

BANK FOR INTERNATIONAL SETTLEMENTS

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

figures for 1997

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

**Basle
December 1998**

This publication is available on the BIS website at www.bis.org.

© *Bank for International Settlements 1999. All rights reserved. Brief excerpts may be reproduced or translated provided the source is stated.*

ISSN 1024-3380

TABLE OF CONTENTS

	Page
Country tables	
Belgium	1
Canada	13
France	25
Germany	37
Italy	47
Japan	57
Netherlands	67
Sweden	75
Switzerland	83
United Kingdom	91
United States	101
Comparative tables.....	113

COUNTRY TABLES

Table 1
Basic statistical data

	1993	1994	1995	1996	1997
Population (millions)	10.09	10.12	10.14	10.16	10.18
GDP (BEF billions)	7,316	7,678	7,936	8,305	8,661
GDP per capita (BEF)	725,074	758,696	782,642	817,421	850,786
Exchange rate (domestic currency vis-à-vis USD):					
<i>year-end</i>	<i>36.11</i>	<i>31.84</i>	<i>29.44</i>	<i>32.01</i>	<i>36.92</i>
<i>average</i>	<i>34.55</i>	<i>33.45</i>	<i>29.49</i>	<i>30.96</i>	<i>35.85</i>

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

	1993	1994	1995	1996	1997
Notes and coin	424.7	396.3	416.2	435.8	441.3
Transferable deposits ¹	1,008.2	1,066.9	1,111.3	1,150.1	1,225.5
Other .....	.	.	.	.	.
Narrow money supply	1,432.9	1,463.2	1,527.5	1,585.9	1,666.8
<i>Memorandum item:</i>					
Broad money supply	7,110.9	6,621.4	6,615.1	7,228.2	7,499.3

¹ 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)

	1993	1994	1995	1996	1997
Reserve balances held at central bank ¹	1.41	2.05	1.86	2.38	1.19
Transferable deposits at other institutions ²	103.5	113.1	128.9	164.7	182.1
Other .....	.	.	.	.	.
<i>Memorandum items:</i>					
Required reserves .....	.	.	.	.	.
Institutions' borrowing from central bank ^{1,3}	9.01	3.13	4.13	1.24	4.38

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

Table 4

Banknotes and coin

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

	1993	1994	1995	1996	1997
Total banknotes and coin issued.....	459.3	431.4	465.9	486.2	501.1
Denominations:					
Notes:					
10,000 francs	80.6	182.6	206.1	225.7	220.1
5,000 francs ¹	220.8	6.1	0.8	.	.
2,000 francs ² .....	.	100.3	124.2	134.6	159.2
1,000 francs	111.9	95.6	86.2	75.0	68.6
500 francs.....	12.9	13.1	13.5	13.6	14.3
200 francs ³ .....	.	.	.	4.9	5.6
100 francs	14.4	14.5	15.0	10.9	10.8
Coin:					
500 francs	0.2	0.2	0.2	0.2	0.2
250 francs .....	.	0.0	0.1	0.1	0.1
50 francs	7.6	7.8	8.1	8.7	9.1
20 francs	6.8	6.9	7.2	7.6	7.9
5 francs	2.6	2.7	2.8	3.0	3.2
1 franc	1.2	1.3	1.4	1.6	1.7
0.5 francs	0.3	0.3	0.3	0.3	0.3
Banknotes and coin held by credit institutions	34.6	35.1	49.7	50.4	59.8
Total banknotes and coin outside credit institutions	424.7	396.3	416.2	435.8	441.3

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

Table 5
Institutional framework
(at end-1997)

Categories	Number of institutions	Number of branches	Number of accounts (thousands)	Value of accounts (in billions BEF)
Central bank	1	14	2	0.2
Credit institutions ¹	134	7,434	11,207	1,143.7
<i>of which:</i>				
<i>Branches of foreign law</i>	40	.	.	.
<i>of which EU based</i>	25	.	.	.
Postcheque	1	1,593	1,277	81.6

¹ Non-full-size branches excluded.

Table 6
Cash dispensers, ATMs and EFTPOS terminals

	1993	1994	1995	1996	1997
Cash dispensers and ATMs:					
<i>Number of networks</i>	15	15	15	15	15
<i>Number of machines</i>	2,819	3,170	3,654	4,207	5,007
<i>Volume of transactions (millions)</i>	115.65	132.33	144.93	153.80	159.58
<i>Value of transactions (BEF billions)</i>	458.18	533.17	589.28	637.71	673.29
EFTPOS:					
<i>Number of networks</i>	2	2	2	2	2
<i>Number of terminals</i>	52,984	63,765	72,892	81,331	85,727
<i>Volume of transactions (millions)</i>	157.81	181.96	211.45	243.19	276.68
<i>Value of transactions (BEF billions)</i>	344.43	412.67	482.91	564.84	646.24
Electronic money loading machines:¹					
<i>Number of machines</i> .....	.	.	311	1,425	6,438
<i>Volume of transactions (thousands)</i> .....	.	.	121	267	1,776
<i>Value of transactions (BEF millions)</i> .....	.	.	156	354	2,308
Electronic money purchasing terminals:					
<i>Number of machines</i> .....	.	.	1,109	5,504	21,263
<i>Volume of transactions (thousands)²</i> .....	.	.	727	1,534	10,190
<i>Value of transactions (BEF millions)</i> .....	.	.	139	247	1,591

¹ The electronic purse scheme "PROTON" started in February 1995. ² Collected payments.

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

	1993	1994	1995	1996	1997
Cards with a cash function	8,316	8,912	9,461	10,591	11,361
Cards with a debit/credit function ¹	8,431	8,912	9,461	10,591	11,361
<i>of which:</i>					
<i>cards with a debit function</i>	<i>6,434</i>	<i>6,780</i>	<i>7,190</i>	<i>8,141</i>	<i>8,748</i>
<i>cards with a credit function</i> ²	<i>1,997</i>	<i>2,132</i>	<i>2,271</i>	<i>2,450</i>	<i>2,613</i>
Cards with a cheque guarantee function	4,856	4,660	4,645	4,366	4,767
Retailer cards	1,002	1,089	1,221	1,372	1,428
Electronic money cards ³ .....	.	.	30	761	3,430

¹ Overlaps with the cards with a cash function. ² Most cards with a credit function are of the delayed debit type. ³ The electronic purse scheme "PROTON" started in February 1995.

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

	1993	1994	1995	1996	1997
ELLIPS ¹ .....	.	.	.	0.21	0.96
Clearing House	22.52	15.88	14.45	11.57	6.78
<i>Securities clearing</i>					
<i>balances</i> .....	.	.	.	.	.
<i>Postal drafts and money</i>					
<i>orders</i>	2.19	3.76	3.72	3.28	2.85
<i>Debits</i>	4.82	6.25	5.11	4.14	3.57
<i>Credit transfers</i>	10.56	5.87	5.62	4.15	0.36
<i>Provinces</i> ²	4.95	.	.	.	.
CEC	740.25	784.33	826.22	867.92	880.60
Direct debits	61.94	66.43	71.95	76.11	84.86
<i>of which:</i>					
<i>ordinary direct debits</i>	59.89	64.07	69.37	73.27	81.56
<i>refunds</i>	0.51	0.52	0.63	0.67	0.65
<i>unpaid direct debits</i>	1.54	1.84	1.95	2.17	2.65
Other debit operations	306.33	322.14	337.06	351.33	334.43
<i>of which:</i>					
<i>truncated cheques</i>	91.35	84.76	77.47	72.08	65.79
<i>ATMs and POS</i>	214.61	237.02	259.21	278.84	268.24
<i>unpaid cheques</i>	0.37	0.36	0.38	0.41	0.40
Credit transfers	371.21	394.64	416.03	439.61	458.38
<i>of which:</i>					
<i>credit transfers</i>	308.10	322.90	337.02	352.67	368.72
<i>counterparty postal</i>					
<i>drafts</i>	3.34	2.97	2.70	2.48	2.17
<i>counterparty ATM-POS</i>	40.09	49.26	57.01	64.96	67.75
<i>inpayment transfers</i>	19.68	19.51	19.30	19.50	19.74
Large-value credit transfers	0.77	1.12	1.17	0.87	1.84
Others ³ .....	.	.	.	.	1.09

¹ ELLIPS, the Belgian RTGS system, went live on 24th September 1996. ² Since 1994, the volume of transactions in the province has been split up and classified in the relevant groups. ³ Bills of exchange.

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

	1993	1994	1995	1996	1997
ELLIPS ¹	.	.	.	72,533	342,688
Clearing House	298,952	337,567	334,353	243,142	5,413
<i>Securities clearing</i>					
<i>balances</i> ²	8,651	11,010	12,522	10,092	.
<i>Postal drafts and</i>					
<i>money orders</i>	42	67	40	60	62
<i>Debits</i>	18,632	16,862	14,887	15,229	5,031
<i>Credit transfers</i>	263,440	309,628	306,904	217,761	320
<i>Provinces</i> ³	8,174	.	.	.	.
CEC	21,827	24,512	26,588	26,662	18,460
Direct debits	367	407	440	478	600
<i>of which:</i>					
<i>ordinary direct debits</i>	350	387	419	455	572
<i>refunds</i>	5	5	6	6	7
<i>unpaid direct debits</i>	12	15	15	17	21
Other debit operations	1,787	1,830	1,859	1,883	1,884
<i>of which:</i>					
<i>truncated cheques</i>	1,166	1,148	1,123	1,091	1,044
<i>ATMs and POS</i>	610	671	724	779	828
<i>unpaid cheques</i> ²	11	11	12	13	12
Credit transfers	9,733	10,255	10,373	10,583	10,667
<i>of which:</i>					
<i>ordinary credits transfers</i>	8,937	9,386	9,438	9,592	9,626
<i>counterparty postal drafts</i> ...	43	39	37	35	30
<i>counterparty ATM-POS</i>	599	663	719	773	828
<i>inpayment transfers</i>	154	167	179	183	183
Large-value credit transfers	9,940	12,020	13,916	13,718	5,146
Others .....	.	.	.	.	163

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

Table 10

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

	1993	1994	1995	1996	1997
NBB clearing	147,180	188,258	198,608	229,798	199,807
CIK (millions)	566	664	485	735	770
BELFOX ¹	1,408,683	1,915,483	2,164,527	2,635,945	2,527,665

¹ Total number of contracts (options and futures).

Table 11

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

	1993	1994	1995	1996	1997
NBB Clearing	35,805	66,148	85,050	92,937	103,426
CIK	494.4	553.8	546.7	809.0	1,229.0
BELFOX ¹	1.7	4.4	5.8	9.4	13.4

¹ Premium turnover (options).

Table 12
**Indicators of use of various cashless payment instruments:
 volume of transactions**

(in millions)

Instruments	1993	1994	1995	1996	1997
Cheques issued ¹	139.1	124.1	117.1	109.7	95.8
Payments by debit and credit cards ²	169.2	190.9	218.1	249.3	281.6
Paper-based credit transfers	10.6	5.9	5.6	4.2	0.3
<i>Customer initiated</i>	3.2	1.8	1.7	1.3	0.3
<i>Interbank</i>	7.4	4.1	3.9	2.9	.
Paperless credit transfers ³	583.7	640.9	661.2	690.4	697.0
<i>Customer initiated</i>	583.7	640.9	661.2	690.4	695.9
<i>Interbank</i> .....	.	.	.	0.2	1.1
Direct debits	88.5	100.1	104.5	113.5	117.9
Electronic money	.	.	0.7	1.5	10.2
<i>Payments by card-based products</i> .....	.	.	0.7	1.5	10.2
<i>Payments by network-based products</i> .....	.	.	.	.	.
Other .....	.	.	.	.	.
Total	991.1	1,061.9	1,107.2	1,168.6	1,202.8

¹ Postal drafts included. ² Payments with retailers' cards included. ³ In-payment transfers included.

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

Instruments	1993	1994	1995	1996	1997
Cheques issued ¹	13,246	13,693	12,287	11,492	11,664
Payments by debit and credit cards ²	388	443	508	591	673
Paper-based credit transfers	263,440	309,628	306,904	217,761	320
<i>customer initiated</i>	31,612	37,155	36,828	26,131	320
<i>interbank</i>	231,828	272,473	270,076	191,630	.
Paperless credit transfers ³	27,097	36,829	50,209	131,814	390,908
<i>customer initiated</i>	27,097	36,829	50,209	68,155	93,217
<i>interbank</i> .....	.	.	.	63,659	297,691
Direct debits	787	885	979	1,102	1,187
Electronic money	.	.	0.1	0.3	1.6
<i>Payments by card-based products</i> .....	.	.	0.1	0.3	1.6
<i>Payments by network-based products</i> .....	.	.	.	.	.
Other .....	.	.	.	.	.
Total	304,958	361,478	370,887	362,760	404,754

¹ Postal drafts included. ² Payments with retailers' cards included. ³ In-payment transfers included.

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

	1993	1994	1995	1996	1997
Members	34	34	33	32	32
<i>of which: live</i>	33	34	32	32	32
Sub-members ¹	35	37	38	37	39
<i>of which: live</i>	33	36	37	37	39
Participants ²	2	3	5	6	6
<i>of which: live</i>	2	3	3	6	5
Total users	71	74	76	75	77
<i>of which: live</i>	68	73	72	75	76
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i>	2,244	2,551	2,693	2,874	2,969
<i>sub-members</i>	1,887	2,097	2,259	2,404	2,590
<i>participants</i>	125	218	277	354	606
<i>users</i>	4,256	4,866	5,229	5,632	6,165

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

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

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

	1993	1994	1995	1996	1997
Total messages sent	19,828,726	21,233,594	23,796,106	26,928,329	31,355,971
<i>of which:</i>					
<i>category I</i> ¹	6,145,021	6,331,292	6,660,281	6,845,391	7,170,089
<i>category II</i> ²	5,233,779	5,350,057	5,606,480	6,307,048	7,009,454
Total messages received	17,234,167	18,910,023	21,003,109	24,324,277	27,950,457
<i>of which:</i>					
<i>category I</i> ¹	5,556,991	5,835,044	8,197,728	6,441,304	6,665,892
<i>category II</i> ²	4,073,542	4,198,073	4,457,184	5,202,993	5,771,831
Domestic traffic ³	3,604,238	3,907,203	4,452,493	5,283,148	6,138,563
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic	457,218,200	518,097,873	603,575,374	687,785,294	812,117,556

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

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

Table 1
Basic statistical data

	1993	1994	1995	1996	1997
Population (millions):					
<i>year-end</i>	29.0	29.4	29.7	30.1	30.4
<i>average</i>	28.9	29.2	29.6	29.9	30.2
GDP (CAD billions)	724.9	762.3	799.2	820.3	856.1
GDP per capita	25,083	26,106	27,000	27,435	28,348
Exchange rate (domestic currency vis-à-vis USD):					
<i>year-end</i> ¹	1.3217	1.4018	1.3640	1.3706	1.4305
<i>average</i> ²	1.2931	1.3699	1.3678	1.3635	1.3888

¹ Closing spot rate for the year. ² 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)

	1993	1994	1995	1996	1997
Notes and coin	24,400	26,152	26,835	27,862	29,390
Transferable deposits ¹	117,554	122,599	135,065	155,448	171,272
Narrow money supply (M ₁)	55,435	59,122	62,704	73,994	81,572
<i>Memorandum item:</i>					
Broad money supply (M ₂ +) ¹	578,009	591,972	618,381	640,304	632,110

¹ 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)

	1993	1994	1995	1996	1997
Reserve or settlement balances held at central bank	1,295	559	359	478	492
Reserve or settlement balances held at other deposit-taking institutions ¹	123	. ³	. ³	. ³	. ³
<i>Memorandum items:</i>					
Required reserves	4,981	. ³	. ³	. ³	. ³
Institutions' borrowing from central bank ²	214	312	478	543	501

¹ 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. ² Advances to members of the Canadian Payments Association. ³ 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)

	1993	1994	1995	1996	1997
Total banknotes and coin outstanding	29,697,946	30,884,374	31,404,902	32,346,345	33,883,970
Coinage	2,461,277	2,555,721	2,627,247	3,237,236	3,342,014
Denomination of banknotes: ¹					
1,000 dollars	2,080,675	2,344,424	2,510,111	2,780,110	3,107,656
500 dollars	23	23	23	23	23
100 dollars	10,395,069	11,121,838	11,431,499	11,809,378	12,450,299
50 dollars	3,862,611	3,897,707	3,844,013	3,844,436	3,916,443
25 dollars	46	46	46	46	46
20 dollars	8,433,602	8,512,078	8,515,415	8,468,612	8,881,353
10 dollars	1,075,244	1,056,548	1,043,990	993,622	995,189
5 dollars	767,715	762,274	765,042	777,878	778,697
2 dollars	443,765	456,853	491,594	260,196	238,268
1 dollar	165,046	163,988	163,050	161,937	161,112
Other	12,873	12,873	12,872	12,871	12,871
Banknotes and coin held by chartered banks ²	4,830,868	4,455,787	4,190,645	4,294,452	4,252,645
Total banknotes and coin outside chartered banks ³	24,867,078	26,428,587	27,214,257	28,051,893	29,631,325

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

Table 5
Institutional framework
 (at end-1997)

Categories	Number of institutions	Number of branches	Number of transferable deposit accounts (millions)	Value of transferable deposit accounts ¹ (CAD millions)
Central bank	1	4	.	.
Chartered banks	62	8,119	.	140,026
Local credit unions and caisses populaires	2,315	3,809	.	20,848
Trust and loan companies ²	34	1,544	.	7,868
Governmental savings institutions ³ ..	2	170	.	2,530
Post Office .....	.	.	.	.
<i>Memorandum item:</i>				
Branches of foreign deposit-taking institutions .....	.	.	.	.

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

Table 6
Cash dispensers, ATMs and EFTPOS terminals¹

	1993	1994	1995	1996	1997
Cash dispensers and ATMs:					
Number of networks	40	40	40	40	40
Number of machines ² .....	.	.	.	.	.
Total	16,078	16,927	17,670	18,570	19,608
<i>of which:</i>					
<i>Owned by member institutions of the Canadian Payments Association</i>					
	16,058	16,927	17,670	18,570	19,608
<i>Owned or operated by other entities</i>					
	20	0.0	0.0	0.0	0.0
Volume of transactions (millions):					
Total	1,084.8	1,197.3	1,364.1	1,481.1	1,603.1
<i>of which:</i>					
<i>Withdrawals</i>	796.4	877.5	978.9	1,019	1,060.9
<i>Deposits</i>	130.5	143.6	174.4	201.5	234.5
<i>Bill payments</i>	36.1	41.7	50.3	56.4	64.3
<i>Inter-account transfers</i>	56.8	65.6	76.3	81.9	88.7
<i>Balance inquiries</i>	65.0	68.9	84.2	122.3	154.7
Value of transactions (CAD billions):					
<i>Withdrawals</i>	55.0	61.4	68.5	72.3	74.3
<i>Deposits</i> .....	.	.	.	.	.
<i>Bill payments</i>	2.7	3.1	3.8	4.3	4.9
<i>Inter-account transfers</i> .....	.	.	.	.	.
<i>Balance inquiries</i> .....	.	.	.	.	.
EFTPOS:					
<i>Number of networks</i> ³	10	11	11	11	22
<i>Number of terminals</i>	61,900	119,733	189,898	253,089	330,530
<i>Volume of transactions (millions)</i>	74.0	185.2	393.8	676.5	1,039.9
<i>Value of transactions (CAD billions)</i>	3.7	9.4	18.8	30.2	44.3

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

Table 7
Number of payment cards in circulation
 (at year-end, in millions¹)

	1993	1994	1995	1996	1997
Debit cards issued by deposit-taking institutions.....	22.5	24.0	25.9	27.0	30.8
Credit cards issued by deposit-taking institutions ^{2,3} ...	25.0	27.5	28.8	30.2	31.9
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 ⁴	125.0	125.0	125.0	125.0	125.0

¹ All figures, other than those for credit cards issued by deposit-taking institutions, are estimates. ² As at 31st October. ³ 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. ⁴ These figures are rough estimates.

Table 8
**Payment instructions handled by selected payment systems:
 volume of transactions¹**
 (in millions)

	1993	1994	1995	1996	1997
National clearing and settlement system:					
<i>Small cheques</i>	1,737.8	1,665.3	1,596.7	1,521.1	1,474.1
<i>Large cheques (over CAD 50,000)</i>	7.5	6.9	6.2	6.3	7.0
<i>Unqualified²</i>	12.8	13.5	15.0	15.0	15.3
<i>Tape clearings^{3,4}</i>	0.0	0.0	0.0	0.0	0.0
<i>EDI⁴</i>	0.0	0.0	0.0	0.2	0.4
<i>Magnetic tape credits</i>	127.2	169.0	211.7	256.1	296.3
<i>Magnetic tape debits</i>	149.0	174.7	198.3	231.8	276.3
<i>Shared ABM networks</i>	236.2	271.0	297.9	306.3	331.2
<i>Point of sale</i>	40.7	129.8	290.2	537.8	832.8
Total	2,311.2	2,430.2	2,616.0	2,874.6	3,233.4
Interbank International Payment System	2.1	2.2	2.3	2.4	2.7

¹ Owing to the rounding of figures, components may not always add to the total shown. ² 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. ³ 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. ⁴ "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 transactions¹**
 (in billions of Canadian dollars)

	1993	1994	1995	1996	1997
National clearing and settlement system:					
<i>Small cheques</i>	1,026.3	1,029.5	1,022.6	1,052.0	1,118.4
<i>Large cheques (over CAD 50,000)</i>	19,209.7	19,922.8	15,912.3	12,231.1	14,831.1
<i>Unqualified²</i>	26.8	14.3	14.5	16.1	18.6
<i>Tape clearings^{3,4}</i>	0.0	0.0	0.0	0.0	0.0
<i>EDI</i>	2.4	4.3	22.7	39.4	38.8
<i>Magnetic tape credits</i>	141.9	155.1	177.8	202.5	247.7
<i>Magnetic tape debits</i>	37.9	44.4	55.4	70.2	92.8
<i>Shared ABM networks</i>	16.3	19.1	20.9	21.9	24.5
<i>Point of sale</i>	2.3	6.8	14.2	24.7	37.2
Total	20,463.6	21,196.3	17,240.4	13,657.9	16,409.1
Interbank International Payment system	12,977.4	15,896.0	15,968.0	15,425.0	19,234.0

¹ Owing to the rounding of figures, components may not always add to the total shown. ² 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. ³ 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. ⁴ "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 10
**Transfer instructions handled by securities settlement systems:
 volume of transactions**
 (for the twelve-month period ended 31st October)

	1993	1994	1995	1996	1997
Number of trades/transactions reported to CDS ^{1,2} (millions)	9.9	10.6	10.0	15.0	19.6
<i>Memorandum item:</i>					
Value of eligible securities ³ (CAD billions)	594	699	800	1,106	1,269

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

	1993	1994	1995	1996	1997
Value of settlement amounts (not nets) of trades ¹					
Total	15.9	20.5	21.3	39.4	54.7
<i>of which:</i>					
<i>Government of Canada domestic marketable bonds</i>	13.7	17.5	19.0	26.0	35.1
<i>Federal Government Treasury Bills</i> ² .....	.	.	.	11.0	16.5
<i>other</i>	2.2	3.0	2.3	2.4	3.1

¹ Consists of trade values reported from the Toronto Stock Exchange and the Montreal Exchange and both sides of transactions between CDS member institutions. ² 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	1993	1994	1995	1996	1997
Cheques and other paper payment instruments issued	2,109.7	2,022.8	1,941.5	1,850.9	1,795.7
Payments by credit card	1,043.7	1,167.2	1,260.0	1,344.9	1,424.2
Payments by debit card at the point of sale (EFTPOS)	74.0	185.2	393.8	676.5	1,003.9
Paper-based credit transfers ....	.	.	.	.	.
Paperless credit transfers	188.7	244.5	304.3	363.7	419.9
<i>customer initiated</i> ¹	36.1	41.7	50.3	56.4	64.3
<i>interbank/large-value</i> .....	.	.	.	.	.
<i>direct credits</i>	152.6	202.8	254.0	307.3	355.6
Direct debits	178.8	209.6	238.0	278.2	331.6
Total	3,594.9	3,829.3	4,137.6	4,514.2	4,975.3

¹ 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)

Instruments	1993	1994	1995	1996	1997
Cheques and other paper payment instruments issued	24,315.4	25,159.9	20,339.3	15,959.0	19,161.7
Payments by credit card	73.6	84.5	93.9	104.6	117.5
Payments by debit card at the point of sale (EFTPOS)	3.7	9.4	18.8	30.2	44.3
Paper-based credit transfers ....	.	.	.	.	.
Paperless credit transfers	173.0	189.2	217.2	247.3	302.1
<i>customer initiated</i> ¹	2.7	3.1	3.8	4.3	4.9
<i>interbank/large-value</i> .....	.	.	.	.	.
<i>direct credits</i>	170.3	186.1	213.4	243.0	297.2
Direct debits	45.5	53.3	66.5	84.2	111.4
Total	24,611.2	25,496.3	20,735.7	16,425.3	19,737.0

¹ Bill payments initiated at automated teller machines.

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

	1993	1994	1995	1996	1997
Members	14	14	14	14	15
<i>of which: live</i>	14	14	14	14	15
Sub-members ¹	31	33	33	33	35
<i>of which: live</i>	30	33	32	33	35
Participants ²	2	3	6	6	9
<i>of which: live</i>	1	2	5	6	8
Total users	47	50	53	53	59
<i>of which: live</i>	45	49	51	53	58
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i>	2,244	2,551	2,693	2,874	2,969
<i>sub-members</i>	1,887	2,097	2,259	2,404	2,590
<i>participants</i>	125	218	277	354	606
<i>users</i>	4,256	4,866	5,229	5,632	6,165

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

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

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

	1993	1994	1995	1996	1997
Total messages sent	9,883,583	10,960,197	12,385,962	13,497,483	15,259,702
<i>of which:</i>					
<i>category I</i> ¹	2,334,799	2,625,746	3,089,574	3,533,941	4,105,848
<i>category II</i> ²	3,218,948	3,388,084	3,706,456	3,787,370	4,061,848
Total messages received	8,872,447	9,764,225	11,032,239	11,882,651	13,195,729
<i>of which:</i>					
<i>category I</i> ¹	2,657,324	3,013,534	3,525,885	4,085,216	4,580,790
<i>category II</i> ²	3,496,285	3,656,006	3,893,434	3,875,583	4,090,266
Domestic traffic ³	2,927,646	3,262,525	3,535,839	3,770,608	4,170,195
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic	457,218,200	518,097,873	603,575,374	687,785,294	812,117,556

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

Table 1
Basic statistical data

	1993	1994	1995	1996	1997
Population:					
<i>year-end (millions)</i>	57.7	57.7	57.8	58.5	58.7
GDP (FRF billions)	7,082.8	7,376.1	7,663.7	7,861.0	8,136.0
GDP per capita	122,752	127,835	132,590	134,376	138,603
Exchange rate (domestic currency vis-à-vis USD):					
<i>year-end</i>	5.849	5.416	4.964	5,237	5,988
<i>average</i>	5.663	5.552	4,991	5,243	5,950

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

	1993	1994	1995	1996	1997
Notes and coin	249.4	252.2	255.8	257.8	260.7
Transferable deposits ¹	1,376.9	1,419.7	1,544.0	1,556.8	1,673.3
<i>of which held by:</i>					
<i>corporate sector</i>	381.7	414.7	433.4	453.2	489.6
<i>households</i>	742.2	748.0	822.4	795.3	815.0
<i>others</i>	252.0	257.0	288.2	308.3	368.7
Narrow money supply (M ₁) ²	1,626.3	1,671.9	1,799.8	1,814.6	1,934.0
Broad money supply (M ₃) ³	5,162.3	5,282.2	5,463.4	5,289.9	5,393.1

¹ Excluding foreign currency deposits. ² M₁ = notes and coin and French franc denominated sight deposits held by non-banks (overseas territories excluded). ³ M₃ = M₁ + taxable passbook accounts, Savings Banks "A" passbook deposits and Mutual Credit Bank "blue" books, popular savings books (LEP), industrial development accounts (CODEVI) and housing savings accounts (CEL) + foreign currency denominated assets, time deposits and money market securities issued by credit institutions.

Table 3

Settlement media used by banks

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

	1993	1994	1995	1996	1997
Reserve balances held at central bank ¹	8.3	8.1	7.2	7.3	7.6
Transferable deposits at other institutions	2,631.5	2,839.6	3,189.1	3,260.7	3,609.8
Accounts at the Post Office .....	.	.	.	.	.
Accounts at the Treasury .....	.	.	.	.	.
<i>Memorandum items:</i>					
Required reserves	7.4	7.3	5.8	6.3	5.1
Institutions' borrowing from central bank ²	392.5	229.4	.	.	.

¹ Monthly average. ² 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)

	1993	1994	1995	1996	1997
Total banknotes and coin issued ¹	280.7	284.5	287.1	288.9	292.0
Denomination of banknotes: ¹					
500 francs	133.8	129.9	124.3	129.2	133.4
200 francs	74.5	81.0	87.3	85.8	85.2
100 francs	47.8	48.3	49.8	48.3	47.1
50 francs	6.5	6.5	6.5	6.1	6.3
20 francs	1.0	1.0	1.0	1.0	1.0
10 francs .....	.	.	.	.	.
Banknotes and coin held by credit institutions ²	14.8	15.8	17.0	18.2	20.0
Total banknotes and coin outside credit institutions ²	249.4	252.2	255.8	257.8	260.7
<i>Memorandum item:</i>					
Banknotes held in overseas territories	16.5	16.5	14.3	12.9	11.3

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

Table 5
Institutional framework
(at end-1997)

Categories	Number of institutions	Number of branches	Number of accounts ¹ (thousands)	Value of accounts (FRF billions)
Central bank	1	211	63	3.9
Commercial banks	334 ²	10,308	18,971	612.8
Savings banks	35	4,223	9,334	186.5
Cooperative and rural banks	127	10,857	24,181	455.9
Post Office	1	16,919	9,825	180.4
Municipal credit banks	20	79	81	0.9
Treasury	1	4,042	863	215.1

¹ Sight deposits. ² Branches of foreign banks: 93; foreign-owned banks: n.a.

Table 6
Cash dispensers, ATMs and EFTPOS terminals

	1993	1994	1995	1996	1997
Cash dispensers and ATMs:					
<i>Number of networks</i>	1	1	1	1	1
<i>Number of machines</i>	18,735	20,533	22,852	24,531	27,077
<i>Volume of transactions</i> <i>(thousands)</i> ¹	765,734	822,137	913,444	1,060,494	1,165,225
<i>Value of transactions</i> <i>(FRF millions)</i> ¹	334,083	347,031	370,861	430,535	474,724
EFTPOS:					
<i>Number of networks</i>	1	1	1	1	1
<i>Number of machines</i> ²	530,000	540,000	543,000	546,000	560,000
<i>Volume of transactions</i> <i>(thousands)</i> ²	1,564,462	1,672,404	1,866,803	2,084,284	2,301,576
<i>Value of transactions</i> <i>(FRF millions)</i> ²	511,289	534,376	590,214	656,037	701,654

¹ Including intrabank cash withdrawals processed through selected interbank payment systems. ² Estimated.

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

	1993	1994	1995	1996	1997
Cards with a cash function	21,812	22,812	24,430	27,219	30,156
Cards with a debit/credit function	21,466	22,240	23,617	25,510	27,703
<i>of which:</i>					
<i>cards with a debit function</i>	21,466	22,240	23,617	25,510	27,703
<i>cards with a credit function ...</i>	512	579	654	735	780
Cards with a cheque guarantee function	193	.	.	.	.

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

	1993	1994	1995	1996	1997
Clearing houses	3,677.4	3,659.0	3,588.4	3,633.8	3,623.0
<i>of which:</i>					
<i>cheques</i>	3,663.5	3,650.0	3,582.1	3,630.3	3,620.7
<i>credit transfers</i>	2.8	2.2	1.6	0.3	0.1
<i>bills of exchange</i>	6.0	1.9	0.0	0.0	0.0
<i>avals de trésorerie</i>	0.5	0.4	0.3	0.2	0.1
<i>large-value credit transfers</i>	4.6	4.5	4.4	3.0	2.1
Automated clearing houses	4,038.9	4,364.4	4,744.7	5,197.7	5,596.3
CREIC (truncated cheques system)	252.6	259.9	281.8	293.0	285.2
Ordinateur de compensation	1,467.8	635.7	.	.	.
<i>of which:</i>					
<i>credit transfers</i>	657.0	341.7	.	.	.
<i>LCRs and paperless bills of exchange</i>	102.1	49.8	.	.	.
<i>direct debits</i>	455.8	156.0	.	.	.
<i>interbank payment orders</i>	47.1	23.0	.	.	.
<i>ATM withdrawals</i>	192.7	65.0	.	.	.
<i>card payments</i>	13.1	0.2	.	.	.
Interbank Teleclearing System (SIT)	764.5	1,791.8	2,590.3	3,940.0	4,919.5
<i>of which:</i>					
<i>credit transfers</i>	292.3	679.8	1,081.3	1,166.4	1,242.4
<i>LCRs and paperless bills of exchange</i>	30.5	88.7	129.3	129.3	124.8
<i>direct debits</i>	258.2	636.5	850.4	927.8	987.2
<i>interbank payment orders</i>	20.0	55.4	91.1	114.4	122.6
<i>card payments</i> .....	.	.	1.9	1,130.1	1,922.2
<i>ATM withdrawals</i>	163.5	331.4	436.3	472.0	520.3
Cartes bancaires	1,554.0	1,677.0	1,872.6	964.7	391.6
<i>ATM withdrawals</i>	2.6	4.8	7.7	10.5	12.3
<i>card payments</i>	1,551.4	1,672.2	1,864.9	954.2	379.3
Banque de France	37.6	34.3	29.4	15.0	1.6
<i>of which:</i>					
<i>Treasury transfers</i>	34.9	32.0	27.3	13.8	0.5
<i>interbank credit transfers</i>	0.4	0.4	0.4	0.0	0.0
<i>Banque de France large-value credit transfers</i>	1.1	0.9	0.9	0.7	0.6
<i>telegraphic credit transfers</i>	1.2	1.0	0.8	0.5	0.5
Sagittaire large-value credit transfers	3.9	4.1	4.5	4.7	4.7
TBF .....	.	.	.	.	0.1
SNP .....	.	.	.	.	0.5

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

	1993	1994	1995	1996	1997
Clearing houses	156,778.5	150,624.1	137,412.8	131,353.9	90,258.0
<i>of which:</i>					
<i>cheques</i>	11,130.4	11,300.9	11,025.3	11,629.9	11,550.4
<i>credit transfers</i>	1,277.5	1,244.5	1,312.7	124.0	10.6
<i>bills of exchange</i>	199.0	36.3	0.0	0.0	0.0
<i>avals de trésorerie</i>	79,277.8	71,416.5	62,263.3	54,942.0	32,371.0
<i>large-value credit transfers</i>	64,893.8	66,625.9	62,811.5	64,658.0	46,326.0
Automated clearing houses	9,000.2	9,599.2	10,375.4	12,818.5	14,098.7
CREIC (truncated cheques system)	140.6	143.4	155.0	161.3	156.8
Ordinateur de compensation	6,731.4	3,463.7	.	.	.
<i>of which:</i>					
<i>credit transfers</i>	3,292.5	1,913.5	.	.	.
<i>LCRs and paperless bills of exchange</i>	2,521.6	1,230.5	.	.	.
<i>direct debits</i>	786.3	267.5	.	.	.
<i>interbank payment orders</i>	54.1	28.4	.	.	.
<i>ATM withdrawals</i>	73.9	23.8	.	.	.
<i>card payments</i>	3.0	0.1	.	.	.
Interbank Teleclearing System (SIT)	1,618.2	5,454.5	9,625.6	12,339.7	13,820.7
<i>of which:</i>					
<i>credit transfers</i>	783.1	2,518.6	5,158.3	7,345.0	8,519.8
<i>LCRs and paperless bills of exchange</i>	434.7	1,825.8	2,950.8	2,948.0	2,868.8
<i>direct debits</i>	320.6	929.0	1,248.0	1,359.1	1,454.9
<i>interbank payment orders</i>	15.3	59.1	112.5	179.1	213.0
<i>card payments</i> .....	.	.	0.5	345.4	589.0
<i>ATM withdrawals</i>	61.5	122.0	155.5	163.1	175.2
Cartes bancaires	510.0	537.6	594.8	317.5	121.2
<i>ATM withdrawals</i>	1.7	3.3	5.1	6.9	8.6
<i>card payments</i>	508.3	534.2	589.7	310.6	112.6
Banque de France	44,346.3	41,741.8	36,838.4	34,822.2	27,828.2
<i>of which:</i>					
<i>Treasury transfers</i>	457.8	429.8	470.5	480.2	213.2
<i>interbank credit transfers</i>	199.8	190.5	279.2	0.0	0.0
<i>Banque de France large-value credit transfers</i>	36,022.6	38,107.1	29,645.6	24,532.0	19,597.0
<i>telegraphic credit transfers</i>	7,666.1	5,014.4	6,443.1	9,810.0	8,018.0
Sagittaire large-value credit transfers	108,750.0	110,847.0	104,567.0	113,886.0	120,377.0
TBF .....	.	.	.	.	28,713.0
SNP .....	.	.	.	.	47,608.0

Table 10

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

	1993	1994	1995	1996	1997
SATURNE:					
<i>Treasury bills</i>	172,254	182,109	248,056	265,376	248,584
<i>BMTN</i> ¹	9,542	7,859	7,687	7,126	6,905
<i>Other TCN</i> ²	15,809	32,642	60,333	68,334	73,029
RELIT	13,000,000	15,000,000	12,000,000	13,700,000	17,800,000

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

Table 11

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

	1993	1994	1995	1996	1997
SATURNE:					
<i>Treasury bills</i>	19,673.2	23,306.0	40,042.9	46,441.4	49,718.4
<i>BMTN</i> ¹	436.7	290.3	269.2	282.7	277.1
<i>Other TCN</i> ²	1,169.1	2,167.0	3,729.0	5,072.4	5,844.7
RELIT: ³					
<i>Bonds</i>	21,600	25,250	34,203	51,838	64,671
<i>French stocks</i>	5,100	6,200	4,366	5,700	9,532
<i>Mutual bonds</i> .....	.	4,050	3,586	3,628	3,441
<i>Others</i>	5,300	4,500	.	.	.

¹ Medium-term negotiable instruments (transferred through SATURNE for the first time in 1992). ² Short-term negotiable instruments. ³ 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)

Instruments	1993	1994	1995	1996	1997
Cheques issued	4,908.9	4,876.4	4,844.7	4,952.3	4,925.6
Payments by debit and credit card	1,564.5	1,672.4	1,866.8	2,084.3	2,301.6
Paper-based credit transfers	66.4	58.2	53.8	33.5	15.6
<i>of which:</i>					
<i>customer initiated</i>	58.6	51.0	47.0	29.1	12.3
<i>interbank/large-value</i>	7.8	7.2	6.8	4.4	3.3
Paperless credit transfers	1,472.8	1,556.5	1,608.5	1,748.2	1,841.8
<i>of which:</i>					
<i>customer initiated</i>	1,468.9	1,552.4	1,604.0	1,743.5	1,836.5
<i>interbank/large-value</i>	3.9	4.1	4.5	4.7	5.3
Direct debits	999.4	1,155.3	1,205.9	1,343.9	1,430.6
Bills of exchange	154.2	151.2	142.6	142.6	137.6
ATM withdrawals	765.7	828.1	913.4	1,060.5	1,165.2
Total	9,931.9	10,298.1	10,635.7	11,365.3	11,818.0

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

Instruments	1993	1994	1995	1996	1997
Cheques issued	15,291	14,286	13,904	14,613	14,818
Payments by debit and credit card	511	534	590	656	702
Paper-based credit transfers	191,426	183,850	164,099	155,406	106,768
<i>of which:</i>					
<i>customer initiated</i>	3,366	2,496	2,656	1,464	456
<i>interbank/large-value</i>	188,060	181,354	161,443	153,942	106,312
Paperless credit transfers	117,013	119,162	113,332	125,107	208,995
<i>of which:</i>					
<i>customer initiated</i>	8,263	8,315	8,765	11,221	12,297
<i>interbank/large-value</i>	108,750	110,847	104,567	113,886	196,698
Direct debits.....	2,314	2,554	2,710	3,059	3,438
Bills of exchange	3,445	3,313	3,217	3,211	3,127
ATM withdrawals	334	347	371	431	475
Total	330,334	324,046	298,223	302,483	338,323

Table 14
Participation in S.W.I.F.T. by domestic institutions¹

	1993	1994	1995	1996	1997
Members	105	108	111	107	103
<i>of which: live</i>	98	103	104	101	100
Sub-members ²	93	98	97	103	104
<i>of which: live</i>	91	96	95	100	104
Participants ³	4	5	8	10	45
<i>of which: live</i>	3	4	7	7	34
Total users	202	211	216	220	252
<i>of which: live</i>	192	203	206	208	238
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i>	2,244	2,551	2,693	2,874	2,969
<i>sub-members</i>	1,887	2,097	2,259	2,404	2,590
<i>participants</i>	125	218	277	354	606
<i>users</i>	4,256	4,866	5,229	5,632	6,165

¹ Data for France include Monaco, Guadeloupe, Martinique and La Réunion. ² Domestic users sponsored by members abroad. ³ 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 users¹

	1993	1994	1995	1996	1997
Total messages sent	34,258,946	36,494,832	41,003,897	43,779,359	48,756,990
<i>of which:</i>					
<i>category I²</i>	8,966,621	9,608,391	10,379,951	11,084,517	12,137,346
<i>category II³</i>	11,843,080	12,253,787	13,937,393	14,291,099	15,400,655
Total messages received	31,838,047	33,446,733	37,786,319	40,737,035	45,940,168
<i>of which:</i>					
<i>category I²</i>	9,216,560	9,910,743	10,711,093	11,534,499	12,943,528
<i>category II³</i>	12,163,096	12,224,274	13,895,771	14,011,490	14,688,233
Domestic traffic ⁴	10,963,677	11,455,375	13,387,410	14,020,407	15,992,898
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic	457,218,200	518,097,873	603,575,374	687,785,294	812,117,556

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

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

Table 1
Basic statistical data

	1993	1994	1995	1996	1997
Population (millions):					
<i>year-end</i>	81.3	81.5	81.8	82.0	82.1
<i>average</i>	81.2	81.4	81.4	81.9	82.1
GDP (DEM billions)	3,159.1	3,320.3	3,442.7	3,515.3	3,616.2
GDP per capita (DEM thousands)	38.9	40.8	42.3	42.9	44.0
Exchange rate (domestic currency vis-à-vis USD):					
<i>year-end</i>	1.7263	1.5488	1.4335	1.5548	1.7921
<i>average</i>	1.6544	1.6218	1.4338	1.5037	1.7348

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

	1993	1994	1995	1996	1997
Notes and coin ¹	212.0	225.9	237.5	246.8	247.0
Narrow money supply (M ₁) ² ...	726.3	764.1	816.1	916.9	938.0
<i>Memorandum item:</i>					
Broad money supply (M ₃) ²	1,906.6	1,937.0	2,007.4	2,181.8	2,259.7
Transferable deposits ³	527.8	541.1	580.8	676.8	691.1
<i>of which held by:</i>					
<i>households</i>	327.3	333.1	352.0	393.8	413.8
<i>corporate sector</i>	158.8	174.7	197.3	246.2	245.4
<i>other</i>	41.7	33.3	31.5	36.8	31.9

¹ Excluding credit institutions' cash balances. ² M₁ = currency in circulation (excluding credit institutions' cash balances) + domestic non-banks' sight deposits (excluding public sector's deposits held at the central bank). M₂ = M₁ + domestic non-banks' time deposits at less than four years. M₃ = M₂ + savings deposits of domestic non-banks at statutory notice. ³ 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)

	1993	1994	1995	1996	1997
Reserve balances held at central bank ¹	60.4	44.4	37.3	39.5	41.7
<i>of which:</i>					
<i>required reserves</i> ²	59.6	43.6	36.5	38.7	41.0
Transferable deposits held at other institutions	380.2	342.8	363.9	401.1	427.6
<i>Memorandum item:</i>					
Institutions' borrowing from central bank ³	14.8	9.8	5.5	3.3	2.7

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

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

	1993	1994	1995	1996	1997
Total banknotes and coin outstanding ¹	238.6	250.9	263.5	275.7	276.2
Denomination of banknotes:					
1,000 Mark	68.5	75.0	81.1	86.6	88.5
500 Mark	24.3	25.7	26.1	27.8	27.7
200 Mark	11.6	11.3	10.8	10.1	9.3
100 Mark	86.8	90.7	95.9	100.1	99.5
50 Mark	20.3	20.4	21.1	21.9	21.6
20 Mark	7.7	7.9	8.1	8.5	8.6
10 Mark	4.7	4.8	5.0	5.1	5.2
5 Mark	0.3	0.2	0.3	0.3	0.3
Banknotes and coin held by credit institutions	26.7	25.0	26.0	28.9	29.2
Total banknotes and coin outside credit institutions ²	212.0	225.9	237.5	246.8	247.0

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

Table 5
Institutional framework
 (at end-1997)

Categories	Number of institutions	Number of branches ¹	Number of accounts (thousands) ²	Value of accounts (DEM billions)
Central bank ³	1	164	36	1.3
Commercial banks ⁴	375	23,548	20,500	278.1
Savings banks	611	19,179	37,855	266.8
Cooperative and rural banks	2,422	16,804	22,400	145.0
<i>Memorandum item:</i>				
Branches of foreign banks	75	51	.	3.1

¹ Branches = number of bank offices. ² Sight accounts of domestic non-banks, partly estimated. ³ The Bundesbank as a legal entity comprises the Central Office (in Frankfurt am Main) and nine Land Central Banks with 167 branches. ⁴ 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 terminals¹

	1993	1994	1995	1996	1997
Cash dispensers and ATMs:					
<i>Number of networks</i>	4	4	4	4	4
<i>Number of machines</i>	25,000	29,400	35,700	37,600	41,397
<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	.
EFTPOS:					
<i>Number of networks</i> ²	18	18	19	19	22
<i>Number of machines</i> ²	28,000	62,500	70,048	115,000	162,794
<i>Volume of transactions (millions)</i> ³	69.1	104.0	149.4	214.2	225.8
<i>Value of transactions (DEM billions)</i> ³	6.2	10.8	20.5	32.7	29.0

¹ Partly estimated. ² From 1993 on, electronic cash and POZ procedures only. ³ From 1993 on, electronic cash and POZ procedures only. In 1997 electronic cash only.

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

	1993	1994	1995	1996	1997
Cards with a cash function .....	.	.	.	.	.
Cards with a debit/credit function	44,842	47,353	74,337	80,454	85,200
<i>of which:</i>					
<i>cards with a debit function²</i>	35,901	37,113	62,597	66,914	71,000
<i>cards with a credit function</i>	8,941	10,240	11,740	13,540	14,200
Cards with a cheque guarantee function	35,901	37,113	38,479	39,937	41,720
Retailer cards .....	.	4,500	4,800	4,900	5,000

¹ Partly estimated. ² 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:¹
volume of transactions
(in millions)

	1993	1994	1995	1996	1997
Retail payments	2,613.5	2,355.1	2,272.2	2,276.1	2,244.9
Maschinell-optische Beleglesung (MAOBE) ²	393.5	248.0	115.3	77.9	27.7
<i>Collection items</i>	155.5	86.0	26.7	20.2	16.8
<i>Credit transfers</i>	238.0	162.0	88.6	57.7	10.9
Belegloser Datenträgeraustausch (DTA) ³ ..	2,220.0	2,107.1	2,156.9	2,198.1	2,217.2
<i>Collection items</i>	1,702.2	1,496.9	1,499.1	1,473.3	1,469.9
<i>Credit transfers</i>	517.8	610.2	657.8	724.8	747.3
Large-value payments	483.8	477.6	33.1	30.0	33.9
Gross settlement procedures	56.5	34.3	13.6	10.3	11.2
<i>of which:</i>					
<i>Eiliger Zahlungsverkehr</i> <i>(EIL-ZV)⁴</i>	3.4	4.0	5.5	7.2	10.6
<i>Platzüberweisungsverkehr⁵</i>	53.1	30.3	8.1	3.1	0.6
Net settlement procedures	427.3	443.3	19.5	19.7	22.7
Konventionelle Abrechnung ^{6,7}	416.4	430.6	1.7	1.0	0.3
<i>Collection items</i> <i>(conventional)⁷</i>	95.4	150.8	0.7	0.5	0.2
<i>Local credit transfers</i> <i>(conventional)⁷</i>	321.0	279.8	1.0	0.5	0.1
Elektronische Abrechnung Frankfurt (EAF) ⁸	10.9	12.7	17.8	18.8	22.4

¹ Does not include figures relating to IFTs not operated by the Deutsche Bundesbank. ² Machine-optical voucher reading procedure, excluding payments submitted in a paper-based form which 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). ³ 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). ⁴ Express electronic credit transfer system. ⁵ 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. System was closed down end of May 1997. ⁶ Daily local clearing system. ⁷ Reporting change in 1995: number of delivery envelopes cleared instead of individual payments contained therein. ⁸ Electronic clearing with file transfer (EAF), from 8th March 1996 onwards EAF2.

Table 9
Payment instructions handled by selected IFTs:¹
value of transactions
(in billions of Deutsche Mark)

	1993	1994	1995	1996	1997
Retail payments	4,822.1	4,688.7	4,699.4	4,628.4	4,540.5
Maschinell-optische Beleglesung (MAOBE) ²	2,814.4	2,307.3	266.9	240.7	218.8
<i>Collection items</i>	2,666.5	2,203.4	240.0	224.5	215.3
<i>Credit transfers</i>	147.9	103.9	26.9	16.2	3.5
Belegloser Datenträgeraustausch (DTA) ³ ..	2,007.7	2,381.4	4,432.5	4,387.7	4,321.7
<i>Collection items</i>	1,063.8	1,313.9	3,277.1	3,173.6	3,044.9
<i>Credit transfers</i>	943.9	1,067.5	1,155.4	1,214.1	1,276.8
Large-value payments	195,455.3	204,656.0	187,966.8	189,952.8	218,119.3
Gross settlement procedures	27,661.8	30,342.6	32,197.1	32,613.5	35,372.8
of which:					
<i>Eiliger Zahlungsverkehr</i> <i>(EIL-ZV)</i> ⁴	18,874.6	22,772.4	27,007.5	28,743.1	33,395.5
<i>Platzüberweisungsverkehr</i> ⁵	8,787.2	7,570.2	5,189.6	3,870.4	1,977.3
Net settlement procedures	167,793.5	174,313.4	155,769.7	157,339.3	182,746.5
Konventionelle Abrechnung ⁶ ..	38,488.5	29,409.9	7,382.3	3,929.8	1,077.9
<i>Collection</i> <i>(conventional)</i>	827.6	799.9	669.8	620.8	275.1
<i>Local credit transfers</i> <i>(conventional)</i>	37,660.9	28,610.0	6,712.5	3,309.0	802.8
Elektronische Abrechnung Frankfurt (EAF) ⁷	129,305.0	144,903.5	148,387.4	153,409.5	181,668.6

¹ Does not include figures relating to IFTs not operated by the Deutsche Bundesbank. ² Machine-optical voucher reading procedure, excluding payments submitted in a paper-based form which 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). ³ 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). ⁴ Express electronic credit transfer system. ⁵ 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. System was closed down end of May 1977. ⁶ Daily local clearing system. ⁷ Electronic clearing with file transfer (EAF), from 8th March 1996 onwards EAF2.

Table 10

**Transfer instructions handled by securities settlement systems:¹
volume of transactions**
(in millions)

	1993	1994	1995	1996 ²	1997
Total	27.8	25.2	23.4	20.6	31.2
<i>Delivery versus payment</i> ...	21.9	20.5	19.0	17.7	27.5
<i>Without countervalue</i>	5.9	4.7	4.4	2.9	3.7

¹ Source: Deutsche Börse Clearing AG. ² From 1996 on interregional transactions calculated in a new procedure; only chargeable transactions.

Table 11

**Transfer instructions handled by securities settlement systems:¹
value of transactions**
(in billions of Deutsche Mark)

	1993	1994	1995	1996	1997
Delivery versus payment	9,417.8	9,510.5	11,878.7	16,040	18,850

¹ Source: Deutsche Börse Clearing AG.

Table 12
**Indicators of use of various cashless payment instruments:
 volume of transactions¹**
 (in millions)

Instruments	1993	1994	1995	1996	1997
Cheques issued	934.0	903.0	812.0	772.0	729.0
<i>of which:</i>					
<i>truncated</i> ²	730.0	722.0	650.0	625.0	597.8
Payments by credit and debit cards ³	293.5	350.5	416.1	504.1	529.2
Paper-based credit transfers	1,959.1	1,672.2	1,128.8	589.6	615.8
<i>customer initiated</i>	1,947.8	1,664.7	1,126.8	588.5	615.2
<i>interbank/large-value</i> ⁴	11.3	7.5	2.0	1.1	0.6
Paperless credit transfers	3,294.3	3,899.4	4,527.3	5,317.7	5,562.2
<i>customer initiated</i>	3,281.2	3,884.3	4,507.2	5,296.5	5,536.8
<i>interbank/large-value</i> ⁴	13.1	15.1	20.1	21.2	25.4
Direct debits ⁵	4,286.9	4,607.0	4,704.6	4,828.8	5,393.2
Total	10,767.8	11,432.1	11,588.8	12,012.2	12,829.4

¹ 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%). ² Not included in direct debits in order to avoid double-counting. ³ 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". Payments by debit cards: in 1997 only electronic cash. ⁴ Only interbank payments via the Bundesbank in Konventionelle Abrechnung in Frankfurt, EAF2, Eiliger Zahlungsverkehr and Platzüberweisungsverkehr. ⁵ 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 transactions¹**

(in billions of Deutsche Mark)

Instruments	1993	1994	1995	1996	1997
Cheques issued	5,343.0	5,550.0	4,544.0	4,135.0	4,005.0
<i>of which:</i>					
<i>truncated</i> ²	583.0	662.8	908.8	1,240.5	1,602.0
Payments by credit and debit cards ³	48.3	57.2	65.6	81.9	81.7
Paper-based credit transfers	65,984.4	55,224.8	26,764.2	17,671.7	10,565.9
<i>customer initiated</i>	24,418.6	22,908.5	15,743.2	11,206.8	8,032.4
<i>interbank/large-value</i> ⁴	41,565.8	32,316.3	11,021.0	6,464.9	2,533.5
Paperless credit transfers	155,854.9	177,993.7	185,615.2	197,824.3	234,232.1
<i>customer initiated</i>	11,333.4	15,528.5	19,634.8	26,149.2	32,129.6
<i>interbank/large-value</i> ⁴	144,521.5	162,465.2	165,980.4	171,675.1	202,102.5
Direct debits ⁵	4,481.7	4,766.8	4,644.5	5,562.3	6,382.0
Total	231,712.3	243,592.5	221,633.5	225,275.2	255,266.7

¹ Partly estimated; for 1995, adjusted value of cheque, credit transfer and direct debit transactions. ² Not included in direct debits in order to avoid double-counting. ³ 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". Payments by debit cards: in 1997 only electronic cash. ⁴ Only interbank payments via the Bundesbank in Konventionelle Abrechnung in Frankfurt, EAF2 Eiliger Zahlungsverkehr and Platzüberweisungsverkehr. ⁵ 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

	1993	1994	1995	1996	1997
Members	153	152	157	156	153
<i>of which: live</i>	150	149	152	155	153
Sub-members ¹	82	92	100	100	105
<i>of which: live</i>	78	88	97	94	101
Participants ²	2	6	7	8	12
<i>of which: live</i>	2	3	4	4	8
Total users	237	250	264	264	270
<i>of which: live</i>	230	240	253	253	262
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i>	2,244	2,551	2,693	2,874	2,969
<i>sub-members</i>	1,887	2,097	2,259	2,404	2,590
<i>participants</i>	125	218	277	354	606
<i>users</i>	4,256	4,866	5,229	5,632	6,165

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

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

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

	1993	1994	1995	1996	1997
Total messages sent	35,359,560	38,187,536	43,824,742	47,803,674	55,873,558
<i>of which:</i>					
<i>category I</i> ¹	12,842,381	13,843,274	15,580,557	16,493,249	17,731,609
<i>category II</i> ²	7,245,703	7,557,127	8,373,229	8,564,736	9,177,317
Total messages received	48,149,365	51,011,768	56,505,445	59,246,442	66,287,028
<i>of which:</i>					
<i>category I</i> ¹	15,490,352	16,438,145	17,759,489	18,627,409	20,146,525
<i>category II</i> ²	20,424,752	21,833,621	24,441,740	25,231,632	28,261,324
Domestic traffic ³	6,056,083	6,310,196	6,734,317	6,834,054	7,396,209
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic	457,218,200	518,097,873	603,575,374	687,785,294	812,117,556

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

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

Table 1
Basic statistical data

	1993	1994	1995	1996	1997
Population (millions):					
<i>year-end</i>	57.2	57.2	57.3	57.5	57.5
GDP (ITL billions)	1,550,150	1,641,105	1,770,949	1,873,664	1,951,215
GDP per capita (ITL millions)	27.3	28.7	31.0	32.6	33.9
Exchange rate (domestic currency vis-à-vis USD):					
<i>year-end</i>	1,704.0	1,629.7	1,584.7	1,530.6	1,759.2
<i>average</i>	1,573.7	1,611.8	1,628.9	1,543.0	1,703.4

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

	1993	1994	1995	1996	1997
Notes and coin	89,769	96,221	98,281	100,113	107,433
Narrow money supply (M ₁)	578,472	599,978	604,492	622,273	666,304
Transferable deposits	473,943	488,055	490,240	509,035	544,776
Other	14,760	15,702	15,971	13,125	14,095
<i>Memorandum item:</i>					
Broad money supply ¹	841,316	847,418	834,148	863,290	930,991

¹ With the exception of certificates of deposits with a maturity of at least 18 months.

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

	1993	1994	1995	1996	1997
Reserve balances held at central bank ¹	105,917	92,619	73,938	72,202	82,949
<i>of which:</i>					
<i>required reserves</i>	105,796	92,468	73,736	71,958	82,626
Transferable deposits at other institutions ²	52,455	56,352	64,156	85,319	97,331
<i>Memorandum item:</i>					
Institutions' borrowing from central bank ³	1,906	1,888	2,636	1,429	1,114

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

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

	1993	1994	1995	1996	1997
Total banknotes and coin outstanding	95,230	101,788	105,146	108,092	116,204
Denomination of banknotes:					
500,000 lire .....	.	.	.	.	3,919
100,000 lire	66,862	72,346	74,815	78,264	81,677
50,000 lire	20,662	21,531	22,177	21,429	21,873
10,000 lire	3,903	3,996	4,077	4,173	4,299
5,000 lire	848	905	938	967	1,016
2,000 lire	346	333	292	270	255
1,000 lire	887	914	950	1,003	1,035
Banknotes and coin held by credit institutions	5,461	5,567	6,865	7,979	8,771
Total banknotes and coin outside credit institutions	89,769	96,221	98,281	100,113	107,433

Table 5
Institutional framework
 (at end-1997)

Categories	Number of institutions	Number of branches	Number of accounts (thousands)	Value of accounts (ITL billions)
Central bank	1	99	.	.
Commercial banks	283	18,234	22,223	445,445
Cooperative and rural banks	652	7,016	4,795	92,658
Postal Administration	1	14,587	511	6,673
<i>Memorandum item:</i>				
Branches of foreign banks	55	82	21	3,724

Table 6
Cash dispensers, ATMs and EFTPOS terminals

	1993	1994	1995	1996	1997
Cash dispensers and ATMs:					
<i>Number of networks</i>	1	1	1	1	1
<i>Number of machines</i>	15,227	18,672	21,670	24,223	25,500
<i>Volume of transactions (thousands)</i>	214,665	276,928	330,490	367,762	411,643
<i>Value of transactions (ITL billions)</i>	63,995	85,389	106,756	115,051	129,493
EFTPOS:					
<i>Number of networks</i> .....	.	.	.	.	.
<i>Number of terminals</i>	77,206	104,051	153,752	214,705	281,526
<i>Volume of transactions (thousands)¹</i>	56,454	89,190	121,565	169,187	253,696
<i>Value of transactions¹ (ITL billions)</i>	11,469	16,808	23,475	30,867	46,162

¹ Both with debit and credit cards.

Table 7
Number of payment cards in circulation¹
 (in thousands)

	1993	1994	1995	1996	1997
Cards with a cash function	11,295	12,396	13,824	15,270	17,317
Cards with a debit/credit function	16,279	18,210	20,482	22,549	24,521
<i>of which:</i>					
<i>cards with a debit function</i>	10,555	12,124	13,791	14,906	15,693
<i>cards with a credit function</i>	5,724	6,086	6,691	7,643	8,828
Cards with a cheque guarantee function ²	1,674	1,766	1,655	1,151	894
Retailer cards .....	.	.	.	.	.

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

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

	1993	1994	1995	1996	1997
BI-COMP (Net Settlement System)					
Local clearing	253,189	240,675	235,665	225,622	217,577
<i>of which:</i>					
<i>cheques</i>	250,617	238,504	233,698	223,927	215,827
<i>of which: out-of-town</i>	85,703	85,782	90,259	89,061	91,822
<i>bills of exchange</i> ¹	1,019	.	.	.	.
<i>credit transfers</i>	325	282	263	151	104
<i>other items</i> ²	1,228	1,889	1,704	1,544	1,646
Electronic Memoranda	1,896	2,084	1,810	1,651	1,452
<i>of which:</i>					
<i>interbank deposits</i>	1,005	731	725	776	763
<i>foreign operations</i>	533	562	208	82	41
<i>credit transfers</i>	187	222	285	145	53
<i>other items</i> ³	171	569	592	648	595
Ingrosso (ex SIPS)	3,111	3,526	4,462	5,326	6,057
Retail	451,171	489,582	586,865	664,097	710,609
<i>of which:</i>					
<i>cheque truncation</i>	321,354	287,179	283,937	287,635	285,659
<i>Bancomat</i>	56,114	61,616	74,383	91,117	103,529
<i>collection orders</i>	73,703	140,333	154,061	170,648	189,529
<i>credit transfers</i> .....	.	454	74,484	114,637	129,169
<i>other items</i> ⁴ .....	.	.	.	60	2,723
BI-REL ⁵ (Gross Settlement System)	1,056	1,016	1,027	1,129	2,694
<i>of which:</i>					
<i>large value and cross border credit transfers</i> ⁶ .....	.	.	.	.	1,566
<i>payments between banks and Banca d'Italia/Treasury</i>	1,013	973	981	1,079	1,046
<i>Interbank credit transfers (BISS)</i>	43	43	46	50	82

¹ From 1994 onwards, bills of exchange are included in "other items". ² Includes payments between the banking system and the Treasury, the Banca d'Italia or the Postal Administration; and from 1994, bills of exchange. ³ From 1993, the settlement of securities transactions in particular. ⁴ Mainly transactions through e-money and interests and dividends on the securities deposited at the central securities depository for shares and corporate bonds (Monte titoli); transactions with debit cards at the Post Office; electronic notification of unpaid cheques. ⁵ Debits/credits for the settlement of clearing balances are not included. ⁶ Since June 1997.

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

	1993	1994	1995	1996	1997
BI-COMP (Net Settlement System)					
Local clearing	4,622,317	4,255,270	3,574,629	2,897,869	2,561,307
<i>of which:</i>					
<i>cheques</i>	1,583,041	1,587,415	1,635,293	1,647,404	1,645,946
<i>of which: out-of-town</i>	622,365	629,890	659,491	661,971	692,263
<i>bills of exchange</i> ¹	40,394	.	.	.	.
<i>credit transfers</i>	732,001	634,657	593,773	254,402	64,600
<i>other items</i> ²	2,266,881	2,033,198	1,345,563	996,063	850,761
Electronic Memoranda	17,067,600	17,972,187	18,408,052	23,099,794	25,225,920
<i>of which:</i>					
<i>interbank deposits</i>	11,698,000	11,782,702	11,557,140	15,052,765	16,641,197
<i>foreign operations</i>	987,000	894,808	493,336	327,058	224,848
<i>credit transfers</i>	716,000	857,732	1,029,143	796,409	225,524
<i>other items</i> ³	3,666,600	4,436,945	5,328,433	6,923,562	8,134,351
Ingrosso (ex SIPS)	18,293,744	25,928,601	27,377,138	34,530,551	41,511,463
Retail	492,310	675,298	1,239,833	1,582,504	1,789,819
<i>of which:</i>					
<i>check truncation</i>	288,342	286,985	290,343	298,483	299,915
<i>Bancomat</i>	16,152	17,821	21,303	25,818	29,173
<i>collection orders</i>	187,816	367,504	468,342	520,246	570,125
<i>credit transfers</i> .....	.	2,988	459,845	731,562	863,538
<i>other items</i> ⁴ .....	.	.	.	6,395	27,068
BI-REL ⁵ (Gross Settlement System)	2,619,500	2,428,800	2,737,756	2,719,900	4,374,800
<i>of which:</i>					
<i>large value cross border credit transfers</i> ⁵ .....	.	.	.	.	1,529,000
<i>payments between banks and Banca d'Italia/Treasury</i>	2,538,300	2,318,900	2,599,800	2,580,700	2,542,800
<i>Interbank credit transfers (BISS)</i>	81,200	109,900	137,956	139,200	303,000

¹ From 1994 onwards, bills of exchange are included in "other items". ² Includes payments between the banking system and the Treasury, the Banca d'Italia or the Postal Administration; and from 1994, bills of exchange. ³ From 1993, the settlement of securities transactions in particular. ⁴ 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); transactions with debit cards at the Post Office; electronic notification of unpaid cheques. ⁵ Debits/credits for the settlement of clearing balances are not included. ⁶ Since June 1997.

Table 11

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

(in billions of Italian lire)

	1993	1994	1995	1996	1997
Securities Settlement Procedures:					
LDT ¹	9,562,669	12,539,583	15,134,844	29,882,833	42,069,723
<i>government securities</i>	9,264,315	12,100,697	14,801,877	29,344,943	41,017,980
<i>bonds</i>	55,547	37,619	45,405	89,648	84,139
<i>shares</i>	242,807	401,267	287,562	448,242	967,604
Government Securities Centralised Accounts (CAT) ²	1,884,042	1,743,402	1,575,070	1,805,554	2,240,512
Monte Titoli ³	51,880	48,926	31,667	68,619	132,150

¹ Bilateral balances. ² Net balances resulting from the LDT procedure 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; 1,004,258 in 1996; and 927,001 in 1997. ³ Transfer instructions carried out directly through the accounts held at the Monte Titoli. The data only refer to the nominal value of the bonds exchanged.

Table 12
**Indicators of use of various cashless payment instruments:
 volume of transactions¹**
 (in millions)

Instruments	1993	1994	1995	1996	1997
Cheques issued	621.6	574.8	563.6	676.9	656.8
Payments by debit and credit cards	81.7	100.6	130.6	190.5	263.9
Paper-based credit transfers	20.0	2.9	2.7	2.6	1.0
<i>customer initiated</i>	17.8	.	.	.	.
<i>interbank/large-value</i>	2.2	2.9	2.7	2.6	1.0
Paperless credit transfers	856.2	911.5	919.1	941.4	975.0
<i>customer initiated</i> ²	851.3	906.1	913.1	934.5	968.4
<i>interbank/large-value</i>	4.9	5.4	6.0	6.9	6.6
Direct debits	73.2	78.7	90.9	162.8	200.7
Others	159.0	153.1	157.3	242.5	249.7
<i>paperless collections</i> ³	99.9	106.6	124.5	183.2	191.1
<i>paper-based collections</i> ⁴	59.1	46.5	32.8	59.3	58.6
Total	1,811.7	1,821.6	1,864.2	2,216.7	2,347.1

¹ 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 systems. Since 1996 figures relate to the entire system. ² Includes postal money orders and inpayments to postal current account that are originated from cash payments at post offices and processed automatically within the Postal System. ³ Collections of electronic bank receipts (RIBA). ⁴ Collections of commercial bills and paper-based bank receipts.

Table 13
**Indicators of use of various cashless payment instruments:
 value of transactions¹**
 (in billions of Italian lire)

Instruments	1993	1994	1995	1996	1997
Cheques issued	2,170,124	2,108,124	2,190,634	2,544,373	2,557,610
Payments by debit and credit cards	15,671	19,218	24,718	34,562	47,070
Paper-based credit transfers	5,237,552	4,352,098	3,945,363	3,576,763	2,542,800
<i>customer initiated</i>	432,371	.	.	.	.
<i>interbank/large-value</i>	4,805,181	4,352,098	3,945,363	3,576,763	2,542,800
Paperless credit transfers	39,170,808	48,123,253	50,168,310	62,804,524	72,653,507
<i>customer initiated</i> ²	4,444,264	4,970,266	5,274,307	5,831,388	6,927,326
<i>interbank/large-value</i>	34,726,544	43,152,987	44,894,003	56,973,136	65,726,181
Direct debits	89,095	106,721	116,309	158,429	250,904
Others	452,127	463,821	534,787	777,969	802,781
<i>paperless collections</i> ³	265,398	298,930	400,943	547,890	587,922
<i>paper-based collections</i> ⁴	186,729	164,891	133,844	230,079	214,859
Total	47,135,377	55,173,235	56,980,121	69,896,620	78,854,672

¹ Up to 1995 the figures for payment operations effected by banking instruments were provided by 75 banks accounting for approximately 80% of the current account deposits in all banking systems. Since 1996 figures relate to the entire system. ² Includes postal money orders and inpayments to postal current account that are originated from cash payments at post offices and processed automatically within the Postal System. ³ Collections of electronic bank receipts (RIBA). ⁴ Collections of commercial bills and paper-based bank receipts.

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

	1993	1994	1995	1996	1997
Members	190	189	188	185	183
<i>of which: live</i>	187	186	182	185	181
Sub-members ¹	29	32	37	43	45
<i>of which: live</i>	28	32	36	40	44
Participants ²	0	0	1	3	4
<i>of which: live</i>	0	0	1	3	2
Total users	219	221	226	231	232
<i>of which: live</i>	215	218	219	228	227
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i>	2,244	2,551	2,693	2,874	2,969
<i>sub-members</i>	1,887	2,097	2,259	2,404	2,590
<i>participants</i>	125	218	277	354	606
<i>users</i>	4,256	4,866	5,229	5,632	6,165

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

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

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

	1993	1994	1995	1996	1997
Total messages sent	22,572,543	24,681,961	27,584,947	30,081,128	31,672,855
<i>of which:</i>					
<i>category I</i> ¹	6,845,876	7,596,603	6,360,220	6,903,858	7,968,583
<i>category II</i> ²	5,904,935	6,063,052	6,512,180	6,659,465	7,091,972
Total messages received	22,189,826	25,066,961	28,480,765	31,508,461	32,742,840
<i>of which:</i>					
<i>category I</i> ¹	6,930,817	8,061,681	9,502,849	10,487,061	9,980,426
<i>category II</i> ²	4,758,663	5,448,679	6,239,393	6,736,480	6,881,867
Domestic traffic ³	3,751,213	4,235,252	4,959,227	5,419,805	4,127,570
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic	457,218,200	518,097,873	603,575,374	687,785,294	812,117,556

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

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

Table 1
Basic statistical data

	1993	1994	1995	1996	1997
Population (millions) ¹	124.8	125.0	125.6	125.9	126.2
GDP (nominal; JPY trillions)	475.4	479.3	483.2	499.9	507.0
GDP per capita (JPY thousands)	3,810.2	3,833.0	3,848.2	3,971.4	4,017.9
Exchange rate (domestic currency vis-à-vis USD):					
<i>year-end</i>	<i>111.89</i>	<i>99.83</i>	<i>102.91</i>	<i>115.98</i>	<i>129.92</i>
<i>average</i>	<i>111.06</i>	<i>102.18</i>	<i>93.97</i>	<i>108.81</i>	<i>120.92</i>

¹ As of 1st October.

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

Table 2
Settlement media used by non-banks¹
(in billions of Japanese yen)

	1993	1994	1995	1996	1997
Notes and coin ²	39,506.0	40,982.4	44,772.3	47,268.3	51,000.8
Narrow money supply (M ₁) ²	145,614.6	151,665.3	171,544.1	188,144.6	204,283.2
Broad money supply (M ₂ + CDs) ²	526,839.6	541,419.4	559,283.3	576,977.1	600,079.1
Transferable deposits ³	117,463.6	121,117.0	122,464.1	142,380.6	148,713.0
<i>of which held by:</i>					
<i>households</i>	<i>45,240.5</i>	<i>48,507.3</i>	<i>53,023.4</i>	<i>65,800.8</i>	<i>74,951.1</i>
<i>corporate sector</i>	<i>66,228.9</i>	<i>66,158.0</i>	<i>63,575.9</i>	<i>69,662.9</i>	<i>67,070.5</i>
<i>other</i> ⁴	<i>5,994.2</i>	<i>6,451.7</i>	<i>5,864.8</i>	<i>6,916.9</i>	<i>6,691.4</i>
Postal deposits ⁵	12,483.2	13,927.1	15,802.7	19,109.9	25,603.9

¹ Not seasonally adjusted. ² Year-end. ³ Demand deposits in yen at city banks, regional banks, regional banks II, trust banks, long-term credit banks and Shinkin banks; end-March. ⁴ Public sector. ⁵ Transferable deposits only. The figure in each column actually represents that at the end of March the next year.

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

Table 3
Settlement media used by banks¹
(in billions of Japanese yen)

	1993	1994	1995	1996	1997
Reserve balances held at central bank ²	2,959.8	3,038.6	3,239.5	3,404.3	3,602.9
<i>of which:</i>					
<i>required reserves</i>	2,956.9	3,035.5	3,226.1	3,358.0	3,553.8
Transferable deposits at banks ³	8,987.7	9,420.2	8,214.9	6,344.1	8,058.3
Banks' borrowing from central bank ⁴	6,070.0	5,991.7	2,390.5	1,983.4	4,634.3

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

Source: Economic Statistics Annual (Bank of Japan).

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

	1993	1994	1995	1996	1997
Total banknotes and coin in circulation	45,279	46,626	50,060	54,589	58,715
Denomination of banknotes:					
10,000 yen	36,475	37,663	40,913	45,037	48,958
5,000 yen	1,912	1,947	2,008	2,147	2,191
1,000 yen	3,060	3,093	3,147	3,313	3,346
500 yen	129	128	126	126	125

Source: Economic Statistics Annual (Bank of Japan).

Table 5
Institutional framework¹

Categories	Number of institutions	Number of branches	Number of transferable accounts (millions)	Value of transferable accounts (JPY billions) ²
Central bank	1	34	0.002	3,602.9
Commercial banks ³	165	15,248	327.5	141,737.7
Cooperative and rural banks ⁴	4,006	28,903	.	42,127.4
Branches of foreign banks	93	144	.	1,299.5
Post Office	1	24,693	104.8	25,603.9

¹ Figures at end-March 1998. In the column of the value of transferable accounts, end-December 1997 figures for central bank, commercial banks and cooperative and rural banks. ² For commercial banks and cooperative and rural banks, data are not comparable with those for previous issues because saving deposits which can be withdrawn on demand are included in transferable accounts. ³ 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). ⁴ 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 terminals¹

	1993	1994	1995	1996	1997
Cash dispensers and ATMs:					
<i>Number of networks</i>	23	22	21	18	16
<i>Number of machines</i>	116,732	122,250	127,247	132,330	140,639
<i>Volume of transactions</i> <i>(thousands)</i> ²	407,083	447,381	482,709	514,982	635,165
<i>Value of transactions</i> <i>(JPY billions)</i> ²	17,874	19,193	20,441	21,482	22,183
EFTPOS:					
<i>Number of networks</i> ³	266	271	256	265	252
<i>Number of terminals</i> ³	21,010	28,320	25,061	22,977	19,499
<i>Volume of transactions</i> <i>(thousands)</i>	599	801	.	556	517
<i>Value of transactions</i> <i>(JPY billions)</i>	12.3	6.6	.	2.0	3.5

¹ The figure in each column actually represents that at the end of March the next year. In rows of the volume/value of transactions of cash dispensers and ATMs, end-December figures. ² Figures represent interbank transactions only and do not include intrabank transactions. ³ Including those for labour credit associations.

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

Table 7
Number of payment cards in circulation¹
 (in thousands)

	1993	1994	1995	1996	1997
Cards with a cash function ²	231,750	244,370	260,830	270,820	283,080
Cards with a debit/credit function	220,738	228,705	237,472	234,708	245,413
<i>of which:</i>					
<i>cards with a debit function ..</i>	6,218	7,965	9,962	11,748	11,743
<i>cards with a credit function .</i>	214,520	220,740	227,510	222,960	233,670
Cards with a cheque guarantee function ³ .....	.	.	.	.	.
Retailer cards	53,020	55,850	59,160	52,340	60,540

¹ End-March. The figure in the row of the cards with a debit function actually represents that at the end of March the next year. ² Excludes cards issued by fishery cooperatives and the Post Office. ³ 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)

	1993	1994	1995	1996	1997
Bill and cheque clearing systems	327,866	318,083	305,827	296,030	283,487
Zengin System	826,386	874,290	935,485	995,646	1,056,143
Foreign Exchange (Gaitame) Yen Clearing System	6,577	7,078	8,839	9,403	10,434
BOJ-NET	3,771	3,854	3,849	3,781	4,402

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)

	1993	1994	1995	1996	1997
Bill and cheque clearing systems	3,262	2,770	1,845	1,745	1,585
Zengin System	1,793	1,894	2,067	2,140	2,298
Foreign Exchange (Gaitame) Yen Clearing System	5,951	6,647	7,670	8,573	10,357
BOJ-NET	39,295	40,705	40,847	38,882	40,504

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)

	1993	1994	1995	1996	1997
Registration system ¹	368.0	439.3	598.3	781.5	1,177.5
Book-entry system	395.9	426.0	486.5	480.1	701.6
<i>Financing bills</i>	126.3	122.5	112.7	81.9	99.4
<i>Treasury bills</i>	159.2	152.0	175.2	143.3	123.1
<i>Government bonds, etc.</i>	110.4	151.5	198.6	255.0	479.1

¹ 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)

	1993	1994	1995	1996	1997
Registration system ¹	1,116.1	1,192.4	1,636.7	2,109.4	3,417.0
Book-entry system	2,504.9	2,182.7	2,511.8	2,567.1	3,616.9
<i>Financing bills</i>	797.1	706.0	706.7	683.7	687.7
<i>Treasury bills</i>	1,303.4	961.1	1,144.2	938.3	1,003.1
<i>Government bonds, etc.</i>	404.4	515.6	660.9	945.0	1,926.0

¹ 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	1993	1994	1995	1996	1997
Bills and cheques cleared ¹	327.9	318.1	305.8	296.0	283.5
Payments by credit card ²	366.2	362.8	371.8	494.6	584.5
Paper-based credit transfers ³	751.4	808.6	942.8	993.3	1,030.1
Paperless credit transfers ²	788.0	836.5	899.4	962.9	1,020.4
<i>customer initiated</i> ⁴	778.3	826.2	887.4	950.4	1,006.0
<i>interbank/large-value</i> ⁵	9.7	10.3	12.0	12.5	14.4
Direct debits .....	.	.	.	.	.
Total .....	.	.	.	.	.

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

Sources: 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	1993	1994	1995	1996	1997
Bills and cheques cleared ¹	3,262.4	2,769.9	1,845.1	1,745.0	1,585.1
Payments by credit card	12.6	12.5	13.3	14.3	16.0
Paper-based credit transfers ²	44.4	43.1	50.0	60.6	49.1
Paperless credit transfers ³	43,894.9	46,967.0	46,968.4	47,837.5	51,261.2
<i>customer initiated</i> ⁴	1,794.1	1,870.5	2,043.9	2,141.6	2,263.9
<i>interbank/large-value</i> ⁵	42,100.8	45,096.5	44,924.5	45,695.9	48,997.3
Direct debits .....	.	.	.	.	.
Total .....	.	.	.	.	.

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

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

	1993	1994	1995	1996	1997
Members	116	127	130	133	138
<i>of which: live</i>	114	127	130	133	136
Sub-members ¹	78	84	91	91	97
<i>of which: live</i>	76	83	91	91	96
Participants ²	7	8	12	15	23
<i>of which: live</i>	6	7	10	14	21
Total users	201	219	233	239	258
<i>of which: live</i>	196	217	231	238	253
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i>	2,244	2,551	2,693	2,874	2,969
<i>sub-members</i>	1,887	2,097	2,259	2,404	2,590
<i>participants</i>	125	218	277	354	606
<i>users</i>	4,256	4,866	5,229	5,632	6,165

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

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

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

	1993	1994	1995	1996	1997
Total messages sent	19,566,216	21,843,420	24,748,540	26,798,560	29,937,227
<i>of which:</i>					
<i>category I</i> ¹	4,462,919	4,728,927	5,253,371	5,474,056	5,543,351
<i>category II</i> ²	4,963,253	5,023,849	5,374,359	5,326,415	5,581,169
Total messages received	18,812,497	20,444,154	23,487,782	25,894,551	29,868,982
<i>of which:</i>					
<i>category I</i> ¹	2,498,926	2,695,175	3,004,009	3,255,693	3,525,671
<i>category II</i> ²	6,182,981	6,568,628	7,326,157	7,932,287	9,045,326
Domestic traffic ³	2,519,129	2,562,869	2,989,029	2,996,465	3,446,210
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic	457,218,200	518,097,873	603,575,374	687,785,294	812,117,556

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

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

Table 1
Basic statistical data

	1993	1994	1995	1996	1997
Population (millions):					
<i>year-end</i>	15.3	15.4	15.5	15.6	15.7
GDP (NLG billions)	581.5	613.0	635.0	667.6	703.7
GDP per capita	37,901	39,742	40,985	42,888	44,952
Exchange rate (domestic currency vis-à-vis USD):					
<i>year-end</i>	1.94	1.74	1.60	1.74	2.02
<i>average</i>	1.86	1.82	1.61	1.69	1.95

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

	1993	1994	1995	1996	1997
Notes and coin	37.6	38.1	38.2	38.3	38.7
Transferable deposits	112.1	114.1	134.8	156.4	170.4
<i>of which held by:</i>					
<i>persons</i>	45.6	47.0	51.7	59.4	63.5
<i>corporate sector</i>	53.9	54.5	65.2	77.5	84.0
<i>other</i>	12.6	12.6	17.8	19.5	23.0
Narrow money supply (M ₁)	149.6	152.2	173.0	194.7	209.1
Broad money supply	464.5	466.0	486.6	515.0	553.1

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

	1993	1994	1995	1996	1997
Reserve balances held at central bank ¹	19,985	19,408	9,785	16,040	17,399
Transferable deposits at other institutions	3,118	2,462	3,061	3,116	2,382
<i>Memorandum items:</i>					
<i>Required reserves</i>	15,783	11,361	0.0	0.0	6,112
<i>Institutions' borrowing from central banks</i>	4,160	8,022	9,748	15,981	11,267

¹ Reserve balances also include "Required reserves" and "Institutions' borrowing from central banks", 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)

	1993	1994	1995	1996	1997
Total banknotes and coin issued	40.4	40.9	41.3	41.7	42.1
Denomination of banknotes:					
1,000 guilders	15.5	15.8	14.9	14.4	14.5
250 guilders	4.7	5.0	5.2	5.4	5.3
100 guilders	13.4	13.2	13.8	14.6	14.8
50 guilders	1.7	1.8	1.9	1.7	1.8
25 guilders	1.7	1.8	1.8	2.0	2.0
10 guilders	0.8	0.8	0.8	0.8	0.8
5 guilders	0.1	0.1	0.0	0.0	0.0
Banknotes and coin held by credit institutions	2.8	2.8	3.1	3.4	3.4
Total banknotes and coin outside credit institutions	37.6	38.1	38.2	38.3	38.7

Table 5
Institutional framework
 (at end-1997)

Categories	Number of institutions	Number of branches	Number of accounts (thousands)	Value of accounts (NLG billions)
Central bank	1	9	.	.
Commercial banks	98	2,888	.	.
Savings banks	26	26	.	.
Cooperative and rural banks	1	1,823	.	.
Postbank	1	2,325	.	.
Total	127	7,071	21,700	170
<i>Memorandum item:</i>				
Branches of foreign banks	22	.	.	.

Table 6
Cash dispensers, ATMs and EFTPOS terminals

	1993	1994	1995	1996	1997
Cash dispensers and ATMs:					
<i>Number of networks</i>	2	2	2	2	2
<i>Number of machines</i>	4,461	4,998	5,489	5,793	6,401
<i>Volume of transactions (millions)</i>	314	367	425	456	521
<i>Value of transactions (NLG billions)</i>	56	65	74	81	89
EFTPOS:					
<i>Number of networks</i>	1	1	1	1	1
<i>Number of machines</i>	24,549	47,588	73,376	96,044	120,417
<i>Volume of transactions (millions)</i>	67	144	256	371	486
<i>Value of transactions (NLG billions)</i>	6.8	14.4	24.3	35.3	45.5

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

	1993	1994	1995	1996	1997
Cards with a cash function	13,107	13,988	16,419	18,933	24,037
Cards with a debit/credit function ¹	1,257	1,257	1,493	1,846	2,541
<i>of which:</i>					
<i>cards with a debit function</i>	1,257	1,257	1,493	1,846	2,541
<i>cards with a credit function</i>	.	.	.	.	.
Cards with a cheque guarantee function	1,796	1,297	724	591	411
Retailer cards .....	.	.	.	.	.

¹ A multiple 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)

	1993	1994	1995	1996	1997
Interpay.....	1,136.1	1,241.7	1,407.1	1,588.5	1,782.9
<i>of which:</i>					
<i>cheques</i>	110.4	86.3	63.2	50.6	39.9
<i>other</i>	1,025.7	1,155.4	1,343.9	1,537.9	1,743.0
TOP ¹	2.3	2.4	2.5	2.7	3.1

¹ Merge of 8007 S.W.I.F.T. and the Central Bank FA System.

Table 9

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

	1993	1994	1995	1996	1997
Interpay.....	2,207.4	2,195.0	2,189.1	2,319.5	2,512.9
<i>of which:</i>					
<i>cheques</i>	16.7	13.4	9.9	8.4	6.6
<i>other</i>	2,190.7	2,181.6	2,179.2	2,311.1	2,506.3
TOP ¹	18,311.1	19,322.2	18,791.0	22,613.8	26,972.6

¹ Merge of 8007 S.W.I.F.T. and the Central Bank FA System.

Table 10

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

	1993	1994	1995	1996	1997
NECIGEF	1.244	1.061	0.906	1.325	1.685
<i>of which:</i>					
<i>Deliveries against payment</i> ....	.	.	.	0.286	0.529
<i>Free transfers</i>	1.244	1.061	0.906	1.039	1.156
Clearing institute central bank	0.002	0.002	0.003	0.003	0.003
AEX Effectenclearing	1.195	1.155	1.350	2.300	3.800
AEX Optieclearing .....	.	13.999	17.163	28.665	48.942
<i>of which:</i>					
<i>Options, contracts cleared</i> .....	.	12.604	15.873	26.975	46.166
<i>Futures, contracts cleared</i> .....	.	1.395	1.290	1.690	2.776
<i>Options, contracts exercised</i> ..	.	1.139	1.343	1.945	2.978
<i>Futures, contracts exercised</i> ..	.	0.056	0.032	0.048	0.074

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

	1993	1994	1995	1996	1997
NECIGEF .....	.	.	.	.	.
<i>of which:</i>					
<i>Deliveries against payment</i>	.	.	.	295.4	568.8
<i>Free transfers .....</i>	.	.	.	.	.
Central bank clearing institute ...	48.9	79.5	100.1	127.0	186.9
<i>of which:</i>					
<i>CDs</i>	16.0	25.1	49.5	44.8	44.0
<i>CPs</i>	17.1	39.6	37.2	60.1	120.4
<i>MTNs</i>	15.9	14.8	13.4	22.1	22.6
AEX Effectenclearing	509.4	579.7	680.9	983.7	1,106.9
<i>of which:</i>					
<i>Government securities</i>	355.8	397.1	432.7	597.5	488.2
<i>Bonds</i>	28.2	27.0	48.5	62.9	62.6
<i>Shares</i>	125.4	155.6	199.7	323.3	556.1
AEX Optieclearing ¹ .....	.	106.7	109.7	200.3	504.9
<i>of which:</i>					
<i>Options, contracts cleared</i>	.	7.9	8.9	19.3	56.4
<i>Futures, contracts cleared</i>	.	98.7	100.8	181.0	448.5
<i>Options, contracts exercised ..</i>	.	18.8	19.0	34.9	65.6
<i>Futures, contracts exercised ..</i>	.	4.8	3.1	5.6	12.6

¹ Figures refer to contracts cleared.

Table 12

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

	1993	1994	1995	1996	1997
Cheques issued	219.0	177.0	133.7	104.2	81.0
Payments by debit and credit cards	61.3	125.8	255.9	370.9	485.5
Paper-based credit transfers	403.6	390.5	381.4	374.3	372.0
<i>customer initiated</i>	403.6	390.5	381.4	374.3	372.0
<i>interbank/large value</i> .....	.	.	.	.	.
Paperless credit transfers	800.9	849.9	906.2	954.4	1,009.8
<i>customer initiated</i>	798.6	847.4	903.8	951.7	1,006.7
<i>interbank/large value</i>	2.3	2.4	2.5	2.7	3.1
Direct debits	479.5	531.0	597.5	658.9	725.1
Total	1,964.3	2,074.2	2,274.7	2,462.7	2,673.3

Table 13

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

Instruments	1993	1994	1995	1996	1997
Cheques issued	30.9	25.2	19.3	15.9	12.5
Payments by debit and credit cards	6.8	14.4	24.3	35.3	46.2
Paper-based credit transfers	150.3	145.0	136.6	129.5	128.5
<i>customer initiated</i>	150.3	145.0	136.6	129.5	128.5
<i>interbank/large value</i> .....	.	.	.	.	.
Paperless credit transfers	20,962.5	21,953.9	21,394.9	25,303.7	29,815.3
<i>customer initiated</i>	2,651.4	2,631.8	2,603.8	2,689.9	2,842.8
<i>interbank/large value</i>	18,311.1	19,322.2	18,791.0	22,613.8	26,972.6
Direct debits	229.8	239.8	259.8	281.3	314.6
Total	21,380.2	22,378.4	21,834.9	25,765.7	30,317.1

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

	1993	1994	1995	1996	1997
Members	30	29	30	29	30
<i>of which: live</i>	29	27	28	29	29
Sub-members ¹	28	28	32	34	35
<i>of which: live</i>	26	28	32	34	32
Participants ²	1	0	2	3	5
<i>of which: live</i>	0	0	2	3	4
Total users	59	57	64	66	70
<i>of which: live</i>	55	55	62	65	65
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i>	2,244	2,551	2,693	2,874	2,969
<i>sub-members</i>	1,887	2,097	2,259	2,404	2,590
<i>participants</i>	125	218	277	354	606
<i>users</i>	4,256	4,866	5,229	5,632	6,165

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

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

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

	1993	1994	1995	1996	1997
Total messages sent	14,543,442	15,253,565	16,903,885	18,667,326	21,967,507
<i>of which:</i>					
<i>category I</i> ¹	6,474,480	6,508,032	6,747,310	7,032,141	7,544,714
<i>category II</i> ²	2,912,403	3,107,787	3,275,847	3,420,058	3,951,510
Total messages received	13,983,712	14,538,364	16,027,297	17,802,379	20,199,570
<i>of which:</i>					
<i>category I</i> ¹	5,169,497	5,279,922	5,498,322	5,726,242	6,205,747
<i>category II</i> ²	2,066,993	2,081,037	2,204,721	2,362,906	2,602,689
Domestic traffic ³	1,996,747	1,750,991	1,870,671	2,052,952	2,456,699
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic	457,218,200	518,097,873	603,575,374	687,785,294	812,117,556

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

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

Table 1
Basic statistical data

	1993	1994	1995	1996	1997
Population (millions):					
<i>average</i>	8.72	8.79	8.83	8.84	8.85
GDP (SEK billions)	1,442.2	1,571.0	1,626.2	1,677.9	1,745.9
GDP per capita	165,903	174,208	186,270	189,830	197,277
Exchange rate (domestic currency vis-à-vis USD):					
<i>year-end</i>	8.3325	7.4615	6.6177	6.8859	7.9082
<i>average</i>	7.8015	7.7126	7.1372	7.7062	7.6364

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

	1993	1994	1995	1996	1997
Notes and coin	67.1	68.8	68.5	72.2	74.4
Transferable deposits	612.5	638.8	655.3	729.9	733.2
<i>of which held by:</i>					
<i>households</i>	376.4	388.5	385.3	409.9	392.1
<i>corporate sector</i>	213.9	229.8	252.9	299.9	319.6
<i>other</i> ¹	22.2	20.5	17.1	20.1	21.5
Other ²	30.5	4.7	8.0	13.4	18.6
Narrow money supply (M ₁) .....	.	.	.	.	.
<i>Memorandum item:</i>					
Broad money supply (M ₃) ..	710.1	712.3	731.8	815.8	826.2

¹ Local government. ² Postal giro accounts and certificates of deposit.

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

	1993	1994	1995	1996	1997
Reserve balances held at central bank	17.4	1.5	1.3	1.5	2.0
<i>of which:</i>					
<i>required reserves</i>	5.3	.	.	.	.
Transferable deposits at other institutions	34.2	45.4	52.8	70.6	95.9
Other ¹	1.1	.	.	.	.
<i>Memorandum item:</i>					
Institutions' borrowing from central bank	0.0	0.0	0.0	0.0	0.0

¹ Deposits on postal giro accounts.

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

	1993	1994	1995	1996	1997
Total banknotes and coin outstanding	75,722	76,442	76,660	80,790	82,795
Denomination of banknotes:					
1,000 kronor	39,803	39,569	37,841	38,636	39,226
500 kronor	18,384	19,903	22,316	25,565	27,157
100 kronor	12,001	11,298	10,649	10,332	9,906
50 kronor	261	205	185	913	962
20 kronor	1,525	1,608	1,679	1,309	1,366
10 kronor	345	315	300	286	277
5 kronor	95	94	94	93	92
Banknotes held by credit institutions ¹	8,919	7,848	8,357	8,774	8,681
Total banknotes outside credit institutions	63,495	65,144	64,707	68,360	70,305

¹ Includes coins held by banks.

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	10	.	.
Commercial banks ¹	20	3,294	.	864.2
Savings banks	87	303	.	56.3
<i>Memorandum item:</i>				
Branches of foreign banks	17	17	.	7.7

¹ 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

	1993	1994	1995	1996	1997
Cash dispensers and ATMs:					
<i>Number of networks</i>	2	2	2	2	2
<i>Number of machines</i>	2,226	2,281	2,359	2,379	2,370
<i>Volume of transactions (millions)</i>	247	270	281	297	312
<i>Value of transactions (SEK billions)</i>	195	218	226	239	249
EFTPOS:					
<i>Number of networks</i> ¹	2	2	2	2	2
<i>Number of terminals</i>	26,634	48,466	54,400	61,400	68,800
<i>Volume of transactions (millions)</i>	57	80	92	111	141
<i>Value of transactions (SEK billions)</i>	38	46	53	69	84

¹ 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 circulation¹
(in thousands)

	1993	1994	1995	1996	1997
Cards with a cash function	5,162	6,037	6,171	6,317	6,849
Cards with a debit/credit function ²	11,412	12,076	4,742	5,662	6,111
<i>of which:</i>					
<i>cards with a debit function</i>	9,937	10,379	3,525	3,731	4,188
<i>cards with a credit function</i>	1,475	1,697	1,217	1,931	1,923
Cards with a cheque guarantee function					
Retailer cards	7,961	9,121	.	.	.

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

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

	1993	1994	1995	1996	1997
Data Clearing (retail clearing) ¹	127,784	120,957	112,807	105,718	91,485
<i>of which:</i>					
<i>truncated cheques</i>	86,100	78,983	66,619	57,582	44,849
<i>other</i>	41,684	41,974	46,188	48,136	46,636
The RIX system ²	78	84	119	310	326
<i>of which:</i>					
<i>interbank (large-value transactions)</i>	24	21	21	25	24
<i>third-party transactions ("clearing transactions")</i>	54	63	98	285	302

¹ The Data Clearing is owned by the Swedish Bankers' Association and is managed by the Bank Giro Centre. ² 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)

	1993	1994	1995	1996	1997
Data Clearing (retail clearing) ¹	20,510	9,617	3,850	2,330	2,388
<i>of which:</i>					
<i>truncated cheques</i>	20,120	9,204	3,395	1,730	1,590
<i>other</i>	390	413	455	600	798
The RIX system ²	40,898	39,920	53,591	78,189	82,051
<i>of which:</i>					
<i>interbank (large-value transactions)</i>	16,836	14,101	15,345	17,452	18,906
<i>third-party transactions ("clearing transactions")</i>	24,062	25,819	38,246	60,737	63,145

¹ The Data Clearing is owned by the Swedish Bankers' Association and is managed by the Bank Giro Centre. Settlement of these transactions takes place once daily in the RIX system on a gross bilateral basis. ² Since 1990 RIX has been operating on a gross basis. Total daily payments in the RIX system averaged SKr 300 billion during 1996.

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

	1993	1994	1995	1996	1997
VPC: ¹					
<i>of which:</i>					
<i>government securities</i>	149	500	498	601	594
<i>equities</i>	2,000	2,500	2,414	3,077	4,719

¹ 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)

	1993	1994	1995	1996	1997
VPC: ¹					
<i>of which:</i>					
<i>government securities</i> ²	46,000	40,428	66,432	80,272
<i>equities</i>	1,055	1,119	1,505	2,346

¹ Värdepapperscentralen AB (Swedish Securities Register Centre). ² 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	1993	1994	1995	1996	1997
Cheques issued ¹	73	49	46	40	18
Payments by debit and credit cards	68	97	111	120	173
Paper-based credit transfers	161	170	189	196	208
<i>customer initiated</i>					
<i>interbank/large-value</i>					
Paperless credit transfers	428	435	431	441	452
<i>customer initiated</i>					
<i>interbank/large-value</i>					
Direct debits	40	45	50	54	65
Total	697	747	781	811	916

¹ From 1993 the figures do not refer to the number of cheques issued but to the volume of transactions. Partly based on estimates.

Table 13

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

(in billions of Swedish kronor)

Instruments	1993	1994	1995	1996	1997
Cheques issued .....	.	.	.	.	.
Payments by debit and credit cards	53	79	91	103	127
Paper-based credit transfers	2,230	1,933	1,946	1,656	1,973
<i>customer initiated</i>					
<i>interbank/large-value</i>					
Paperless credit transfers	3,587	4,282	4,405	5,076	5,344
Direct debits	205	183	194	202	193
Total	6,075	6,477	6,636	7,037	7,637

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

	1993	1994	1995	1996	1997
Members.....	10	9	9	9	8
<i>of which:live</i>	10	8	8	8	7
Sub-members ¹	9	9	12	12	12
<i>of which:live</i>	9	9	11	12	12
Participants ²	0	0	2	3	10
<i>of which:live</i>	0	0	1	2	2
Total users.....	19	18	23	24	30
<i>of which:live</i>	19	17	20	22	21
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i>	2,244	2,551	2,693	2,874	2,969
<i>sub-members</i>	1,887	2,097	2,259	2,404	2,590
<i>participants</i>	125	218	277	354	606
<i>users</i>	4,256	4,866	5,229	5,632	6,165

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

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

Table 15
S.W.I.F.T. message flows to/from domestic users¹

	1993	1994	1995	1996	1997
Total messages sent.....	7,447,346	8,701,454	10,019,610	11,256,498	12,512,774
<i>of which:</i>					
<i>category I</i> ¹	2,915,188	3,335,280	3,816,919	4,349,901	4,890,247
<i>category II</i> ²	1,863,230	2,029,226	2,223,462	2,400,631	2,576,992
Total messages received.....	6,040,394	7,021,354	7,971,173	8,992,702	10,296,368
<i>of which:</i>					
<i>category I</i> ¹	2,136,086	2,427,632	2,833,733	3,167,954	3,649,313
<i>category II</i> ²	1,566,639	1,925,165	2,104,694	2,357,508	2,635,197
Domestic traffic ³	984,831	1,213,723	1,455,832	1,722,933	2,049,871
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic.....	457,218,200	518,097,873	603,575,374	687,785,294	812,117,556

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

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

Table 1
Basic statistical data

	1993	1994	1995	1996	1997
Population (thousands):					
<i>year-end</i>	6,968.6	7,019.0	7,062.4	7,084.8	7,096.8
<i>average</i>	6,989.0	7,036.9	7,080.9	7,108.3	7,113.6
GDP (CHF billions)	349.8	357.2	364.6	364.8	370.1
GDP per capita	50,196.5	50,893.9	51,620.1	51,485.3	52,202.3
Exchange rate (domestic currency vis-à-vis USD):					
<i>year-end</i> <i>(December average)</i>	1.4640	1.3289	1.1639	1.3271	1.4387
<i>average</i>	1.4775	1.3660	1.1817	1.2351	1.4509

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

	1993	1994	1995	1996	1997
Notes and coin	26.96	27.84	27.89	29.41	28.91
Transferable deposits ¹	59.57	63.42	68.69	77.87	88.75
Narrow money supply (M ₁) ²	136.59	141.40	155.24	169.98	184.76
<i>Memorandum item:</i>					
Broad money supply (M ₃) ²	400.11	415.02	427.00	455.65	472.13

¹ Sight deposits in Swiss francs. ² Definition 1995.

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

	1993	1994	1995	1996	1997
Reserve balances held at central bank ¹	4.73	4.20	4.87	5.69	5.38
Transferable deposits at other institutions	22.82	17.93	19.44	28.06	31.38
Transferable deposits at Postfinance (Post Office)	1.71	1.45	1.33	1.66	1.34
<i>Memorandum items:</i>					
Required reserves ²	5.81	5.75	5.82	6.35	6.67
Institutions' borrowing from central bank ³	0.01	0.01	0.01	0.76	0.00

¹ Figures at year-end are peak values; average figures are as follows (in billions): 1993: 2.65, 1994: 2.68, 1995: 2.57, 1996: 2.94, 1997: 3.71. ² Cash liquidity (cash, deposits with the Swiss National Bank and the Postfinance). ³ Lombard credits.

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

	1993	1994	1995	1996	1997
Total banknotes and coin issued	31,374.8	32,634.6	33,009.1	34,598.3	34,316.7
Denomination of banknotes:					
1,000 francs	13,584.9	14,504.6	14,568.5	15,940.8	15,864.8
500 francs	3,748.0	3,835.3	3,848.9	3,912.3	1,768.0
200 francs ¹ .....	.	.	.	.	3,103.6
100 francs	8,926.8	9,058.6	9,187.1	9,249.2	8,052.7
50 francs	1,425.1	1,463.6	1,586.9	1,594.6	1,627.2
20 francs	1,044.9	1,065.6	1,080.2	1,127.2	1,112.2
10 francs	596.9	608.4	611.6	614.5	604.4
Coin	2,048.2	2,098.5	2,125.9	2,159.7	2,183.9
Banknotes held by credit institutions (including Postfinance)	4,462.5	4,815.0	5,125.2	5,216.0	5,515.0
Total banknotes and coin outside credit institutions	26,912.3	27,819.6	27,883.9	29,382.3	28,801.7

¹ Introduced in October 1997.

Table 5
Institutional framework
 (at end-1997)

Categories	Number of institutions	Number of branches	Number of accounts	Value of accounts (CHF billions)
Central bank	1	10 ¹	714	5.15
Credit institutions	360	3,395	.	66.86
Post office	1	3,600	1,738,244	17.44
<i>Memorandum item:</i>				
Foreign banks	18	25	.	0.33

¹ Including two head offices.

Table 6
Cash dispensers, ATMs and EFTPOS terminals

	1993	1994	1995	1996	1997
Cash dispensers and ATMs:					
<i>Number of networks</i> ¹	2	2	2	2	2
<i>Number of machines</i>	3,062	3,380	3,753	4,160	4,809
<i>Volume of transactions</i> ^{2,3}	57.67	64.02	70.27	74.82	80.92
<i>Value of transactions</i> ^{2,4}	17.71	19.05	20.19	20.80	21.91
EFTPOS:					
<i>Number of networks</i> ⁵	2	2	2	2	2
<i>Number of terminals:</i> ⁶					
<i>EC-Direct</i>	9,989	16,140	24,191	33,018	41,498
<i>Postomat-Plus</i>	8,367	16,702	24,703	33,629	41,184
<i>Volume of transactions</i> ³	27.95	39.85	56.73	76.21	96.78
<i>Value of transactions</i> ⁴	2.43	4.02	6.46	9.06	10.32

¹ Bancomat and Postomat systems have been shared since autumn 1997. ² Only transactions through a central processor ("on them" items). ³ In millions. ⁴ In billions of Swiss francs. ⁵ ec-Direct and Postomat-Plus. ⁶ Most of the terminals can be used by both networks.

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

	1993	1994	1995	1996	1997
Cards with a debit/credit prepaid function	5,115	5,615	6,064	6,544	7,013
<i>of which:</i>					
<i>cards with a debit function</i>	3,165	3,454	3,716	4,023	4,298
<i>cards with a credit function</i>	1,828	2,059	2,263	2,450	2,635
<i>cards with a cash function</i> ¹	4,359	4,913	5,610	5,892	6,624
<i>cards with a prepaid function</i> .....	.	.	.	.	2,748
Cards with a cheque guarantee function	3,286	3,557	3,846	4,094	4,378
Retailer cards .....	.	.	.	.	.

¹ Cash withdrawals at ATMs.

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

	1993	1994	1995	1996	1997
SIC (Swiss Interbank Clearing)	67.4	88.7	96.0	108.0	121.0
Payments on data carrier or file transfer ¹	65.5	71.8	80.4	85.8	93.5
Cheques	9.8	7.9	6.3	5.2	4.3

¹ 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)

	1993	1994	1995	1996	1997
SIC (Swiss Interbank Clearing)	34,126.0	33,254.2	32,184.0	38,032.3	45,792.1
Payments on data carrier or file transfer ¹ .....	.	252.5	281.2	294.1	314.1
Cheques	36.5	30.7	25.7	21.5	19.1

¹ 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)

	1993	1994	1995	1996	1997
SEGA: ¹					
Deliveries against payment	4.20	3.89	3.57	4.48	9.49
Deliveries free of payment ..	0.42	0.41	0.39	0.42	0.45

¹ The Swiss Securities Clearing Company.

Table 11

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

	1993	1994	1995	1996	1997
SEGA ¹	654.0	715.7	888.3	1,180.9	1,696.4

¹ The Swiss Securities Clearing Company.

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

Instruments	1993	1994	1995	1996	1997
Through banks: ¹					
Cheques issued ²	15.4	13.1	11.3	10.3	9.3
Payments by debit, credit and prepaid cards ³	60.9	75.3	89.4	109.2	133.4
Paperless credit transfers ⁴ ...	119.8	144.6	157.6	172.8	189.5
Direct debits	13.2	16.0	18.8	21.1	25.0
Total	209.3	249.0	277.1	313.4	357.2
Through the PTT:					
Payments by debit cards ⁵	4.4	7.7	14.1	21.7	25.9
Transfers (paper-based and paperless credit transfers, direct debits) ⁶	258.7	255.0	276.3	298.6	315.5
Total	263.1	262.7	290.4	320.3	341.4
Grand total	472.4	511.7	567.5	633.7	698.6

¹ Intra-bank payments are not included. ² Eurocheques, bank cheques and Swiss Bankers Travellers Cheques. ³ Eurocheque card, American Express, Eurocard, VISA, Diners Club and CASH. ⁴ SIC and banks' data carrier exchange facility. ⁵ POSTCARD since 1997 at retail outlets only (i.e. transactions at Post Offices excluded). ⁶ Detailed figures are not published by the Postfinance.

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

Instruments	1993	1994	1995	1996	1997
Through banks: ¹					
Cheques issued ²	37.21	31.36	26.34	22.19	19.69
Payments by debit, credit and prepaid cards ³	10.57	12.74	14.87	17.16	20.35
Paperless credit transfers ⁴ ...	34,126.00	33,476.89	32,428.90	38,284.87	46,059.63
Direct debits .....	.	29.77	36.30	41.56	46.55
Total	34,173.78	33,550.76	32,506.41	38,365.78	46,146.22
Through the PTT:					
Payments by debit cards ⁵	0.30	0.68	1.76	2.94	2.30
Transfers (paper-based and paperless credit transfers, direct debits) ⁶	1,124.47	1,128.85	1,161.67	1,245.73	1,235.03
Total	1,124.77	1,129.53	1,163.43	1,248.67	1,237.33
Grand total	35,298.55	34,680.29	33,669.84	39,614.45	47,383.55

¹ Intra-bank payments are not included. ² Eurocheques, bank cheques and Swiss Bankers Travellers Cheques. ³ Eurocheque card, American Express, Eurocard, VISA, Diners Club and CASH. ⁴ Until 1993, only SIC; since 1994, SIC and banks' data carrier exchange facility. ⁵ POSTCARD since 1997 at retail outlets only (i.e. transactions at Post Offices excluded). ⁶ Detailed figures are not published by the Postfinance.

Table 14
Participation in S.W.I.F.T. by domestic institutions¹

	1993	1994	1995	1996	1997
Members	119	124	126	125	126
<i>of which: live</i>	115	122	120	124	123
Sub-members ²	61	65	68	72	74
<i>of which: live</i>	60	62	67	69	73
Participants ³	6	10	12	13	20
<i>of which: live</i>	3	8	10	10	17
Total users	186	199	206	210	220
<i>of which: live</i>	178	192	197	203	213
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i>	2,244	2,551	2,693	2,874	2,969
<i>sub-members</i>	1,887	2,097	2,259	2,404	2,590
<i>participants</i>	125	218	277	354	606
<i>users</i>	4,256	4,866	5,229	5,632	6,165

¹ Data for Switzerland and Liechtenstein. ² Domestic users sponsored by members abroad. ³ 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 users¹

	1993	1994	1995	1996	1997
Total messages sent	30,961,709	33,910,798	35,748,763	38,733,223	42,846,848
<i>of which:</i>					
<i>category I²</i>	8,024,796	8,648,770	9,247,470	9,773,822	10,513,965
<i>category II³</i>	8,639,285	8,874,142	9,432,351	9,532,780	9,650,554
Total messages received	27,264,322	30,405,937	31,829,507	35,222,140	39,773,888
<i>of which:</i>					
<i>category I²</i>	5,526,472	5,931,601	6,251,734	6,593,731	7,207,202
<i>category II³</i>	4,665,332	4,830,139	4,848,735	5,253,289	6,093,729
Domestic traffic ⁴	5,435,479	6,520,135	5,676,737	6,084,984	6,939,049
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic	457,218,200	518,097,873	603,575,374	687,785,294	812,117,556

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

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

Table 1
Basic statistical data

	1993	1994	1995	1996	1997
Population (millions):					
<i>mid-year</i>	58.2 ¹	58.4 ¹	58.4	58.8	59.0
GDP (GBP billions) ²	630.0	668.9	700.9	734.5	785.8
GDP per capita	10,825	11,453	12,002	12,491	13,319
Exchange rate (domestic currency vis-à-vis USD):					
<i>year-end</i>	0.6766	0.6392	0.6450	0.5841	0.6078
<i>average</i>	0.6660	0.6524	0.6336	0.6403	0.6104

¹ Estimated. ² Nominal at market prices.

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

	1993 ¹	1994	1995	1996	1997
Notes and coin	17.9	18.8	19.9	20.8	22.5
Narrow money deposits ²	377.6	391.7	417.1	439.5	462.4
Narrow money supply ²	395.5	410.5	437.0	460.3	484.9
<i>Memorandum items:</i>					
Broad money supply (M ₄) ..	546.8	568.3	622.6	682.9	721.1
Broad money deposits	528.9	549.5	602.7	662.1	698.6
<i>of which held by:</i>					
<i>persons</i>	366.7	375.4	402.8	425.4	432.1
<i>corporate sector</i>	75.6	79.6	85.0	95.4	112.9
<i>other</i>	86.6	94.5	115.0	141.3	153.6

¹ Data for 1993 calculated on a new definition of M₄. ² Break in series means that this figure is not comparable with previous figures in the series. The definition of deposits in M₂ is altered with effect from December 1992. Previously, bank deposits in M₂ comprised all non-interest-bearing deposits plus "chequable" sight or time deposits regardless of maturity plus other deposits (excluding certificates of deposit) of less than £100,000 and with less than one month to maturity; building society deposits included in M₂ were "transactions accounts" and other deposits of less than £100,000 and up to one month'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).

Table 3

Settlement media used by banks, building societies and discount houses
(at year-end, not seasonally adjusted, in billions of pounds sterling)

	1993 ¹	1994	1995	1996	1997
Reserve balances held at central bank	1.4	1.5	1.8	2.4	2.6
Sight and time deposits with other banks, building societies, discount houses	204.5	223.6	224.1	227.6	239.5
<i>of which:</i>					
<i>sight</i>	30.6	36.5	32.9	38.9	61.4
<i>time</i>	154.9	168.2	173.3	174.1	170.3
<i>residual</i> ²	19.0	18.9	17.9	14.6	7.8
<i>Memorandum items:</i>					
Required reserves	0	0	0	0	0
Discount houses' borrowing from central bank	0.33	0	0	0	0

¹ Data for 1993 calculated on a new definition of M₄. ² In respect of deposits which cannot be split between sight and time (e.g. building society deposits with each other).

Table 4

Banknotes and coin
(in millions of pounds sterling)

	1993	1994	1995	1996	1997
Total banknotes and coin in issue ^{1,2}	21,559	23,080	24,299	25,959	27,642
Denomination of banknotes in circulation: ³					
50 pounds.....	2,996	2,989	3,205	3,368	3,709
20 pounds.....	7,337	8,362	9,098	10,021	11,138
10 pounds.....	5,714	5,945	6,111	6,340	6,426
5 pounds.....	1,211	1,160	1,135	1,119	1,076
1 pound.....	57	57	56	56	55
Total	17,315	18,513	19,605	20,904	22,404
Banknotes held by credit institutions ^{1,2,4}	3,662	4,328	4,403	5,116	5,170
Total banknotes outside credit institutions ^{1,2,4}	17,897	18,752	19,896	20,843	22,472

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

Table 5
Institutional framework
(at end-1997)

Categories	Number of institutions	Number of branches	Number of accounts (millions)	Value of accounts (GBP billions) ¹
Central bank	1	1	} 107.5 ²	} 364.4 ³
Commercial banks	480	13,676		
Building societies	71	2,537	20.2	95.5 ⁴
Post Office	1	19,020	16.0	1.4 ⁵
Total	553	35,234	143.7	461.3
<i>Memorandum item:</i>				
Branches of foreign banks	265	.	.	.

¹ Figures for value of accounts with banks and building societies are compatible with the retail element of M₄. National Savings Bank (NSB) accounts are not included in M₄. ² Includes estimates. ³ All private sector sterling accounts with UK banks (including the central bank and Girobank). ⁴ Private sector ordinary share and deposit accounts with UK building societies and shares and deposits below £50,000 from corporate bodies. Retail issues of subscribed capital, e.g. Perpetual Interest Bearing Shares, are excluded. ⁵ National Savings Ordinary Accounts only. NSB facilities are available at post offices on an agency basis.

Table 6
Cash dispensers, ATMs and EFTPOS terminals

	1993	1994	1995	1996	1997
Cash dispensers and ATMs:					
<i>Number of networks</i>	3	3	3	3	3
<i>Number of machines (thousands)</i>	19.1	20.0	20.9	22.1	23.2
<i>Volume of transactions (millions)</i>	1,242	1,335	1,471	1,599	1,745
<i>Value of transactions (GBP billions)</i> ¹	60	65	72	80	90
EFTPOS:					
<i>Number of networks</i> ²	3	3	3	3	3
<i>Number of terminals (thousands)</i> ³	270	350	505	550	530
<i>Volume of transactions (millions)</i> .....	.	.	.	.	.
<i>Value of transactions (GBP billions)</i> .....	.	.	.	.	.

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

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

	1993	1994	1995	1996	1997
Cards with a cash function	75.0	77.3	83.7	89.0	96.8
Cards with a debit/credit function:					
<i>of which:</i>					
<i>cards with a debit function</i>	24.1	26.0	28.4	32.5	36.6
<i>cards with a credit function²</i>	27.6	28.5	30.8	34.1	38.4
Cards with a cheque guarantee function ³	44.0	45.5	48.0	50.7	53.3
Retailer cards ⁴	8.5	10.3	13.0	15.4	17.6

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

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

	1993	1994	1995	1996	1997
Large-value systems:					
<i>Town (paper)</i> ¹	0.1	<0.1	0.0	.	.
<i>CHAPS (automated)</i>	11	12	13	14	17
Cheque and credit clearings:					
<i>cheques</i> ^{2,3}	2,323	2,278	2,206	2,171	2,115
<i>paper-based credit transfers</i> ^{2,3}	173	173	171	176	181
BACS:					
<i>credit transfers</i> ²	858	910	969	1,033	1,098
<i>direct debits</i>	1,045	1,148	1,299	1,443	1,584
Total	4,410.1	4,521	4,658	4,837	4,995

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

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

	1993	1994	1995	1996	1997
Large-value systems:					
<i>Town (paper)</i> ¹	1,069	681	59	.	.
<i>CHAPS (automated)</i>	23,545	25,053	26,719	28,881	36,032
Cheque and credit clearings:					
<i>cheques</i> ^{2,3}	1,194	1,210	1,234	1,298	1,351
<i>paper-based credit transfers</i> ^{2,3}	106	101	99	102	102
BACS:					
<i>credit transfers</i> ²	574	657	742	898	1,025
<i>direct debits</i>	262	284	312	353	407
Total	26,750	27,986	29,165	31,532	38,917

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

Table 10

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

	1993	1994	1995	1996	1997
CGO ¹	736.8	768.4	747.5	960.1	949.8
CMO ²	267.6	285.3	269.0	268.0	263.1
CREST ³ .....	.	.	.	1,598	29,005

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

Table 11

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

	1993	1994	1995	1996	1997
CGO ¹	11,725	15,266	16,001	24,288	28,283
CMO ²	2,344	2,547	3,305	3,483	3,842
CREST ³ .....	.	.	.	109	3,996

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

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

Instruments	1993	1994	1995	1996	1997
Cheques issued: ^{1,2}					
<i>large-value (Town)</i> ³	<0.1	<0.1	0.0	.	.
<i>others</i>	2,886.1	2,802.3	2,698.7	2,643.1	2,582.0
Payments by card:					
<i>debit</i>	659.0	808.0	1,004.0	1,270.0	1,503.0
<i>credit</i> ⁴	748.0	815.0	903.0	1,035.0	1,128.0
Paper-based credit transfers ^{2,5}	432.2	414.5	404.8	418.7	419.1
Paperless credit transfers:					
<i>large-value (CHAPS)</i>	11.0	11.6	12.6	14.4	16.5
<i>others</i> ²	924.7	975.2	1,031.5	1,155.9	1,224.0
Direct debits	1,046.0	1,148.1	1,299.0	1,442.8	1,583.6
Total ⁶	6,707.1	6,974.7	7,353.6	7,979.9	8,456.2

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

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

Instruments	1993	1994	1995	1996	1997
Cheques issued: ^{1,2}					
<i>large-value (Town)</i> ³	1,094.6	681.1	59.3	.	.
<i>others</i>	1,492.0	1,496.1	1,517.9	1,590.8	1,652.0
Payments by card:					
<i>debit</i>	17.9	22.4	28.5	37.1	45.1
<i>credit</i> ⁴	33.3	37.5	42.3	51.0	58.1
Paper-based credit transfers ^{2,5}	457.2	397.2	371.2	401.9	394.9
Paperless credit transfers:					
<i>large-value (CHAPS)</i>	23,545.0	25,052.0	26,719.0	28,881.2	36,032.4
<i>others</i> ²	598.0	681.4	766.9	950.9	1,092.0
Direct debits	262.0	283.6	312.3	352.8	407.0
Total ⁶	27,500.0	28,651.3	29,817.4	32,265.7	39,681.5

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

Table 14
Participation in S.W.I.F.T. by domestic institutions¹

	1993	1994	1995	1996	1997
Members	59	60	65	68	65
<i>of which: live</i>	57	59	62	66	63
Sub-members ²	219	231	236	239	244
<i>of which: live</i>	214	228	235	236	241
Participants ³	46	65	77	91	113
<i>of which: live</i>	38	57	69	80	104
Total users	324	356	378	398	422
<i>of which: live</i>	309	344	366	382	408
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i>	2,244	2,551	2,693	2,874	2,969
<i>sub-members</i>	1,887	2,097	2,259	2,404	2,590
<i>participants</i>	125	218	277	354	606
<i>users</i>	4,256	4,866	5,229	5,632	6,165

¹ Data for the United Kingdom and the Isle of Man. ² Domestic users sponsored by members abroad. ³ 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 users¹

	1993	1994	1995	1996	1997
Total messages sent	54,796,966	60,967,184	71,035,477	82,578,192	100,441,417
<i>of which:</i>					
<i>category I²</i>	9,537,290	10,352,681	11,181,501	12,312,467	13,797,623
<i>category II³</i>	18,110,333	19,379,515	21,654,710	23,419,297	26,714,116
Total messages received	48,734,436	55,179,903	66,015,464	79,741,899	101,914,835
<i>of which:</i>					
<i>category I²</i>	11,316,746	12,540,347	13,978,532	15,500,253	17,009,249
<i>category II³</i>	8,284,102	8,350,297	8,906,827	9,429,168	11,142,323
Domestic traffic ⁴	12,838,570	14,154,000	16,386,855	19,335,976	23,902,129
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic	457,218,200	518,097,873	603,575,374	687,785,294	812,117,556

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

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

Table 1
Basic statistical data

	1993	1994	1995	1996	1997
Population (millions) ¹	258.2	260.7	263.2	265.6	267.9
GDP (USD billions) ²	6,558.1	6,947.0	7,269.6	7,661.6	8,110.9
GDP per capita (in USD)	25,399.3	26,647.5	27,604.1	28,846.4	30,275.8

¹ Data estimated as of 1st July each year. Includes Armed Forces overseas. ² Annual data. Data reflect National Income and Product Account revisions as of August 1998.

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

Table 2
Settlement media used by non-banks¹
(in billions of US dollars)

	1993	1994	1995	1996	1997
Notes and coin held by public ²	328.3	361.0	379.6	400.0	433.3
Transferable deposits ³	821.2	808.9	767.7	698.7	660.5
Narrow money supply (M ₁) ⁴	1,153.7	1,174.4	1,152.8	1,104.9	1,097.5
<i>Memorandum item:</i>					
Broad money supply: ⁴					
M ₂	3,506.6	3,523.4	3,672.0	3,845.4	4,059.2
M ₃	4,274.8	4,353.2	4,615.2	4,953.4	5,399.9

¹ Averages of daily figures for the month of December. ² 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. ³ Transferable deposits consist of demand deposits and other chequable deposits. ⁴ Composition of money stock measures is as follows: M₁: currency and coin + travellers' cheques + demand deposits + other chequable deposits. M₂: M₁ + overnight Euro-dollars and RPs + money market mutual funds (general purpose and broker dealer only) + money market deposit accounts + savings time accounts. M₃: M₂ + 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)

	1993	1994	1995	1996	1997
Balances held at central bank ¹ ...	35.0	30.8	29.6	24.5	30.8
Balances due from commercial banks ²	29.0	29.1	32.7	37.8	31.8
<i>Memorandum items:</i>					
Banks' borrowing from central bank (USD millions) ³	94.0	223.0	136.0	85.0	2,035.0
Required reserves ⁴	61.9	60.3	56.5	49.3	47.4

¹ Year-end balances of depository institutions held at Federal Reserve banks including reserve balances and required clearing balances. Data not seasonally adjusted. ² 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\$ 154.7, 151.7, 180.9, 164.0 and 261.8 billion at year-end 1993, 1994, 1995, 1996 and 1997 respectively. Data not seasonally adjusted. ³ Monthly average figures may be significantly different from year-end figures. Data not seasonally adjusted. ⁴ Required reserves are biweekly averages of daily figures for weeks ending 22nd December 1993, 21st December 1994, 20th December 1995, 18th December 1996 and 31st December 1997. Vault cash used to satisfy required reserves in December (average of daily figures, not seasonally adjusted) amounted to US\$ 33.8, 37.1 38.1, 38.0 and 37.7 billion for 1992, 1993, 1994, 1995, 1996 and 1997 respectively.

Source: Federal Reserve.

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

	1993	1994	1995	1996	1997
Total banknotes and coin outstanding ¹	431.4	477.6	505.0	551.8	575.1
Banknotes and coin held by depository institutions ²	37.0	42.8	44.6	50.7	49.0
Banknotes and coin held by Treasury and Federal Reserve banks	66.1	73.8	80.8	101.1	92.8
Banknotes and coin outside Treasury and Federal Reserve banks	365.3	403.8	424.2	450.7	482.3
<i>of which:</i>					
100 dollars	201.5	229.1	241.5	261.4	291.6
50 dollars	41.0	43.9	46.4	48.6	48.2
20 dollars	74.9	80.5	84.2	87.1	88.0
10 dollars	13.2	13.8	14.1	14.3	14.2
5 dollars	6.9	7.3	7.5	7.8	7.9
1 dollar	5.7	6.1	6.3	6.6	6.7
other ³	1.3	1.3	1.4	1.4	1.4
coin	20.8	21.8	22.8	23.6	24.3
Total banknotes and coin held by public	328.3	361.0	379.6	400.0	433.3

¹ Total currency and coin outstanding. ² Partly estimated. ³ Miscellaneous banknotes outstanding.

Sources: US Treasury and Federal Reserve.

Table 5
Institutional framework
 (at end-1997)

Categories	Number of institutions	Number of branches ¹	Number of accounts (thousands, sight)	Value of accounts (billions, sight)
Central bank ²	1 (12)	25	9,4 ³	16,2 ⁴
Commercial banks	9,088	61,522	.	763.1 ⁵
Thrift institutions ⁶	1,843	12,016 ⁷	.	46.7 ⁵
Credit unions	11,400	.	.	36.7 ⁵

¹ Number of branches does not include head offices. ² The Federal Reserve is the central bank. The Board of Governors is located in Washington, D.C. and there are 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. ³ Number of depository institution accounts at the central bank. ⁴ Consists of deposits by depository institutions at the central bank. ⁵ Total transactions accounts. Data not seasonally adjusted. ⁶ Includes savings banks, savings and loan associations, cooperative and industrial banks at year-end 1997. ⁷ Includes number of savings and loan branches in June 1997 and branches of savings, cooperative and industrial banks at year-end 1997.

Source: Federal Reserve.

Table 6
Cash dispensers, ATMs and EFTPOS terminals

	1993	1994	1995	1996	1997
Cash dispensers and ATMs:					
<i>Number of networks</i> ¹	65	60	50	52	49
<i>Number of machines</i> ²	94,822	109,080	122,706	139,134	165,000
<i>Volume of transactions</i> ³ <i>(billions)</i>	7.7	8.3	9.7	10.7	10.9
<i>Value of transactions</i> <i>(USD billions)</i>	525.0	558.0	656.6	727.6	744.6
EFTPOS:⁴					
<i>Number of networks</i> ⁵	26	25	27	25	20
<i>Number of terminals</i>	155,000	344,100	528,700	875,400	1,300,000
<i>Volume of transactions</i> <i>(millions)</i>	429.6	624.0	775.2	1,095.6	1,442.4
<i>Value of transactions</i> <i>(USD billions)</i>	10.3	15.6	22.8	34.0	49.0

¹ The number of networks in 1997 includes 8 national ATM networks and 41 regional networks. ² Does not include card-activated terminals which do not dispense cash. ³ Transactions include withdrawals and other transactions. Withdrawals are estimated to be at least 70% of transactions. ⁴ Volume and value of EFTPOS transactions includes only Personal Identification Number (PIN)-based debit EFTPOS. Does not include off-line (signature-based) transactions. ⁵ 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)

	1993	1994	1995	1996	1997
Cards with a cash function ¹	483.3	540.1	592.4	654.1	682.6
Cards with a cheque guarantee function ² .....	.	.	.	.	.
Cards with a debit/credit function ³	531.7	590.5	650.8	678.7	704.0
<i>of which:</i>					
<i>cards with a debit function</i>	206.1	207.5	211.0	217.2	220.0
<i>cards with a credit function⁴</i>	325.6	383.0	439.8	461.5	484.0
Retailer cards	505.0	542.6	587.2	601.8	598.3
Oil company cards	117.7	114.2	115.3	112.0	110.8

¹ Estimated. Includes credit and debit cards with a cash function. Excludes prepaid (stored value) cards. ² Reliable data on cheque guarantee "cards" are not available. ³ A small number of payment cards have both a debit and credit function. Cards are classified as debit or credit cards according to their primary use. ⁴ Includes VISA, MasterCard, Discover and American Express cards as well as travel and entertainment cards. Number of telephone cards in circulation: 155.1, 160.5, 166.3, 171.0 and 172.9 million for 1993, 1994, 1995 1996 and 1997 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)

	1993	1994	1995	1996	1997
Large-value systems: ¹					
CHIPS ²	42.2	45.5	51.0	53.5	58.9
Fedwire ³	69.7	72.0	75.9	82.6	89.5
Cheque clearings:					
private clearing houses and direct exchanges ⁴	22,527.0	26,221.0	28,145.0	29,852.0	30,020.0
Federal Reserve ⁵	19,681.0	17,149.0	16,128.0	16,129.0	16,531.0
Automated clearing houses:					
private ⁶	473.9	553.8	682.7	876.0	1,268.6
Federal Reserve ⁷	2,085.1	2,379.2	2,724.3	3,053.0	3,280.4
Memorandum item:					
"On-us" cheques ⁸	18,089.0	18,300.0	18,690.0	18,703.0	19,542.0

¹ Number of originations. Data do not include non-value messages. ² CHIPS, the Clearing House Interbank Payments System, is operated by the New York Clearing House Association. ³ Fedwire is operated by the Federal Reserve. ⁴ Cheques are processed either "on-us" (about 30%), or by regional private cheque clearing houses (about 45%, which includes direct exchanges), or by the Federal Reserve. Estimate. ⁵ Includes personal, commercial, government and travellers' cheques and commercial and postal money orders. ⁶ Includes an estimated 861 million "on-us" items and 407 million private sector items. ⁷ Includes all government and commercial debits and credits. Beginning with 1997, non-value items are not counted. ⁸ Estimated.

Sources: Federal Reserve and National Automated Clearing House Association.

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

	1993	1994	1995	1996	1997
Large-value systems:					
CHIPS ¹	262,256.4	295,443.8	310,021.2	331,541.1	362,186.5
Fedwire ²	207,629.8	211,201.5	222,954.1	249,140.0	288,419.8
Cheque clearings:					
<i>private clearing houses and direct exchanges</i> .....	.	.	.	.	.
Federal Reserve ³	14,623.0	12,607.4	12,083.0	12,072.8	12,597.5
Automated clearing houses:					
<i>private</i> ⁴	1,204.9	1,730.5	1,905.9	2,102.1	3,289.7
Federal Reserve ⁵	7,595.1	8,369.5	9,194.1	9,997.9	10,710.3

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

Source: Federal Reserve

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

	1993	1994	1995	1996	1997
Federal Reserve:					
<i>Government securities</i> ¹	12.0	12.6	12.8	13.1	12.9
Depository Trust Company:					
<i>Corporate and municipal securities</i> ²	98.3	106.0	119.0	135.7	151.0

¹ 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). ² 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)

	1993	1994	1995	1996	1997
Federal Reserve:					
<i>Government securities</i> ¹	146.2	144.7	149.8	160.6	174.9
Depository Trust Company:					
<i>Corporate and municipal securities</i> ²	27.8	34.0	41.0	50.2	62.0

¹ 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). ² 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 12
**Indicators of use of various cashless payment instruments:
 volume of transactions**
 (in millions)

Instruments	1993	1994	1995	1996	1997
Cheques issued ¹	60,297.0	61,670.0	62,963.0	64,684.0	66,093.0
Payments by card:					
<i>debit</i> ²	708.9	1,096.3	1,598.9	2,469.4	3,912.5
<i>credit</i> ³	12,516.0	13,681.0	14,913.7	16,129.8	16,878.5
Paperless credit transfers:					
<i>CHIPS</i>	42.2	45.5	51.0	53.5	58.9
<i>Fedwire</i> ⁴	69.7	72.0	75.9	82.6	89.5
<i>Federal Reserve ACH</i> ⁵	1,345.8	1,525.7	1,738.9	1,944.9	2,110.2
Direct debits:					
<i>Federal Reserve ACH</i> ⁶	739.3	847.0	978.3	1,100.5	1,170.2
Total	75,718.9	78,937.5	82,319.7	86,464.7	90,312.8

¹ Includes personal, commercial, government and travellers' cheques and commercial and postal money orders. Data for commercial cheques not processed by the Federal Reserve are estimated. ² Includes on-line (PIN-based) and off-line (signature-based) transactions. ³ 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). ⁴ Value of Fedwire funds transfers. Does not include securities transfers over Fedwire. ⁵ Does not include commercial "on-us" ACH transactions originated and received by the same bank. Beginning in 1997, non-value items are not counted. ⁶ Does not include commercial "on-us" 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	1993	1994	1995	1996	1997
Cheques issued ¹	69,160.7	71,500.0	73,515.0	74,879.0	77,811.0
Payments by card:					
<i>debit</i> ²	20.6	33.6	59.1	99.7	162.5
<i>credit</i> ³	620.6	730.8	879.0	982.8	1,071.1
Paperless credit transfers:					
<i>CHIPS</i>	262,256.4	295,443.8	310,021.2	331,541.1	362,186.5
<i>Fedwire</i> ⁴	207,629.8	211,201.5	222,954.1	249,140.0	288,419.8
<i>Federal Reserve ACH</i> ⁵	2,698.9	3,284.8	3,756.5	4,235.4	4,843.9
Direct debits:					
<i>Federal Reserve ACH</i> ⁵	4,896.3	5,084.7	5,437.6	5,762.5	5,866.4
Total	547,283.3	587,279.2	616,622.5	666,640.5	740,361.2

¹ Includes personal, commercial, government and travellers' cheques and commercial and postal money orders. Data for commercial cheques not processed by the Federal Reserve are estimated. ² Includes on-line (PIN-based) and off-line (signature-based) values. ³ 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). ⁴ Value of funds transfers only. Does not include securities transfers over Fedwire. ⁵ 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 institutions¹

	1993	1994	1995	1996	1997
Members	147	147	156	169	152
<i>of which: live</i>	146	143	154	157	150
Sub-members ²	267	293	313	344	336
<i>of which: live</i>	257	286	309	332	328
Participants ³	26	47	73	96	133
<i>of which: live</i>	23	38	62	81	121
Total users	440	487	542	599	621
<i>of which: live</i>	426	467	525	570	599
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i>	2,244	2,551	2,693	2,874	2,969
<i>sub-members</i>	1,887	2,097	2,259	2,404	2,590
<i>participants</i>	125	218	277	354	606
<i>users</i>	4,256	4,866	5,229	5,632	6,165

¹ Data for the United States and Puerto Rico. ² Domestic users sponsored by members abroad. ³ 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 users¹

	1993	1994	1995	1996	1997
Total messages sent	72,629,616	83,173,828	99,258,753	115,518,434	138,458,554
<i>of which:</i>					
<i>category I²</i>	11,230,055	13,810,761	17,316,090	20,841,198	25,265,791
<i>category II³</i>	13,760,056	15,257,951	17,017,438	18,975,068	22,625,585
Total messages received	80,281,134	93,700,305	111,638,649	128,751,988	152,856,912
<i>of which:</i>					
<i>category I²</i>	17,043,643	20,207,556	24,217,175	27,770,832	31,252,056
<i>category II³</i>	37,604,439	41,497,646	46,829,754	49,839,334	56,185,599
Domestic traffic ⁴	11,782,604	13,454,096	17,269,612	20,970,071	24,923,744
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic	457,218,200	518,097,873	603,575,374	687,785,294	812,117,556

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

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

COMPARATIVE TABLES

Table 1
Notes and coin in circulation¹

	1993	1994	1995	1996	1997
	USD per inhabitant²				
Belgium	1,164	1,229	1,391	1,340	1,174
Canada	637	635	662	675	676
France	739	807	891	841	742
Germany	1,511	1,790	2,025	1,936	1,679
Italy	921	1,032	1,082	1,138	1,062
Japan	3,243	3,736	3,873	3,740	3,582
Netherlands	1,263	1,424	1,537	1,411	1,227
Sweden	1,042	1,120	1,312	1,327	1,183
Switzerland	2,638	2,985	3,394	3,127	2,832
United Kingdom	455	504	528	606	627
United States	1,272	1,385	1,442	1,506	1,617
	As percentage of GDP				
Belgium	6.0	5.2	5.3	5.2	5.1
Canada	3.4	3.4	3.4	3.4	3.4
France	3.5	3.4	3.3	3.3	3.2
Germany	6.7	6.8	6.9	7.0	6.8
Italy	5.8	5.9	5.5	5.3	5.5
Japan	9.5	9.7	10.4	10.9	11.6
Netherlands	6.5	6.2	6.0	5.7	5.5
Sweden	5.3	5.0	4.7	4.8	4.7
Switzerland	7.7	7.8	7.7	8.1	7.8
United Kingdom	2.8	2.8	2.8	2.8	2.9
United States	5.0	5.2	5.2	5.2	5.3
	As percentage of narrow money³				
Belgium	29.6	27.1	27.2	27.5	26.5
Canada	44.0	44.2	42.8	37.7	36.0
France	15.3	15.1	14.2	14.2	13.5
Germany	29.2	29.6	29.1	26.9	26.3
Italy	15.5	16.0	16.3	16.1	16.1
Japan ⁵	31.1	30.7	29.2	29.0	28.7
Netherlands	25.1	25.0	22.1	19.7	18.5
Sweden	10.7	10.7	10.5	9.9	10.0
Switzerland	19.7	19.7	18.0	17.3	15.6
United Kingdom	4.5	4.6	4.6	4.5	4.6
United States	28.5	30.7	32.9	36.2	39.5

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

Table 2

Transferable deposits held by non-banks¹

	1993	1994	1995	1996	1997
	USD per inhabitant²				
Belgium	2,764	3,307	3,715	3,536	3,261
Canada	3,067	2,975	3,334	3,768	3,938
France	4,080	4,543	5,381	5,082	4,761
Germany	3,761	4,287	4,953	5,309	4,697
Italy	4,863	5,236	5,399	5,784	5,386
Japan ³	8,160	9,425	11,032	10,623	9,507
Netherlands	3,763	4,265	5,421	5,763	5,397
Sweden	8,850	9,811	11,351	11,991	10,476
Switzerland	5,839	6,799	8,359	8,303	8,692
United Kingdom	9,589	10,493	11,073	12,797	12,895
United States	3,180	3,103	2,917	2,631	2,465
	As percentage of GDP				
Belgium	14.0	14.0	14.0	13.8	14.1
Canada	16.2	16.1	17.3	19.1	20.0
France	19.4	19.2	20.1	19.8	20.6
Germany	16.7	16.3	16.8	19.1	19.1
Italy	30.4	29.8	27.6	27.2	27.9
Japan ³	24.6	25.3	25.0	28.3	29.5
Netherlands	19.3	18.6	21.2	23.4	24.2
Sweden	44.6	42.4	40.6	44.3	42.0
Switzerland	17.0	17.8	18.8	21.4	24.0
United Kingdom	60.0	58.6	59.5	59.8	58.8
United States	12.5	11.6	10.6	9.1	8.1
	As percentage of narrow money⁴				
Belgium	70.0	72.9	72.8	72.5	73.5
Canada	212.1	207.4	215.5	210.0	210.0
France	84.7	84.9	85.8	85.8	86.5
Germany	72.7	70.8	71.2	73.8	73.7
Italy	81.9	81.4	81.1	81.8	81.8
Japan ⁵	86.5	85.3	82.7	81.6	80.5
Netherlands	74.9	75.0	77.9	80.3	81.5
Sweden	90.6	90.3	90.6	91.1	88.7
Switzerland	43.6	44.9	44.2	45.8	48.0
United Kingdom	95.5	95.4	95.4	95.5	95.4
United States	71.2	68.9	66.6	63.2	60.2

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

Table 3
Settlement media used by banks¹
 (1997)

	Banks' reserves at central bank (USD billion)²	Banks' reserves at central bank in percentage of narrow money³	Transferable deposits at other banks (USD billion)²	Transferable deposits at other banks in percentage of narrow money²
Belgium	0.032	0.07	4.93	10.93
Canada	0.3	0.65	.	.
France	1.3	0.39	603.0	186.6
Germany	23.3	4.4	238.6	45.6
Italy	47.2	12.4	55.3	14.6
Japan	27.7	1.8	65.0 ⁴	4.4 ⁵
Netherlands	8.625	8.32	1.181	1.1
Sweden	0.25	0.24	12.1	11.6
Switzerland	3.7	2.9	21.8	17.0
United Kingdom	4.3	0.5	394.0	49.4
United States	30.8	2.8	31.8	2.9

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

Table 4
Institutional framework¹
 (1997)

	Number of institutions	Number of inhabitants per institution	Number of branches	Number of inhabitants per branch	Number of accounts per inhabitant
Belgium	136	74,853	9,041	1,126	1.23
Canada ²	2,413	12,598	13,642	2,228	.
France	519	113,102	46,639	1,259	1.1
Germany	3,409	24,083	59,695 ³	1,375	1.0
Italy	937	61,366	39,936	1,440	0.5
Japan	4,266	29,578	69,022	1,828	.
Netherlands	127	123,261	7,071	2,214	1.4
Sweden	125	70,800	3,624	2,442	.
Switzerland	362	19,604	6,995	1,015	.
United Kingdom	553	106,691	35,234	1,675	2.4
United States ⁴	22,331	11,997	73,538	3,643	.

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

Table 5
Cash dispensers and ATMs¹

	1993	1994	1995	1996	1997
Number of machines per 1,000,000 inhabitants					
Belgium	119	313	360	414	492
Canada	554	576	595	617	645
France	325	356	395	419	461
Germany	308	361	436 ⁴	459	504
Italy	266	326	378	421	443
Japan	935	978	1,013	1,051	1,115
Netherlands	291	324	354	372	409
Sweden	255	259	267	269	268
Switzerland	439	481	532	587	678
United Kingdom	328	342	358	376	393
United States	367	418	466	524	616
Number of transactions per inhabitant					
Belgium	9.1	13.1	14.3	15.1	15.7
Canada	37.4	40.7	45.9	49.2	52.7
France	13.3	14.2	15.8	18.1	19.9
Germany .....	.	11.5	13.4 ⁴	15.3	.
Italy	3.8	4.8	5.8	6.4	7.2
Japan	3.3	3.6	3.8	4.1	5.0
Netherlands	20.5	23.8	27.4	29.3	33.3
Sweden	28.3	30.7	31.8	33.6	35.3
Switzerland	8.3	9.1	10.0	10.6	11.4
United Kingdom	21.3	22.9	25.2	27.2	29.6
United States	29.8	31.8	36.9	40.3	40.7
Average value of transactions (USD)²					
Belgium	110.3	126.5	138.1	129.5	114.3
Canada ³	53.4	51.1	51.2	52.0	50.4
France	77.0	76.5	81.3	77.5	68.0
Germany .....	.	157.6	196.6 ⁴	179.0	.
Italy	189.4	191.3	198.3	202.7	184.7
Japan	395.4	419.8	450.6	383.4	288.8
Netherlands	95.9	97.4	108.4	105.4	87.9
Sweden	101.2	104.7	112.6	104.4	104.5
Switzerland	207.8	217.8	246.9	209.5	186.6
United Kingdom	72.5	74.6	77.3	78.1	84.5
United States	68.2	67.2	67.7	68.0	68.3

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

Table 6
EFTPOS terminals¹

	1993	1994	1995	1996	1997
Number of terminals per 1,000,000 inhabitants					
Belgium	5,246	6,294	7,174	7,997	8,421
Canada	2,134	4,073	6,394	8,408	10,873
France	7,435	7,574	9,394	9,333	9,540
Germany ³	344	767	856	1,402	1,983
Italy	1,350	1,819	2,683	3,734	4,896
Japan	168	227	200	183	155
Netherlands	1,600	3,085	4,736	6,170	7,692
Sweden	3,054	5,514	6,160	6,946	7,774
Switzerland	1,433	2,379	3,499	4,747	5,803
United Kingdom	4,639	5,993	8,647	9,345	8,983
United States	600	1,320	2,009	3,296	4,853
Number of transactions per inhabitant					
Belgium	14.2	18.0	20.8	23.9	27.2
Canada	2.6	6.3	13.3	22.5	34.2
France	24.3	26.1	32.3	35.6	39.2
Germany ³	0.85	1.28	1.83	2.61	2.75
Italy	0.99	1.56	2.12	2.94	4.41
Japan	0.005	0.006	0.007	0.004	0.004
Netherlands	4.4	9.3	16.5	23.8	31.0
Sweden	6.5	8.8	10.4	12.6	15.9
Switzerland	4.0	5.7	8.0	10.8	13.6
United Kingdom .....	.	.	.	.	.
United States	1.7	2.4	2.9	4.1	5.4
Average value of transactions (USD)²					
Belgium	63.2	71.2	77.6	72.6	63.3
Canada	38.7	37.1	34.9	32.7	30.7
France	58.0	57.6	63.3	60.0	50.9
Germany ³	54.2	64.0	95.7	98.2	71.7
Italy	129.1	119.8	118.6	118.2	106.8
Japan	184.9	80.2	.	32.4	56.6
Netherlands	54.6	55.0	59.1	56.5	48.0
Sweden	85.5	80.8	80.7	80.7	78.0
Switzerland	58.8	73.8	96.4	96.3	73.5
United Kingdom .....	.	.	.	.	.
United States	24.0	25.0	29.4	31.0	34.0

¹ For explanation of figures see relevant country tables. ² Converted at yearly average exchange rates. ³ In 1997 electronic cash only.

Table 7

Number of cards¹
(1997 per 1,000 inhabitants)

	Cards with a cash function	Cards with a debit/credit function	Cards with cheque guarantee function	Retailers' cards
Belgium	1,116	1,116	468	140
Canada	1,590	577	.	4,112
France	514	472	.	.
Germany .....	.	1,038	508	61
Italy	301	426	16	.
Japan	2,243	1,945	.	480
Netherlands	1,535	162	26	.
Sweden	774	691	.	.
Switzerland	933	988	617	.
United Kingdom	1,641	1,271	903	298
United States	2,548	2,628	.	2,233

¹ For explanation of figures, see relevant country tables.

Table 8

Relative importance of cashless payment instruments¹
(percentage of total volume of cashless transactions)

	1993	1994	1995	1996	1997
Cheques					
Belgium	14.0	11.7	10.6	9.4	8.0
Canada	58.7	52.8	46.9	41.0	36.1
France	49.1	47.4	45.6	43.6	41.7
Germany	8.1	7.9	7.0	6.4	5.7
Italy ²	37.2	34.0	32.8	30.5	28.0
Japan .....	.	.	.	.	.
Netherlands	11.1	8.5	5.9	4.2	3.0
Sweden ⁵ .....	.	.	.	.	1.9
Switzerland ³	3.3	2.6	2.0	1.6	1.3
United Kingdom ⁴	43.0	40.2	36.7	33.1	30.5
United States	79.6	78.1	76.5	74.8	73.2
Payment by cards					
Belgium	17.1	18.0	19.7	21.3	23.4
Canada	31.1	35.3	40.0	44.8	48.8
France	15.7	16.2	17.6	18.3	19.5
Germany	2.6	3.1	3.6	4.2	4.1
Italy ²	4.1	5.2	6.6	8.6	11.2
Japan .....	.	.	.	.	.
Netherlands	3.1	6.1	11.3	15.1	18.2
Sweden ⁵	9.8	11.6	14.2	14.8	18.9
Switzerland	13.8	16.2	18.4	20.7	22.8
United Kingdom	21.0	23.3	25.9	28.9	31.1
United States	17.5	18.7	20.1	21.5	23.0

¹ For explanation of figures see relevant country tables. In some cases the total may not sum to 100% because of other items. ² The figures for the years 1993-95 differ from those provided in the statistical annex of the Italian chapter as they are estimated for the whole system. ³ Postal cheques are not included because detailed figures are not published by the Postfinance. ⁴ Includes Town cheques. ⁵ 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.)

	1993	1994	1995	1996	1997
	Credit transfers				
Belgium	60.0	60.9	60.2	59.5	58.0
Canada	5.2	6.4	7.4	8.1	8.4
France	15.4	15.7	15.6	15.7	15.7
Germany	45.6	48.7	48.8	49.2	48.2
Italy ²	44.6	46.8	45.9	42.6	41.6
Japan .....	.	.	.	.	.
Netherlands	61.3	59.8	56.6	54.0	51.7
Sweden	84.5	82.3	79.4	78.5	72.1
Switzerland ⁶	80.1	78.1	76.3	74.4	72.3
United Kingdom ⁷	20.4	20.1	19.7	19.9	19.6
United States	1.9	2.1	2.3	2.4	2.5
	Direct debits				
Belgium	8.9	9.4	9.4	9.7	9.8
Canada	5.0	5.5	5.8	6.2	6.7
France	10.6	11.2	11.3	11.8	12.1
Germany	43.7	40.3	40.6	40.2	42.0
Italy ²	4.4	4.7	5.4	7.3	8.6
Japan .....	.	.	.	.	.
Netherlands	24.4	25.6	26.3	26.8	27.1
Sweden	5.7	6.1	6.4	6.7	7.1
Switzerland ⁸	2.8	3.1	3.3	3.3	3.6
United Kingdom	15.6	16.5	17.7	18.1	18.7
United States	1.0	1.1	1.2	1.3	1.3

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

Table 9

Relative importance of cashless payment instruments¹
(percentage of total value of cashless transactions)

	1993	1994	1995	1996	1997
	Cheques				
Belgium	4.3	3.8	3.3	3.2	2.9
Canada	98.8	98.7	98.1	97.2	97.1
France	4.6	4.4	4.7	4.8	4.4
Germany	2.3	2.3	2.1	1.8	1.6
Italy ²	5.4	4.5	4.5	3.6	3.2
Japan .....	.	.	.	.	.
Netherlands	0.1	0.1	0.1	0.1	0.0
Sweden .....	.	.	.	.	.
Switzerland ³	0.1	0.1	0.1	0.1	.
United Kingdom ⁴	9.4	7.6	5.3	4.9	4.2
United States	12.6	12.2	11.9	11.2	10.5
	Payment by cards				
Belgium	0.1	0.1	0.1	0.2	0.2
Canada	0.3	0.4	0.5	0.8	0.8
France	0.2	0.2	0.2	0.2	0.2
Germany	0.02	0.02	0.03	0.04	0.03
Italy ²	0.03	0.04	0.05	0.05	0.06
Japan .....	.	.	.	.	.
Netherlands	0.0	0.1	0.1	0.1	0.2
Sweden	0.9	1.0	1.4	1.5	1.7
Switzerland .....	.	.	.	.	0.1
United Kingdom	0.2	0.2	0.2	0.3	0.3
United States	0.1	0.1	0.2	0.2	0.2

¹ For explanation of figures see relevant country tables. In some cases the total may not sum to 100% because of other items. ² The figures for the years 1993-95 differ from those provided in the statistical annex of the Italian chapter as they are estimated for the whole system. ³ Postal cheques are not included because detailed figures are not published by the Postfinance. ⁴ Includes Town cheques.

Table 9 (cont.)

	1993	1994	1995	1996	1997
Credit transfers					
Belgium	95.3	95.9	96.3	96.3	96.6
Canada	0.7	0.7	1.0	1.5	1.5
France	93.4	93.5	93.0	92.7	93.3
Germany	95.7	95.7	95.8	95.7	95.9
Italy ²	93.2	94.2	94.1	95.0	95.4
Japan .....	.	.	.	.	.
Netherlands	98.7	98.8	98.6	98.7	98.8
Sweden	95.8	96.2	95.7	95.6	95.8
Switzerland ⁵	99.9	99.8	99.8	99.8	99.8
United Kingdom ⁶	89.5	91.2	93.4	93.7	94.6
United States	86.4	86.8	87.0	87.7	88.5
Direct debits					
Belgium	0.3	0.2	0.3	0.3	0.3
Canada	0.2	0.2	0.3	0.5	0.6
France	0.7	0.8	0.9	1.0	1.0
Germany	2.0	2.0	2.1	2.5	2.5
Italy ²	0.2	0.2	0.2	0.2	0.3
Japan .....	.	.	.	.	.
Netherlands	1.1	1.1	1.2	1.1	1.0
Sweden	3.3	2.8	2.9	2.9	2.5
Switzerland ⁷ .....	.	0.1	0.1	0.1	0.1
United Kingdom	1.0	1.0	1.0	1.1	1.0
United States	0.9	0.9	0.9	0.9	0.8

⁵ All transfers at Postfinance included. ⁶ Paper-based and paperless (includes large-value: CHAPS). ⁷ Without Postfinance direct debits. See footnote 3.

Table 10a
Features of selected interbank funds transfer systems¹
 (figures relate to 1997)

	Type ²	Owner/ Manager ³	No. of participants		Processing ⁴	Settlement ⁵	Membership ⁶
				of which direct			
Belgium							
ELLIPS	L	B + CB	122	22	RTT	RTGS	RM
Clearing House	L + R	B + CB	126	26	M	N	O
CEC	R	B + CB	122	26	ACH	N	O
Canada							
IIPS	L	B + AS	63	19	.	. ⁷	RM
France							
SAGITTAIRE	L	CB	57	57	RTT	N	RM
CH Paris ⁸	L + R	AS	388	30	M	N	RM
CH Provinces ⁹	R	CB	380 ¹⁰	234 ¹⁰	M	N	O
SIT	R	CB + B/AS	316	22	RTT	N	RM
CREIC	R	CB	16	16	ACH	N	O
Card payments	R	B/AS	184	11	RTT	N	RM
TBF	L	CB	158	154	RTT	RTGS	O
SNP	L	B/AS	24	10	RTT	N	RM
Germany							
MAOBE ¹¹	R	CB	5,097	.	ACH	GS	O
DTA ¹¹	R	CB	5,097	.	ACH	GS	O
EIL-ZV	L	CB	2,947	.	RTT	RTGS	O
Platz. überweisungsverkehr ^{11,12}	L + R	CB	5,097	.	M	GS	O
Konvent. Abrechnung	L + R	CB	178	.	M	N	O
EAF 2.....	L	CB	68	.	RTT	N	RM
Italy							
Local clearing	R	CB	598	251	RTT ¹³	N	O
Retail	R	CB ¹⁴	897	211	ACH	N	O
ME ¹⁵	L	CB	294	294	RTT	N	O
Ingrosso (ex SIPS)	L	CB ¹⁴	858	187	RTT	N	O
BI-REL	L	CB	791	791	RTT	RTGS	O

¹ For additional information see relevant country chapters. ² L = Large-value system, R = Retail system. ³ Owner/Manager: B = Banks, CB = Central Banks, AS = Payment Association. ⁴ Processing method: M = Manual, ACH = Automated Clearing House (off-line), RTT = Real-Time Transmission. ⁵ N = multilateral Netting, BN = Bilateral Netting, RTGS = Real-Time Gross Settlement, GS = other Gross Settlement. ⁶ O = Open membership (any bank can apply) or RM = Restricted Membership (subject to criteria). ⁷ Other (see Table 11, Footnote 7). ⁸ Clearing House in Paris. ⁹ Clearing Houses in the provinces. ¹⁰ All institutions on which cheques are drawn or at which bills of exchange are payable are bound by regulations to participate in the local clearing houses, through an agent in certain cases. ¹¹ Number of accounts. ¹² System was closed down end of May 1997. ¹³ Transactions can also be submitted on floppy disk. ¹⁴ System managed by the Interbank Society for Automation in the name and on behalf of the Banca d'Italia. ¹⁵ Electronic memoranda.

Table 10a (cont.)

	Degree of centralisation ¹⁶	Pricing ¹⁷	Closing time for same-day transactions ¹⁸	Number of transactions (thousands)	Value of transactions (USD billions) ¹⁹	Ratio of transactions value to GDP (at annual rate)
Belgium						
ELLIPS	C	F	16.45	955	9,282	39.8
Clearing House	D	V	15.00	6,780	8.7	0.6
CEC	C	F	15.00	880,603	500	2.1
Canada						
IIPS	D	N	16.30	2,700	13,849	22.5
France						
SAGITTAIRE	C	F	13.00	4,746	20,103	14.80
CH Paris ⁸	C	F	15.00	691,878	13,908	10.24
CH Provinces ⁹	C	N	11.00	2,931,067	1,162	0.86
SIT	C	F	13.30	4,919,551	2,308	1.70
CREIC	C	F	NO	285,269	26	0.02
Card payments ²³	C	F	13.30	2,301,576	117	0.09
TBF	C	F	17.30	67	4,795	3.53
SNP	C	F	15.45	526	7,951	5.85
Germany						
MAOBE	D	V	NO	27,700	122	0.06
DTA	D	V	NO	2,217,200	2,412	1.20
EIL-ZV	D	F	15.00	10,600	18,635	9.25
Platz. überweisungsverkehr ^{12,20}	D	N	12.00	600	1,103	0.55
Konvent. Abrechnung ²¹	D	F	13.00	300	601	0.30
EAF2	C	F	12.45	22,400	101,372	50.30
Italy						
Local clearing	D	V	13.30	217,577	1,504	1.3
Retail	C	F	NO ²²	710,609	1,051	0.9
ME ¹⁵	C	V	15.30	1,452	14,809	12.9
Ingrosso (ex SIPS)	C	F	14.00	6,057	24,370	21.3
BI-REL	C	V	16.20	2,694	2,568	2.2

¹⁶ Geographical access to the system: C = Centralised (one processing centre only) or D = Decentralised. ¹⁷ Prices charged to participants: F = Full costs (including investments), V = Variable costs, S = Symbolic costs (below variable costs), N = No costs. ¹⁸ Closing time for same day transactions (NO = no same-day transactions). ¹⁹ Converted at yearly average exchange rates. ²⁰ Decrease due to conversion requirement, resulting in a switch of previously paper-based payments to EIL-ZV and DTA. ²¹ Reporting change in 1995: number of delivery envelopes cleared instead of individual payments contained therein. ²² Except for the credit transfers entered before 12.00 which are settled on the same day. ²³ These data are included in the SIT data.

Table 10b
Features of selected interbank funds transfer systems¹
 (figures relate to 1997)

	Type ²	Owner/ Manager ³	No. of participants		Processing ⁴	Settlement ⁵	Membership ⁶
				<i>of which direct</i>			
Japan							
FEYCS	L	B	264	264	RTT	N	RM
BOJ-NET	L	CB	426	426	RTT	RTGS ⁷	RM
Netherlands							
Interpay	R	B	72	72	ACH	N	O
TOP ⁸	L	CB	124	124	RTT	RTGS	O
Sweden							
RIX	L	CB	130	27	RTT	RTGS	RM
Bank Giro System	R	B	23	23	ACH	N	O
Switzerland							
SIC	L + R	CB + B	221	221	RTT	RTGS	RM
DTA/LSV	R	B	163	163	ACH	GS	RM
United Kingdom							
CHAPS	L	B	422	17	RTGS ⁹	N	RM
BACS	R	B	37,000	16	ACH	N	RM
Cheque/credit	R	B	613	13	M	N	RM
United States							
Fedwire	L	CB	9,967	9,967	RTT	RTGS	O
CHIPS	L	B	95	95	RTT	N	RM

¹ For additional information see relevant country chapters. ² L = Large-value system; R = Retail system. ³ Owner/Manager: B = Banks, CB = Central Banks. ⁴ Processing method: M = Manual, ACH = Automated Clearing House (off-line), RTT = Real-Time Transmission. ⁵ N = multilateral Netting, BN = Bilateral Netting, RTGS = Real-Time Gross Settlement, GS = other Gross Settlement. ⁶ O = Open membership (any bank can apply) or RM = Restricted Membership (subject to criteria). ⁷ The system has been designed to allow participants to enter funds transfer instructions continuously, in which case settlement takes place on the central bank's books immediately. It is, however, also used to settle on a net basis. ⁸ Merge of 8007 S.W.I.F.T. and the Central Bank FA System. ⁹ Changed to an RTGS system on 22nd April 1996.

Table 10b (cont.)

	Degree of centralisation ¹⁰	Pricing ¹¹	Closing time for same-day transactions ¹²	Number of transactions (thousands)	Value of transactions (USD billions)	Ratio of transactions value to GDP (at annual rate)
Japan						
FEYCS	D	V ¹³	13.45	10,434	85,656	20.4
BOJ-NET	D	V ¹³	17.00	4,402	334,962	79.9
Netherlands						
Interpay	D	F	12.45	1,782,900	1,287	3.6
TOP ⁸	C	V	16.30	3,096	13,815	38.3
Sweden						
RIX	C	F	17.00	326	10,743	47.0
Bank Giro System	C	F	NO	289,532	343	1.5
Switzerland						
SIC	C	F	16.15	121,006	31,561	123.7
DTA/LSV	C	F	NO	93,494	216	0.8
United Kingdom¹⁴						
CHAPS	D	F	15.45	16,535	59,031	45.9
BACS	C	F	NO	2,682,685	2,346	1.8
Cheque/credit	D	F	NO	2,238,548	2,325	1.8 ¹⁵
United States						
Fedwire	C	F	18.30	89,500	288,420	35.6
CHIPS	C	F	16.30	58,900	362,187	44.7

¹⁰ Geographical access to the system: C = Centralised (one processing centre only) or D = Decentralised. ¹¹ Prices charged to participants: F = Full costs (including investments), V = Variable costs, S = Symbolic costs (below variable costs), N = No costs. ¹² Closing time for same-day transactions (NO = no same-day transactions). ¹³ Prices are set on the principle that institutions which are to benefit from on-line processing should pay the relevant charges. ¹⁴ Interbank figures only. ¹⁵ Excludes Northern Ireland.

Table 11
Operating hours of selected large-value interbank funds transfer systems¹
(as of December 1997)

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)
Belgium						
ELLIPS	G	6.30-16.45	.	16.30	15.00	(9.00-16.15)
C.E.C.	N	15.01-15.00 ²	15.15	15.00	15.00 ³	(9.00-16.15)
Clearing House	N	8.00-15.00	15.00	.	. ³	(9.00-16.15)
Canada⁴						
IIPS	N ⁵	8.00-16.30	noon ⁶	16.30 ⁷	16.30 ⁷	
France						
SAGITTAIRE	N	8.00-13.00 ⁸	18.30	.	8.00 ⁹	(8.15-17.00)
TBF ¹⁰	G	7.30-17.30	17.30	17.30	17.30	
SNP	N	7.30-15.45	16.15	15.45	15.45	
Germany						
Express electronic credit transfer system	G	8.15-15.00	8.15-15.00	(11)	8.00 ⁹	
Express (paper-based) local credit transfer system ¹²	G	8.00-12.00	8.00-12.00	(11)	8.00 ⁹	(9.30-13.00 ¹³)
EAF2 ¹⁴	N	8.00-12.45	14.30 ¹⁵	(11)	8.00 ⁹	
Italy						
BI-REL	G	8.00-16.20	8.00-16.20	15.50	9.00 ⁹	(8.45-16.30 ¹⁶)
Ingrosso (ex SIPS)	N	8.00-14.00	15.30	14.00	9.00 ⁹	
ME	N	8.00-15.30	15.30	15.30	9.00 ⁹	
Japan						
FEYCS	N	9.00-13.45	15.00	10.30 ⁹	10.30 ⁹	(9.00-17.00)
BOJ-NET	G ¹⁷	9.00-17.00	9.00-17.00	14.00	n.a.	
Netherlands						
TOP ¹⁸	G	8.00-16.30 ²⁰	8.00-16.30	14.00 ^{9,19}	14.00 ^{9,19}	9.00-13.00
Sweden						
RIX	G	8.00-17.00	8.00-17.00	(21)	8.00 ⁹	(9.00-16.15)
Switzerland						
SIC	G	18.00-16.15 ²²	18.00-16.15 ²²	15.00 ²²	8.00 ³	(9.00-16.00)
United Kingdom						
CHAPS	G ²³	8.30-15.45	end of day	none	12.00	(7.30-15.30 ²⁴)
United States⁶						
Fedwire	G	00.30-18.30 ²⁵	00.30-18.30	18.00	18.00	(8.30-18.30 ²⁶)
CHIPS	N	00.30-16.30	18.00 ²⁷	16.30	16.30	
ECU clearing system						
	N	14.01-14.00 ²⁸	15.45	none	none	(TOM/NEXT ²⁹)

Footnotes to Table 11

- ¹ Some systems make no explicit distinction between large-value and retail transactions and may be used to settle interbank transfers relating to a variety of underlying transactions. Some systems may also accept payment orders for a number of value days. 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.
- ² The C.E.C. transfer system operates round-the-clock, five days a week.
- ³ S.W.I.F.T. guideline.
- ⁴ Eastern time.
- ⁵ 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.
- ⁶ Net settlement at noon the next day (retroactive to the business day).
- ⁷ Local time at the receiving IIPS point, or the beneficiary account point, whichever is earlier.
- ⁸ 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.
- ⁹ S.W.I.F.T. guideline; in practice it may be later.
- ¹⁰ The TBF became operational on 27th October 1997.
- ¹¹ This is subject to arrangements between the correspondent banks.
- ¹² System was closed down end of May 1997.
- ¹³ For settlement purposes it can be later.
- ¹⁴ Electronic netting system in Frankfurt for interbank transfers predominantly relating to international DM transactions.
- ¹⁵ Planned time for communication of completion (positive message) or non-completion (negative message) of settlement.
- ¹⁶ The money market may continue to operate beyond the standard hours according to the closing times of the clearing and settlement systems.
- ¹⁷ The system has been designed to allow participants to enter funds transfer instructions continuously, in which case settlement takes place on the central bank's books immediately. BOJ-NET, however, is also used to settle on a net basis.
- ¹⁸ Merge of 8007 S.W.I.F.T. and the Central Bank FA System.
- ¹⁹ Interbank guilder transfers relating to international transactions are sent through the 8007 S.W.I.F.T. system which is operated by the Netherlands Bank; net settlement of these transactions takes place over the Central Bank TOP System.
- ²⁰ The 8007 S.W.I.F.T. system is, for a given value day, also open on the previous business day.
- ²¹ Participants decide among themselves which cut-off times they will use for different types of third-party orders. Large-value payments can be made during any time of the day.

- 22 The system is open for input 24 hours a day. Settlement services are limited by the indicated opening and closing times. A value day starts at 18.00 local time on the previous business day and ends at 16.15 on the value day. Third-party payments may be entered for same-day settlement until 15.00. Between 15.00 (cut-off 1) and 16.00 (cut-off 2) only cover (bank-to-bank) payments are accepted for same-day settlement. From 16.00 to 16.15 transactions are restricted to the processing of lombard credits (collateralised loans from the Swiss National Bank at a penalty rate).
- 23 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 and CHIPS 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 16.30 and 17.00. 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 1997)

	Type ¹	Owner/ Manager ²	No. of participants		Settlement of cash leg ³	Delivery ³
				<i>of which direct</i>		
Belgium						
NBB Clearing	G,O	CB	183	183	G	G
CIK	E,O	B	140	140	G	N
Canada						
SSS ⁴	G,E,O	B,SE,O	90	90	N	G/N
DCS ⁵	G	B,SE,O	70	70	N	G
France						
SATURNE	G,O	CB	322	322	N	GS
RELIT	B,G,O	B	248	248	N	GS
Germany						
DBC	G,E,O	SE	385		N/G	G
Italy						
Securities Settlement Procedures:						
LDT	G,E,O	CB	281	281	N	N
CAT	G	CB	741	741	. ⁶	G
Monte Titoli	E,O	Monte Titoli	426	.	. ⁶	G
Japan						
JGB registration	G	CB	449	449	G/N	G/N
JGB book-entry	G	CB	384	384	G/N	G/N
Netherlands						
NECIGEF	G+E+O	B+CB+SE	55	55	G	G
CB Clearing Institute	G+O	CB	85	85	N	N
Sweden						
VPC	G+E+O	B+O	57	57	G/N	G
OM	O	O	42	42	N	N
Switzerland						
SECOM	G,E,O	B	350	350	G	G
United Kingdom						
CGO	G+O	CB/SE	232	232	N	G
CMO	O	CB	88	88	N	G
CREST	E,O	B,SE,O	3,432	3,432	N	G
United States						
Fedwire	G	CB	8,281	8,281	G	G
DTC (SDFS) ⁷	E,O	B,SE,O	558	558	N	G

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

Table 12 (cont.)

	Delivery lag	Central Securities Depository	Cash Settlement Agent	Number of transactions (thousands)	Value of transactions (USD billions) ⁹	Ratio of transactions value to GDP (at annual rate)
Belgium						
NBB Clearing	T+2/T+3 ¹⁰	NBB	NBB	200	2,801.4	11.94
CIK	T+3 ¹¹	CIK	NBB	770,000	33.3	0.14
Canada						
SSS ⁴	up to T+3	CDS	B ¹²	{19,600 ¹³	{39,387 ¹³	{63.9
DCS ⁵	up to T+3	CDS	B ¹⁴			
France						
SATURNE	T	Banque de France	CB	330	9,325	6.9
RELIT	T+3 ¹⁵	SICOVAM	CB	17,800	12,967	9.5
Germany						
DBC	T+0-40	DBC	CB	31,200	10,518	5.2
Italy						
Securities Settlement Procedures:						
LDT	T+2/T+3 T+5 ¹⁶	CAT+ Monte Titoli	CB	.	24,698	21.6
CAT	T	CAT	. ⁶	927.0	1,315	1.1
Monte Titoli	T	Monte Titoli	. ⁶	.	78	0.1
Japan						
JGB registration	T+3	CB	CB	1,177.5	28,258	6.7
JGB book-entry	T+3	CB	CB	701.6	29,912	7.1
Netherlands						
NECIGEF	T+3	NECIGEF	KAS-ASS	1,685	.	.
CB Clearing Institute ..	T,T+3	CB	CB	3	95.7	0.27
Sweden						
VPC	T+2, T+3 ¹⁷	VPC	CB	5,313	10,818	40.5
OM	T+3		CB	42,542	.	.
Switzerland						
SECOM	T+3	SEGA	CB	9,909	1,179	4.58
United Kingdom						
CGO	T,T+1	CB	CB	949.8	46,335	36.0
CMO	T	CB	CB	263.1	6,294	4.9
CREST	T+5	n.a.	B			
United States						
Fedwire	T,T+1	CB	CB	12,900	174,900	21.6
DTC (SDFS) ⁸	T+3	DTC	DTC	151,000	62,000	7.6

⁹ Converted at yearly average exchange rate. ¹⁰ T+2 for Treasury bills; T+3 for bonds. ¹¹ The seller retains the responsibility for delivering securities. ¹² A single chartered bank. ¹³ Figures are for the twelve months ended 31st October 1997. ¹⁴ A single chartered bank, though not the same bank as for the SSS. ¹⁵ When processed by the "SLAB" system (special delivery service by bilateral agreements), the delivery occurs same day. ¹⁶ T+2 for government bills; T+3 for government and corporate bonds; T+5 for equities, warrants and convertible bonds. ¹⁷ 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 1997

(number of messages, in thousands)

From/To	BE	CA	CH	DE	FR	GB	IT
BE	6,139	201	1,878	2,147	2,351	4,451	1,235
CA	190	4,170	499	522	301	1,339	218
CH	1,342	443	6,939	5,325	2,596	4,768	2,250
DE	1,678	374	4,149	7,396	2,662	6,402	3,129
FR	2,083	309	1,894	3,672	15,993	5,315	2,726
GB	3,305	1,316	4,793	8,285	4,224	23,902	4,717
IT	1,038	188	1,880	3,564	2,472	5,040	4,128
JP	455	270	774	1,197	663	3,747	524
NL	2,236	140	1,320	2,958	996	2,821	716
SE	297	52	309	1,268	332	2,077	317
US	2,450	3,413	6,042	7,113	3,744	14,254	3,474
Total G-10	21,212	10,878	30,478	43,447	36,335	74,116	23,432
Total non-G-10	6,738	2,317	9,296	22,840	9,605	27,799	9,311
Total all countries	27,950	13,196	39,774	66,287	45,940	101,915	32,743

From/To	JP	NL	SE	US	Total G-10	Non-G-10	All countries
BE	453	2,420	275	3,347	24,897	6,459	31,356
CA	333	132	49	4,728	12,482	2,777	15,260
CH	743	1,156	263	7,920	33,745	9,102	42,847
DE	1,054	2,331	695	7,925	37,797	18,077	55,874
FR	672	1,017	270	5,705	39,656	9,101	48,757
GB	4,615	2,425	1,527	16,019	75,128	25,313	100,441
IT	514	659	212	4,461	24,156	7,517	31,673
JP	3,446	229	98	8,570	19,974	9,963	29,937
NL	256	2,457	212	3,357	17,468	4,499	21,968
SE	117	310	2,050	1,781	8,909	3,603	12,513
US	6,649	2,780	1,270	24,924	76,112	62,347	138,459
Total G-10	18,852	15,916	6,921	88,737	370,325	158,759	529,083
Total non-G10	11,017	4,283	3,375	64,120	170,702	112,332	283,034
Total all countries	29,869	20,200	10,296	152,857	541,027	271,091	812,118

Source:

S.W.I.F.T.

**Central bank officials involved in the preparation of
the 1998 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 Mr. Markus Mayers
Bank of Italy	Mr. Luca Ferrara
Bank of Japan	Mr. Tetsuya Sakamoto Ms. Hiroko Itoh
Netherlands Bank	Mr. Simon P. Kappelhof Mr. Richard Heuver
Sveriges Riksbank	Ms. Gabriela Guiborg
Swiss National Bank	Mr. Stéphane Fumeaux
Board of Governors of the Federal Reserve System	Mr. James Bohn Ms. Nicole Price
Bank for International Settlements	Mr. Masayuki Mizuno 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.

Reducing Foreign Exchange Settlement Risk: A Progress Report, July 1998.

Report on OTC Derivatives: Settlement Procedures and Counterparty Risk Management, September 1998.

Payment Systems in Lebanon, September 1998

