Delivery <sup>3</sup>
				<i>of which direct</i>		
<b>Belgium</b>						
NBB Clearing .....	G,O	CB	209	.	N	N
CIK .....	E,O	B	160	.	N	N
<b>Canada</b>						
BBS <sup>4</sup> .....	G,E,O	B,SE,O	89	89	N	G/N
DCS <sup>5</sup> .....	G	B,SE,O	63	63	N	G
<b>France</b>						
SATURNE .....	G,O	B,CB	322	322	N	G
RELIT .....	G,E,O	B	449	449	N	G/N
<b>Germany</b>						
DKV .....	G,E,O	SE	394	394	N/G	G
<b>Italy</b>						
Securities Settlement Procedures:						
Daily Procedure .....	G,E,O	CB	301	301	N	N
CAT .....	G	CB	756	756	.6	G
Monte Titoli .....	E,O	Monte Titoli	437	.	.6	G
<b>Japan</b>						
JGB registration .....	G	CB	436 <sup>7</sup>	436 <sup>7</sup>	G/N	G/N
JGB book-entry .....	G	CB	371 <sup>7</sup>	371 <sup>7</sup>	G/N	G/N
<b>Netherlands</b>						
NECIGEF .....	G+E+O	B+CB+SE	55	55	G	G
CB Clearing Institute .....	G+O	CB	85	85	N	N
<b>Sweden</b>						
VPC .....	G+E+O	B+O	53	53	G/N	G
OM .....	O	O	43	43	N	N
<b>Switzerland</b>						
SECOM .....	G,E,O	B	334	334	G	G
<b>United Kingdom</b>						
CGO .....	G+O	CB/SE	264	264	N	G
CMO .....	O	CB	59	59	N	G
<b>United States</b>						
Fedwire .....	G	CB	6,699	6,699	G	G
DTC (NDFS) <sup>8</sup> .....	E,O	B,SE,O	581	581	N	G

<sup>1</sup> G = Government securities, E = Equity, O = Other. <sup>2</sup> B = Banks, CB = Central Banks, SE = Stock Exchange, O = Other. <sup>3</sup> G = Gross, N = Net. <sup>4</sup> The book-based system of The Canadian Depository for Securities Limited (CDS). <sup>5</sup> The real-time, on-line debt-clearing service of CDS, which commenced operation during August 1994. <sup>6</sup> Deliveries free of payments. <sup>7</sup> End-year. <sup>8</sup> Next-day funds settlement.

Table 12 (cont.)

	Delivery lag	Central Securities Depository	Cash Settlement Agent	Number of transactions (thousands)	Value of transactions (USD billions) <sup>9</sup>	Ratio of transactions value to GDP (at annual rate)
<b>Belgium</b>						
NBB Clearing .....	T+2/T+3 <sup>10</sup>	NBB	NBB	230	2,903.4	11.3
CIK .....	T+3 <sup>11</sup>	CIK	NBB	2,093	25.3	0.1
<b>Canada</b>						
BBS <sup>4</sup> .....	up to T+3	CDS	B <sup>12</sup>	}15,000 <sup>13</sup>	}28,888 <sup>13</sup>	}48.5
DCS <sup>5</sup> .....	up to T+3	CDS	B <sup>14</sup>			
<b>France</b>						
SATURNE .....	T	Banque de France	CB	340	9,804	6.6
RELIT .....	T+3 <sup>15</sup>	SICOVAM	CB	.	11,666	7.78
<b>Germany</b>						
DKV .....	T+0-40	DKV	CB	20,600	10,316	4.5
<b>Italy</b>						
Securities Settlement Procedures:						
Daily Procedure .....	T+2/T+3 T+5 <sup>16</sup>	CAT+ Monte Titoli	CB	.	19,367	15.9
CAT .....	T	CAT	. <sup>6</sup>	1,004.2	1,170	1.0
Monte Titoli .....	T	Monte Titoli	. <sup>6</sup>	.	44	0.04
<b>Japan</b>						
JGB registration .....	T+3	CB	CB	781.5	19,386	4.2
JGB book-entry .....	T+3	CB	CB	480.1	23,592	5.1
<b>Netherlands</b>						
NECIGEF .....	T+3	NECIGEF	KAS-ASS	1,481	.	.
CB Clearing Institute ...	T,T+3	CB	CB	3	59.4	0.19
<b>Sweden</b>						
VPC .....	T+2, T+3 <sup>17</sup>	VPC	CB	3,678	8,816	40.5
OM .....	T+3		CB	36,615	2,066	9.5
<b>Switzerland</b>						
SECOM .....	T+3	SEGA	CB	4,900	890	3.2
<b>United Kingdom</b>						
CGO .....	T,T+1	CB	CB	960.1	37,931	32.7
CMO .....	T	CB	CB	268.0	5,439	4.7
<b>United States</b>						
Fedwire .....	T,T+1	CB	CB	13,100	160,600	21.2
DTC (NDFS) <sup>8</sup> .....	T+5	DTC	DTC	135,700	50,200	6.6

<sup>9</sup> Converted at yearly average exchange rate. <sup>10</sup> T+2 for Treasury bills; T+3 for bonds. <sup>11</sup> The seller retains the responsibility for delivering securities. <sup>12</sup> A single chartered bank. <sup>13</sup> Figures are for the twelve months ended 31st October 1996. <sup>14</sup> A single chartered bank, though not the same bank as for the BBS. <sup>15</sup> When processed by the "SLAB" system (special delivery service by bilateral agreements), the delivery occurs same day. <sup>16</sup> T+2 for government bills; T+3 for government and corporate bonds; T+5 for equities, warrants and convertible bonds. <sup>17</sup> Same-day delivery and settlement is also possible under specific conditions.

Table 13  
**S.W.I.F.T. traffic: intra G-10 messages flows in 1996**  
(number of messages, in thousands)

From/To	BE	CA	FR	DE	IT	JP	NL
Belgium .....	5,283	205	2,278	2,006	1,128	395	2,218
Canada .....	177	3,771	287	493	206	292	112
France .....	2,012	301	14,020	3,481	2,779	585	957
Germany .....	1,439	365	2,449	6,834	2,901	888	1,924
Italy .....	886	178	2,340	3,371	5,420	477	610
Japan .....	374	259	566	1,068	526	2,996	191
Netherlands .....	1,995	131	908	2,635	654	194	2,053
Sweden .....	275	48	316	1,179	298	105	283
Switzerland .....	1,382	471	2,551	5,173	2,251	678	1,025
United Kingdom .....	2,761	1,124	3,582	6,920	3,874	3,801	1,941
United States .....	1,965	2,936	3,286	6,257	3,177	5,857	2,837
<b>Total G-10 .....</b>	<b>18,548</b>	<b>9,789</b>	<b>32,582</b>	<b>39,416</b>	<b>23,214</b>	<b>16,269</b>	<b>14,151</b>
<b>Total non-G-10 .....</b>	<b>5,776</b>	<b>2,093</b>	<b>8,155</b>	<b>19,831</b>	<b>8,296</b>	<b>9,426</b>	<b>3,651</b>
<b>Total all countries .....</b>	<b>24,324</b>	<b>11,882</b>	<b>40,737</b>	<b>59,247</b>	<b>31,510</b>	<b>25,695</b>	<b>17,802</b>

From/To	SE	CH	GB	US	Total G-10	Non-G-10	All countries
Belgium .....	241	1,858	3,055	2,793	21,461	5,468	26,928
Canada .....	42	508	1,224	3,850	10,961	2,537	13,497
France .....	261	1,899	4,227	5,234	35,756	8,023	43,779
Germany .....	601	3,645	4,665	6,279	31,991	15,813	47,804
Italy .....	205	1,839	3,874	4,059	23,258	6,823	30,081
Japan .....	82	689	2,977	7,726	17,454	9,345	26,799
Netherlands .....	195	1,160	2,173	2,788	14,886	3,781	18,667
Sweden .....	1,723	308	1,717	1,600	7,852	3,404	11,258
Switzerland .....	261	6,085	3,884	6,752	30,513	8,220	38,733
United Kingdom .....	1,312	3,958	19,336	13,680	62,288	20,290	82,578
United States .....	1,088	5,148	11,044	20,970	64,566	50,953	115,518
<b>Total G-10 .....</b>	<b>6,012</b>	<b>27,097</b>	<b>58,177</b>	<b>75,731</b>	<b>320,986</b>	<b>134,657</b>	<b>455,642</b>
<b>Total non-G10 .....</b>	<b>2,981</b>	<b>8,126</b>	<b>21,565</b>	<b>53,021</b>	<b>142,919</b>	<b>89,224</b>	<b>232,143</b>
<b>Total all countries .....</b>	<b>8,993</b>	<b>35,222</b>	<b>79,742</b>	<b>128,752</b>	<b>463,905</b>	<b>223,881</b>	<b>687,785</b>

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

## **Central bank officials involved in the preparation of the 1997 edition of the statistical update of the "Red Book"**

National Bank of Belgium	Mr. Alec Schotte
Bank of Canada	Mr. Reid Stilborn
Bank of England	Mr. Roy Clive
Bank of France	Mr. Bertrand Manoury Ms. Dominique Désir
Deutsche Bundesbank	Ms. Bianca Schönfelder
Bank of Italy	Mr. Luca Ferrara
Bank of Japan	Mr. Junichi Iwabuchi Ms. Hiroko Itoh
Netherlands Bank	Mr. Simon P. Kappelhof Mr. Richard Heuver
Sveriges Riksbank	Mr. Bo Dahlheim
Swiss National Bank	Mr. Stéphane Fumeaux
Board of Governors of the Federal Reserve System	Ms. Diana Hancock Mr. James Bohn Mr. Eugene E. Snyder
Bank for International Settlements	Mr. Masao Okawa Mr. Gerhard F. Randecker



## **Other BIS publications relating to payment and settlement systems**

*Report on Netting Schemes*, February 1989.

*Large-Value Funds Transfer Systems in the Group of Ten Countries*, May 1990.

*Report of the Committee on Interbank Netting Schemes*, November 1990.

*Delivery Versus Payment in Securities Settlement Systems*, September 1992.

*Central Bank Payment and Settlement Services with Respect to Cross-Border and Multi-Currency Transactions*, September 1993.

*Payment Systems in Australia*, July 1994.

*Payment Systems in Finland*, July 1994.

*Payment Systems in the Group of Ten Countries*, December 1993 (fourth edition).

*Cross-Border Securities Settlements*, March 1995.

*Payment Systems in Iceland*, May 1995.

*Payment Systems in Norway*, May 1995.

*Payment Systems in Saudi Arabia*, February 1996.

*Settlement Risk in Foreign Exchange Transactions*, March 1996.

*Security of Electronic Money*, August 1996.

*Implications for Central Banks of the Development of Electronic Money*, October 1996.

*Disclosure Framework for Securities Settlement Systems*, February 1997. (Published jointly with IOSCO).

*Payment Systems in Korea*, March 1997.

*Real-time Gross Settlement Systems*, March 1997.

*Clearing Arrangements for Exchange-traded Derivatives*, March 1997.

*Payment Systems in the Czech Republic*, June 1997.







