

**BANK FOR INTERNATIONAL SETTLEMENTS**

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

**figures for 1993**

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

**Basle  
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## **COUNTRY TABLES**



Table 1  
**Basic statistical data**

	1989	1990	1991	1992	1993
Population (millions) .....	9.95	9.99	10.02	10.07	10.10
GDP (BEF billions) .....	6,053	6,426	6,723	7,034	7,137
GDP per capita (BEF) .....	608,341	643,243	670,958	698,510	706,634
Exchange rate (domestic currency vis-à-vis USD):					
<i>year-end</i> .....	35.76	30.98	31.27	33.18	36.11
<i>average</i> .....	39.43	33.41	34.18	32.12	34.55

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

	1989	1990	1991	1992	1993
Notes and coin .....	421.7	413.2	417.0	414.1	424.7
Transferable deposits <sup>1</sup> .....	876.9	905.4	917.6	902.0	1,008.2
Other .....	.	.	.	.	.
Narrow money supply .....	1,298.6	1,318.6	1,334.6	1,316.1	1,432.9
<i>Memorandum item:</i>					
Broad money supply .....	5,150.5	5,381.3	5,690.8	6,061.2	7,110.9

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

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

	1989	1990	1991	1992	1993
Reserve balances held at central bank <sup>1</sup> .....	.	.	4.05	2.09	1.41
Transferable deposits at other institutions <sup>2</sup> .....	471.3	717.3	614.1	522.2	378.1
Other .....	.	.	.	.	.
<i>Memorandum items:</i>					
Required reserves .....	.	.	.	.	.
Institutions' borrowing from central bank <sup>1,3</sup> .....	.	.	3.31	3.74	9.01

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



Table 4  
**Banknotes and coin**

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

	1989	1990	1991	1992	1993
Total banknotes and coin issued .....	459.4	446.3	450.1	448.1	459.3
Denominations:					
Notes:					
10,000 francs <sup>1</sup> .....	.	.	.	16.3	80.6
5,000 francs .....	305.0	295.8	297.8	279.1	220.8
1,000 francs .....	111.9	106.8	107.3	109.1	111.9
500 francs .....	12.1	12.2	12.4	12.6	12.9
100 francs .....	13.6	13.7	14.0	14.1	14.4
50 francs .....	0.6	.	.	.	.
Coin:					
500 francs .....	1.0	1.1	1.1	0.2	0.2
50 francs .....	4.7	5.9	6.5	7.1	7.6
20 francs .....	6.4	6.5	6.6	6.7	6.8
5 francs .....	2.2	2.3	2.4	2.5	2.6
1 franc .....	1.6	1.7	1.7	1.1	1.2
0.5 francs .....	0.3	0.3	0.3	0.3	0.3
Banknotes and coin held by credit institutions .....	37.7	33.1	33.1	34.0	34.6
Total banknotes and coin outside credit institutions .....	421.7	413.2	417.0	414.1	424.7

<sup>1</sup> Notes with a denomination of BEF 10,000 have only been issued since 11th December 1992.

Table 5  
**Institutional framework**  
 (at end-1993)

Categories	Number of institutions	Number of branches	Number of accounts (thousands)	Value of accounts (BEF billions)
Central bank .....	1	18	.	.
Credit institutions .....	131	10,038 <sup>1</sup>	10,701	937.7
Postcheque .....	1	1,818 <sup>2</sup>	1,200	70.4
Branches of banks incorporated under foreign law .....	39	.	.	.
<i>of which EU-based</i> .....	25	.	.	.

<sup>1</sup> Non-full-size branches excluded. <sup>2</sup> 937 non-full-size branches excluded.

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

	1989	1990	1991	1992	1993
Cash dispensers and ATMs:					
<i>Number of networks</i> .....	3	3	3	3	3
<i>Number of machines</i> .....	913	939	1,052	1,096	1,197
<i>Volume of transactions (millions)</i> .....	67.89	70.86	80.79	88.33	91.67
<i>Value of transactions (BEF billions)</i> .....	228.63	248.52	296.71	331.67	349.49
EFTPOS:					
<i>Number of networks</i> <sup>1</sup> .....	5	5	6	6	6
<i>Number of terminals</i> .....	24,644	28,253	32,199	40,627	52,984
<i>Volume of transactions (millions)</i> <sup>2</sup> .....	66.84	80.34	104.06	131.44	157.81
<i>Value of transactions (BEF billions)</i> <sup>2</sup> .....	103.14	142.64	203.01	276.85	344.43

<sup>1</sup> Six companies have their own POS terminals, but the payments are all managed by Banksys. <sup>2</sup> Figures now include payments with credit cards at POS terminals.

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

	1989	1990	1991	1992	1993
Cards with a cash function .....	5,547	6,377	6,857	7,792	8,316
Cards with a debit/credit function <sup>1</sup> .....	5,655	6,485	6,967	7,907	8,431
<i>of which:</i>					
<i>cards with a debit function</i>	4,672	5,250	5,466	6,101	6,434
<i>cards with a credit function<sup>2</sup></i> .....	983	1,235	1,501	1,806	1,997
Cards with a cheque guarantee function .....	4,228	4,651	4,653	4,598	5,367
Retailer cards .....	736	688	767	913	1,002

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

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

	1989	1990	1991	1992	1993
Clearing House .....	31.63	27.87	27.28	24.67	22.52
<i>Securities clearing</i>					
<i>balances</i> <sup>1</sup> .....					
<i>Postal drafts</i> .....	3.19	2.90	2.63	2.21	2.19
<i>FX transactions</i> <sup>2</sup> .....	0.06	0.07	0.03	0.46	0.94
<i>Debits</i> .....	6.50	5.87	6.22	5.55	4.82
<i>Ordinary credits</i> .....	3.98	3.86	3.88	3.35	2.46
<i>Bilaterally exchanged</i>					
<i>credits</i> .....	8.89	6.92	7.61	7.65	7.16
<i>Province</i> .....	8.96	8.21	6.90	5.45	4.95
<i>Others</i> .....	0.05	0.04	0.01	0.00	0.00
CEC .....	549.65	610.33	652.12	695.20	740.25
Direct debits .....	39.10	45.32	50.76	56.53	61.94
<i>of which:</i>					
<i>ordinary direct debits</i> .....	38.19	44.08	49.27	54.71	59.89
<i>refunds</i> .....	0.43	0.51	0.50	0.49	0.51
<i>unpaid direct debits</i> .....	0.48	0.73	0.98	1.33	1.54
Other debit operations .....	234.51	260.07	275.35	290.43	306.33
<i>of which:</i>					
<i>truncated cheques</i> .....	113.53	114.88	110.35	98.85	91.35
<i>ATMs and POS</i> .....	120.98	145.19	164.92	191.31	214.61
<i>unpaid cheques</i> <sup>3</sup> .....			0.08	0.27	0.37
Credit transfers .....	276.04	304.93	325.94	348.08	371.21
<i>of which:</i>					
<i>ordinary credit transfers</i> ....	261.92	283.96	298.35	314.59	327.78
<i>counterparty postal</i>					
<i>drafts</i> .....	5.00	4.26	3.77	3.52	3.34
<i>counterparty ATM-POS</i> .....	9.11	16.71	23.82	29.97	40.09
Large-value credit transfers .....	.	0.01	0.07	0.16	0.77

<sup>1</sup> Negligible quantity. <sup>2</sup> The break in series is due to a more detailed breakdown of the related credit transfers. <sup>3</sup> The application started in June 1991.

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

	1989	1990	1991	1992	1993
Clearing House .....	164,687	181,193	187,000	203,067	298,952
<i>Securities clearing balances<sup>1</sup></i> .....	.	.	5,255	5,531	8,651
<i>Postal drafts</i> .....	63	41	39	43	42
<i>FX transactions<sup>2</sup></i> .....	16,224	14,037	11,841	21,970	71,951
<i>Debits</i> .....	11,858	20,820	18,465	18,482	18,632
<i>Ordinary credits</i> .....	102,160	115,828	137,951	149,278	191,255
<i>Bilaterally exchanged credits</i> .....	209	162	295	250	234
<i>Province</i> .....	9,264	9,451	5,833	6,518	8,174
<i>Others</i> .....	24,909	20,854	7,321	995	13
CEC .....	8,125	9,529	12,334	15,928	21,827
Direct debits .....	218	259	299	341	367
<i>of which:</i>					
<i>ordinary direct debits</i> .....	210	248	286	324	350
<i>refunds</i> .....	3	4	4	5	5
<i>unpaid direct debits</i> .....	5	7	9	12	12
Other debit operations .....	1,427	1,548	1,627	1,699	1,787
<i>of which:</i>					
<i>truncated cheques</i> .....	1,108	1,161	1,170	1,158	1,166
<i>ATMs and POS</i> .....	319	387	455	541	610
<i>unpaid cheques<sup>3</sup></i> .....			2	7	11
Credit transfers .....	6,480	7,474	8,298	9,322	9,733
<i>of which:</i>					
<i>ordinary credits</i> .....	6,118	7,047	7,806	8,746	9,091
<i>counterparty postal drafts</i> ..	55	49	46	44	43
<i>counterparty ATM-POS</i> .....	307	378	446	532	599
Large-value credit transfers .....	.	248	2,111	4,566	9,940

<sup>1</sup> In January 1991 the NBB launched a securities clearing system for dematerialised Treasury certificates and linear bonds. <sup>2</sup> The break in series is due to a more detailed breakdown of the related credit transfers. <sup>3</sup> The application started in June 1991.

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

	1989	1990	1991	1992	1993
NBB clearing: <sup>1</sup>					
<i>Treasury certificates</i> .....	.	.	14,435	19,430	30,170
<i>Linear bonds</i> .....	.	.	38,914	60,857	117,014
CiK:					
<i>Equity transactions     (millions)</i> .....	277.6	269.3	260.8	253.1	565.9 <sup>2</sup>

<sup>1</sup> In January 1991 the NBB launched a securities clearing system for dematerialised Treasury certificates and linear bonds. <sup>2</sup> The volume of equity transactions refers to the number of shares traded; the number of actual transactions is estimated at about 610,000.

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

	1989	1990	1991	1992	1993
NBB clearing: <sup>1</sup>					
<i>Treasury certificates</i> .....	.	.	6,999	9,694	21,473
<i>Linear bonds</i> .....	.	.	3,990	8,567	14,331
CiK:					
<i>Equity transactions</i> .....	418.0	319.2	290.0	315.6	494.4

<sup>1</sup> In January 1991 the NBB launched a securities clearing system for dematerialised Treasury certificates and linear bonds.

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

Instruments	1989	1990	1991	1992	1993
Cheques issued .....	230.5	206.6	193.8	174.2	163.1
Payments by debit and credit cards .....	78.7	95.5	119.3	144.7	169.2
Paper-based credit transfers .....	6.0	5.6	5.2	4.6	3.4
Paperless credit transfers .....	460.6	495.9	506.6	524.0	595.7
Direct debits <sup>1</sup> .....	57.3	65.9	73.2	81.3	92.8
Other .....	.	.	.	.	.
<b>Total .....</b>	<b>833.1</b>	<b>869.5</b>	<b>898.1</b>	<b>928.8</b>	<b>1,024.2</b>

<sup>1</sup> Revised figures.

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

Instruments	1989	1990	1991	1992	1993
Cheques issued .....	13,713	12,179	9,937	12,460	13,693
Payments by debit and credit cards .....	153	205	262	331	388
Paper-based credit transfers .....	108,841	122,389	141,592	153,511	196,896
Paperless credit transfers <sup>1</sup> .....	24,625	27,654	32,808	35,284	40,476
Direct debits <sup>1</sup> .....	317	374	430	485	640
Other .....	.	.	.	.	.
<b>Total .....</b>	<b>147,649</b>	<b>162,801</b>	<b>185,029</b>	<b>202,071</b>	<b>252,093</b>

<sup>1</sup> Revised figures.

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

	1989	1990	1991	1992	1993
Members .....	32	33	36	35	34
<i>of which: live</i> .....	32	32	33	35	33
Sub-members <sup>1</sup> .....	26	28	35	39	35
<i>of which: live</i> .....	25	25	28	32	33
Participants <sup>2</sup> .....	1	2	1	2	2
<i>of which: live</i> .....	1	2	1	1	2
Total users .....	59	63	66	76	71
<i>of which: live</i> .....	58	59	62	68	68
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i> .....	1,697	1,812	1,963	2,074	2,244
<i>sub-members</i> .....	1,315	1,469	1,607	1,738	1,887
<i>participants</i> .....	37	63	78	91	125
<i>users</i> .....	3,049	3,344	3,648	3,903	4,256

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

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

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

	1989	1990	1991	1992	1993
Total messages sent .....	14,139,694	15,297,042	16,567,543	18,097,152	19,828,726
<i>of which:</i>					
<i>category I<sup>1</sup></i> .....	5,180,098	5,222,108	5,347,697	5,751,632	6,145,021
<i>category II<sup>2</sup></i> .....	3,654,675	4,187,387	4,698,968	5,030,069	5,233,779
<i>of which:</i>					
<i>sent/received to/from</i>					
<i>domestic users</i> .....	2,292,087	2,355,072	2,524,657	2,920,427	3,604,238
Total messages received .....	11,792,454	12,619,118	13,868,647	15,086,640	17,234,167
<i>of which:</i>					
<i>category I<sup>1</sup></i> .....	.	.	.	5,171,658	5,556,991
<i>category II<sup>2</sup></i> .....	.	.	.	3,596,967	4,073,542
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic .....	298,780,982	332,895,932	365,159,291	405,540,962	457,218,200

<sup>1</sup> Category I: customer (funds) transfers. <sup>2</sup> Category II: bank (funds) transfers.

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



Table 1  
Basic statistical data

	1989	1990	1991	1992	1993
Population (millions):					
<i>year-end</i> .....	27.5	27.9	28.2	28.6	29.0
<i>average</i> .....	27.3	27.7	28.0	28.5	28.9
GDP (CAD billions) .....	650.8	671.0	676.0	688.5	710.7
GDP per capita .....	23,812.0	24,224.0	24,142.0	24,128.0	24,592.0
Exchange rate (domestic currency vis-à-vis USD):					
<i>year-end</i> <sup>1</sup> .....	1.1585	1.1599	1.1555	1.2709	1.3217
<i>average</i> <sup>2</sup> .....	1.1842	1.1668	1.1458	1.2083	1.2898

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

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

	1989	1990	1991	1992	1993
Notes and coin .....	19,108	19,777	21,051	22,790	24,400
Narrow money supply (M <sub>1</sub> ) .....	43,549	42,915	45,018	48,706	55,441
<i>Memorandum item:</i>					
Broad money supply (M <sub>2</sub> <sup>+</sup> ) .....	456,454	499,117	534,626	558,927	579,250
Transferable deposits <sup>1</sup>					
<i>of which held by:</i>					
<i>households</i> .....	96,792	97,896	103,992	108,560	117,674
<i>corporate sector</i> .....	508	471	386	388	232
<i>other</i> <sup>2</sup> .....	18,496	18,382	17,173	18,408	20,738

<sup>1</sup> Canadian dollar deposit liabilities only. <sup>2</sup> Including non-deposit-taking financial institutions.

Table 3  
**Settlement media used by credit/deposit-taking institutions**  
 (at year-end, in millions of Canadian dollars)

	1989	1990	1991	1992	1993
Reserve or settlement balances held at central bank .....	1,864	1,721	1,433	1,201	1,295
Reserve or settlement balances held at other deposit-taking institutions <sup>1</sup> .....	149	139	118	112	123
<i>Memorandum items:</i>					
Required reserves .....	5,454	5,391	5,466	5,225	4,981
Institutions' borrowing from central bank <sup>2</sup> .....	62	79	298	155	214

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

Table 4

**Banknotes and coin**

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

	1989	1990	1991	1992	1993
Total banknotes and coin outstanding .....	24,204,720	25,210,932	26,766,713	27,978,336	29,697,901
Coinage .....	2,112,146	2,240,895	2,285,284	2,369,102	2,461,232
Denomination of banknotes: <sup>1</sup>					
1,000 dollars .....	1,343,758	1,380,135	1,512,989	1,764,341	2,080,675
500 dollars .....	23	23	23	23	23
100 dollars .....	7,274,605	7,676,995	8,470,370	9,446,389	10,395,069
50 dollars .....	3,306,316	3,436,616	3,649,557	3,768,243	3,862,611
25 dollars .....	46	46	46	46	46
20 dollars .....	7,578,850	7,936,798	8,199,334	8,117,219	8,433,602
10 dollars .....	1,295,574	1,166,303	1,158,192	1,104,404	1,075,244
5 dollars .....	708,192	785,781	891,388	798,979	767,715
2 dollars .....	376,987	402,933	418,493	430,334	443,765
1 dollar .....	195,350	171,534	168,164	166,383	165,046
Other .....	12,873	12,873	12,873	12,873	12,873
Banknotes held by deposit-taking institutions <sup>2</sup> .....	4,352,603	4,972,428	5,389,586	4,640,831	4,713,372
Total banknotes outside deposit-taking institutions .....	17,739,971	17,997,167	19,091,843	20,968,403	22,523,297

<sup>1</sup> Value of all notes outstanding at the end of the year. <sup>2</sup> Value of notes held by chartered banks. Excludes value of notes held by non-bank deposit-taking institutions.

Table 5  
**Institutional framework**  
 (at end-1993)

Categories	Number of institutions	Number of branches	Number of transferable deposit accounts (millions)	Value of transferable deposit accounts <sup>1</sup> (CAD millions)
Central bank .....	1	9	.	.
Chartered banks .....	68 <sup>2</sup>	7,880	.	90,233
Local credit unions and caisses populaires .....	2,553	3,901	.	15,688
Trust and loan companies .....	98 <sup>3</sup>	1,842	.	9,473
Governmental savings institutions .....	2 <sup>4</sup>	180	.	2,280
Post Office .....	.	.	.	.
<i>Memorandum item:</i>				
Branches of foreign deposit-taking institutions .....	.	.	.	.

<sup>1</sup> Household sector only. <sup>2</sup> Six operate nationwide. <sup>3</sup> Only a few operate nationwide. Figure excludes those trust and loan companies that do not accept transferable deposits. <sup>4</sup> Operate only in Alberta or Ontario.

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

	1989	1990	1991	1992	1993
<b>Cash dispensers and ATMs:</b>					
Number of networks .....	40	40	40	40	40
Number of machines <sup>2</sup> .....					
<b>Total</b> .....	<b>9,120</b>	<b>11,730</b>	<b>13,175</b>	<b>14,596</b>	<b>16,078</b>
<i>of which:</i>					
<i>Owned by member institutions of the Canadian Payments Association</i> .....					
	8,970	11,708	13,154	14,576	16,058
<i>Owned or operated by other entities</i> .....					
	150	22	21	20	20
Volume of transactions (millions):					
<b>Total</b> .....	<b>755.3</b>	<b>786.9</b>	<b>941.5</b>	<b>1,024.8</b>	<b>1,084.8</b>
<i>of which:</i>					
<i>Withdrawals</i> .....	536.7	560.1	689.6	757.4	796.4
<i>Deposits</i> .....	105.8	110.9	122.4	124.0	130.5
<i>Bill payments</i> .....	22.1	25.2	28.4	32.6	36.1
<i>Inter-account transfers</i> .....	37.8	36.4	44.3	50.6	56.8
<i>Balance inquiries</i> .....	52.9	54.3	56.8	60.2	65.0
Value of transactions (CAD billions):					
<i>Withdrawals</i> .....	33.3	35.8	44.8	50.7	55.0
<i>Deposits</i> .....	.	.	.	.	.
<i>Bill payments</i> .....	1.7	1.9	2.1	2.4	2.7
<i>Inter-account transfers</i> .....	.	.	.	.	.
<i>Balance inquiries</i> .....	.	.	.	.	.
<b>EFTPOS:</b>					
<i>Number of networks</i> .....	7	10	11	11	10
<i>Number of terminals</i> .....	4,287	9,250	13,300	29,600	61,900
<i>Volume of transactions (millions)</i> .....	2.4	3.3	10.3	30.3	74.0
<i>Value of transactions (CAD billions)</i> .....	0.1	0.2	0.5	1.6	3.7

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

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

	1989	1990	1991	1992	1993
Debit cards issued by deposit-taking institutions .....	15.0	16.3	17.5	18.5	22.5
Credit cards issued by deposit-taking institutions <sup>2,3</sup> .....	20.4	23.2	24.3	24.4	25.0
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 .....	100.0	115.0	120.0	125.0	125.0

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

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

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

	1989	1990	1991	1992	1993
National clearing and settlement system:					
<i>Small cheques</i> .....	1,794.8	1,824.3	1,798.0	1,758.4	1,737.8
<i>Large cheques (over CAD 50,000)</i> .....	8.0	7.4	7.5	6.8	7.5
<i>Unqualified<sup>2</sup></i> .....	12.3	11.9	12.3	12.2	12.8
<i>Tape clearings<sup>3</sup></i> .....	6.7	6.4	5.8	3.2	0.0
<i>EDI</i> .....	.	.	.	0.0 <sup>4</sup>	0.0 <sup>4</sup>
<i>Magnetic tape credits</i> .....	66.5	77.3	87.2	98.7	127.2
<i>Magnetic tape debits</i> .....	59.0	76.7	97.2	122.1	149.0
<i>Shared ABM networks</i> .....	90.2	132.2	169.8	201.4	236.2
<i>Point of sale</i> .....	0.0 <sup>4</sup>	0.4	2.1	6.0	40.7
<b>Total</b> .....	<b>2,037.6</b>	<b>2,136.5</b>	<b>2,180.0</b>	<b>2,209.0</b>	<b>2,311.1</b>
Interbank International Payment System .....	.	.	1.6	1.8	2.1

<sup>1</sup> Owing to the rounding of figures, components may not always add to the total shown. <sup>2</sup> Payment items either that have been returned principally because of insufficient funds in the payer's account or because of stop-payment orders or that do not meet the standards and specifications for MICR-encoded documents of the Canadian Payments Association. <sup>3</sup> Payment items that have had the relevant information stripped from them following sorting. The information is exchanged between Direct Clearers on magnetic tape on a bilateral basis at a limited number of Regional Settlement Points. The physical items are exchanged subsequently. <sup>4</sup> Insignificant.

Table 9  
**Payment instructions handled by selected payment systems:  
 value of transactions<sup>1</sup>**  
 (in billions of Canadian dollars)

	1989	1990	1991	1992	1993
National clearing and settlement system:					
<i>Small cheques</i> .....	1,023.4	1,058.6	1,015.0	1,014.6	1,026.3
<i>Large cheques (over CAD 50,000)</i> .....	15,576.4	16,242.2	16,939.3	17,125.0	19,209.7
<i>Unqualified<sup>2</sup></i> .....	14.7	25.0	39.4	18.0	26.8
<i>Tape clearings<sup>3</sup></i> .....	6.5	6.5	6.0	3.7	0.0
<i>EDI</i> .....	.	.	.	0.2	2.4
<i>Magnetic tape credits</i> .....	67.9	83.7	102.6	126.4	141.9
<i>Magnetic tape debits</i> .....	14.4	18.3	24.0	31.9	37.9
<i>Shared ABM networks</i> .....	5.6	8.4	11.0	13.4	16.3
<i>Point of sale</i> .....	0.0 <sup>4</sup>	0.0 <sup>4</sup>	0.1	0.5	2.3
<i>Total</i> .....	16,709.0	17,442.9	18,137.6	18,333.8	20,463.7
Interbank International Payment System .....	.	.	7,500.0	10,100.0	12,977.4

<sup>1</sup> Owing to the rounding of figures, components may not always add to the total shown. <sup>2</sup> Payment items either that have been returned principally because of insufficient funds in the payer's account or because of stop-payment orders or that do not meet the standards and specifications for MICR-encoded documents of the Canadian Payments Association. <sup>3</sup> Payment items that have had the relevant information stripped from them following sorting. The information is exchanged between Direct Clearers on magnetic tape on a bilateral basis at a limited number of Regional Settlement Points. The physical items are exchanged subsequently. <sup>4</sup> Insignificant.

Table 10  
**Transfer instructions handled by securities settlement systems:  
 volume of transactions**  
 (for the twelve-month period ended 31st October)

	1990	1991	1992	1993	1994
Number of trades reported to CDS <sup>1,2</sup> (millions) .....	5.8	5.4	6.7	9.9	10.6
<i>Memorandum item:</i>					
Value of eligible securities <sup>3</sup> (CAD billions)	251	379	465	594	699

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



Table 11

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

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

	1990	1991	1992	1993	1994
Value of settlement amounts (not nets) of trades <sup>1</sup>					
<i>Total</i> .....	.	.	.	15.9	20.5
<i>of which:</i>					
<i>Government of Canada domestic marketable bonds</i> .....	.	.	.	13.7	17.5
<i>other</i> .....	.	.	.	2.2	3.0

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

Table 12

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

(in millions; all figures are estimates)

Instruments	1989	1990	1991	1992	1993
Cheques and other paper payment instruments issued .....	2,186.2	2,220.0	2,188.3	2,135.5	2,109.6
Payments by credit card .....	820.0	887.7	926.7	959.0	1,043.7
Payments by debit card at the point of sale (EFTPOS) .....	2.4	3.3	10.3	30.3	74.0
Paper-based credit transfers .....	.	.	.	.	.
Paperless credit transfers .....	101.9	117.9	133.0	151.0	188.8
<i>customer initiated</i> <sup>1</sup> .....	22.1	25.2	28.4	32.6	36.1
<i>interbank/large-value</i> .....	.	.	.	.	.
<i>direct credits</i> .....	79.8	92.7	104.6	118.4	152.7
Direct debits .....	70.8	92.0	116.7	146.6	178.8
<b>Total</b> .....	<b>3,181.3</b>	<b>3,320.9</b>	<b>3,375.0</b>	<b>3,422.4</b>	<b>3,594.9</b>

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

Table 13  
**Indicators of use of various cashless payment instruments:  
 value of transactions**  
 (in billions of Canadian dollars; all figures are estimates)

Instruments	1989	1990	1991	1992	1993
Cheques and other paper payment instruments issued .....	19,943.9	20,798.8	21,599.7	21,792.0	24,315.4
Payments by credit card .....	55.3	59.7	62.5	66.4	73.6
Payments by debit card at the point of sale (EFTPOS) .....	0.1	0.2	0.5	1.6	3.7
Paper-based credit transfers .....	.	.	.	.	.
Paperless credit transfers .....	83.2	102.3	125.2	154.0	173.0
<i>customer initiated</i> <sup>1</sup> .....	1.7	1.9	2.1	2.4	2.7
<i>interbank/large-value</i> .....	.	.	.	.	.
<i>direct credits</i> .....	81.5	100.4	123.1	151.6	170.3
Direct debits .....	17.3	22.0	28.8	38.3	45.6
<b>Total</b> .....	<b>20,099.8</b>	<b>20,983.0</b>	<b>21,816.7</b>	<b>22,052.7</b>	<b>24,611.3</b>

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

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

	1989	1990	1991	1992	1993
Members .....	13	14	14	15	14
<i>of which: live</i> .....	13	14	14	13	14
Sub-members <sup>1</sup> .....	25	28	29	28	31
<i>of which: live</i> .....	23	26	27	27	30
Participants <sup>2</sup> .....	0	1	1	1	2
<i>of which: live</i> .....	0	0	1	1	1
Total users .....	38	43	44	44	47
<i>of which: live</i> .....	36	40	42	41	45
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i> .....	1,697	1,812	1,963	2,074	2,244
<i>sub-members</i> .....	1,315	1,469	1,607	1,738	1,887
<i>participants</i> .....	37	63	78	91	125
<i>users</i> .....	3,049	3,344	3,648	3,903	4,256

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

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

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

	1989	1990	1991	1992	1993
Total messages sent .....	6,754,350	7,579,453	8,420,902	9,200,133	9,883,583
<i>of which:</i>					
<i>category I</i> <sup>1</sup> .....	1,415,240	1,492,352	1,721,023	1,971,465	2,334,799
<i>category II</i> <sup>2</sup> .....	2,479,377	2,754,512	3,028,624	3,241,260	3,218,948
<i>of which:</i>					
<i>sent/received</i> <i>to/from domestic</i> <i>users</i> .....	2,043,229	2,298,169	2,544,210	2,808,125	2,927,646
Total messages received .....	6,103,467	7,043,854	7,960,221	8,541,677	8,872,447
<i>of which:</i>					
<i>category I</i> <sup>1</sup> .....	.	.	.	2,463,012	2,657,324
<i>category II</i> <sup>2</sup> .....	.	.	.	3,444,189	3,496,285
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic .....	298,780,982	332,895,932	365,159,291	405,540,962	457,218,200

<sup>1</sup> Category I: customer (funds) transfers. <sup>2</sup> Category II: bank (funds) transfers.

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



Table 1  
Basic statistical data

	1989	1990	1991	1992	1993
Population:					
<i>year-end (millions) .....</i>	56.3	56.6	56.9	57.2	57.7
GDP (FRF billions) .....	6,159.7	6,505.5	6,746.9	6,997.6	7,093.7
GDP per capita .....	109,409	114,938	118,575	122,336	122,941
Exchange rate (domestic currency vis-à-vis USD):					
<i>year-end .....</i>	5.788	5.129	5.180	5.393	5.842
<i>average .....</i>	6.381	5.447	5.642	5.294	5.663

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

	1989	1990	1991	1992	1993
Notes and coin .....	246.5	255.5	254.4	255.5	252.4
Transferable deposits <sup>1</sup> .....	1,378.6	1,433.0	1,354.7	1,351.6	1,377.0
<i>of which held by:</i>					
<i>corporate sector .....</i>	330.9	346.3	367.5	352.8	381.7
<i>households .....</i>	758.4	782.9	715.3	743.7	742.2
<i>others .....</i>	289.3	303.8	271.9	255.2	253.1
Narrow money supply (M <sub>1</sub> ) <sup>2</sup> ....	1,625.0	1,688.5	1,609.2	1,607.1	1,629.4
Broad money supply (M <sub>3</sub> ) <sup>3</sup> .....	4,614.2	5,024.9	5,160.7	5,429.8	5,347.9

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

Table 3  
**Settlement media used by banks**  
 (at year-end, not seasonally adjusted, in billions of French francs)

	1989	1990	1991	1992	1993
Reserve balances held at central bank <sup>1</sup> .....	81.7	67.3	52.2	18.9	20.2
Transferable deposits at other institutions .....	2,965.9	2,926.1	2,846.9	2,482.9	2,631.4
Accounts at the Post Office .....	1.6	1.4	1.3	1.4	.
Accounts at the Treasury .....	15.7	8.7	12.5	4.7	.
<i>Memorandum items:</i>					
Required reserves .....	80.9	66.0	50.9	18.4	19.3
Institutions' borrowing from central bank <sup>2</sup> .....	263.3	172.5	187.3	321.0	392.5

<sup>1</sup> Monthly average. <sup>2</sup> Net stock; calls for tender, repurchase agreements and discounting operations.

Table 4

**Banknotes and coin**

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

	1989	1990	1991	1992	1993
Total banknotes and coin issued <sup>1</sup> .....	268.7	280.4	281.3	283.5	280.7
Denomination of banknotes: <sup>1</sup>					
500 francs .....	127.4	132.8	134.1	134.1	133.8
200 francs .....	61.5	67.6	70.3	73.4	74.5
100 francs .....	56.3	55.3	52.4	50.6	47.8
50 francs .....	5.8	5.9	5.9	6.0	6.5
20 francs .....	1.1	1.2	1.2	1.1	1.0
10 francs .....	0.4	0.4	.	.	.
Banknotes and coin held by credit institutions <sup>2</sup> .....	12.8	14.3	15.3	15.6	14.8
Total banknotes and coin outside credit institutions <sup>2</sup>	246.5	255.5	254.4	255.5	252.4
<i>Memorandum item:</i>					
Banknotes held in overseas territories .....	9.5	10.6	11.5	12.4	13.5

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

Table 5  
**Institutional framework**  
 (at end-1993)

Categories	Number of institutions	Number of branches	Number of accounts <sup>2</sup> (thousands)	Value of accounts (FRF billions)
Central bank .....	1	211	88	3.2
Commercial banks .....	425 <sup>1</sup>	10,442	18,360	536.4
Savings banks .....	35	4,264	9,156	48.3
Cooperative and rural banks .....	146	10,718	22,780	377.1
Post Office .....	1	16,877	9,642	168.1
Municipal credit banks .....	21	76	82	0.7
Treasury .....	1	3,752	837	131.4

<sup>1</sup> Branches of foreign banks: 84; foreign-owned banks: 96. <sup>2</sup> Sight deposits.

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

	1989	1990	1991	1992	1993
<b>Cash dispensers and ATMs:</b>					
<i>Number of networks</i> .....	1	1	1	1	1
<i>Number of machines</i> .....	13,031	14,428	16,134	17,432	18,735
<i>Volume of transactions (thousands)</i> <sup>1</sup> .....	493,454	547,720	633,544	694,364	765,734
<i>Value of transactions (FRF millions)</i> <sup>1</sup> .....	227,396	242,822	295,515	316,492	334,083
<b>EFTPOS:</b>					
<i>Number of networks</i> .....	1	1	1	1	1
<i>Number of terminals</i> <sup>2</sup> .....	160,000	180,000	203,000	320,000	429,000
<i>Volume of transactions (thousands)</i> <sup>2</sup> .....	618,000	933,000	1,051,000	1,300,000	1,400,000
<i>Value of transactions (FRF millions)</i> <sup>2</sup> .....	259,357	303,515	346,650	430,000	460,000

<sup>1</sup> Including intrabank cash withdrawals and cash withdrawals processed through selected interbank payment systems. <sup>2</sup> Estimated.



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

	1989	1990	1991	1992	1993
Cards with a cash function .....	18,691	19,469	19,820	21,072	21,812
Cards with a debit/credit function .....	18,597	19,393	19,743	20,892	21,466
<i>of which:</i>					
<i>cards with a debit function</i>	18,597	19,393	19,743	20,892	21,466
<i>cards with a credit function</i>	214	276	345	453	512
Cards with a cheque guarantee function .....	99	86	82	192	193
Retailer cards (estimated) .....	18,000	20,000	20,000	20,000	.

<sup>1</sup> A card with multiple functions 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)

	1989	1990	1991	1992	1993
Clearing houses .....	3,544.1	3,589.4	3,625.9	3,652.0	3,677.4
<i>of which:</i>					
<i>cheques</i> .....	3,494.3	3,547.9	3,597.0	3,633.4	3,663.5
<i>credit transfers</i> .....	8.7	7.2	5.6	3.8	2.8
<i>bills of exchange</i> .....	32.2	25.8	17.8	9.5	6.0
<i>avals de trésorerie</i> .....	0.9	0.6	0.6	0.4	0.5
<i>large-value credit transfers</i>	8.0	7.9	4.9	4.9	4.6
Automated clearing houses .....	2,967.5	3,261.2	3,656.7	3,983.9	4,304.1
CREIC (truncated cheques system) .....	178.8	201.6	214.8	230.8	252.6
Ordinateur de compensation .....	1,591.2	1,722.7	1,874.7	1,811.0	1,467.8
<i>of which:</i>					
<i>credit transfers</i> .....	697.6	742.5	802.2	781.4	657.0
<i>LCRs and paperless bills of exchange</i> .....	113.3	124.1	126.8	124.3	102.1
<i>direct debits</i> .....	508.8	560.2	620.1	588.1	455.8
<i>interbank payment orders</i> ...	7.7	9.0	17.0	41.2	47.1
<i>ATM withdrawals</i> .....	236.2	256.2	269.8	229.2	192.7
<i>card payments</i> .....	27.7	30.7	38.8	46.8	13.1
Interbank Teleclearing System (SIT) .....	.	.	43.7	301.8	764.5
<i>of which:</i>					
<i>credit transfers</i> .....	.	.	18.0	107.5	292.3
<i>LCRs and paperless bills of exchange</i> .....	.	.	3.6	10.5	30.5
<i>direct debits</i> .....	.	.	8.2	90.3	258.2
<i>interbank payment orders</i> ...	.	.	0.2	2.5	20.0
<i>ATM withdrawals</i> .....	.	.	13.7	91.0	163.5
Cartes bancaires .....	1,197.5	1,336.9	1,523.5	1,640.3	1,819.2
<i>ATM withdrawals</i> .....	189.0	189.7	234.6	244.5	267.8
<i>card payments</i> .....	1,008.5	1,174.2	1,288.8	1,395.7	1,551.4
Banque de France .....	50.0	48.2	46.8	42.7	37.6
<i>of which:</i>					
<i>Treasury transfers</i> .....	46.5	45.2	44.0	39.6	34.9
<i>interbank credit transfers</i> ...	0.8	0.5	0.4	0.9	0.4
<i>Banque de France large-value credit transfers</i> .....	2.0	1.7	1.5	1.3	1.1
<i>telegraphic credit transfers</i>	0.7	0.8	0.9	0.9	1.2
Sagittaire large-value credit transfers .....	1.8	2.5	2.9	3.3	3.9

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

	1989	1990	1991	1992	1993
Clearing houses .....	116,558.4	128,205.4	120,023.5	128,371.3	156,778.5
<i>of which:</i>					
<i>cheques</i> .....	10,436.5	11,357.2	11,634.9	11,582.0	11,130.4
<i>credit transfers</i> .....	1,044.7	1,150.6	1,228.3	1,275.5	1,277.5
<i>bills of exchange</i> .....	812.1	663.0	509.3	316.1	199.0
<i>avals de trésorerie</i> .....	72,068.5	80,861.0	71,354.0	73,179.0	79,277.8
<i>large-value credit transfers</i>	32,196.6	34,173.6	35,297.0	42,018.7	64,893.8
Automated clearing houses .....	6,108.5	6,979.0	7,946.4	8,609.8	9,127.2
CREIC (truncated cheques system) .....	97.1	111.1	119.8	129.1	140.6
Ordinateur de compensation .....	5,604.4	6,398.4	7,178.6	7,661.6	6,731.4
<i>of which:</i>					
<i>credit transfers</i> .....	2,294.2	2,639.4	3,104.3	3,458.6	3,292.5
<i>LCRs and paperless bills of exchange</i> .....	2,446.1	2,774.6	2,969.3	3,065.5	2,521.6
<i>direct debits</i> .....	740.6	850.1	959.7	991.2	786.3
<i>interbank payment orders</i> ...	17.8	21.1	29.0	47.2	54.1
<i>ATM withdrawals</i> .....	100.6	106.8	107.9	88.7	73.9
<i>card payments</i> .....	5.1	6.4	8.4	10.4	3.0
Interbank Teleclearing System (SIT) .....	.	.	98.8	234.9	1,618.2
<i>of which:</i>					
<i>credit transfers</i> .....	.	.	43.8	103.8	783.1
<i>LCRs and paperless bills of exchange</i> .....	.	.	39.1	23.9	434.7
<i>direct debits</i> .....	.	.	9.8	69.0	320.6
<i>interbank payment orders</i> ...	.	.	0.6	2.6	15.3
<i>ATM withdrawals</i> .....	.	.	5.5	35.6	61.5
Cartes bancaires .....	407.0	469.4	549.2	584.2	637.0
<i>ATM withdrawals</i> .....	91.7	95.5	120.9	119.3	128.7
<i>card payments</i> .....	315.3	373.9	428.3	464.9	508.3
Banque de France .....	33,401.5	37,054.1	40,378.3	42,547.8	44,346.3
<i>of which:</i>					
<i>Treasury transfers</i> .....	655.9	746.7	691.8	467.8	457.8
<i>interbank credit transfers</i> ...	141.1	160.0	158.6	131.3	199.8
<i>Banque de France large-value credit transfers</i> .....	25,804.1	28,589.7	32,015.4	34,466.4	36,022.6
<i>telegraphic credit transfers</i>	6,800.4	7,557.7	7,512.5	7,482.3	7,666.1
Sagittaire large-value credit transfers .....	22,794.0	35,393.0	43,845.0	59,219.0	108,750.0

Table 10

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

	1989	1990	1991	1992	1993
<b>SATURNE:</b>					
<i>Treasury bills</i> .....	98,373	102,374	109,837	126,904	172,254
<i>BMTN</i> <sup>1</sup> .....	.	.	.	3,639	9,542
<i>Other TCN</i> <sup>2</sup> .....	.	.	8,378	6,160	15,809

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

Table 11

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

	1989	1990	1991	1992	1993
<b>SATURNE:</b>					
<i>Treasury bills</i> .....	3,945.2	3,971.7	5,203.8	10,199.8	19,673.2
<i>BMTN</i> <sup>1</sup> .....	.	.	.	174.8	436.7
<i>Other TCN</i> <sup>2</sup> .....	.	.	373.3	342.9	1,169.1
<b>RELIT:</b> <sup>3</sup>					
<i>Treasury bonds</i> .....	.	.	.	11,400	21,600
<i>French stocks</i> .....	.	.	.	2,600	5,100
<i>Mutual funds</i> .....	.	.	.	8,200	18,000
<i>Others</i> .....	.	.	.	3,800	5,300

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

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

<b>Instruments</b>	<b>1989</b>	<b>1990</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>
Cheques issued .....	4,627.2	4,876.8	4,776.4	4,868.7	4,909.0
Payments by debit and credit card .....	1,036.2	1,177.9	1,327.7	1,442.5	1,564.5
Paper-based credit transfers .....	112.7	98.0	88.3	77.0	66.4
<i>of which:</i>					
<i>customer initiated</i> .....	100.3	86.5	80.0	68.6	58.6
<i>interbank/large-value</i> .....	12.4	11.5	8.3	8.4	7.8
Paperless credit transfers	1,159.5	1,243.7	1,302.7	1,404.0	1,472.8
<i>of which:</i>					
<i>customer initiated</i> .....	1,157.7	1,241.2	1,299.8	1,400.7	1,468.9
<i>interbank/large-value</i> .....	1.8	2.5	2.9	3.3	3.9
Direct debits .....	767.3	844.9	853.7	979.6	1,057.8
Bills of exchange .....	192.1	170.0	163.3	159.3	153.6
ATM withdrawals .....	493.5	547.7	633.5	694.4	765.7
<b>Total</b> .....	<b>8,388.5</b>	<b>8,959.0</b>	<b>9,145.6</b>	<b>9,625.5</b>	<b>9,989.8</b>

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

<b>Instruments</b>	<b>1989</b>	<b>1990</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>
Cheques issued .....	17,582	18,783	16,276	16,099	15,291
Payments by debit and credit card .....	320	380	437	475	511
Paper-based credit transfers .....	139,722	154,316	149,421	160,075	194,391
<i>of which:</i>					
<i>customer initiated</i> .....	2,711	2,974	3,083	2,797	6,331
<i>interbank/large-value</i> .....	137,011	151,342	146,338	157,278	188,060
Paperless credit transfers .....	27,830	41,137	50,231	68,816	119,550
<i>of which:</i>					
<i>customer initiated</i> .....	5,036	5,744	6,386	9,597	10,800
<i>interbank/large-value</i> .....	22,794	35,393	43,845	59,219	108,750
Direct debits .....	1,467	1,359	1,499	1,557	2,314
Bills of exchange .....	3,800	3,826	3,813	3,690	3,445
ATM withdrawals .....	227	243	296	316	334
<b>Total</b> .....	<b>190,948</b>	<b>220,044</b>	<b>221,973</b>	<b>251,028</b>	<b>335,836</b>

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

	1989	1990	1991	1992	1993
Members .....	100	103	105	109	105
<i>of which: live</i> .....	96	100	104	101	98
Sub-members <sup>2</sup> .....	63	72	83	87	93
<i>of which: live</i> .....	56	66	81	80	91
Participants <sup>3</sup> .....	3	3	4	4	4
<i>of which: live</i> .....	1	2	3	3	3
Total users .....	166	178	192	200	202
<i>of which: live</i> .....	153	168	188	184	192
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i> .....	1,697	1,812	1,963	2,074	2,244
<i>sub-members</i> .....	1,315	1,469	1,607	1,738	1,887
<i>participants</i> .....	37	63	78	91	125
<i>users</i> .....	3,049	3,344	3,648	3,903	4,256

<sup>1</sup> Data for France include Monaco, Guadeloupe, Martinique and Reunion. <sup>2</sup> Domestic users sponsored by members abroad. <sup>3</sup> Participants are not shareholders in S.W.I.F.T. and their message traffic over the network is restricted.

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

Table 15  
S.W.I.F.T. message flows to/from domestic users<sup>1</sup>

	1989	1990	1991	1992	1993
Total messages sent .....	23,003,600	25,565,700	27,710,200	30,310,818	34,258,946
<i>of which:</i>					
<i>category I</i> .....	7,810,900	7,607,000	7,999,200	8,533,000	8,966,621
<i>category II</i> .....	7,089,100	8,493,700	9,603,300	10,450,100	11,843,080
<i>sent to domestic users</i> .....	5,758,800	7,233,600	8,226,500	9,386,200	10,963,677
Total messages received .....	19,938,200	23,166,600	25,896,300	28,460,152	31,838,047
<i>of which:</i>					
<i>category I</i> .....	.	.	.	8,753,700	9,216,560
<i>category II</i> .....	.	.	.	10,472,800	12,163,096
<i>received from domestic users</i> ..	.	.	.	11,384,100	.
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic .....	298,780,982	332,895,932	365,159,291	405,540,962	457,218,200

<sup>1</sup> Data for France include Monaco, Guadeloupe, Martinique and Reunion.

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





Table 1  
Basic statistical data

	1989 <sup>1</sup>	1990	1991	1992	1993
Population (millions):					
<i>year-end</i> .....	62.7	79.8	80.3	81.0	81.3
<i>average</i> .....	62.1	79.4	80.0	80.6	81.2
GDP (DEM billions) .....	2,224.4	2,426.0 <sup>1</sup>	2,853.6	3,075.6	3,159.1
GDP per capita (DEM thousands).....	35.8	38.4 <sup>1</sup>	35.7	38.2	38.9
Exchange rate (domestic currency vis-à-vis USD):					
<i>year-end</i> .....	1.6978	1.4940	1.5160	1.6140	1.7263
<i>average</i> .....	1.8813	1.6161	1.6612	1.5595	1.6544

<sup>1</sup> Old Länder only.

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

	1989 <sup>1</sup>	1990	1991	1992	1993
Notes and coin <sup>2</sup> .....	146.9	158.6	171.8	200.5	212.0
Narrow money supply (M <sub>1</sub> ) <sup>3</sup> .....	450.7	584.3	604.0	669.6	726.3
<i>Memorandum item:</i>					
Broad money supply (M <sub>3</sub> ) <sup>3</sup> .....	1,255.6	1,503.0	1,597.7	1,718.7	1,906.6
Transferable deposits <sup>4</sup> .....	310.6	444.9	445.0	469.5	527.8
<i>of which held by:</i>					
<i>households</i> .....	176.3	240.2	253.7	288.5	327.3
<i>corporate sector</i> .....	107.3	151.0	149.2	152.1	158.8
<i>other</i> .....	27.0	53.7	42.1	28.9	41.7

<sup>1</sup> Old Länder only. <sup>2</sup> Currency in circulation (excluding credit institutions' cash balances). <sup>3</sup> M<sub>1</sub> = currency in circulation (excluding credit institutions' cash balances) + domestic non-banks' sight deposits (excluding public sector's deposits held at the central bank). M<sub>2</sub> = M<sub>1</sub> + domestic non-banks' time deposits at less than four years. M<sub>3</sub> = M<sub>2</sub> + savings deposits of domestic non-banks at statutory notice. <sup>4</sup> Sight deposits of domestic non-banks (including deposits held at the central bank).

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

	1989 <sup>1</sup>	1990	1991	1992	1993
Reserve balances held at central bank <sup>2</sup> .....	58.9	70.9	75.0	86.4	60.4
<i>of which:</i>					
<i>required reserves</i> <sup>3</sup> .....	58.1	68.9	73.6	85.2	59.6
Transferable deposits held at other institutions .....	110.4	256.4	226.9	301.2	380.2
<i>Memorandum item:</i>					
Institutions' borrowing from central bank <sup>4</sup> .....	5.2	6.2	1.9	1.6	14.8

<sup>1</sup> Old Länder only. <sup>2</sup> "Actual reserves". <sup>3</sup> After deduction of deductible cash balances. <sup>4</sup> Lombard loans.

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

	1989 <sup>1</sup>	1990	1991	1992	1993
Total banknotes and coin outstanding .....	162.1	179.7	194.6	227.3	238.6
Denomination of banknotes:					
1,000 Mark .....	39.5	40.7	46.9	64.3	68.5
500 Mark .....	19.6	21.1	21.5	24.0	24.3
200 Mark .....	.	6.6	9.6	11.5	11.6
100 Mark .....	66.4	69.6	73.8	82.1	86.8
50 Mark .....	15.0	17.9	18.3	19.4	20.3
20 Mark .....	6.0	6.7	6.7	7.4	7.7
10 Mark .....	3.8	4.0	4.2	4.4	4.7
5 Mark .....	0.3	0.3	0.3	0.3	0.3
Banknotes and coin held by credit institutions .....	15.2	21.1	22.8	26.8	26.7
Total banknotes and coin outside credit institutions <sup>2</sup> .....	146.9	158.6	171.8	200.5	212.0

<sup>1</sup> Old Länder only. <sup>2</sup> Identical with Table 2, "Notes and coin".

Table 5  
**Institutional framework**  
 (at end-1993)

Categories	Number of institutions	Number of branches <sup>1</sup>	Number of accounts (thousands) <sup>2</sup>	Value of accounts (DEM billions)
Central bank .....	1 <sup>3</sup>	188 <sup>3</sup>	37	14.3
Commercial banks <sup>4</sup> .....	407	7,913	16,000	173.6
Savings banks .....	704	19,946	36,700	205.4
Cooperative and rural banks .....	2,780	17,645	21,000	109.0
Postbank .....	1	20,898	4,800	24.8
<i>Memorandum item:</i>				
Branches of foreign banks .....	57	92	.	.

<sup>1</sup> Branches = number of bank offices. <sup>2</sup> Sight accounts of domestic non-banks, partly estimated. <sup>3</sup> The Bundesbank as a legal entity comprises the Central Office (in Frankfurt am Main) and nine Land Central Banks as well as 188 branches. <sup>4</sup> Including mortgage banks, instalment sales financing institutions, banks with special functions and building and loan associations.

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

	1989 <sup>2</sup>	1990	1991	1992	1993
Cash dispensers and ATMs:					
<i>Number of networks</i> .....	4	4	4	4	4
<i>Number of machines</i> .....	9,300	11,300	13,750	19,000	25,000
<i>Volume of transactions</i> .....	.	.	.	.	.
<i>Value of transactions</i> .....	.	.	.	.	.
EFTPOS:					
<i>Number of networks</i> <sup>3</sup> .....	5	11	18	19	17
<i>Number of machines</i> <sup>3</sup> .....	10,928	23,152	34,673	51,806	28,000
<i>Volume of transactions (millions)</i> <sup>4</sup> .....	0.8	3.5	20.2	28.0	69.1
<i>Value of transactions (DEM billions)</i> <sup>4</sup> .....	0.1	0.2	1.8	1.9	6.2

<sup>1</sup> Partly estimated. <sup>2</sup> Old Länder only. <sup>3</sup> From 1993 on, electronic cash and POZ procedures only. Up to 1993, non-bank systems also included. <sup>4</sup> From 1993 on, electronic cash and POZ procedures only. In 1991 and 1992, electronic cash and other debit card procedures. In 1989 and 1990, electronic cash procedure only.

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

	1989 <sup>2</sup>	1990	1991	1992	1993
Cards with a cash function .....	.	.	.	.	.
Cards with a debit/credit function .....	25,916	28,726	33,528	39,272	44,842
<i>of which:</i>					
<i>cards with a debit function<sup>3</sup></i> .....	22,281	23,729	27,424	31,863	35,901
<i>cards with a credit function</i> .....	3,635	4,997	6,104	7,409	8,941
Cards with a cheque guarantee function .....	22,281	23,729	27,424	31,863	35,901
Retailer cards .....	.	.	1,500	3,000	.

<sup>1</sup> Partly estimated. <sup>2</sup> Old Länder only. <sup>3</sup> Eurocheque cards, eligible for cash and debit functions in association with a Personal Identification Number (PIN).

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

	1989 <sup>1</sup>	1990	1991	1992	1993
Maschinell-optische Beleglesung (MAOBE) <sup>2</sup> .....	635.3	677.5	667.5	588.5	463.6
<i>Cheques and direct debits</i> ..	346.1	324.5	320.4	291.7	221.4
<i>Credit transfers</i> .....	289.2	353.0	347.1	296.8	242.2
Belegloser Datenträgeraustausch <sup>3</sup> .....	1,513.3	1,744.5	2,094.7	2,061.1	2,149.9
<i>Truncated cheques and direct debits</i> .....	1,306.2	1,475.7	1,698.1	1,616.6	1,636.3
<i>Credit transfers</i> .....	207.1	268.8	396.6	444.5	513.6
Direktverkehr - credit transfers <sup>4</sup> .....	4.0	5.4	5.7	3.1	3.4
<i>of which:</i>					
<i>Eiliger Zahlungsverkehr (EIL-ZV)<sup>5</sup></i> .....	1.4	2.4	3.0	2.6	3.2
<i>of which:</i>					
<i>"by cable"</i> .....	0.8	0.9	1.2	1.9	2.1
Platzüberweisungsverkehr <sup>6</sup> .....	45.1	23.1	80.2	71.9	53.7
Konventionelle Abrechnung <sup>7</sup> ...	248.3	234.4	338.0	381.2	416.4
<i>Cheques and other collection items</i> .....	44.3	40.1	44.8	57.2	95.4
<i>Credit transfers</i> .....	204.0	194.3	293.2	324.0	321.0
Elektronische Abrechnung mit Filetransfer - EAF: <sup>8</sup>					
<i>Credit transfers</i> .....	.	2.3	5.0	7.8	10.9

<sup>1</sup> Old Länder only. <sup>2</sup> OCR document reading. <sup>3</sup> Paperless exchange of data media. <sup>4</sup> Direct traffic between branches of the Deutsche Bundesbank. <sup>5</sup> Electronic intercity credit transfers. <sup>6</sup> Express (paper-based) local credit transfer system. <sup>7</sup> Daily local clearing system. <sup>8</sup> Daily electronic clearing with file transfer.

Table 9  
**Payment instructions handled by payment systems of  
the Deutsche Bundesbank:  
value of transactions**  
(in billions of Deutsche Mark)

	1989 <sup>1</sup>	1990	1991	1992	1993
Maschinell-optische Belegung (MAOBE) <sup>2</sup> .....	2,602.4	2,920.6	3,260.8	3,148.2	2,867.9
<i>Cheques and direct debits</i> ..	2,361.9	2,609.0	2,964.3	2,960.1	2,719.2
<i>Credit transfers</i> .....	240.5	311.6	296.5	188.1	148.7
Belegloser Datenträgeraustausch <sup>3</sup> .....	879.4	1,134.2	1,462.6	1,697.9	1,954.3
<i>Truncated cheques and direct debits</i> .....	570.1	718.7	843.9	872.1	1,011.2
<i>Credit transfers</i> .....	309.3	415.5	618.7	825.8	943.1
Direktverkehr - credit transfers <sup>4</sup> .....	7,683.4	9,469.1	11,764.6	13,977.1	18,243.9
of which:					
<i>Eiliger Zahlungsverkehr (EIL-ZV)</i> <sup>5</sup> .....	6,617.0	8,354.2	10,792.2	13,611.0	18,143.5
of which:					
<i>"by cable"</i> .....	5,721.0	7,208.6	9,705.8	13,349.3	17,750.4
Platzüberweisungsverkehr <sup>6</sup> .....	7,057.8	8,405.2	8,119.2	8,430.2	10,127.5
Konventionelle Abrechnung <sup>7</sup> ...	104,137.9	86,180.2	63,856.3	55,377.1	38,488.5
<i>Cheques and other collection items</i> .....	674.0	698.9	735.7	818.9	827.6
<i>Credit transfers</i> .....	103,463.9	85,481.3	63,120.6	54,558.2	37,660.9
Elektronische Abrechnung mit Filetransfer - EAF: <sup>8</sup>					
<i>Credit transfers</i> .....	.	24,993.1	54,936.2	83,023.1	129,305.0

<sup>1</sup> Old Länder only. <sup>2</sup> OCR document reading. <sup>3</sup> Paperless exchange of data media. <sup>4</sup> Direct traffic between branches of the Deutsche Bundesbank. <sup>5</sup> Electronic intercity credit transfers. <sup>6</sup> Express (paper-based) local credit transfer system. <sup>7</sup> Daily local clearing system. <sup>8</sup> Daily electronic clearing with file transfer.

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

	1989 <sup>2</sup>	1990	1991	1992	1993
<b>Total</b> .....	19.9	22.1	20.5	22.6	27.8
<i>Delivery versus payment</i> ....	11.9	16.2	16.4	16.5	21.9
<i>Without countervalue</i> .....	8.0	5.9	4.1	6.1	5.9

<sup>1</sup> Source: Deutscher Kassenverein AG. <sup>2</sup> Old Länder only.

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

	1989 <sup>2</sup>	1990	1991	1992	1993
Delivery versus payment .....	2,789.5	3,078.3	2,852.9	4,663.5	9,417.8

<sup>1</sup> Source: Deutscher Kassenverein AG. <sup>2</sup> Old Länder only.

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

Instruments	1989 <sup>2</sup>	1990	1991	1992	1993
Cheques issued .....	661.0	784.0	880.0	902.0	934.0
<i>of which:</i>					
<i>truncated</i> <sup>3</sup> .....	413.0	573.0	643.0	658.0	730.0
Payments by credit and debit cards <sup>4</sup> .....	82.6	121.7	170.3	214.0	293.5
Paper-based credit transfers .....	1,684.4	1,835.4	2,012.3	1,991.2	1,959.1
<i>customer initiated</i> .....	1,659.0	1,812.0	1,989.0	1,971.0	1,947.8
<i>interbank/large-value</i> <sup>5</sup> .....	25.4	23.4	23.3	20.2	11.3
Paperless credit transfers .....	1,872.1	2,264.5	2,697.3	3,092.4	3,294.3
<i>customer initiated</i> .....	1,871.0	2,261.0	2,691.0	3,083.0	3,281.2
<i>interbank/large-value</i> <sup>5</sup> .....	1.1	3.5	6.3	9.4	13.1
Direct debits <sup>6</sup> .....	2,589.0	2,939.5	3,419.8	4,016.0	4,811.5
<b>Total</b> .....	<b>6,889.1</b>	<b>7,945.1</b>	<b>9,179.7</b>	<b>10,215.6</b>	<b>11,292.4</b>

<sup>1</sup> Partly estimated. <sup>2</sup> Old Länder only. <sup>3</sup> Not included in direct debits in order to avoid double-counting. <sup>4</sup> Excluding retailer cards. Credit cards: the card companies' settlements with the retailers (normally credit transfers) and payment of the monthly totals by card holders to card issuers by credit transfer, direct debit or cheque are contained in the corresponding items. Debit cards: not included in item "direct debits". <sup>5</sup> Only interbank payments via the Bundesbank in Konventionelle Abrechnung in Frankfurt, Elektronische Abrechnung mit Filetransfer, Eiliger Zahlungsverkehr and Platzüberweisungsverkehr. <sup>6</sup> Including cash dispenser/ATM withdrawals made with eurocheque cards at banks other than that issuing the card.



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

Instruments	1989 <sup>2</sup>	1990	1991	1992	1993
Cheques issued .....	4,644.0	3,997.0	4,443.0	4,583.0	5,343.0
<i>of which:</i>					
<i>truncated</i> <sup>3</sup> .....	123.0	228.0	254.0	261.0	583.0
Payments by credit and debit cards <sup>4</sup> .....	15.9	22.6	30.0	35.7	48.3
Paper-based credit transfers .....	120,675.4	105,029.3	84,343.0	76,837.7	65,984.4
<i>customer initiated</i> .....	13,287.0	14,548.0	16,273.0	19,303.0	24,418.6
<i>interbank/large-value</i> <sup>5</sup> .....	107,388.4	90,481.3	68,070.0	57,534.7	41,565.8
Paperless credit transfers .....	9,766.0	35,646.0	68,349.0	103,156.0	155,854.9
<i>customer initiated</i> .....	3,532.0	4,103.0	5,424.0	9,508.0	11,333.4
<i>interbank/large-value</i> <sup>5</sup> .....	6,234.0	31,543.0	62,925.0	93,648.0	144,521.5
Direct debits <sup>6</sup> .....	2,025.0	2,573.8	2,902.2	3,906.1	4,481.7
<b>Total</b> .....	<b>137,126.3</b>	<b>147,268.7</b>	<b>160,067.2</b>	<b>188,518.5</b>	<b>231,712.3</b>

<sup>1</sup> Partly estimated. <sup>2</sup> Old Länder only. <sup>3</sup> Not included in direct debits in order to avoid double-counting. <sup>4</sup> Excluding retailer cards. Credit cards: the card companies' settlements with the retailers (normally credit transfers) and payment of the monthly totals by card holders to card issuers by credit transfer, direct debit or cheque are contained in the corresponding items. Debit cards: not included in item "direct debits". <sup>5</sup> Only interbank payments via the Bundesbank in Konventionelle Abrechnung in Frankfurt; Elektronische Abrechnung mit Filetransfer, Eiliger Zahlungsverkehr and Platzüberweisungsverkehr. <sup>6</sup> Including cash dispenser/ATM withdrawals made with eurocheque cards at banks other than that issuing the card.

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

	1989	1990	1991	1992	1993
Members .....	135	147	150	152	153
<i>of which: live</i> .....	134	135	144	148	150
Sub-members <sup>1</sup> .....	64	70	81	84	82
<i>of which: live</i> .....	62	61	71	79	78
Participants <sup>2</sup> .....	1	1	1	2	2
<i>of which: live</i> .....	1	1	1	1	2
Total users .....	200	218	232	238	237
<i>of which: live</i> .....	197	197	216	228	230
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i> .....	1,697	1,812	1,963	2,074	2,244
<i>sub-members</i> .....	1,315	1,469	1,607	1,738	1,887
<i>participants</i> .....	37	63	78	91	125
<i>users</i> .....	3,049	3,344	3,648	3,903	4,256

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

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

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

	1989	1990	1991	1992	1993
Total messages sent .....	25,857,693	28,299,791	30,963,599	32,585,476	35,359,560
<i>of which:</i>					
<i>category I</i> .....	9,306,430	10,261,651	11,027,035	11,997,937	12,842,381
<i>category II</i> .....	5,864,269	6,180,512	6,563,223	6,747,897	7,245,703
<i>of which:</i>					
<i>sent/received</i>					
<i>to/from domestic users</i> .....	4,409,370	4,768,910	5,158,337	5,527,524	6,056,083
Total messages received .....	35,996,386	38,740,113	42,081,217	44,887,628	48,149,365
<i>of which:</i>					
<i>category I</i> .....	.	.	.	14,832,041	15,490,352
<i>category II</i> .....	.	.	.	18,220,015	20,424,752
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic .....	298,780,982	332,895,932	365,159,291	405,540,962	457,218,200

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

Table 1  
Basic statistical data

	1989	1990	1991	1992	1993
Population (millions):					
<i>year-end</i> <sup>1</sup> .....	57.6	57.7	56.8	56.9	57.2
GDP (ITL billions) .....	1,193,462	1,312,066	1,426,580	1,507,190	1,560,114
GDP per capita (ITL millions) .....	20.7	22.7	25.1	26.5	27.3
Exchange rate (domestic currency vis-à-vis USD):					
<i>year-end</i> .....	1,270.5	1,130.2	1,151.1	1,470.9	1,704.0
<i>average</i> .....	1,373.6	1,198.4	1,241.6	1,232.3	1,573.7

<sup>1</sup> Since 1991 (year of the last census) the figures relating to population have been rectified.

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

	1989	1990	1991	1992	1993
Notes and coin .....	67,644	69,449	76,354	85,617	89,769
Narrow money supply (M <sub>1</sub> ) .....	451,786	482,357	537,502	544,046	578,472
Transferable deposits .....	365,461	395,840	441,719	442,418	473,943
Other .....	18,681	17,068	19,429	16,011	14,760
<i>Memorandum item:</i>					
Broad money supply .....	738,395	801,991	878,104	920,026	986,268

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

	1989	1990	1991	1992	1993
Reserve balances held at central bank <sup>1</sup> .....	112,981	125,688	129,111	130,054	105,917
<i>of which:</i>					
<i>required reserves</i> .....	112,465	125,491	128,915	129,927	105,796
Transferable deposits at other institutions <sup>2</sup> .....	96,062	61,167	55,016	46,407	52,455
<i>Memorandum item:</i>					
Institutions' borrowing from central bank <sup>3</sup> .....	2,149	2,305	1,134	1,235	1,906

<sup>1</sup> Since 1990 the data comprise average required reserves and average free reserves for the period 15th December - 14th January. <sup>2</sup> Sight interbank deposits and net balances of reciprocal accounts are included. <sup>3</sup> Since 1990 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)

	1989	1990	1991	1992	1993
Total banknotes and coin outstanding .....	71,369	74,809	82,024	90,859	95,230
Denomination of banknotes:					
100,000 lire .....	48,092	51,339	56,569	63,205	66,862
50,000 lire .....	16,584	16,553	18,154	20,018	20,662
10,000 lire .....	3,724	3,784	3,882	3,929	3,903
5,000 lire .....	687	742	776	826	848
2,000 lire .....	105	103	180	298	346
1,000 lire .....	828	856	939	945	887
Banknotes and coin held by credit institutions .....	3,725	5,360	5,670	5,242	5,461
Total banknotes and coin outside credit institutions .....	67,644	69,449	76,354	85,617	89,769

Table 5  
**Institutional framework**  
 (at end-1993)

Categories	Number of institutions	Number of branches	Number of accounts (thousands)	Value of accounts (ITL billions)
Central bank .....	1	98	.	.
Commercial banks .....	220	15,887	20,199	385,097
Cooperative and rural banks .....	771	6,122	4,547	79,063
Postal Administration .....	1	14,412	450	9,783
<i>Memorandum item:</i>				
Branches of foreign banks .....	41	50	8	487

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

	1989	1990	1991	1992	1993
Cash dispensers and ATMs:					
<i>Number of networks</i> .....	1	1	1	1	1
<i>Number of machines</i> .....	7,791	9,770	11,571	13,917	15,227
<i>Volume of transactions (thousands)</i> <sup>1</sup> .....	80,067	100,663	131,283	162,583	187,407
<i>Value of transactions</i> <sup>1</sup> (ITL billions).....	21,513	28,770	38,992	49,168	58,050
EFTPOS:					
<i>Number of networks</i> .....	.	.	.	.	.
<i>Number of terminals</i> <sup>2</sup> .....	10,240	22,185	45,711	62,251	77,206
<i>Volume of transactions (thousands)</i> <sup>1</sup> .....	2,400	5,400	8,500	12,681	17,774
<i>Value of transactions</i> <sup>1</sup> (ITL billions) .....	335	898	1,727	2,526	3,398

<sup>1</sup> Data relating to a sample group of 75 banks accounting for approximately 80% of current account deposits of the entire banking system. <sup>2</sup> Up to 1990 data relate to the sample group of banks described in footnote 1.

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

	1989	1990	1991	1992	1993
Cards with a cash function .....	6,073	7,761	8,948	10,606	11,295
Cards with a debit/credit function .....	8,682	11,212	12,991	14,858	16,279
<i>of which:</i>					
<i>cards with a debit function</i>	5,002	6,659	8,059	9,494	10,555
<i>cards with a credit function</i>	3,680	4,553	4,932	5,364	5,724
Cards with a cheque guarantee function <sup>2</sup> .....	1,808	1,942	2,323	2,187	1,674
Retailer cards .....	.	.	.	.	.

<sup>1</sup> A card with multiple functions may appear in several categories. It is, therefore, not meaningful to add the figures. <sup>2</sup> Includes eurocheque cards and, up to 1992, cheque guarantee cards usable only in Italy. Since 1991, the latter have been gradually eliminated.

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

	1989	1990	1991	1992	1993
Clearing sub-systems:					
Local clearing .....	360,400	442,689	440,125	292,129	253,189
<i>of which:</i>					
<i>cheques</i> <sup>1</sup> .....	358,000	439,362	436,187	288,458	250,617
<i>of which: out-of-town</i>					
<i>cheques</i> .....	191,870	238,135	222,395	96,062	85,703
<i>bills of exchange</i> <sup>1</sup> .....	400	1,000	1,680	1,430	1,019
<i>credit transfers</i> <sup>2</sup> .....	.	.	.	441	325
<i>other items</i> <sup>1,3</sup> .....	2,000	2,327	2,258	1,800	1,228
Electronic Memoranda <sup>4</sup> .....	469	1,255	1,465	1,804	1,896
<i>of which:</i>					
<i>interbank deposits</i> .....	77	411	722	1,020	1,005
<i>foreign operations</i> .....	360	721	600	542	533
<i>credit transfers</i> .....	9	34	64	147	187
<i>other items</i> <sup>5</sup> .....	23	89	79	95	171
<i>paper items</i> .....	.	.	.	.	.
SIPS <sup>6</sup> .....	640	1,833	2,311	2,780	3,111
Retail .....	.	46,641	125,086	361,783	451,171
<i>of which:</i>					
<i>cheque truncation</i> <sup>7</sup> .....	.	13,006	79,162	317,970	321,354
<i>Bancomat</i> <sup>8</sup> .....	.	33,635	45,924	43,813	56,114
<i>collection orders</i> <sup>9</sup> .....	.	.	.	.	73,703
Centralised accounts <sup>10</sup> .....	1,002	1,005	949	1,136	1,056
<i>of which:</i>					
<i>payments between banks</i> <i>and Banca d'Italia/ Treasury</i> .....	1,000	1,000	943	1,116	1,013
<i>BISS</i> <sup>11</sup> .....	2	5	6	20	43

<sup>1</sup> Up to 1990 figures are estimated. <sup>2</sup> Up to 1991 credit transfers are included among the "other items". <sup>3</sup> Includes: payments between the banking system and the Treasury, the Banca d'Italia or the Postal Administration; credit transfers (up to 1991); cash balances of the securities settlement procedures (up to 1992). <sup>4</sup> The Electronic Memoranda procedure was launched in July 1989. <sup>5</sup> From 1993 on, this category includes the cash balances of the securities settlement procedures. <sup>6</sup> Procedure launched in July 1989. <sup>7</sup> Procedure launched in March 1990. <sup>8</sup> Procedure launched in November 1989. <sup>9</sup> Procedure launched in 1993. <sup>10</sup> Debits/credits for the settlement of clearing balances are not included. <sup>11</sup> Procedure launched in April 1989.

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

	1989	1990	1991	1992	1993
Clearing sub-systems:					
Local clearing .....	5,210,747	5,430,309	5,696,810	6,345,384	4,622,317
<i>of which:</i>					
<i>cheques</i> .....	1,165,092	1,506,627	1,631,530	1,605,684	1,583,041
<i>of which: out-of-town</i>					
<i>cheques</i> .....	489,345	646,889	643,187	606,197	622,365
<i>bills of exchange</i> .....	10,582	19,835	48,715	45,193	40,394
<i>credit transfers</i> <sup>1</sup> .....	.	.	.	1,024,169	732,001
<i>other items</i> <sup>2</sup> .....	4,035,073	3,903,847	4,016,565	3,670,338	2,266,881
Electronic Memoranda <sup>3</sup> .....	1,434,396	5,148,000	6,332,000	10,450,000	17,067,600
<i>of which:</i>					
<i>interbank deposits</i> .....	630,560	3,480,000	5,223,000	8,772,000	11,698,000
<i>foreign operations</i> .....	524,603	1,014,000	553,000	782,000	987,000
<i>credit transfers</i> .....	28,005	128,000	225,000	539,000	716,000
<i>other items</i> <sup>4</sup> .....	131,554	526,000	331,000	357,000	3,666,600
<i>paper items</i> .....	119,674	.	.	.	.
SIPS <sup>5</sup> .....	1,718,800	5,647,324	8,273,530	11,994,531	18,293,744
Retail .....	600	15,956	75,368	262,740	492,310
<i>of which:</i>					
<i>check truncation</i> <sup>6</sup> .....	.	6,845	63,643	251,554	288,342
<i>Bancomat</i> <sup>7</sup> .....	600	9,111	11,725	11,186	16,152
<i>collection orders</i> <sup>8</sup> .....	.	.	.	.	187,816
Centralised accounts .....	1,474,525	1,634,400	1,650,500	2,873,100	2,619,500
<i>of which:</i>					
<i>payments between banks</i> <i>and Banca d'Italia/     Treasury</i> <sup>9</sup> .....	1,456,000	1,608,900	1,613,700	2,775,000	2,538,300
<i>BISS</i> <sup>10</sup> .....	18,525	25,500	36,800	98,100	81,200

<sup>1</sup> Up to 1991 credit transfers are included among the "other items". <sup>2</sup> Includes: payments between the banking system and the Treasury, the Banca d'Italia or the Postal Administration; credit transfers (up to 1991); cash balances of the securities settlement procedures (up to 1992). <sup>3</sup> The Electronic Memoranda procedure was launched in July 1989. <sup>4</sup> From 1993 on, this category includes the cash balances of the securities settlement procedures. <sup>5</sup> Procedure launched in July 1989. <sup>6</sup> Procedure launched in March 1990. <sup>7</sup> Procedure launched in November 1989. <sup>8</sup> Procedure launched in 1993. <sup>9</sup> Debits/credits for the settlement of clearing balances are not included. <sup>10</sup> Procedure launched in April 1989.



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

(in billions of Italian lire)

	1989	1990	1991	1992	1993
Securities Settlement Procedures:	609,948	1,485,532	3,083,221	4,187,516	9,562,669
<i>government securities</i> .....	365,969	1,252,304	2,922,895	4,053,516	9,264,315
<i>bonds</i> .....	225,681	202,032	132,578	108,875	242,807
<i>shares</i> .....	18,298	31,196	27,748	25,125	55,547
Government Securities Centralised Accounts (CAT) <sup>1</sup>	.	113,600	324,599	586,274	1,884,042

<sup>1</sup> Procedure launched in September 1990. Net balances resulting from the securities settlement procedures are not included. The number of transfer instructions handled through the CAT procedure amounted to 156.9 thousand in 1992 and 561.2 thousand in 1993.

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

Instruments	1989	1990	1991	1992	1993
Cheques issued .....	688.9	729.7	689.3	674.5	621.6
Payments by debit and credit cards .....	30.4	47.6	63.5	74.8	81.7
Paper-based credit transfers .....	583.7	617.2	631.3	660.9	697.7
<i>customer initiated</i> <sup>2</sup> .....	580.7	613.9	628.1	658.0	695.5
<i>interbank/large-value</i> .....	3.0	3.3	3.2	2.9	2.2
Paperless credit transfers .....	135.9	159.0	168.7	172.5	178.5
<i>customer initiated</i> .....	134.8	155.9	164.9	167.9	173.6
<i>interbank/large-value</i> .....	1.1	3.1	3.8	4.6	4.9
Direct debits .....	38.7	49.9	62.6	69.0	73.2
Others .....	167.4	168.1	173.4	167.5	159.0
<i>paperless collections</i> <sup>3</sup> .....	63.9	76.7	86.6	95.7	99.9
<i>paper-based collections</i> <sup>4</sup> .....	103.5	91.4	86.8	71.8	59.1
<b>Total</b> .....	<b>1,645.0</b>	<b>1,771.5</b>	<b>1,788.8</b>	<b>1,819.2</b>	<b>1,811.7</b>

<sup>1</sup> The figures for payment operations effected by banking instruments have been provided by 75 banks accounting for approximately 80% of the current account deposits of the entire banking system. The data on the other payment operations (Banca d'Italia cashier's cheques, postal instruments, credit cards, interbank large-value transfers) relate to the entire system. <sup>2</sup> Customer initiated paper-based transfers include postal money orders and inpayments to postal current accounts that are processed automatically but originate from cash payments. <sup>3</sup> Collections of electronic bank receipts (RIBA). <sup>4</sup> Collections of bills of exchange and paper-based bank receipts.

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

Instruments	1989	1990	1991	1992	1993
Cheques issued .....	1,891,751	2,130,696	2,156,272	2,223,172	2,170,124
Payments by debit and credit cards .....	5,730	8,635	11,754	14,291	15,671
Paper-based credit transfers .....	5,676,688	6,161,729	6,330,688	7,191,203	5,596,276
<i>customer initiated</i> <sup>2</sup> .....	555,286	648,982	701,174	745,865	791,095
<i>interbank/large-value</i> .....	5,121,402	5,512,747	5,629,514	6,445,338	4,805,181
Paperless credit transfers .....	5,795,539	14,245,811	18,227,933	26,236,791	38,812,084
<i>customer initiated</i> .....	2,771,493	3,552,987	3,810,603	4,223,160	4,085,540
<i>interbank/large-value</i> .....	3,024,046	10,692,824	14,417,330	22,003,631	34,726,544
Direct debits .....	34,417	46,787	61,619	73,741	89,095
Others .....	383,789	432,347	462,658	468,069	452,127
<i>paperless collections</i> <sup>3</sup> .....	144,228	184,661	215,684	249,762	265,398
<i>paper-based collections</i> <sup>4</sup> .....	239,561	247,686	246,974	218,307	186,729
<b>Total</b> .....	<b>13,787,914</b>	<b>23,026,005</b>	<b>27,250,924</b>	<b>36,207,267</b>	<b>47,135,377</b>

<sup>1</sup> The figures for payment operations effected by banking instruments have been provided by 75 banks accounting for approximately 80% of the current account deposits of the entire banking system. The data on the other payment operations (Banca d'Italia cashier's cheques, postal instruments, credit cards, interbank large-value transfers) relate to the entire system. <sup>2</sup> Customer initiated paper-based transfers include postal money orders and inpayments to postal current accounts that are processed automatically but originate from cash payments. <sup>3</sup> Collections of electronic bank receipts (RIBA). <sup>4</sup> Collections of bills of exchange and paper-based bank receipts.

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

	1989	1990	1991	1992	1993
Members .....	184	192	196	188	190
<i>of which: live</i> .....	171	188	190	186	187
Sub-members <sup>1</sup> .....	24	24	28	30	29
<i>of which: live</i> .....	23	22	24	30	28
Participants <sup>2</sup> .....	0	0	0	0	0
<i>of which: live</i> .....	0	0	0	0	0
Total users .....	208	216	224	218	219
<i>of which: live</i> .....	194	210	214	216	215
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i> .....	1,697	1,812	1,963	2,074	2,244
<i>sub-members</i> .....	1,315	1,469	1,607	1,738	1,887
<i>participants</i> .....	37	63	78	91	125
<i>users</i> .....	3,049	3,344	3,648	3,903	4,256

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

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

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

	1989	1990	1991	1992	1993
Total messages sent .....	17,266,969	18,188,905	19,203,007	21,144,390	22,572,543
<i>of which:</i>					
<i>category I</i> <sup>1</sup> .....	5,181,772	5,852,557	6,110,992	6,695,298	6,845,876
<i>category II</i> <sup>2</sup> .....	5,828,060	5,132,683	5,359,223	5,783,865	5,904,935
<i>of which:</i>					
<i>sent/received</i>					
<i>to/from domestic users</i> .....	3,421,754	2,802,044	2,944,909	3,465,396	3,751,213
Total messages received .....	16,603,267	16,973,327	18,148,442	20,008,765	22,189,826
<i>of which:</i>					
<i>category I</i> <sup>1</sup> .....	.	.	.	6,101,945	6,930,817
<i>category II</i> <sup>2</sup> .....	.	.	.	4,240,352	4,758,663
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic .....	298,780,982	332,895,932	365,159,291	405,540,962	457,218,200

<sup>1</sup> Category I: customer (funds) transfers. <sup>2</sup> Category II: bank (funds) transfers.

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

Table 1  
Basic statistical data

	1989	1990	1991	1992	1993
Population (millions) <sup>1</sup> .....	123.3	123.6	124.0	124.5	124.8
GDP (nominal; JPY trillions) ...	396.2	424.5	450.8	464.8	468.6
GDP per capita (JPY thousands) .....	3,213.3	3,434.8	3,635.4	3,733.4	3,754.8
Exchange rate (domestic currency vis-à-vis USD):					
<i>year-end</i> .....	<i>143.40</i>	<i>135.40</i>	<i>125.25</i>	<i>124.65</i>	<i>111.89</i>
<i>average</i> .....	<i>138.11</i>	<i>144.88</i>	<i>134.59</i>	<i>126.62</i>	<i>111.06</i>

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

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

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

	1989	1990	1991	1992	1993
Notes and coin <sup>2</sup> .....	35,470.6	35,846.9	36,653.9	36,865.8	39,506.0
Narrow money supply (M <sub>1</sub> ) <sup>2</sup> ....	114,473.6	119,628.1	131,044.1	136,138.0	145,614.6
Broad money supply (M <sub>2</sub> + CDs) <sup>2</sup> .....	470,020.3	504,972.0	516,346.0	515,484.3	526,839.6
Transferable deposits <sup>3</sup> .....	100,760.0	118,046.1	122,019.1	118,279.6	117,463.6
<i>of which held by:</i>					
<i>households</i> .....	<i>35,665.0</i>	<i>44,318.2</i>	<i>43,288.0</i>	<i>44,209.5</i>	<i>45,240.5</i>
<i>corporate sector</i> .....	<i>59,927.2</i>	<i>67,906.9</i>	<i>73,140.3</i>	<i>68,094.2</i>	<i>66,228.9</i>
<i>other</i> <sup>4</sup> .....	<i>5,167.8</i>	<i>5,821.0</i>	<i>5,590.8</i>	<i>5,975.9</i>	<i>5,994.2</i>
Postal deposits <sup>5</sup> .....	8,744.7	10,111.6	12,258.4	12,162.8	12,483.2

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

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

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

	1989	1990	1991	1992	1993
Reserve balances held at central bank <sup>2</sup> .....	4,636.6	5,028.3	2,966.3	2,892.5	2,959.8
<i>of which:</i>					
<i>required reserves</i> .....	4,630.0	5,024.2	2,962.6	2,889.7	2,956.9
Transferable deposits at banks <sup>3</sup>	10,446.2	9,699.6	8,572.9	9,752.1	8,987.7
Banks' borrowing from central bank <sup>4</sup> .....	6,945.1	6,303.3	10,267.1	7,218.4	6,070.0

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

Source: Economic Statistics Annual (Bank of Japan).

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

	1989	1990	1991	1992	1993
Total banknotes and coin in circulation .....	40,449	43,017	43,318	42,511	45,279
Denomination of banknotes:					
10,000 yen .....	32,728	34,895	34,787	33,971	36,475
5,000 yen .....	1,639	1,752	1,844	1,853	1,912
1,000 yen .....	2,867	2,967	3,069	3,021	3,060
500 yen .....	135	133	132	130	129

Source: Economic Statistics Annual (Bank of Japan).

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

Categories	Number of institutions	Number of branches	Number of transferable accounts (millions)	Value of transferable accounts (JPY billions)
Central bank .....	1	34	0.002	2,959.8
Commercial banks <sup>2</sup> .....	150	15,147	298.1	102,571.9
Cooperative and rural banks <sup>3</sup> .....	5,377	34,254	.	33,186.4
Branches of foreign banks .....	90	145	.	293.9
Post Office .....	1	24,303	88.5	12,483.2

<sup>1</sup> Figures at end-1993 or at end-March 1994 for the institutions other than the Post Office. Figures at end-March 1993 for the Post Office. <sup>2</sup> Including city banks, regional banks, regional banks II, trust banks and long-term credit banks.

<sup>3</sup> Including Shinkin banks, credit cooperatives, labour credit associations, agricultural cooperatives, fishery cooperatives, the Norinchukin Bank and the Shoko Chukin Bank.

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

Table 6  
Cash dispensers, ATMs and EFTPOS terminals

	1989	1990	1991	1992	1993
<b>Cash dispensers and ATMs:</b>					
<i>Number of networks</i> <sup>1</sup> .....	71	75	27	26	23
<i>Number of machines</i> <sup>2</sup> .....	77,337	87,931	98,599	108,275	116,732
<i>Volume of transactions (thousands)</i> <sup>3</sup> .....	.	207,564	297,669	370,588	416,869
<i>Value of transactions (JPY billions)</i> <sup>3</sup> .....	.	10,652	14,283	16,678	18,190
<b>EFTPOS:</b>					
<i>Number of networks</i> <sup>4</sup> .....	31	143	218	240	266
<i>Number of terminals</i> <sup>4</sup> .....	1,673	10,170	26,359	32,816	21,010
<i>Volume of transactions (thousands)</i> <sup>5</sup> .....	228	490	701	695	599
<i>Value of transactions (JPY billions)</i> <sup>5</sup> .....	.	.	9.8	8.6	12.3

<sup>1</sup> End-year. <sup>2</sup> End-March. <sup>3</sup> Figures represent interbank transactions only and do not include intrabank transactions.

<sup>4</sup> Figures for 1989-1991 include those for city banks, regional banks, regional banks II, Shinkin banks and credit cooperatives. Figures for 1992-1993 include those for labour credit associations also. End-year for 1989-1991, end-March 1993 and end-March 1994 for 1992 and 1993 respectively. <sup>5</sup> Figures for 1991 and 1992 are estimated from the transaction volume/value for December 1991 and March 1993 respectively.

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



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

	1989	1990	1991	1992	1993
Cards with a cash function <sup>1</sup> .....	182,690	185,970	228,140	251,230	267,740
Cards with a debit/credit function .....	144,595	167,213	190,648	209,218	220,738
<i>of which:</i>					
<i>cards with a debit function</i> <sup>2</sup>	125	1,093	3,688	5,712	6,218
<i>cards with a credit function</i> <sup>1</sup> .....	144,470	166,120	186,960	203,000	214,520
Cards with a cheque guarantee function <sup>3</sup> .....	.	.	.	.	.
Retailer cards <sup>1</sup> .....	32,680	40,010	44,650	49,600	53,020

<sup>1</sup> End-March. <sup>2</sup> For 1989-1992, end-year. The figure for 1992 is estimated from the data available. For 1993, end-March. <sup>3</sup> Cards with a cheque guarantee function do not exist in Japan.

Source: Center for Financial Industry Information Systems.

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

	1989	1990	1991	1992	1993
Bill and cheque clearing systems .....	382,060	382,745	367,124	350,245	327,866
Zengin System .....	574,694	645,246	718,274	779,083	826,386
Foreign Exchange (Gaitame) Yen Clearing System .....	4,348	6,270	6,052	6,119	6,578
BOJ-NET .....	.	.	3,634	3,710	3,771

Sources: Statistics on Payment Activities in Japan (Bank of Japan, in Japanese), 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)

	1989	1990	1991	1992	1993
Bill and cheque clearing systems .....	4,469	4,797	4,037	3,563	3,262
Zengin System .....	1,600	1,870	1,777	1,725	1,793
Foreign Exchange (Gaitame) Yen Clearing System .....	5,105	7,258	6,258	6,208	5,951
BOJ-NET .....	29,653	36,870	33,980	35,892	39,295

Sources: Statistics on Payment Activities in Japan (Bank of Japan, in Japanese), Economic Statistics Annual (Bank of Japan) and other national data.

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

	1989	1990	1991	1992	1993
Registration system <sup>1</sup> .....	234.5	229.3	227.8	275.6	368.0
Book-entry system .....	128.7	205.2	306.5	391.9	395.9
<i>Financing bills</i> .....	.	.	104.6	131.6	126.3
<i>Treasury bills</i> .....	.	.	121.5	173.4	159.2
<i>Government bonds, etc.</i> .....	.	.	80.4	87.0	110.4

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

Sources: Statistics on Payment Activities in Japan (Bank of Japan, in Japanese) and other national data.

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

	1989	1990	1991	1992	1993
Registration system <sup>1</sup> .....	1,407.0	1,390.2	1,012.4	876.8	1,116.1
Book-entry system .....	566.3	946.8	1,253.0	2,021.3	2,504.9
<i>Financing bills</i> .....	.	.	536.2	710.8	797.1
<i>Treasury bills</i> .....	.	.	533.9	1,035.3	1,303.4
<i>Government bonds, etc.</i> .....	.	.	182.9	275.2	404.4

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

Sources: Statistics on Payment Activities in Japan (Bank of Japan, in Japanese) and other national data.

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

Instruments	1989	1990	1991	1992	1993
Bills and cheques cleared <sup>1</sup> .....	382.1	382.7	367.1	350.2	327.9
Payments by credit card .....	.	.	.	.	.
Paper-based credit transfers .....	.	.	.	.	.
<i>customer initiated</i> <sup>2</sup> .....	564.7	604.9	645.2	693.1	751.4
<i>interbank/large-value</i> .....	.	.	.	.	.
Paperless credit transfers .....	543.1	613.5	685.2	740.6	788.0
<i>customer initiated</i> <sup>3</sup> .....	536.2	604.6	676.4	731.7	778.3
<i>interbank/large-value</i> <sup>4</sup> .....	6.9	8.9	8.8	8.9	9.7
Direct debits <sup>5</sup> .....	1,238.9	1,437.5	1,706.6	.	.
<b>Total</b> .....	.	.	.	.	.

<sup>1</sup> Transactions cleared through bill and cheque-clearing houses. <sup>2</sup> Comprising paper-based transfers through the Domestic Funds Transfer System and the Post Office. <sup>3</sup> Transactions through the Zengin System (excluding paper-based transfers). <sup>4</sup> Transactions through BOJ-NET and the Foreign Exchange (Gaitame) Yen Clearing System. <sup>5</sup> Direct debits for five major public utility charges (electricity, gas, water, telephone and television).

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

Table 13  
**Indicators of use of various cashless payment instruments:  
 value of transactions**  
 (in trillions of Japanese yen)

Instruments	1989	1990	1991	1992	1993
Bills and cheques cleared <sup>1</sup> .....	4,469.0	4,797.3	4,037.5	3,563.5	3,262.4
Payments by credit card .....	10.0	13.3	15.7	17.2	17.3
Paper-based credit transfers .....	.	.	.	.	.
<i>customer initiated</i> <sup>2</sup> .....	48.4	54.2	53.6	47.7	44.4
<i>interbank/large-value</i> .....	.	.	.	.	.
Paperless credit transfers .....	.	25,220.0	37,652.6	39,308.6	43,894.9
<i>customer initiated</i> <sup>3</sup> .....	1,636.3	1,817.7	1,706.3	1,667.3	1,794.1
<i>interbank/large-value</i> <sup>4</sup> .....	.	23,402.3	35,946.3	37,641.3	42,100.8
Direct debits <sup>5</sup> .....	12.3	16.6	.	.	.
<b>Total</b> .....	.	.	.	.	.

<sup>1</sup> Transactions cleared through bill and cheque-clearing houses. <sup>2</sup> Comprising paper-based transfers through the Domestic Funds Transfer System and the Post Office. <sup>3</sup> Transactions through the Zengin System (excluding paper-based transfers). <sup>4</sup> Transactions through BOJ-NET and the Foreign Exchange (Gaitame) Yen Clearing System. <sup>5</sup> Direct debits for five major public utility charges (electricity, gas, water, telephone and television).

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

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

	1989	1990	1991	1992	1993
Members .....	103	106	110	112	116
<i>of which: live</i> .....	98	103	109	110	114
Sub-members <sup>1</sup> .....	63	69	70	73	78
<i>of which: live</i> .....	63	66	68	70	76
Participants <sup>2</sup> .....	5	7	7	8	7
<i>of which: live</i> .....	5	6	6	7	6
Total users .....	171	182	187	193	201
<i>of which: live</i> .....	166	175	183	187	196
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i> .....	1,697	1,812	1,963	2,074	2,244
<i>sub-members</i> .....	1,315	1,469	1,607	1,738	1,887
<i>participants</i> .....	37	63	78	91	125
<i>users</i> .....	3,049	3,344	3,648	3,903	4,256

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

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

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

	1989	1990	1991	1992	1993
Total messages sent .....	17,266,969	15,057,485	15,983,025	17,794,807	19,566,216
<i>of which:</i>					
<i>category I</i> <sup>1</sup> .....	2,643,897	3,119,491	3,654,591	4,206,763	4,462,919
<i>category II</i> <sup>2</sup> .....	4,055,013	4,618,529	4,854,475	4,923,671	4,963,253
<i>sent to domestic users</i> .....	1,822,266	2,302,210	2,254,694	2,363,060	2,519,129
Total messages received .....	12,965,106	15,579,704	16,062,497	17,244,547	18,812,497
<i>of which:</i>					
<i>category I</i> <sup>1</sup> .....	.	.	.	2,263,207	2,498,926
<i>category II</i> <sup>2</sup> .....	.	.	.	5,739,005	6,182,981
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic .....	298,780,982	332,895,932	365,159,291	405,540,962	457,218,200

<sup>1</sup> Category I: customer (funds) transfers. <sup>2</sup> Category II: bank (funds) transfers.

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



Table 1  
Basic statistical data

	1989	1990	1991	1992	1993
Population (millions):					
<i>year-end</i> .....	14.9	15.0	15.1	15.2	15.3
GDP (NLG billions) .....	484.7	516.3	542.2	563.1	574.3
GDP per capita .....	32,545.0	34,397.0	35,819.0	36,958.0	37,436.0
Exchange rate (domestic currency vis-à-vis USD):					
<i>year-end</i> .....	1.92	1.69	1.71	1.81	1.94
<i>average</i> .....	2.12	1.82	1.87	1.76	1.86

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

	1989	1990	1991	1992	1993
Notes and coin .....	36.0	36.5	37.0	37.0	37.6
Transferable deposits .....	83.0	87.5	92.3	98.1	112.1
<i>of which held by:</i>					
<i>persons</i> .....	39.7	40.7	40.4	41.6	45.6
<i>corporate sector</i> .....	37.2	40.1	42.3	45.1	53.9
<i>other</i> .....	6.1	6.7	9.6	11.3	12.6
Narrow money supply (M <sub>1</sub> ) .....	119.0	123.9	129.3	135.1	149.6
Broad money supply .....	359.7	387.1	409.3	435.1	468.4

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

	1989	1990	1991	1992	1993
Reserve balances held at central bank .....	31	17	116	32	42
Transferable deposits at other institutions (thousands) .....	2,479	3,979	2,768	1,906	3,118
<i>Memorandum items:</i>					
Required reserves .....	6,078	6,605	0	12,484	15,783
Institutions' borrowing from central bank .....	6,240	8,503	2,799	5,041	4,160



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

	1989	1990	1991	1992	1993
Total banknotes and coin issued .....	38.7	39.4	39.9	39.9	40.4
Denomination of banknotes:					
1,000 guilders .....	15.5	15.4	15.5	15.1	15.5
250 guilders .....	3.8	4.1	4.2	4.3	4.7
100 guilders .....	13.0	13.4	13.6	13.8	13.4
50 guilders .....	1.3	1.4	1.5	1.6	1.7
25 guilders .....	1.9	1.8	1.7	1.7	1.7
10 guilders .....	0.7	0.7	0.7	0.7	0.8
5 guilders .....	0.1	0.1	0.1	0.1	0.1
Banknotes held by credit institutions .....	2.6	2.9	2.9	2.9	2.8
Total banknotes outside credit institutions .....	36.0	36.5	37.0	37.0	37.6

Table 5  
**Institutional framework**  
 (at end-1993)

Categories	Number of institutions	Number of branches	Number of accounts (millions)	Value of accounts (NLG billions)
Central bank .....	1	12	.	.
Commercial banks .....	86	2,903	4.8	61.9
Savings banks .....	41	45	0.1	0.3
Cooperative and rural banks .....	1	1,989	5.2	30.2
Postbank .....	1	2,200	6.4	19.6
<i>Memorandum item:</i>				
Branches of foreign banks .....	23	.	.	.

Table 6  
Cash dispensers, ATMs and EFTPOS terminals

	1989	1990	1991	1992	1993
<b>Cash dispensers and ATMs:</b>					
<i>Number of networks</i> .....	2	2	2	2	2
<i>Number of machines</i> .....	1,839	2,700	3,354	3,964	4,461
<i>Volume of transactions (millions)</i> .....	.	116	207	262	314
<i>Value of transactions (NLG billions)</i> .....	.	20	36	45	56
<b>EFTPOS:</b>					
<i>Number of networks</i> .....	3	2	2	2	1
<i>Number of terminals</i> .....	2,047	2,223	4,038	11,440	24,549
<i>Volume of transactions (millions)</i> .....	17	27	32	47	67
<i>Value of transactions (NLG billions)</i> .....	0.7	1.3	1.8	3.8	7.3

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

	1989	1990	1991	1992	1993
Cards with a cash function .....	7,717	8,371	9,273	12,538	13,107
Cards with a debit/credit function .....	956	856	1,950	1,500	1,257
<i>of which:</i>					
<i>cards with a debit function</i>	.	.	.	1,500	1,257
<i>cards with a credit function</i>	.	.	.	.	.
Cards with a cheque guarantee function .....	1,882	1,998	2,213	1,765	1,796
Retailer cards .....	.	.	.	.	.

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

	1989	1990	1991	1992	1993
BankGiroCentre .....	895.8	944.1	992.6	1,045.8	1,130.5
<i>of which:</i>					
<i>cheques</i> .....	118.2	114.6	110.5	91.7	71.9
<i>other</i> .....	777.6	829.5	882.1	954.1	1,058.6
8007 S.W.I.F.T. ....	0.9	1.4	2.0	1.8	1.9
Central bank current account system (FA) .....	0.8	0.8	0.5	0.5	0.4

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

	1989	1990	1991	1992	1993
BankGiroCentre .....	1,566.0	1,711.9	1,851.8	1,942.0	2,207.4
<i>of which:</i>					
<i>cheques</i> .....	16.0	16.5	16.2	15.0	11.7
<i>other</i> .....	1,550.0	1,695.4	1,835.6	1,927.0	2,195.7
8007 S.W.I.F.T. ....	2,947.3	5,252.9	7,862.0	8,055.0	9,011.0
Central bank current account system (FA) .....	10,354.0	10,137.0	6,694.2	7,658.5	9,300.1

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

	1989	1990	1991	1992	1993
Amsterdam Stock Exchange .....	.	.	.	.	.
Central bank clearing institute ..	0.001	0.002	0.002	0.003	0.002

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

	1989	1990	1991	1992	1993
Amsterdam Stock Exchange .....	182.7	170.0	234.0	303.6	509.4
Central bank clearing institute ..	26.7	34.7	38.2	48.8	48.9

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

Instruments	1989	1990	1991	1992	1993
Cheques .....	267.0	260.0	247.0	221.9	180.5
Credit and debit cards .....	17.0	27.0	32.0	46.6	91.7
Paper-based credit transfers .....	101.0	102.0	98.0	105.0	101.4
<i>customer initiated</i> .....	101.0	102.0	98.0	105.0	101.4
<i>interbank/large value</i> .....	0.0	0.0	0.0	0.0	0.0
Paperless credit transfers .....	965.0	956.0	963.0	1,003.1	1,382.3
<i>customer initiated</i> .....	963.3	953.8	960.5	1,000.8	1,380.0
<i>interbank/large value</i> .....	1.7	2.2	2.5	2.3	2.3
Direct debits .....	329.0	360.0	392.0	431.4	479.5
<b>Total</b> .....	<b>1,679.0</b>	<b>1,705.0</b>	<b>1,732.0</b>	<b>1,808.0</b>	<b>2,235.3</b>

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

<b>Instruments</b>	<b>1989</b>	<b>1990</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>
Cheques .....	36.0	35.0	33.0	32.0	25.9
Credit and debit cards .....	0.7	1.3	2.0	3.8	10.0
Paper-based credit transfers .....	41.0	48.0	45.0	48.0	36.5
<i>customer initiated</i> .....	41.0	48.0	45.0	48.0	36.5
<i>interbank/large value</i> .....	0.0	0.0	0.0	0.0	0.0
Paperless credit transfers .....	15,904.3	18,141.7	17,032.0	18,741.2	21,188.1
<i>customer initiated</i> .....	2,603.0	2,751.8	2,475.8	3,027.7	2,877.0
<i>interbank/large value</i> .....	13,301.3	15,389.9	14,556.2	15,713.5	18,311.1
Direct debits .....	200.0	223.0	246.0	226.0	229.8
<b>Total</b> .....	<b>16,182.0</b>	<b>18,449.0</b>	<b>17,358.0</b>	<b>19,051.0</b>	<b>21,490.2</b>

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

	1989	1990	1991	1992	1993
Members .....	27	29	30	29	30
<i>of which: live</i> .....	26	26	26	29	29
Sub-members <sup>1</sup> .....	22	23	23	25	28
<i>of which: live</i> .....	20	22	21	23	26
Participants <sup>2</sup> .....	1	1	1	1	1
<i>of which: live</i> .....	0	0	0	0	0
Total users .....	50	53	54	55	59
<i>of which: live</i> .....	46	48	47	52	55
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i> .....	1,697	1,812	1,963	2,074	2,244
<i>sub-members</i> .....	1,315	1,469	1,607	1,738	1,887
<i>participants</i> .....	37	63	78	91	125
<i>users</i> .....	3,049	3,344	3,648	3,903	4,256

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

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

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

	1989	1990	1991	1992	1993
Total messages sent .....	11,204,861	12,168,453	12,944,496	13,547,572	14,543,442
<i>of which:</i>					
<i>category I</i> .....	5,664,570	5,836,114	6,071,972	6,310,685	6,474,480
<i>category II</i> .....	2,606,782	2,743,791	2,790,345	2,733,648	2,912,403
<i>of which:</i>					
<i>sent/received</i> <i>to/from domestic</i> <i>users</i> .....	1,031,989	999,117	1,419,578	1,763,389	1,996,747
Total messages received .....	10,199,217	11,331,221	12,158,421	12,865,625	13,983,712
<i>of which:</i>					
<i>category I</i> .....	.	.	.	4,941,606	5,169,497
<i>category II</i> .....	.	.	.	1,921,436	2,066,993
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic .....	298,780,982	332,895,932	365,159,291	405,540,962	457,218,200

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

Table 1  
Basic statistical data

	1989	1990	1991	1992	1993
Population (millions):					
<i>average</i> .....	8.49	8.56	8.62	8.67	8.72
GDP (SEK billions) .....	1,232.6	1,359.9	1,447.3	1,439.8	1,449.5
GDP per capita .....	145,183	158,867	167,900	166,067	166,227
Exchange rate (domestic currency vis-à-vis USD):					
<i>year-end</i> .....	6.2270	5.6980	5.5500	7.0500	8.3325
<i>average</i> .....	6.4481	5.9189	6.0587	5.8123	7.8015

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

	1989	1990	1991	1992	1993
Notes and coin .....	60.6	62.0	64.8	64.3	67.1
Transferable deposits .....	482.4	537.6	563.0	589.2	612.5
<i>of which held by:</i>					
<i>households</i> .....	325.0	353.7	384.8	374.2	376.4
<i>corporate sector</i> .....	147.1	173.8	167.4	199.9	213.9
<i>other</i> <sup>1</sup> .....	10.3	10.1	10.8	15.1	22.2
Other <sup>2</sup> .....	28.7	36.9	34.0	29.3	30.5
Narrow money supply (M <sub>1</sub> ) .....					
<i>Memorandum item:</i>					
Broad money supply (M <sub>3</sub> ) ..	571.7	636.5	661.8	682.8	710.1

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

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

	1989	1990	1991	1992	1993
Reserve balances held at central bank <sup>1</sup> .....	15.8	5.1	19.4	6.9	11.9
<i>of which:</i>					
<i>required reserves</i> .....	12.1	12.5	2.9	2.8	5.3
Transferable deposits at other institutions .....	124.5	158.2	124.1	34.1	34.2
Other <sup>2</sup> .....	1.3	2.2	0.8	1.5	1.1
<i>Memorandum item:</i>					
Institutions' borrowing from central bank <sup>3</sup> .....	0.0	0.0	0.0	0.0	0.0

<sup>1</sup> Including money market operations and borrowing under special facilities. <sup>2</sup> Deposits on postal giro accounts. <sup>3</sup> In the Riksbank Act there is a provision which allows the Riksbank to lend to banks and other financial institutions for reasons other than monetary policy, i.e. for liquidity purposes. This happened for the first time in September 1992. The figures refer to the situation at the end of the year.



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

	1989	1990	1991	1992	1993
Total banknotes and coin outstanding .....	68,308	71,979	76,098	73,945	75,722
Denomination of banknotes:					
10,000 kronor .....	1,194	665	170	19	0
1,000 kronor .....	37,704	38,594	41,091	39,299	39,803
500 kronor .....	9,199	12,182	14,733	15,711	18,384
100 kronor .....	15,419	15,497	14,669	13,354	12,001
50 kronor .....	961	1,010	1,035	817	261
20 kronor .....	.	.	.	1,011	1,525
10 kronor .....	1,502	1,573	1,313	433	345
5 kronor .....	100	99	97	96	95
Banknotes held by credit institutions .....	7,889	10,266	11,543	9,894	8,919
Total banknotes outside credit institutions .....	58,190	59,354	61,565	60,846	63,495

Table 5  
**Institutional framework**  
 (at end-1993)

Categories	Number of institutions	Number of branches	Number of accounts (millions)	Value of accounts (SEK billions)
Central bank .....	1	19	.	.
Commercial banks <sup>1</sup> .....	19	2,483	23.35	571.9
Savings banks <sup>2</sup> .....	90	349	2.89	40.6
Cooperative and rural banks <sup>1</sup> .....	.	.	.	.
Post Office .....	1	1,473	1.92	24.3
<i>Memorandum item:</i>				
Branches of foreign banks .....	2	2	0.00	0.6

<sup>1</sup> In 1991 the twelve cooperative regional banks merged into one unit. In 1992 this unit was transformed into a banking company and included in the commercial bank sector. <sup>2</sup> In late 1992 the sector's former commercial bank, Sparbankernas Bank, together with eleven large savings banks, formed a new bank, Sparbanken Sverige AB, which at the end of the year accounted for about 80% of the sector's total balance sheet.

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

	1989	1990	1991	1992	1993
Cash dispensers and ATMs:					
<i>Number of networks</i> .....	2	2	2	2	2
<i>Number of machines</i> .....	1,928	2,102	2,221	2,203	2,226
<i>Volume of transactions (millions)</i> .....	174	170	208	218	247
<i>Value of transactions (SEK billions)</i> .....	103	107	152	163	195
EFTPOS:					
<i>Number of networks</i> <sup>1</sup> .....	2	2	2	2	2
<i>Number of terminals</i> .....	3,420	6,090	8,916	14,276	26,630
<i>Volume of transactions (millions)</i> .....	6	16	33	46	63
<i>Value of transactions (SEK billions)</i> .....	4	8	17	27	33

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

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

	1989	1990	1991	1992 <sup>2</sup>	1993
Cards with a cash function .....	.	.	.	5,684	5,758
Cards with a debit/credit function <sup>3</sup> .....	3,245	3,110	3,769	10,463	11,412
<i>of which:</i>					
<i>cards with a debit function</i>	1,222	1,280	2,352	8,946	9,937
<i>cards with a credit function</i> .....	2,023	1,830	1,417	1,517	1,475
Cards with a cheque guarantee function .....					
Retailer cards .....	3,610	4,100	4,984	7,245	7,961

<sup>1</sup> A card with multiple functions may appear in several categories. It is, therefore, not meaningful to add the figures. <sup>2</sup> From 1992, new source of statistics. <sup>3</sup> Total number of payment cards in Sweden.

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

	1989	1990	1991	1992	1993
Data Clearing (retail clearing) <sup>1</sup>	148,990	145,852	151,434	141,436	127,784
<i>of which:</i>					
<i>truncated cheques</i> .....	112,756	106,471	108,299	98,972	86,100
<i>other</i> .....	36,234	39,381	43,135	42,464	41,684
The RIX system .....	50	98 <sup>2</sup>	91	79	79
<i>of which:</i>					
<i>interbank (large-value) transactions</i> .....	12	27 <sup>2</sup>	25	28	24
<i>third-party transactions ("clearing transactions")</i> ....	38	71 <sup>2</sup>	66	51	55

<sup>1</sup> The Data Clearing is managed by the Bank Giro Centre. Calculated bilateral net amounts are reported back to participants and settled via the Riksbank's RIX system. <sup>2</sup> Up to 1989, clearing and settlement were carried out on a bilateral net basis. 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)

	1989	1990	1991	1992	1993
Data Clearing (retail clearing) <sup>1</sup>	13,161	17,138	19,167	17,920	20,510
<i>of which:</i>					
<i>truncated cheques</i> .....	12,908	16,799	18,741	17,546	20,120
<i>other</i> .....	253	339	426	374	390
The RIX system .....	9,524	34,949 <sup>2</sup>	38,434	44,521	41,396
<i>of which:</i>					
<i>interbank (large-value)     transactions</i> .....	3,810	13,979 <sup>2</sup>	17,502	23,462	16,835
<i>third-party transactions     ("clearing transactions")</i> ....	5,714	20,970 <sup>2</sup>	20,932	21,059	24,561

<sup>1</sup> The Data Clearing is managed by the Bank Giro Centre. Calculated bilateral net amounts are reported back to participants and settled via the Riksbank's RIX system. <sup>2</sup> Up to 1989, clearing and settlement were carried out on a bilateral net basis. Since 1990 RIX has been operating on a gross basis. Total daily payments in the RIX system averaged S.kr. 164 billion during 1993.

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

	1989	1990	1991	1992	1993
VPC: <sup>1</sup>					
<i>of which:</i>					
<i>government securities</i> .....	.	.	.	.	298
<i>equities</i> .....	.	.	.	.	8,084

<sup>1</sup> Värdepapperscentralen AB (Swedish Securities Register Centre). Government and mortgage securities have been included in the VP book-entry system since mid-1993. Therefore the figures refer to the second half of 1993 only. The figures include all transactions between accounts within VPC. The number of trades generating these transactions are, however, considerably lower. The number of actual trades in equities and government securities is only about one-sixth and one-half, respectively, of the figures in the table. 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)

	1989	1990	1991	1992	1993
VPC: <sup>1</sup>					
<i>of which:</i>					
government securities <sup>2</sup> .....	.	.	.	.	6,807
equities .....	.	.	.	.	528

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

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

Instruments	1989	1990	1991	1992	1993
Cheques issued .....	170	120	77	71	51
Payments by debit and credit cards .....	50	55	68	70	94
Paper-based credit transfers .....	204	276	210	165	161
customer initiated .....					
interbank/large-value .....					
Paperless credit transfers .....	378	326	388	456	462
customer initiated .....					
interbank/large-value .....					
Direct debits .....	27	30	34	37	40
<b>Total .....</b>	<b>829</b>	<b>807</b>	<b>777</b>	<b>799</b>	<b>808</b>

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

Instruments	1989	1990	1991	1992	1993
Cheques issued .....	680	698	757	675	487
Payments by debit and credit cards .....	33	34	43	44	62
Paper-based credit transfers .....	1,576	1,871	1,980	2,115	2,230
<i>customer initiated</i> .....					
<i>interbank/large-value</i> .....					
Paperless credit transfers .....	2,926	3,474	3,674	3,538	3,744
Direct debits .....	163	188	203	152	205
<b>Total</b> .....	<b>5,378</b>	<b>6,265</b>	<b>6,657</b>	<b>6,524</b>	<b>6,728</b>

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

	1989	1990	1991	1992	1993
Members .....	16	13	11	11	10
<i>of which: live</i> .....	15	13	10	10	10
Sub-members <sup>1</sup> .....	11	10	9	9	9
<i>of which: live</i> .....	11	10	9	9	9
Participants <sup>2</sup> .....	0	0	0	0	0
<i>of which: live</i> .....	0	0	0	0	0
Total users .....	27	23	20	20	19
<i>of which: live</i> .....	26	23	19	19	19
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i> .....	1,697	1,812	1,963	2,074	2,244
<i>sub-members</i> .....	1,315	1,469	1,607	1,738	1,887
<i>participants</i> .....	37	63	78	91	125
<i>users</i> .....	3,049	3,344	3,648	3,903	4,256

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

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

Table 15  
S.W.I.F.T. message flows to/from domestic users<sup>1</sup>

	1989	1990	1991	1992	1993
Total messages sent .....	6,091,052	6,248,239	6,701,761	7,088,941	7,447,346
<i>of which:</i>					
<i>category I</i> <sup>1</sup> .....	2,324,604	2,458,434	2,653,863	2,810,225	2,915,188
<i>category II</i> <sup>2</sup> .....	1,704,908	1,672,378	1,788,521	1,797,251	1,863,230
<i>sent to domestic users</i> .....	967,900	980,546	1,055,822	994,931	984,831
Total messages received .....	5,291,973	5,417,561	5,766,385	5,879,573	6,040,394
<i>of which:</i>					
<i>category I</i> <sup>1</sup> .....	.	.	.	1,980,723	2,136,086
<i>category II</i> <sup>2</sup> .....	.	.	.	1,482,130	1,566,639
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic .....	298,780,982	332,895,932	365,159,291	405,540,962	457,218,200

<sup>1</sup> Category I: customer (funds) transfers. <sup>2</sup> Category II: bank (funds) transfers.

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





Table 1  
Basic statistical data

	1989	1990	1991	1992	1993
Population (thousands):					
<i>year-end</i> .....	6,720.0	6,751.0	6,834.0	6,905.0	6,968.6
<i>average</i> .....	6,723.0	6,796.0	6,872.0	6,936.0	6,989.0
GDP (CHF billions) .....	290.4	314.0	332.7	338.4	343.0
GDP per capita .....	43,214.0	46,512.0	48,683.0	49,008.0	49,220.8
Exchange rate (domestic currency vis-à-vis USD):					
<i>year-end (December average)</i> .....	1.5679	1.2776	1.3877	1.4220	1.4640
<i>average</i> .....	1.6357	1.3880	1.4353	1.4036	1.4775

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

	1989	1990	1991	1992	1993
Notes and coin .....	26.14	26.34	26.30	26.85	26.96
Transferable deposits <sup>1</sup> .....	53.34	54.19	52.78	55.00	59.57
Narrow money supply (M <sub>1</sub> ) .....	79.50	80.53	79.08	81.85	86.53
<i>Memorandum item:</i>					
Broad money supply (M <sub>3</sub> )...	362.63	372.83	383.76	394.37	418.35

<sup>1</sup> Sight deposits in Swiss francs.

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

	1989	1990	1991	1992	1993
Reserve balances held at central bank <sup>1</sup> .....	5.05	4.49	4.16	4.54	4.73
Transferable deposits at other institutions .....	23.19	18.77	18.17	18.29	22.82
Transferable deposits at PTT (Post Office) .....	1.88	1.51	1.39	1.78	1.71
<i>Memorandum items:</i>					
Required reserves <sup>2</sup> .....	5.11	5.66	5.55	5.81	5.81
Institutions' borrowing from central bank <sup>3</sup> .....	0.70	0.17	0.11	0.03	0.01

<sup>1</sup> Figures at year-end are peak values; average figures are as follows (in billions): 1989: 3.49, 1990: 3.02, 1991: 2.83, 1992: 2.55, 1993: 2.65. <sup>2</sup> Cash liquidity (cash, deposits with the Swiss National Bank and the PTT). <sup>3</sup> Lombard credits.

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

	1989	1990	1991	1992	1993
Total banknotes and coin issued .....	30,895.3	31,438.8	31,270.2	31,359.6	31,374.8
Denomination of banknotes:					
1,000 francs .....	13,497.3	13,613.3	13,263.0	13,501.9	13,584.9
500 francs .....	4,093.6	4,081.3	3,912.0	3,782.5	3,748.0
100 francs .....	8,741.4	9,043.9	9,089.1	9,059.0	8,926.8
50 francs .....	1,320.9	1,346.9	1,371.6	1,401.9	1,425.1
20 francs .....	960.4	985.4	1,000.7	1,017.9	1,044.9
10 francs .....	545.8	560.7	571.7	581.3	596.9
Coin .....	1,735.9	1,807.3	2,062.1	2,015.1	2,048.2
Banknotes held by credit institutions (incl. PTT) .....	4,646.2	5,108.2	4,696.2	4,375.6	4,462.5
Total banknotes and coin outside credit institutions .....	26,249.1	26,330.6	26,574.0	26,984.0	26,912.3

Table 5  
**Institutional framework**  
 (at end-1993)

Categories	Number of institutions	Number of branches	Number of accounts	Value of accounts (CHF billions)
Central bank .....	1	10 <sup>1</sup>	776	4.73
Credit institutions .....	419	3,991	.	45.78
Post Office .....	1	3,765	1,472,019	14.70
<i>Memorandum item:</i>				
Foreign banks .....	13	24	.	0.1

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

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

	1989	1990	1991	1992	1993
<b>Cash dispensers and ATMs:</b>					
<i>Number of networks</i> <sup>1</sup> .....	2	2	2	2	2
<i>Number of machines</i> .....	1,962	2,262	2,371	2,669	3,062
<i>Volume of transactions</i> <sup>2,3</sup> .....	33.30	39.40	45.50	51.50	57.67
<i>Value of transactions</i> <sup>2,4</sup> .....	10.78	12.68	14.67	16.27	17.71
<b>EFTPOS:</b>					
<i>Number of networks</i> <sup>5</sup> .....	2	2	2	2	2
<i>Number of terminals:</i> <sup>6</sup>					
<i>ec-Direct</i> .....	2,047	2,765	4,763	7,054	9,989
<i>Postomat-Plus</i> .....	448	913	2,281	4,273	8,367
<i>Volume of transactions</i> <sup>3</sup> .....	6.20	9.60	13.60	19.40	27.95
<i>Value of transactions</i> <sup>4</sup> .....	0.26	0.47	0.80	1.41	2.43

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

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

	1989	1990	1991	1992	1993
Cards with a debit/credit function .....	3,231	3,709	4,147	4,547	5,115
<i>of which:</i>					
<i>cards with a debit function</i>	1,712	2,179	2,383	2,691	3,165
<i>cards with a credit function</i> .....	1,079	1,339	1,518	1,706	1,828
<i>cards with a cash function</i> <sup>1</sup> .....	2,157	2,728	3,184	3,783	4,359
Cards with a cheque guarantee function .....	2,152	2,356	2,629	2,840	3,286
Retailer cards .....	.	.	.	.	.

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

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

	1989	1990	1991	1992	1993
SIC (Swiss Interbank Clearing) .....	56.1	61.8	65.2	64.3	67.4
Payments on data media or file transfer <sup>1</sup> .....	35.6	39.5	46.0	56.7	65.5
Cheques .....	18.5	17.0	15.5	13.0	9.8

<sup>1</sup> Includes DTA (data media 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)

	1989	1990	1991	1992	1993
SIC (Swiss Interbank Clearing) .....	30,020.0	30,355.0	30,431.0	33,369.0	34,126.0
Payments on data media or file transfer <sup>1</sup> .....	.	.	.	.	.
Cheques .....	62.6	61.1	55.3	46.9	36.5

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

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

	1989	1990	1991	1992	1993
SEGA: <sup>1</sup>					
Deliveries against payment .....	4.43	3.81	3.29	3.38	4.20
Deliveries free of payment .	0.52	0.47	0.46	0.44	0.42

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

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

	1989	1990	1991	1992	1993
SEGA <sup>1</sup> .....	396.1	374.6	342.1	385.8	654.0

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

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

Instruments	1989	1990	1991	1992	1993
Through banks: <sup>1</sup>					
Cheques issued <sup>2</sup> .....	26.0	24.1	22.0	19.2	15.4
Payments by debit and credit cards <sup>3</sup> .....	19.7	25.7	38.7	49.4	60.9
Paperless credit transfers <sup>4</sup> ..	84.8	93.2	101.8	110.0	119.8
Direct debits .....	6.9	8.1	9.3	11.0	13.2
<b>Total</b> .....	<b>137.4</b>	<b>151.1</b>	<b>171.8</b>	<b>189.5</b>	<b>209.3</b>
Through the PTT:					
Payments by debit cards <sup>5</sup> ...	.	0.4	0.8	2.1	4.4
Transfers (paper-based and paperless credit transfers, direct debits) <sup>6</sup> .....	206.8	223.1	236.0	245.6	258.7
<b>Total</b> .....	<b>206.8</b>	<b>223.5</b>	<b>236.8</b>	<b>247.7</b>	<b>263.1</b>
<b>Grand total</b> .....	<b>344.2</b>	<b>374.6</b>	<b>408.6</b>	<b>437.2</b>	<b>472.4</b>

<sup>1</sup> Intrabank payments are not included. <sup>2</sup> Eurocheques, bank cheques and Swiss Bankers Travellers Cheques. <sup>3</sup> Eurocheque card, American Express, Eurocard, VISA and Diners Club; partly estimated. <sup>4</sup> SIC and banks' data media exchange system. <sup>5</sup> POSTCARD. <sup>6</sup> Detailed figures were no longer published by the PTT after 1992.

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

Instruments	1989	1990	1991	1992	1993
Through banks: <sup>1</sup>					
Cheques issued <sup>2</sup> .....	63.50	61.97	56.11	47.71	37.21
Payments by debit and credit cards <sup>3</sup> .....	3.91	4.64	6.79	8.43	10.57
Paperless credit transfers <sup>4</sup> ...	30,020.00	30,355.00	30,431.00	33,369.00	34,126.00
Direct debits .....	.	.	.	.	.
<b>Total</b> .....	<b>30,087.41</b>	<b>30,421.61</b>	<b>30,493.90</b>	<b>33,425.14</b>	<b>34,173.78</b>
Through the PTT:					
Payments by debit cards <sup>5</sup> ...	.	0.03	0.06	0.13	0.30
Transfers (paper-based and paperless credit transfers, direct debits) <sup>6</sup> .....	842.70	971.60	1,041.95	1,107.25	1,124.47
<b>Total</b> .....	<b>842.70</b>	<b>971.63</b>	<b>1,042.01</b>	<b>1,107.38</b>	<b>1,124.77</b>
<b>Grand total</b> .....	<b>30,930.11</b>	<b>31,393.24</b>	<b>31,535.91</b>	<b>34,532.52</b>	<b>35,298.55</b>

<sup>1</sup> Intrabank payments are not included. <sup>2</sup> Eurocheques, bank cheques and Swiss Bankers Travellers Cheques. <sup>3</sup> Eurocheque card, American Express, Eurocard, VISA and Diners Club; partly estimated. <sup>4</sup> Only SIC. <sup>5</sup> POSTCARD. <sup>6</sup> Detailed figures were no longer published by the PTT after 1992.

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

	1989	1990	1991	1992	1993
Members .....	102	107	109	117	119
<i>of which: live</i> .....	95	101	101	113	115
Sub-members <sup>2</sup> .....	48	52	53	57	61
<i>of which: live</i> .....	40	47	52	53	60
Participants <sup>3</sup> .....	4	4	5	5	6
<i>of which: live</i> .....	1	3	2	2	3
Total users .....	154	163	167	179	186
<i>of which: live</i> .....	136	151	155	168	178
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i> .....	1,697	1,812	1,963	2,074	2,244
<i>sub-members</i> .....	1,315	1,469	1,607	1,738	1,887
<i>participants</i> .....	37	63	78	91	125
<i>users</i> .....	3,049	3,344	3,648	3,903	4,256

<sup>1</sup> Data for Switzerland and Liechtenstein. <sup>2</sup> Domestic users sponsored by members abroad. <sup>3</sup> Participants are not shareholders in S.W.I.F.T. and their message traffic over the network is restricted.

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

Table 15  
S.W.I.F.T. message flows to/from domestic users<sup>1</sup>

	1989	1990	1991	1992	1993
Total messages sent .....	24,435,931	25,531,459	26,442,633	28,835,267	30,961,709
<i>of which:</i>					
<i>category I</i> <sup>2</sup> .....	6,528,566	7,180,236	7,644,180	7,912,899	8,024,796
<i>category II</i> <sup>3</sup> .....	7,016,273	7,401,454	7,946,117	8,424,164	8,639,285
<i>sent to domestic users</i> .....	4,172,487	4,212,054	4,258,900	4,977,941	5,435,479
Total messages received .....	20,352,052	22,558,989	23,796,984	25,805,430	27,264,322
<i>of which:</i>					
<i>category I</i> <sup>2</sup> .....	.	.	.	5,364,953	5,526,472
<i>category II</i> <sup>3</sup> .....	.	.	.	4,655,906	4,665,332
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic .....	298,780,982	332,895,932	365,159,291	405,540,962	457,218,200

<sup>1</sup> Data for Switzerland and Liechtenstein. <sup>2</sup> Category I: customer (funds) transfers. <sup>3</sup> Category II: bank (funds) transfers.

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



Table 1  
Basic statistical data

	1989	1990	1991	1992	1993
Population (millions):					
<i>mid-year</i> .....	57.2	57.4	57.6	57.8 <sup>1</sup>	58.2 <sup>1</sup>
GDP (GBP billions) <sup>2</sup> .....	515.3	550.3	573.4	594.9	630.0
GDP per capita .....	9,009	9,587	9,955	10,292	10,825
Exchange rate (domestic currency vis-à-vis USD):					
<i>year-end</i> .....	0.6202	0.5183	0.5354	0.6601	0.6766
<i>average</i> .....	0.6104	0.5598	0.5655	0.5661	0.6660

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

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

	1989	1990	1991	1992	1993 <sup>2</sup>
Notes and coin .....	15.4	15.2	15.7	17.0	17.9
Narrow money deposits <sup>1</sup> .....	220.9	240.0	262.6	340.2 <sup>1</sup>	377.6
Narrow money supply <sup>1</sup> .....	236.3	255.2	278.3	357.2 <sup>1</sup>	395.5
<i>Memorandum items:</i>					
Broad money supply (M <sub>4</sub> ) ..	423.4	474.3	502.1	519.4	546.8
Broad money deposits .....	408.0	459.1	486.4	502.4	528.9
<i>of which held by:</i>					
<i>persons</i> .....	284.2	317.4	340.1	354.2	366.7
<i>corporate sector</i> .....	59.8	63.9	69.8	69.3	75.6
<i>other</i> .....	64.0	77.7	76.5	78.9	86.6

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

Table 3  
**Settlement media used by banks, building societies and discount houses**  
 (at year-end, not seasonally adjusted, in billions of pounds sterling)

	1989	1990	1991	1992	1993 <sup>2</sup>
Reserve balances held at central bank .....	1.6	1.8	1.6	1.4	1.4
Sight and time deposits with other banks, building societies, discount houses .....	193.2	200.0	187.0	210.3	204.5
<i>of which:</i>					
<i>sight</i> .....	30.7	30.5	26.8	31.6	30.6
<i>time</i> .....	147.8	152.4	140.2	157.2	154.9
<i>residual</i> <sup>1</sup> .....	14.7	17.1	20.0	21.5	19.0
<i>Memorandum items:</i>					
Required reserves .....	0	0	0	0	0
Discount houses' borrowing from central bank .....	0.01	0.04	0	0	0.33

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

Table 4  
**Banknotes and coin**  
 (in millions of pounds sterling)

	1989	1990	1991	1992	1993
Total banknotes and coin outstanding <sup>1,2</sup> .....	18,820	19,367	19,880	20,445	21,559
Denomination of banknotes in circulation: <sup>3</sup>					
50 pounds .....	.	2,518	2,640	2,801	2,996
20 pounds .....	.	5,277	5,797	6,498	7,337
10 pounds .....	.	6,426	6,323	5,856	5,714
5 pounds .....	.	1,528	1,276	1,232	1,211
1 pound .....	.	61	60	58	57
<b>Total</b> .....	<b>15,450</b>	<b>15,810</b>	<b>16,096</b>	<b>16,445</b>	<b>17,315</b>
Banknotes held by credit institutions <sup>1,2,4</sup> .....	3,462	4,111	4,165	3,613	3,662
Total banknotes outside credit institutions <sup>1,2,4</sup> .....	15,358	15,256	15,715	16,832	17,897

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

Table 5  
**Institutional framework**  
 (at end-1993)

Categories	Number of institutions	Number of branches	Number of accounts (millions)	Value of accounts (GBP billions) <sup>1</sup>
Central bank .....	1	5	} 74.9 <sup>2</sup>	} 179.8 <sup>3</sup>
Commercial banks .....	489	13,107 <sup>2</sup>		
Building societies .....	87	5,654	41.5	197.8 <sup>4</sup>
Post Office .....	1	19,958	15.9	1.4 <sup>5</sup>
<b>Total</b> .....	<b>578</b>	<b>38,724</b>	<b>132.3</b>	<b>379.0</b>
<i>Memorandum item:</i>				
Branches of foreign banks .....	261	.	.	.

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

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

	1989	1990	1991	1992	1993
Cash dispensers and ATMs:					
<i>Number of networks</i> .....	4	3	3	3	3
<i>Number of machines (thousands)</i> .....	15.7	17.0	17.8	18.2	18.7
<i>Volume of transactions (millions)</i> .....	883	992	1,066	1,147	1,198
<i>Value of transactions (GBP billions)<sup>1</sup></i> .....	35	43	49	54	58
EFTPOS:					
<i>Number of networks<sup>2</sup></i> .....	3	3	3	3	3
<i>Number of terminals (thousands)<sup>3</sup></i> .....	75	110	190	200	220
<i>Volume of transactions (millions)</i> .....	.	.	.	.	.
<i>Value of transactions (GBP billions)</i> .....	.	.	.	.	.

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

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

	1989	1990	1991	1992	1993
Cards with a cash function <sup>2</sup> .....	65.4	66.9	65.8	67.9	69.6
Cards with a debit/credit function:					
<i>of which:</i>					
<i>cards with a debit function<sup>3</sup> .....</i>	13.6	19.0	20.1	22.6	24.1
<i>cards with a credit function<sup>2,4</sup> .....</i>	30.1	31.4	28.4	27.9	26.9
Cards with a cheque guarantee function <sup>5</sup> .....	37.8	42.3	43.0	44.4	44.0
Retailer cards <sup>6</sup> .....	.	.	.	8.9	8.5

<sup>1</sup> A card with multiple functions may appear in several categories. It is, therefore, not meaningful to add the figures. <sup>2</sup> Bank cards only (excludes cards issued by building societies). <sup>3</sup> Debit cards were introduced in 1988. <sup>4</sup> Bank VISA and MasterCard and travel and entertainment cards (charge cards) only (excludes cards issued by building societies). <sup>5</sup> Includes eurocheque cards. <sup>6</sup> This figure does not include the number of accounts issued by smaller retailers.

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

	1989	1990	1991	1992	1993
Large-value systems:					
<i>Town (paper)</i> <sup>1</sup> .....	2	1	0.3	0.1	0.1
<i>CHAPS (automated)</i> .....	6	8	8	9	11
Cheque and credit clearings:					
<i>cheques</i> <sup>1,2</sup> .....	2,449	2,517	2,472	2,395	2,323
<i>paper-based credit transfers</i> <sup>1,2</sup> .....	198	191	183	182	173
BACS:					
<i>credit transfers</i> <sup>1</sup> .....	707	756	786	819	858
<i>direct debits</i> .....	709	846	916	1,001	1,045
<b>Total</b> .....	<b>4,071</b>	<b>4,319</b>	<b>4,365.3</b>	<b>4,406.1</b>	<b>4,410.1</b>

<sup>1</sup> Inter-branch items are excluded. <sup>2</sup> Includes Northern Ireland and Scotland.

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

	1989	1990	1991	1992	1993
Large-value systems:					
<i>Town (paper)</i> <sup>1</sup> .....	6,754	4,776	2,228	1,387	1,069
<i>CHAPS (automated)</i> .....	14,733	18,880	19,050	20,928	23,545
Cheque and Credit Clearings:					
<i>cheques</i> <sup>1,2</sup> .....	1,142	1,210	1,207	1,175	1,194
<i>paper-based credit transfers</i> <sup>1,2</sup> .....	116	118	113	110	106
BACS:					
<i>credit transfers</i> <sup>1</sup> .....	333	418	484	519	574
<i>direct debits</i> .....	193	250	288	284	262
<b>Total</b> .....	<b>23,271</b>	<b>25,652</b>	<b>23,370</b>	<b>24,403</b>	<b>26,750</b>

<sup>1</sup> Inter-branch items are excluded. <sup>2</sup> Includes Northern Ireland and Scotland. (Includes estimates.)

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

	1989	1990	1991	1992	1993
CGO <sup>1</sup> .....	.	.	584.0	678.2	736.8
CMO <sup>2</sup> .....	.	.	219.1	247.6	267.6

<sup>1</sup> Central Gilts Office. <sup>2</sup> Central Moneymarkets Office; the CMO began operations in October 1990.

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

	1989	1990	1991	1992	1993
CGO <sup>1</sup> .....	.	.	4,355	6,862	11,725
CMO <sup>2</sup> .....	.	.	1,651	2,054	2,344

<sup>1</sup> Central Gilts Office. <sup>2</sup> Central Moneymarkets Office; the CMO began operations in October 1990.

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

Instruments	1989	1990	1991	1992	1993
Cheques issued: <sup>1,4</sup>					
<i>large-value (Town) .....</i>	3.0	1.0	0.4	<0.1	<0.1
<i>others .....</i>	3,143.0	3,212.0	3,126.0	3,005.0	2,886.1
Payments by card:					
<i>debit .....</i>	68.0	192.0	359.0	522.0	659.0
<i>credit</i> <sup>3</sup> .....	651.0	693.0	690.0	715.0	738.4
Paper-based credit transfers <sup>2,4</sup>	494.0	496.0	477.0	462.0	432.2
Paperless credit transfers:					
<i>large-value (CHAPS) .....</i>	6.0	8.0	8.0	9.0	11.0
<i>others</i> <sup>4</sup> .....	782.0	832.0	861.0	892.0	924.7
Direct debits .....	709.0	846.0	916.0	1,001.0	1,046.0
<b>Total</b> <sup>5</sup> .....	<b>5,856.0</b>	<b>6,280.0</b>	<b>6,437.4</b>	<b>6,606.0</b>	<b>6,697.5</b>

<sup>1</sup> Excludes cheques processed at branch level. Includes cheques used to obtain cash. <sup>2</sup> Excludes items processed at branch level. <sup>3</sup> VISA and MasterCard bank credit cards only. Excludes transactions by holders of charge cards (travel and entertainment cards) and retailer cards. <sup>4</sup> Includes inter-branch items (values are estimated). <sup>5</sup> Excludes postal orders and government payments in cash from post offices against state benefit vouchers.

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

Instruments	1989	1990	1991	1992	1993
Cheques issued: <sup>1,4</sup>					
<i>large-value (Town) .....</i>	9,440.0	5,120.0	2,420.0	1,451.0	1,094.6
<i>others .....</i>	1,469.0	1,549.0	1,533.0	1,483.0	1,492.0
Payments by card:					
<i>debit .....</i>	1.7	5.1	9.5	13.8	17.9
<i>credit<sup>3</sup> .....</i>	23.8	27.7	29.4	31.3	33.5
Paper-based credit transfers <sup>2,4</sup>	629.0	677.0	652.0	621.0	582.0
Paperless credit transfers:					
<i>large-value (CHAPS) .....</i>	14,733.0	18,880.0	19,050.0	20,928.0	23,545.0
<i>others<sup>4</sup> .....</i>	352.0	441.0	512.0	542.0	598.0
Direct debits .....	193.0	250.0	288.0	284.0	262.0
<b>Total<sup>5</sup> .....</b>	<b>26,841.5</b>	<b>26,949.8</b>	<b>24,493.9</b>	<b>25,354.1</b>	<b>27,625.0</b>

<sup>1</sup> Excludes cheques processed at branch level. Includes cheques used to obtain cash. <sup>2</sup> Excludes items processed at branch level. <sup>3</sup> VISA and MasterCard bank credit cards only. Excludes transactions by holders of charge cards (travel and entertainment cards) and retailer cards. <sup>4</sup> Includes inter-branch items (values are estimated). <sup>5</sup> Excludes postal orders and government payments in cash from post offices against state benefit vouchers.



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

	1989	1990	1991	1992	1993
Members .....	53	54	54	57	59
<i>of which: live</i> .....	48	53	53	56	57
Sub-members <sup>2</sup> .....	191	196	204	210	219
<i>of which: live</i> .....	183	187	197	197	214
Participants <sup>3</sup> .....	12	22	28	28	46
<i>of which: live</i> .....	9	17	18	23	38
Total users .....	256	272	286	295	324
<i>of which: live</i> .....	240	257	268	276	309
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i> .....	1,697	1,812	1,963	2,074	2,244
<i>sub-members</i> .....	1,315	1,469	1,607	1,738	1,887
<i>participants</i> .....	37	63	78	91	125
<i>users</i> .....	3,049	3,344	3,648	3,903	4,256

<sup>1</sup> Data for the United Kingdom and the Isle of Man. <sup>2</sup> Domestic users sponsored by members abroad. <sup>3</sup> Participants are not shareholders in S.W.I.F.T. and their message traffic over the network is restricted.

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

Table 15  
S.W.I.F.T. message flows to/from domestic users<sup>1</sup>

	1989	1990	1991	1992	1993
Total messages sent .....	35,768,234	40,436,615	43,171,404	48,167,743	54,796,966
<i>of which:</i>					
<i>category I</i> <sup>2</sup> .....	6,903,624	7,639,886	8,106,518	8,851,050	9,537,290
<i>category II</i> <sup>3</sup> .....	12,995,940	14,036,209	14,799,002	16,109,002	18,110,333
<i>of which:</i>					
<i>sent/received</i> <i>to/from domestic</i> <i>users</i> .....	8,091,519	9,495,324	10,058,121	11,538,743	12,838,570
Total messages received .....	31,430,355	35,495,611	37,850,280	42,182,121	48,734,436
<i>of which:</i>					
<i>category I</i> <sup>2</sup> .....	.	.	.	10,212,447	11,316,746
<i>category II</i> <sup>3</sup> .....	.	.	.	7,863,519	8,284,102
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic .....	298,780,982	332,895,932	365,159,291	405,540,962	457,218,200

<sup>1</sup> Data for the United Kingdom and the Isle of Man. <sup>2</sup> Category I: customer (funds) transfers. <sup>3</sup> Category II: bank (funds) transfers.

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

Table 1  
Basic statistical data

	1989	1990	1991	1992	1993
Population (millions) <sup>1</sup> .....	247.3	249.9	252.7	255.5	258.2
GDP (USD billions) <sup>2</sup> .....	5,250.8	5,546.1	5,722.9	6,038.5	6,374.0
GDP per capita (in USD) .....	21,232.5	22,193.3	22,647.0	23,634.1	24,683.1

<sup>1</sup> Data estimated as of 1st July each year. Includes Armed Forces overseas. <sup>2</sup> Annual data.

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

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

	1989	1990	1991	1992	1993
Notes and coin <sup>2</sup> .....	228.1	249.5	270.3	298.1	328.4
Transferable deposits <sup>3</sup> .....	579.6	586.9	639.4	744.0	821.2
Narrow money supply (M <sub>1</sub> ) <sup>4</sup> ....	811.5	843.8	916.7	1,046.7	1,153.8
<i>Memorandum item:</i>					
Broad money supply: <sup>4</sup>					
M <sub>2</sub> .....	3,245.1	3,366.0	3,470.4	3,527.6	3,585.7
M <sub>3</sub> .....	4,066.4	4,135.5	4,191.9	4,198.2	4,244.3

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

Source: Federal Reserve.

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

	1989	1990	1991	1992	1993
Balances held at central bank <sup>1</sup> ..	38.3	38.7	29.5	32.1	34.6
Balances due from commercial banks <sup>2</sup> .....	33.6	34.1	31.0	33.0	28.9
<i>Memorandum items:</i>					
Banks' borrowing from central bank (USD millions) <sup>3</sup> .....	481.0	190.0	218.0	675.0	94.0
Required reserves <sup>4</sup> .....	62.0	56.1	54.5	55.4	61.9

<sup>1</sup> Year-end balances of depository institutions held at Federal Reserve banks including reserve balances and required clearing balances. Data not seasonally adjusted. <sup>2</sup> Consists of year-end non-interest-bearing balances due from commercial banks in the United States. These transferable balances do not include immediately available funds, such as federal funds sold and securities purchased under agreements to resell (RPs), which together amounted to US\$ 128.5, 147.9, 148.6, 150.9 162.0 and 159.3 billion dollars at year-end 1989, 1990, 1991, 1992 and 1993, respectively. Data not seasonally adjusted. <sup>3</sup> Monthly average figures may be significantly different from year-end figures. Data not seasonally adjusted. <sup>4</sup> Required reserves are biweekly averages of daily figures for weeks ending 27th December 1989, 26th December 1990, 25th December 1991, 23rd December 1992 and 22nd December 1993. Vault cash used to satisfy required reserves in December (average of daily figures, not seasonally adjusted) amounted to US\$ 30.5, 32.7, 33.3, 34.8 and 37.2 billion for 1989, 1990, 1991, 1992 and 1993 respectively.

Source: Federal Reserve.

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

	1989	1990	1991	1992	1993
Total banknotes and coin outstanding <sup>1</sup> .....	299.3	325.2	387.5 <sup>2</sup>	384.9	431.4
Banknotes and coin held by depository institutions <sup>3</sup> .....	32.3	37.4	37.4	36.6	36.9
Banknotes and coin held by Treasury and Federal Reserve banks .....	38.9	38.3	79.8 <sup>2</sup>	50.2	66.1
Banknotes and coin outside Treasury and Federal Reserve banks .....	260.4	286.9	307.7	334.7	365.3
<i>of which:</i>					
100 dollars .....	118.7	140.2	157.2	177.1	201.5
50 dollars .....	31.7	33.9	35.6	38.0	41.0
20 dollars .....	67.1	69.0	70.0	73.3	74.9
10 dollars .....	12.5	12.6	12.6	13.0	13.2
5 dollars .....	6.1	6.3	6.4	6.7	6.9
1 dollar .....	4.9	5.1	5.3	5.5	5.7
other <sup>4</sup> .....	1.1	1.1	1.2	1.2	1.3
coin .....	18.2	18.2	19.3	19.9	20.8
Total banknotes and coin held by public .....	228.1	249.5	270.3	298.1	328.4

<sup>1</sup> Total currency and coin outstanding. <sup>2</sup> The increase in currency outstanding in 1991 can be partly attributed to increased holdings of high-denomination notes by the Treasury, Federal Reserve banks and depository institutions prior to the introduction of notes with enhanced anti-counterfeiting devices. <sup>3</sup> Partly estimated. <sup>4</sup> Miscellaneous banknotes outstanding.

Sources: US Treasury and Federal Reserve.

Table 5  
**Institutional framework**  
 (at end-1993)

Categories	Number of institutions	Number of branches <sup>1</sup>	Number of accounts (thousands, sight)	Value of accounts (billions, sight)
Central bank <sup>2</sup> .....	1(12)	36	10.9 <sup>3</sup>	36.2 <sup>4</sup>
Commercial banks .....	10,876	53,021	.	854.6 <sup>5</sup>
Thrift institutions <sup>6</sup> .....	2,401	16,049	.	61.6 <sup>5</sup>
Credit unions .....	12,472	.	.	26.9 <sup>5</sup>
<i>Memorandum item:</i>				
Branches and agencies of foreign banks .....	585	.	.	.

<sup>1</sup> Number of branches does not include head offices. <sup>2</sup> The Federal Reserve is the central bank. The Board of Governors is located in Washington, D.C. and there are twelve District banks located in Atlanta, Boston, Chicago, Cleveland, Dallas, Kansas City, Minneapolis, New York, Philadelphia, Richmond, St. Louis and San Francisco. Eleven regional cheque processing centres are not included in the number of branches. <sup>3</sup> Number of depository institution accounts at the central bank. <sup>4</sup> Consists of deposits by depository institutions at the central bank. <sup>5</sup> Total transactions accounts. Data not seasonally adjusted. <sup>6</sup> Includes savings banks, savings and loan associations, cooperative and industrial banks at year-end 1993.

Source: Federal Reserve.

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

	1989	1990	1991	1992	1993
<b>Cash dispensers and ATMs:</b>					
<i>Number of networks</i> .....	100.0	90.0	75.0	73.0	65.0
<i>Number of machines</i> <sup>2</sup> .....	75,632.0	80,156.0	83,545.0	87,330.0	94,822.0
<i>Volume of transactions</i> <i>(billions)</i> .....	5.1	5.8	6.4	7.2	7.5
<i>Value of transactions (USD</i> <i>billions)</i> .....	330.0	383.0	429.0	482.0	525.0
<b>EFTPOS:<sup>3</sup></b>					
<i>Number of networks</i> <sup>4</sup> .....	41.0	40.0	23.0	26.0	26.0
<i>Number of terminals</i> .....	49,500.0	60,000.0	88,000.0	115,042.0	196,000.0
<i>Volume of transactions</i> <i>(millions)</i> .....	129.6	180.0	245.4	333.0	430.0
<i>Value of transactions (USD</i> <i>billions)</i> .....	4.0	6.0	6.4	8.0	10.3

<sup>1</sup> Estimates provided by POS News (Faulkner & Gray). <sup>2</sup> Does not include card-activated terminals which do not dispense cash. <sup>3</sup> Personal Identification Number (PIN)-based debit EFTPOS. <sup>4</sup> Both shared and proprietary networks are included.

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

	1989	1990	1991	1992	1993
Cards with a cash function <sup>2</sup> .....	166.1	173.0	177.3	179.9	.
Cards with a cheque guarantee function <sup>3</sup> .....	.	.	.	.	.
Cards with a debit/credit function <sup>3</sup> .....	451.6	480.4	500.0	520.5	534.6
<i>of which:</i>					
<i>cards with a debit function</i>	<i>184.0</i>	<i>191.0</i>	<i>200.0</i>	<i>205.0</i>	<i>209.0</i>
<i>cards with a credit function<sup>4</sup> .....</i>	<i>267.6</i>	<i>289.4</i>	<i>300.0</i>	<i>315.5</i>	<i>325.6</i>
Retailer cards .....	475.0	469.1	464.4	462.7	461.9
Oil company cards .....	122.4	122.0	123.4	119.7	117.7
Travel and entertainment cards	23.5	24.5	24.1	22.4	25.6

<sup>1</sup> Cards that provide multiple functions (i.e., cash and debit) are in widespread use. These cards are reported in more than one category. <sup>2</sup> ATM/Cash Dispenser Personal Identification Number (PIN) type debit cards. Prepaid cards which can also be used as a cash substitute are not included. <sup>3</sup> Reliable data on cheque guarantee "cards" are not available. <sup>4</sup> Includes VISA, MasterCard, Discover and American Express (green, gold, platinum, corporate and optima) cards as well as travel and entertainment cards listed below.

Sources: H. Spencer Nilson (Oxnard, California) and Martaus Associates and POS News (Faulkner & Gray).



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

	1989	1990	1991	1992	1993
Large-value systems: <sup>1</sup>					
CHIPS <sup>2</sup> .....	36.5	37.3	37.6	39.1	42.2
Fedwire <sup>3</sup> .....	59.5	62.6	64.7	67.6	69.7
Cheque clearings:					
private clearing houses and direct exchanges <sup>4</sup> .....	19,044.0	19,944.0	20,689.0	21,024.0	22,527.0
Federal Reserve <sup>5</sup> .....	18,702.0	19,307.0	19,412.0	19,728.0	19,681.0
Automated clearing houses:					
private <sup>6</sup> .....	.	.	.	114.0	120.1
Federal Reserve <sup>7</sup> .....	1,181.0	1,427.0	1,631.0	1,843.0	2,085.1
Memorandum item:					
"On-us" cheques <sup>8</sup> .....	15,154.0	16,149.0	17,364.0	17,648.0	18,089.0

<sup>1</sup> Number of originations. Data do not include non-value messages. <sup>2</sup> CHIPS, the Clearing House Interbank Payments System, is operated by the New York Clearing House Association. <sup>3</sup> Fedwire is operated by the Federal Reserve. <sup>4</sup> Cheques are processed either "on-us" (about 30%), or by regional private cheque clearing houses (about 36%, which includes direct exchanges), or by the Federal Reserve. Estimate. Source: Federal Reserve. <sup>5</sup> Includes personal cheques, commercial cheques, government cheques and postal money orders. <sup>6</sup> Private ACH transactions volume is estimated. <sup>7</sup> Data before 1991 do not include items sent directly to the Federal Reserve by the New York Automated Clearing House but include these items in 1991 and thereafter. Includes all government and commercial debits and credits. Excludes debit items with no value such as notifications of changes in customer information. <sup>8</sup> Estimated.

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

	1989	1990	1991	1992	1993
Large-value systems:					
CHIPS <sup>1</sup> .....	190,200.0	222,100.0	217,300.0	238,300.0	262,256.4
Fedwire <sup>2</sup> .....	182,600.0	199,100.0	192,300.0	199,200.0	207,629.8
Cheque clearings:					
private clearing houses and direct exchanges .....	.	.	.	.	.
Federal Reserve <sup>3</sup> .....	12,971.0	13,154.0	12,792.0	13,850.0	14,623.0
Automated clearing houses: <sup>4</sup>					
private .....	.	.	.	550.0	587.4
Federal Reserve <sup>5</sup> .....	4,232.0	4,661.0	6,912.0	8,458.0	8,747.3

<sup>1</sup> CHIPS, the Clearing House Interbank Payments System, is operated by the New York Clearing House Association. <sup>2</sup> Fedwire is operated by the Federal Reserve. <sup>3</sup> Includes personal cheques, commercial cheques, government cheques and postal money orders. *Source:* Federal Reserve. <sup>4</sup> The value of private ACH transactions is estimated. <sup>5</sup> Includes all government and commercial debits and credits. Data before 1991 do not include items sent directly to the Federal Reserve by the New York Automated Clearing House, but include these items in 1991 and thereafter.

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

	1989	1990	1991	1992	1993
Federal Reserve:					
Government securities <sup>1</sup> .....	10.9	10.9	11.1	11.8	12.0
Depository Trust Company:					
Corporate and municipal securities <sup>2</sup> .....	73.9	72.6	73.2	83.3	98.3

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

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

	1989	1990	1991	1992	1993
Federal Reserve:					
<i>Government securities</i> <sup>1</sup> .....	95.7	99.9	116.3	139.7	146.2
Depository Trust Company:					
<i>Corporate and municipal securities</i> <sup>2</sup> .....	9.2	8.8	13.9	19.4	27.8

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

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

Instruments	1989	1990	1991	1992	1993
Cheques issued <sup>1</sup> .....	52,900.0	55,400.0	57,470.0	58,400.0	60,297.2
Payments by card:					
<i>debit</i> <sup>2</sup> .....	215.0	278.0	301.0	505.0	.
<i>credit</i> <sup>3</sup> .....	8,903.0	10,750.0	11,241.0	11,700.0	12,516.0
Paperless credit transfers:					
<i>CHIPS</i> .....	36.5	37.3	37.6	39.1	42.2
<i>Fedwire</i> <sup>4</sup> .....	59.5	62.6	64.7	67.6	69.7
<i>Federal Reserve ACH</i> <sup>5</sup> .....	767.7	940.8	1,058.6	1,189.5	1,345.7
Direct debits:					
<i>Federal Reserve ACH</i> <sup>6</sup> .....	413.6	486.6	572.6	653.8	739.4
<b>Total</b> <sup>7</sup> .....	<b>63,295.3</b>	<b>67,955.3</b>	<b>70,745.5</b>	<b>72,555.0</b>	<b>75,010.2</b> <sup>8</sup>

<sup>1</sup> Includes personal cheques, commercial and government cheques, commercial and postal money orders and travellers' cheques. Data for the volume of cheques not processed by the Federal Reserve are estimated. <sup>2</sup> Estimates are based on June data and include on-line POS debits and ACH/POS debits. *Source:* POS News (Faulkner & Gray, New York). <sup>3</sup> Includes all types of credit card transactions (i.e. bank, oil company, telephone, retail store, travel and entertainment, etc.). Bank cards include VISA and MasterCard credit cards only (excluding debit cards). *Source:* The Nilson Report (Oxnard, CA.). <sup>4</sup> Fedwire funds transfer volume only. <sup>5</sup> Does not include commercial "on-us" ACH credit transactions originated and received by the same bank. It is estimated that "on-us" items increase total ACH volume (debits + credits) by at least 13%. <sup>6</sup> Does not include commercial "on-us" debit items. Excludes debit items with no value such as notifications of changes in customer information. <sup>7</sup> Does not include 12.0 million government securities transfers on Fedwire in 1993 valued at US\$ 146.2 trillion. <sup>8</sup> Does not include payments made by debit card in 1993.

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

Instruments	1989	1990	1991	1992	1993
Cheques issued <sup>1</sup> .....	69,220.0	70,000.0	66,000.0	67,000.0	69,160.7
Payments by card:					
debit <sup>2</sup> .....	10.9	13.5	16.3	21.8	.
credit <sup>3</sup> .....	413.5	463.3	485.0	529.1	620.6
Paperless credit transfers:					
CHIPS .....	190,200.0	222,100.0	217,300.0	238,300.0	262,256.4
Fedwire <sup>4</sup> .....	182,600.0	199,100.0	192,300.0	199,200.0	207,629.8
Federal Reserve ACH <sup>5</sup> .....	1,135.8	1,423.8	2,092.2	2,690.6	3,046.7
Direct debits:					
Federal Reserve ACH <sup>6</sup> .....	3,096.1	3,236.7	4,819.4	5,767.0	5,700.6
<b>Total<sup>7</sup> .....</b>	<b>446,676.3</b>	<b>496,337.3</b>	<b>483,012.9</b>	<b>513,508.5</b>	<b>548,414.8<sup>8</sup></b>

<sup>1</sup> Includes personal cheques, commercial and government cheques, commercial and postal money orders and travellers' cheques. Data for the volume of cheques not processed by the Federal Reserve are estimated. <sup>2</sup> Estimates are based on June data and include on-line POS debits and ACH/POS debits. *Source:* POS News (Faulkner & Gray, New York). <sup>3</sup> Includes all types of credit card transactions (i.e. bank, oil company, telephone, retail store, travel and entertainment, etc.). Bank cards include VISA and MasterCard credit cards only (excluding debit cards). *Source:* The Nilson Report (Oxnard, CA). <sup>4</sup> Values of transactions processed on Fedwire Funds transfer system only. <sup>5</sup> Does not include commercial "on-us" ACH credit transactions originated and received by the same bank. It is estimated that "on-us" items increase total ACH volume (debits + credits) by at least 13%. Government ACH credit transactions included in the total are estimated for 1988. <sup>6</sup> Does not include commercial "on-us" debit items. <sup>7</sup> Does not include 12.0 million government securities transfers on Fedwire in 1993 valued at US\$ 146.2 trillion. <sup>8</sup> Does not include payments by debit card in 1993.

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

	1989	1990	1991	1992	1993
Members .....	158	155	158	154	147
<i>of which: live</i> .....	152	152	152	151	146
Sub-members <sup>2</sup> .....	216	217	222	242	267
<i>of which: live</i> .....	200	205	212	230	257
Participants <sup>3</sup> .....	10	19	21	23	26
<i>of which: live</i> .....	8	10	14	17	23
Total users .....	384	391	401	419	440
<i>of which: live</i> .....	360	367	378	398	426
<i>Memorandum items:</i>					
Total S.W.I.F.T.:					
<i>members</i> .....	1,697	1,812	1,963	2,074	2,244
<i>sub-members</i> .....	1,315	1,469	1,607	1,738	1,887
<i>participants</i> .....	37	63	78	91	125
<i>users</i> .....	3,049	3,344	3,648	3,903	4,256

<sup>1</sup> Data for the United States and Puerto Rico. <sup>2</sup> Domestic users sponsored by members abroad. <sup>3</sup> Participants are not shareholders in S.W.I.F.T. and their message traffic over the network is restricted.

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

Table 15  
S.W.I.F.T. message flows to/from domestic users<sup>1</sup>

	1989	1990	1991	1992	1993
Total messages sent .....	46,256,189	53,935,959	59,992,143	64,993,013	72,629,616
<i>of which:</i>					
<i>category I<sup>2</sup></i> .....	6,264,048	7,114,348	7,873,755	9,466,437	11,230,055
<i>category II<sup>3</sup></i> .....	9,387,084	10,698,462	11,499,568	12,243,759	13,760,056
<i>of which:</i>					
<i>sent to/received from domestic users</i> .....	7,258,893	9,271,351	10,211,287	10,948,963	11,782,604
Total messages received ....	51,204,503	58,194,552	64,593,442	70,982,141	80,281,134
<i>of which:</i>					
<i>category I<sup>2</sup></i> .....	.	.	.	15,225,444	17,043,643
<i>category II<sup>3</sup></i> .....	.	.	.	35,433,454	37,604,439
<i>Memorandum item:</i>					
Global S.W.I.F.T. traffic .....	298,780,982	332,895,932	365,159,291	405,540,962	457,218,200

<sup>1</sup> Data for the United States and Puerto Rico. <sup>2</sup> Category I: customer (funds) transfers. <sup>3</sup> Category II: bank (funds) transfers.

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

## **COMPARATIVE TABLES**





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

	1989	1990	1991	1992	1993
	<b>USD per inhabitant<sup>2</sup></b>				
Belgium .....	1,185	1,335	1,331	1,239	1,164
Canada .....	600	611	646	627	636
France .....	756	880	863	828	749
Germany .....	1,380	1,330	1,411	1,534	1,511
Italy .....	924	1,065	1,168	1,023	921
Japan .....	2,288	2,570	2,789	2,739	3,243
Netherlands .....	1,263	1,440	1,431	1,339	1,263
Sweden .....	1,286	1,471	1,587	1,207	1,039
Switzerland .....	2,491	3,053	2,802	2,748	2,638
United Kingdom .....	434	511	509	446	455
United States .....	922	998	1,070	1,167	1,272
	<b>As percentage of GDP</b>				
Belgium .....	7.0	6.4	6.2	5.9	6.0
Canada .....	2.9	3.0	3.1	3.3	3.4
France .....	4.0	3.9	3.4	3.7	3.6
Germany .....	6.6 <sup>3</sup>	6.5 <sup>3</sup>	6.0	6.5	6.7
Italy .....	5.7	5.3	5.4	5.7	5.8
Japan .....	10.2	10.1	9.6	9.1	9.7
Netherlands .....	7.4	7.1	6.8	6.6	6.5
Sweden .....	5.5	5.3	5.3	5.1	5.2
Switzerland .....	9.0	8.4	8.0	8.0	7.9
United Kingdom .....	3.0	2.8	2.7	2.9	2.8
United States .....	4.3	4.5	4.7	4.9	5.2
	<b>As percentage of narrow money<sup>4</sup></b>				
Belgium .....	32.5	31.3	31.2	31.5	29.6
Canada .....	43.8	46.1	46.7	46.8	44.0
France .....	15.2	15.1	15.8	15.9	15.5
Germany .....	32.6	27.1	28.4	29.9	29.2
Italy .....	15.0	14.4	14.2	15.7	15.5
Japan .....	35.3	36.0	33.1	31.2	31.1
Netherlands .....	30.3	29.5	28.6	27.4	25.1
Sweden .....	11.9	11.3	11.5	10.8	10.7
Switzerland .....	33.0	32.7	33.6	33.0	31.2
United Kingdom .....	6.5	6.0	5.6	4.8	4.5
United States .....	28.2	29.2	29.4	28.4	28.5

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

Table 2  
Transferable deposits held by non-banks<sup>1</sup>

	1989	1990	1991	1992	1993
<b>USD per inhabitant<sup>2</sup></b>					
Belgium .....	2,465	2,925	2,929	2,700	2,764
Canada .....	3,635	3,608	3,730	3,504	3,617
France .....	4,231	4,936	4,596	4,382	4,085
Germany .....	2,918	3,732	3,655	3,591	3,761
Italy .....	4,994	6,070	6,756	5,286	4,863
Japan <sup>3</sup> .....	6,165	6,058	7,001	7,141	8,160
Netherlands .....	2,910	3,448	3,569	3,548	3,763
Sweden .....	9,622	11,737	12,450	10,096	8,819
Switzerland .....	5,063	6,283	5,565	5,601	5,839
United Kingdom .....	6,227	8,067	8,515	8,917	9,589
United States .....	2,328	2,387	2,540	2,907	3,180
<b>As percentage of GDP</b>					
Belgium .....	14.5	14.1	13.6	12.8	14.0
Canada .....	17.8	17.4	18.0	18.5	19.5
France .....	22.4	22.0	20.9	19.3	19.4
Germany .....	14.0 <sup>4</sup>	18.3 <sup>4</sup>	15.6	15.3	16.7
Italy .....	30.6	30.2	31.0	29.4	30.4
Japan .....	25.4	27.8	27.1	25.4	25.1
Netherlands .....	17.1	16.9	17.0	17.4	19.5
Sweden .....	41.5	42.2	41.2	43.0	44.4
Switzerland .....	18.4	17.3	15.9	16.3	17.4
United Kingdom .....	42.9	43.6	45.8	57.2	60.0
United States .....	11.0	10.8	11.2	12.3	12.9
<b>As percentage of narrow money<sup>5</sup></b>					
Belgium .....	67.5	68.7	68.8	68.5	70.0
Canada .....	265.9	272.0	270.0	261.5	250.0
France .....	84.8	84.9	84.2	84.1	84.5
Germany .....	68.9	76.1	73.7	70.1	72.7
Italy .....	80.9	82.1	82.2	81.3	81.9
Japan <sup>6</sup> .....	87.4	96.7	97.9	91.5	86.5
Netherlands .....	69.8	70.6	71.4	72.6	74.9
Sweden .....	89.5	90.3	90.2	90.6	90.6
Switzerland .....	67.0	67.3	66.4	67.0	68.8
United Kingdom .....	93.5	94.0	94.4	95.2	95.5
United States .....	71.0	69.9	69.8	70.8	71.2

<sup>1</sup> For explanation of figures and definition of transferable deposits, see relevant country tables. <sup>2</sup> Year-end figures converted at end-of-year exchange rates. <sup>3</sup> End-March figure converted at end-March exchange rate. <sup>4</sup> GDP for old Länder only. <sup>5</sup> Narrow money: M<sub>1</sub>; except for Sweden (M<sub>3</sub>) and the United Kingdom (M<sub>2</sub>). <sup>6</sup> End-March figure.

Table 3  
Settlement media used by banks<sup>1</sup>  
(1993)

	Banks' reserves at central bank (USD billion) <sup>2</sup>	Banks' reserves at central bank in percentage of narrow money <sup>3</sup>	Transferable deposits at other banks (USD billion) <sup>2</sup>	Transferable deposits at other banks in percentage of narrow money <sup>2</sup>
Belgium .....	0.039	0.09	10.5	26.4
Canada .....	1.0	2.3	0.1	0.2
France .....	3.5	1.2	450.4	161.5
Germany .....	35.0	8.3	220.2	52.3
Italy .....	62.2	18.3	30.8	9.1
Japan .....	26.5	2.0	77.9 <sup>4</sup>	6.6 <sup>5</sup>
Netherlands .....	0.022	0.03	1.6	2.1
Sweden .....	1.4	1.7	4.2	5.0
Switzerland .....	3.2	5.5	15.6	26.4
United Kingdom .....	2.1	0.4	302.3	51.7
United States .....	34.6	3.0	28.9	2.5

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

Table 4  
**Institutional framework<sup>1</sup>**  
 (1993)

	Number of institutions	Number of inhabitants per institution	Number of branches	Number of inhabitants per branch	Number of accounts per inhabitant
Belgium .....	133	75,947	11,874	851	1.2
Canada <sup>2</sup> .....	2,721	10,658	13,803	2,101	.
France .....	630	91,587	46,340	1,245	1.1
Germany .....	3,893	20,884	66,590	1,221	1.0
Italy .....	993	57,603	36,519	1,566	0.4
Japan .....	5,619	22,210	73,883	1,689	.
Netherlands .....	130	118,008	7,149	2,146	1.1
Sweden .....	111	78,559	4,324	2,017	3.2
Switzerland .....	421	16,552	7,766	897	.
United Kingdom .....	578	100,692	38,724	1,503	2.3
United States .....	25,749	10,028	69,070	3,738	.

<sup>1</sup> For explanation of figures see relevant country tables. <sup>2</sup> Deposit-taking institutions only.

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

	1989	1990	1991	1992	1993
<b>Number of machines per 1,000,000 inhabitants</b>					
Belgium .....	92	94	105	109	119
Canada .....	332	420	467	510	554
France .....	231	255	284	305	325
Germany .....	148	141	171	235	308
Italy .....	135	169	204	245	266
Japan .....	627	711	795	870	935
Netherlands .....	123	180	222	260	291
Sweden .....	227	245	258	254	255
Switzerland .....	292	335	347	387	439
United Kingdom .....	275	296	309	316	321
United States .....	306	321	331	342	367
<b>Number of transactions per inhabitant</b>					
Belgium .....	6.8	7.1	8.1	8.8	9.1
Canada .....	27.7	28.4	33.6	36.0	37.5
France .....	9.0	10.0	11.0	12.0	13.3
Germany .....	.	.	.	.	.
Italy <sup>2</sup> .....	1.7	2.2	2.9	3.6	4.1
Japan .....	.	1.7	2.4	3.0	3.3
Netherlands .....	.	7.7	13.7	17.2	20.4
Sweden .....	20.5	19.9	24.1	25.1	28.3
Switzerland .....	5.0	5.8	6.6	7.4	8.3
United Kingdom .....	15.4	17.3	18.5	19.8	20.6
United States .....	20.6	23.2	25.3	28.2	29.0
<b>Average value of transactions (USD)<sup>3</sup></b>					
Belgium .....	94.2	113.2	117.4	113.2	110.3
Canada <sup>4</sup> .....	52.4	54.8	56.7	55.5	53.5
France .....	72.2	81.4	82.7	86.1	77.0
Germany .....	.	.	.	.	.
Italy .....	195.6	238.5	239.2	245.4	196.8
Japan .....	.	354.2	356.5	355.4	392.9
Netherlands .....	.	95.3	92.2	98.5	96.4
Sweden .....	91.8	106.3	120.6	128.6	101.2
Switzerland .....	197.9	231.9	224.6	225.1	207.8
United Kingdom .....	65.0	77.0	81.0	83.0	72.7
United States .....	64.7	66.0	67.0	66.9	70.0

<sup>1</sup> For explanation of figures see relevant country tables. <sup>2</sup> Estimated figures referring to the whole system; they differ from those provided in the statistical annex of the Italian chapter. <sup>3</sup> Converted at yearly average exchange rates. <sup>4</sup> Average value of a cash withdrawal only.

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

	1989	1990	1991	1992	1993
<b>Number of terminals per 1,000,000 inhabitants</b>					
Belgium .....	2,477	2,828	3,213	4,034	5,246
Canada .....	156	332	472	1,035	2,134
France .....	2,842	3,180	3,568	5,594	7,435
Germany .....	174	290	432	640	344
Italy .....	178	385	805	1,094	1,350
Japan .....	14	82	213	264	168
Netherlands .....	137	148	267	751	1,600
Sweden .....	403	711	1,034	1,647	3,054
Switzerland .....	322	384	758	1,640	2,634
United Kingdom .....	1,311	1,916	3,299	3,806	3,780
United States .....	200	240	348	450	759
<b>Number of transactions per inhabitant</b>					
Belgium .....	6.7	7.9	9.9	12.0	15.6
Canada .....	0.1	0.1	0.4	1.1	2.6
France .....	11.0	16.5	18.5	22.7	24.3
Germany .....	0.01	0.04	0.25	0.35	0.85
Italy <sup>2</sup> .....	0.05	0.12	0.19	0.28	0.39
Japan .....	0.002	0.004	0.006	0.006	0.005
Netherlands .....	1.1	1.8	2.1	3.1	4.4
Sweden .....	0.6	1.6	3.5	5.3	7.2
Switzerland .....	0.9	1.4	2.0	2.8	4.0
United Kingdom .....	.	.	.	.	.
United States .....	0.5	0.7	1.0	1.3	1.7
<b>Average value of transactions (USD)<sup>3</sup></b>					
Belgium .....	42.2	55.4	57.9	57.7	63.2
Canada .....	43.1	42.8	44.3	43.8	38.8
France .....	65.8	59.7	58.5	62.5	58.0
Germany .....	66.4	35.4	53.6	43.5	54.2
Italy .....	101.6	138.8	163.6	161.6	121.5
Japan .....	.	.	103.9	97.7	184.9
Netherlands .....	19.4	26.5	30.1	46.0	58.5
Sweden .....	124.1	96.5	93.5	101.0	67.1
Switzerland .....	25.6	35.3	41.0	51.8	58.8
United Kingdom .....	.	.	.	.	.
United States .....	30.9	33.3	26.1	24.0	24.0

<sup>1</sup> For explanation of figures see relevant country tables. <sup>2</sup> Estimated figures referring to the whole system; they differ from those provided in the statistical annex of the Italian chapter. <sup>3</sup> Converted at yearly average exchange rates.

Table 7  
**Number of cards<sup>1</sup>**  
 (1993, per 1,000 inhabitants)

	<b>Cards with a cash function</b>	<b>Cards with a debit/credit function</b>	<b>Cards with cheque guarantee function</b>	<b>Retailers' cards</b>
Belgium .....	823	835	531	99
Canada .....	1,252	476	.	4,310
France .....	378	372	3	.
Germany .....	.	552	442	.
Italy .....	197	285	29	.
Japan .....	2,145	1,769	.	425
Netherlands .....	854	82	117	.
Sweden .....	660	1,309	.	913
Switzerland .....	626	734	472	.
United Kingdom .....	1,196	876	756	146
United States .....	.	.	.	2,070

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

Table 8

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

	1989	1990	1991	1992	1993
<b>Cheques</b>					
Belgium .....	27.7	23.8	21.5	18.8	16.0
Canada .....	68.7	66.8	64.8	62.4	58.7
France .....	55.2	54.4	52.2	50.6	49.1
Germany .....	9.6	9.9	9.6	8.8	8.3
Italy <sup>2</sup> .....	45.0	44.2	41.6	40.0	37.2
Japan .....	.	.	.	.	.
Netherlands .....	15.9	15.2	14.3	12.3	8.1
Sweden .....	20.5	14.9	9.9	8.9	6.3
Switzerland <sup>3</sup> .....	7.6	6.4	5.4	4.4	3.3
United Kingdom <sup>4</sup> .....	54.0	51.0	49.0	45.0	43.1
United States .....	83.6	81.5	81.2	80.5	80.4
<b>Payment by cards</b>					
Belgium .....	9.1	11.0	13.3	15.6	16.5
Canada .....	25.9	26.8	27.8	28.9	31.1
France .....	12.4	13.1	14.5	15.0	15.7
Germany .....	1.2	1.5	1.8	2.1	2.6
Italy <sup>2</sup> .....	1.6	2.4	3.1	3.7	4.1
Japan .....	.	.	.	.	.
Netherlands .....	1.0	1.6	1.8	2.6	4.1
Sweden .....	6.0	6.8	8.7	8.8	11.6
Switzerland .....	5.7	7.0	9.7	11.8	13.8
United Kingdom .....	12.0	14.0	16.0	19.0	20.8
United States .....	14.4	16.2	16.3	16.8	16.7

<sup>1</sup> For explanation of figures see relevant country tables. In some cases the total may not sum to 100% because of other items. <sup>2</sup> Estimated figures referring to the whole system; they differ from those provided in the statistical annex of the Italian chapter. <sup>3</sup> Postal cheques are not included because detailed figures were no longer published by the PTT after 1992. In 1991 its share was approximately 4%. <sup>4</sup> Includes Town cheques.



Table 8 (contd.)

	1989	1990	1991	1992	1993
<b>Credit transfers</b>					
Belgium .....	56.0	57.6	57.0	56.8	58.5
Canada .....	3.2	3.6	3.9	4.4	5.2
France .....	15.2	15.0	15.2	15.4	15.4
Germany .....	51.6	51.6	51.3	49.8	46.5
Italy <sup>2</sup> .....	39.8	40.0	40.9	42.1	44.6
Japan .....	.	.	.	.	.
Netherlands .....	63.5	62.1	61.3	61.3	66.4
Sweden .....	70.2	74.6	77.0	77.7	77.1
Switzerland .....	84.7	84.4	82.7	81.3	80.1
United Kingdom <sup>5</sup> .....	22.0	21.0	21.0	21.0	20.4
United States .....	1.3	1.5	1.6	1.8	1.9
<b>Direct debits</b>					
Belgium .....	6.9	7.6	8.2	8.8	9.0
Canada .....	2.2	2.8	3.5	4.3	5.0
France .....	9.1	9.4	9.3	10.2	10.6
Germany .....	37.6	37.0	37.3	39.3	42.6
Italy <sup>2</sup> .....	2.6	3.1	3.8	4.1	4.4
Japan .....	.	.	.	.	.
Netherlands .....	19.6	21.1	22.6	23.9	21.5
Sweden .....	3.3	3.7	4.4	4.6	5.0
Switzerland .....	2.0	2.2	2.3	2.5	2.8
United Kingdom .....	12.0	13.0	14.0	15.0	15.6
United States .....	0.7	0.7	0.8	0.9	1.0

<sup>5</sup> Paper-based and paperless (includes large-value: CHAPS).

Table 9  
**Relative importance of cashless payment instruments<sup>1</sup>**  
 (percentage of total value of cashless transactions)

	1989	1990	1991	1992	1993
<b>Cheques</b>					
Belgium .....	9.3	7.5	5.4	6.2	5.4
Canada .....	99.2	99.1	99.0	98.8	98.8
France .....	9.2	8.5	7.3	6.4	4.6
Germany .....	3.4	2.7	2.8	2.4	2.3
Italy <sup>2</sup> .....	15.3	10.5	9.1	7.1	5.4
Japan .....	.	.	.	.	.
Netherlands .....	0.2	0.2	0.2	0.2	0.1
Sweden .....	13.0	11.0	11.0	10.0	7.2
Switzerland <sup>3</sup> .....	0.2	0.2	0.2	0.1	0.1
United Kingdom <sup>4</sup> .....	41.0	25.0	16.0	12.0	9.4
United States .....	15.5	14.1	13.7	13.0	12.6
<b>Payment by cards</b>					
Belgium .....	0.1	0.1	0.1	0.2	0.1
Canada .....	0.3	0.3	0.3	0.3	0.3
France .....	0.2	0.2	0.2	0.2	0.2
Germany .....	0.01	0.02	0.02	0.02	0.02
Italy <sup>2</sup> .....	0.04	0.04	0.04	0.04	0.03
Japan .....	.	.	.	.	.
Netherlands .....	0.0	0.0	0.0	0.0	0.0
Sweden .....	0.5	0.5	0.5	1.0	0.9
Switzerland <sup>5</sup> .....	.	.	.	.	.
United Kingdom .....	0.1	0.1	0.2	0.2	0.2
United States .....	0.1	0.1	0.1	0.1	0.1

<sup>1</sup> For explanation of figures see relevant country tables. In some cases the total may not sum to 100% because of other items. <sup>2</sup> Estimated figures referring to the whole system; they differ from those provided in the statistical annex of the Italian chapter. <sup>3</sup> Postal cheques are not included because detailed figures were no longer published by the PTT after 1992. In 1991 its share was below 0.1%. <sup>4</sup> Includes Town cheques. <sup>5</sup> Below 0.1%.

Table 9 (contd.)

	1989	1990	1991	1992	1993
<b>Credit transfers</b>					
Belgium .....	90.4	92.2	94.3	93.4	94.2
Canada .....	0.4	0.5	0.6	0.7	0.7
France .....	87.7	88.8	89.9	91.2	93.5
Germany .....	95.1	95.5	95.4	95.5	95.7
Italy <sup>2</sup> .....	81.2	87.0	88.6	91.1	93.2
Japan .....	.	.	.	.	.
Netherlands .....	98.5	98.6	98.4	98.6	98.8
Sweden .....	83.0	85.0	85.0	86.0	88.8
Switzerland <sup>6</sup> .....	99.8	99.8	99.8	99.9	99.9
United Kingdom <sup>7</sup> .....	59.0	74.0	83.0	87.0	89.5
United States .....	83.7	85.1	85.2	85.7	86.2
<b>Direct debits</b>					
Belgium .....	0.2	0.2	0.2	0.2	0.3
Canada .....	0.1	0.1	0.1	0.2	0.2
France .....	0.8	0.6	0.7	0.6	0.7
Germany .....	1.5	1.8	1.8	2.1	2.0
Italy <sup>2</sup> .....	0.3	0.2	0.3	0.2	0.2
Japan .....	.	.	.	.	.
Netherlands .....	1.2	1.2	1.4	1.2	1.1
Sweden .....	3.0	3.0	3.0	3.0	3.1
Switzerland .....	.	.	.	.	.
United Kingdom .....	0.7	0.9	1.2	1.1	0.9
United States .....	0.7	0.7	1.0	1.1	1.0

<sup>6</sup> Only SIC and credit transfer through PTT. <sup>7</sup> Paper-based and paperless (includes large-value: CHAPS).

Table 10a  
**Features of selected interbank funds transfer systems<sup>1</sup>**  
 (figures relate to 1993)

	Type <sup>2</sup>	Owner/ Manager <sup>3</sup>	No. of participants		Processing <sup>4</sup>	Settlement <sup>5</sup>	Membership <sup>6</sup>
				of which direct			
<b>Belgium</b>							
CH .....	L + R	B + CB	145	71	M	N	O
CEC .....	R	B + CB	121	.	ACH	N	O
<b>Canada</b>							
IIPS .....	L	B + AS	67	24	.	7	RM
<b>France</b>							
SAGITTAIRE .....	L	CB	63	63	RTT	N	RM
CH Paris <sup>8</sup> .....	L + R	B	435	40	M	N	RM
CH Provinces <sup>9</sup> .....	R	CB	. <sup>10</sup>	. <sup>10</sup>	M	N	O
SIT .....	R	B	289	25	RTT	BN	R
Clearing Computer .....	R	CB	664	18	ACH	N	RM
CREIC .....	R	CB	16	16	ACH	N	O
Card payments .....	R	B	212	11	ACH	N	RM
TBF .....	L	CB	.	.	RTT	RTGS	O
<b>Germany</b>							
MAOBE .....	R	CB	5,817	.	ACH <sup>11</sup>	GS	O
DTA .....	R	CB	5,817	.	ACH	GS	O
EIL-ZV .....	L	CB	5,817	.	RTT	RTGS	O
Platz. <sup>12</sup> .....	L + R	CB	5,817	.	M	GS	O
Konv. Abrechnung <sup>13</sup> .....	L + R	CB	1,472	.	M	N	O
EAF .....	L	CB	50	.	RTT	N	RM
<b>Italy</b>							
Local clearing .....	L + R	CB	612	277	M	N	O
Retail .....	R	CB <sup>14</sup>	963	156	ACH	N	O
ME <sup>15</sup> .....	L	CB	298	298	RTT	N	O
SIPS .....	L	CB <sup>14</sup>	114	114	RTT	N	O
BISS .....	L	CB	406	406	RTT	RTGS	O

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

Table 10a (contd.)

	Degree of centralisation <sup>16</sup>	Pricing <sup>17</sup>	Closing time for same-day transactions <sup>18</sup>	Number of transactions (thousands)	Value of transactions (USD billions) <sup>19</sup>	Ratio of transactions value to GDP (at annual rate)
<b>Belgium</b>						
CH .....	D	V	16.30	22,519	8,652.73	41.9
CEC .....	C	F	13.45	740,253	631.75	3.1
<b>Canada</b>						
HPS .....	D	N	16.00	2,132	10,061	18.2
<b>France</b>						
SAGITTAIRE .....	C	F	13.00	3,900	19,204	15.33
CH Paris <sup>8</sup> .....	C	F	15.00	746,200	26,290	20.99
CH Provinces <sup>9</sup> .....	D	N	11.00	2,931,600	1,398	1.12
SIT .....	D	F	13.30	764,500	286	0.23
Clearing Computer ...	D	F	11.00	1,467,800	1,189	0.95
CREIC .....	D	V	NO	252,600	25	0.02
Card payments .....	D	F	10.30	1,819,200 <sup>20</sup>	112	0.09
TBF .....	N	F	17.00	12,000	52,412	41.84
<b>Germany</b>						
MAOBE .....	D	V	NO	463,640	1,733	0.91
DTA .....	D	V	NO	2,149,908	1,181	0.62
EIL-ZV .....	D	F	14.30	3,184	10,967	5.74
Platz. <sup>12</sup> .....	D	N	12.00	53,063	5,311	2.78
Konv. Abrechnung <sup>13</sup>	D	N	12.00	416,397	23,264	12.18
EAF .....	C	V	12.30	10,892	78,158	40.93
<b>Italy</b>						
Local clearing .....	D	V	9.30	253,189	2,937	3.0
Retail .....	C	F	NO	451,171	313	0.3
ME <sup>15</sup> .....	C	V	16.00	1,896	10,846	10.9
SIPS .....	C	F	14.00	3,111	11,625	11.7
BISS .....	C	V	17.00	43	52	0.1

<sup>16</sup> Geographical access to the system: C = Centralised (one processing centre only) or D = Decentralised. <sup>17</sup> Prices charged to participants: F = Full costs (including investments), V = Variable costs, S = Symbolic costs (below variable costs), N = No costs. <sup>18</sup> Closing time for same day transactions (NO = no same-day transactions). <sup>19</sup> Converted at yearly average exchange rates. <sup>20</sup> Card payments and ATM transactions.

Table 10b  
**Features of selected interbank funds transfer systems<sup>1</sup>**  
 (figures relate to 1993)

	Type <sup>2</sup>	Owner/ Manager <sup>3</sup>	No. of participants		Processing <sup>4</sup>	Settlement <sup>5</sup>	Membership <sup>6</sup>
				of which direct			
<b>Japan</b>							
FEYCS .....	L	B	178 <sup>7</sup>	178 <sup>7</sup>	RTT	N	RM
BOJ-NET .....	L	CB	382 <sup>7</sup>	382 <sup>7</sup>	RTT	RTGS <sup>8</sup>	RM
<b>Netherlands</b>							
BGC-CH.....	R	B	66	66	ACH	N	O
8007-S.W.I.F.T.....	L	B	64	64	ACH + RTT	N	O
FA .....	L	CB	145	145	M + RTT	N + RTGS	O
<b>Sweden</b>							
RIX .....	L + R	CB	111	20	RTT	RTGS + GS	RM
Data-Clearing .....	R	B	109	19	ACH	.	O
<b>Switzerland</b>							
SIC .....	L + R	CB + B	163	163	RTT	RTGS	RM
DTA/LSV .....	R	B	163	163	ACH	N	RM
<b>United Kingdom</b>							
CHAPS .....	L	B	415	14	RTT	N	RM
TOWN .....	L	B	14	14	M	N	RM
BACS .....	R	B	50,000 <sup>9</sup>	19	ACH	N	RM
Cheque/credit .....	R	B	613	12	M	N	RM
<b>United States</b>							
Fedwire .....	L	CB	11,200	11,200	RTT	RTGS	O
CHIPS .....	L	B	122	122	RTT	N	RM

<sup>1</sup> For additional information see relevant country chapters. <sup>2</sup> L = Large-value system; R = Retail system. <sup>3</sup> Owner/Manager: B = Banks, CB = Central Banks. <sup>4</sup> Processing method: M = Manual, ACH = Automated Clearing House (off-line), RTT = Real-Time Transmission. <sup>5</sup> N = multilateral Netting, BN = Bilateral Netting, RTGS = Real-Time Gross Settlement, GS = other Gross Settlement. <sup>6</sup> O = Open membership (any bank can apply) or RM = Restricted Membership (subject to criteria). <sup>7</sup> End-1993. <sup>8</sup> The system has been designed to allow participants to enter funds transfer instructions continuously, in which case settlement takes place on the central bank's books immediately. It is, however, also used to settle on a net basis. <sup>9</sup> Estimated.

Table 10b (contd.)

	Degree of centralisation <sup>9</sup>	Pricing <sup>10</sup>	Closing time for same-day transactions <sup>11</sup>	Number of transactions (thousands)	Value of transactions (USD billions)	Ratio of transactions value to GDP (at annual rate)
<b>Japan</b>						
FEYCS .....	D	V <sup>12</sup>	13.45	6,578	53,584	12.7
BOJ-NET .....	D	V <sup>12</sup>	17.00	3,771	353,818	83.9
<b>Netherlands</b>						
BGC-CH .....	D	F	12.45	1,130.5	2,207	3.8
8007-S.W.I.F.T. ....	C	F	12.45	1.9	9,011	15.7
FA .....	C	V	15.30	0.4	9,300	16.2
<b>Sweden</b>						
RIX .....	C	F	16.30	79	5,306	11.3
Data-Clearing .....	C	F	11.00	127,784	2,629	5.7
<b>Switzerland</b>						
SIC .....	C	F	16.15	67,437	23,097	99.5
DTA/LSV .....	C	F	NO	65,529	.	.
<b>United Kingdom<sup>13</sup></b>						
CHAPS .....	D	F	15.30	11,000	35,353	37.4
TOWN .....	C	F	15.50	100	1,644	1.7
BACS .....	C	F	NO	1,903,000	1,256	1.3
Cheque/credit .....	D	F	NO	2,496,000	1,952	2.1
<b>United States</b>						
Fedwire .....	D	F	18.30	69,700	207,630	32.6
CHIPS .....	C	F	16.30	42,200	262,256	41.1

<sup>9</sup> Geographical access to the system: C = Centralised (one processing centre only) or D = Decentralised. <sup>10</sup> Prices charged to participants: F = Full costs (including investments), V = Variable costs, S = Symbolic costs (below variable costs), N = No costs. <sup>11</sup> Closing time for same day transactions (NO = no same-day transactions). <sup>12</sup> Prices are set on the principle that institutions which are to benefit from on-line processing should pay the relevant charges. <sup>13</sup> Interbank figures only.





Table 11  
Operating hours of selected large-value interbank funds transfer systems<sup>1</sup>  
(as of December 1993)

System	Gross (G) or net (N)	Opening-closing time for same-day value (local time)	Settlement finality (local time)	Cut-off for all third-party payment orders	Cut-off for international correspondents' payment orders	Memo item: Standard money market hours (local time)
<b>Belgium</b>						
C.E.C. <sup>2</sup> .....	N	13:46-13:45 <sup>3</sup>	16:30	13:30	8:30 <sup>4</sup>	
Clearing House of Belgium .....	N	9:00-16:30	16:30	13:00	8:30 <sup>4</sup>	(9:00-16:15 <sup>5</sup> )
<b>Canada<sup>6</sup></b>						
IIPS .....	N <sup>7</sup>	8:00-16:00	12:00 <sup>8</sup>	14:30 <sup>9</sup>	16:00 <sup>9</sup>	(8:30-17:30)
<b>France</b>						
SAGITTAIRE .....	N	8:00-13:00 <sup>10</sup>	18:30	n.a.	8:00 <sup>11</sup>	(8:15-17:00)
TBF (planned) .....	G	8:00-17:15	8:00-17:15	(12)	8:00 <sup>11</sup>	
<b>Germany</b>						
Express electronic credit transfer system .....	G	8:30-14:30	8:30-14:30	(13)	8:00 <sup>11</sup>	
Express (paper-based) local credit transfer system .....	G	8:00-12:00	8:00-12:00	(13)	8:00 <sup>11</sup>	(9:30-13:00 <sup>14</sup> )
EAF <sup>15</sup> .....	N	8:00-12:30	14:30 <sup>16</sup>	(13)	8:00 <sup>11</sup>	
<b>Italy</b>						
BISS .....	G	8:00-17:00	8:00-17:00	17:00	9:00 <sup>11</sup>	(8:45-16:30 <sup>17</sup> )
SIPS .....	N	8:00-14:00	16:30	14:00	9:00 <sup>11</sup>	
ME .....	N	8:00-16:00	16:30	16:00	9:00 <sup>11</sup>	
<b>Japan</b>						
FEYCS .....	N	9:00-13:45	15:00	10:30 <sup>11</sup>	10:30 <sup>11</sup>	(9:00-17:00)
BOJ-NET .....	G <sup>18</sup>	9:00-17:00	9:00-17:00	14:00	n.a.	
<b>Netherlands</b>						
Central Bank FA System .....	G	8:00-15:30	8:00-15:30	n.a. <sup>19</sup>	n.a. <sup>19</sup>	(8:00-15:30)
8007 S.W.I.F.T. ....	N	8:00-12:00 <sup>20</sup>	13:00	8:00 <sup>11</sup>	8:00 <sup>11</sup>	
<b>Sweden</b>						
RIX .....	G <sup>18</sup>	8:15-16:30 <sup>21</sup>	8:15-16:30 <sup>21</sup>	12:00 <sup>22</sup>	8:00 <sup>11</sup>	(9:00-16:00)
<b>Switzerland</b>						
SIC .....	G	18:00-16:15 <sup>23</sup>	18:00-16:15 <sup>23</sup>	15:00 <sup>23</sup>	8:00 <sup>4</sup>	(9:00-16:00)
<b>United Kingdom</b>						
CHAPS .....	N	8:30-15:30 <sup>24</sup>	end of day	none	12:00 <sup>11</sup>	(8:00-15:30 <sup>25</sup> )
<b>United States<sup>6</sup></b>						
Fedwire .....	G	8:30-18:30	8:30-18:30	18:00	18:00	(8:30-18:30 <sup>26</sup> )
CHIPS .....	N	7:00-16:30	18:00 <sup>27</sup>	16:30	16:30	
<b>ECU clearing system</b> .....	N	14:01-14:00 <sup>28</sup>	15:45	none	none	(TOM/NEXT <sup>29</sup> )

### Footnotes to Table 11

(n.a.= not applicable)

- <sup>1</sup> Some systems make no explicit distinction between large-value and retail transactions and may be used to settle interbank transfers relating to a variety of underlying transactions. Some systems may also accept payment orders for a number of value days. Money market hours indicated refer to the time period in which domestic interbank transactions are normally carried out. They therefore do not relate to particular interbank funds transfer systems.
- <sup>2</sup> In June 1990 a special "large-value credit transfer application" was introduced in the C.E.C. All net settlements from the C.E.C. take place at the end of the day at the (manual) Clearing House of Belgium.
- <sup>3</sup> The C.E.C. transfer system operates round-the-clock, five days a week.
- <sup>4</sup> S.W.I.F.T. guideline.
- <sup>5</sup> Luxembourg dealers, who are important operators in Belgian francs, are only active in the market before noon; the central bank conducts its daily fine-tuning operations at about 11:00.
- <sup>6</sup> Eastern time.
- <sup>7</sup> The receiving bank creates a paper document called an inter-member debit voucher either for each credit transfer received or for a daily bilateral net amount. These vouchers are delivered to the (net) sending bank in batches, for which value and volume counts are entered into the Automated Clearing and Settlement System (ACSS), operated by the Canadian Payments Association.
- <sup>8</sup> Net settlement at noon the next day (retroactively).
- <sup>9</sup> Local time at the receiving HPS point, or the beneficiary account point, whichever is earlier.
- <sup>10</sup> SAGITTAIRE'S exchange day, i.e. the period during which orders are recorded by the Bank of France, begins at 8:00 and ends at 17:30. Orders sent after 17:30 are stored by S.W.I.F.T. and processed at the start of the next exchange day. SAGITTAIRE'S accounting day starts at 13:00 on D - 1 and ends at 13:00 on D (transfers sent after 13:00 on D, regardless of whether they are processed during the same exchange day or at the start of the following exchange day, are only entered in the accounts on D + 1). The net positions of members are drawn up after the close of the accounting day.
- <sup>11</sup> S.W.I.F.T. guideline; in practice it may be later.
- <sup>12</sup> A cut-off for third-party orders is being discussed for the planned TBF system.
- <sup>13</sup> This is subject to arrangements between the correspondent banks.
- <sup>14</sup> For settlement purposes it can be later.
- <sup>15</sup> Electronic netting system in Frankfurt for interbank transfers predominantly relating to international DM transactions.
- <sup>16</sup> Planned time for communication of completion (positive message) or non-completion (negative message) of settlement.
- <sup>17</sup> The money market may continue to operate beyond the standard hours according to the closing times of the clearing and settlement systems.
- <sup>18</sup> The system has been designed to allow participants to enter funds transfer instructions continuously, in which case settlement takes place on the central bank's books immediately (in the case of RIX, provided they are confirmed by the counterparty). BOJ-NET, however, is also used to settle on a net basis.
- <sup>19</sup> Interbank guilder transfers relating to international transactions are sent through the 8007 S.W.I.F.T. system which is operated by the Netherlands Bank; net settlement of these transactions takes place over the Central Bank FA System.
- <sup>20</sup> The 8007 S.W.I.F.T. system is, for a given value day, also open from 15:00 to 17:00 on the previous business day.
- <sup>21</sup> Closing time for new payment orders is 16:15; payments can be confirmed, and thereby settled, until 16:30.
- <sup>22</sup> Since mid-1994, the Riksbank has not imposed a second cut-off time. Instead, the participants have to decide among themselves which cut-off times they will use for different types of third-party orders.

- 23 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).
- 24 Earliest opening time is 8:30; all banks are required to be open to receive payments by 9:30.
- 25 There are no standard money market hours but trading typically takes place between about 8:00 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.
- 26 Trading occurs among dealers for funds on deposit at Federal Reserve Banks (i.e. federal funds) as early as 6:30.
- 27 Payments over CHIPS become final on completion of settlement, which normally occurs between 17:00 and 17:30. Rules are designed to ensure that settlement takes place no later than 18:00.
- 28 ECU payment orders can be sent (for up to 28 forward value days) through S.W.I.F.T. 24 hours a day, seven days a week. At 14:00 (GMT + 1) on each value day the netting computer calculates participants' net net positions. Messages arriving after 14:00 are processed automatically for the next value day(s).
- 29 There is no overnight market for ECU interbank loans. Day-to-day interbank ECU transactions are normally carried out in the Euro-markets on a TOM/NEXT basis.

Table 12

**Features of selected securities settlement systems**

(figures relate to 1993)

	Type <sup>1</sup>	Owner/ Manager <sup>2</sup>	No. of participants		Settlement of cash leg <sup>3</sup>	Delivery <sup>3</sup>
				of which direct		
<b>Belgium</b>						
NBB Clearing .....	G	CB	173	.	N	N
CIK <sup>4</sup> .....	E	B	183	.	N	N
<b>Canada</b>						
BBS <sup>5</sup> .....	G,E,O	B,SE,O	104	104	N	G,N
<b>France</b>						
SATURNE .....	G,O	CB	450	450	N	G
RELIT .....	G,E,O	B	449	449	N	G/N
<b>Germany</b>						
DKV .....	G,E,O	SE	.	.	N	G
<b>Italy</b>						
Securities Settlement Procedures:						
Daily Procedure .....	G	CB	318	318	N	N
Monthly Procedure .....	E	CB	292	292	N	N
CAT .....	G	CB	441	441	6	G
<b>Japan</b>						
JGB registration .....	G	CB	387 <sup>7</sup>	387 <sup>7</sup>	G/N	G/N
JGB book-entry .....	G	CB	311 <sup>7</sup>	311 <sup>7</sup>	G/N	G/N
<b>Netherlands</b>						
Stock Exchange .....	G+E+O	B+CB+SE	.	.	N	N
CB Clearing Institute .....	G+O	CB	.	.	N	N
<b>Sweden</b>						
VPC .....	G+E+O	B+O	28	28	N	G
OM .....	O	O	33	33	N	N
<b>Switzerland</b>						
SECOM .....	G,E,O	B	410	410	N <sup>8</sup> /G <sup>9</sup>	G
<b>United Kingdom</b>						
CGO .....	G+O	CB/SE	14	14	N	G
CMO .....	O	CB	12	12	N	G
<b>United States</b>						
Fedwire .....	G	CB	8,550	8,550	G	G
DTC (NDFS) <sup>10</sup> .....	E,O	B,SE,O	515	515	N	G

<sup>1</sup> G = Government securities, E = Equity, O = Other. <sup>2</sup> B = Banks, CB = Central Banks, SE = Stock Exchange, O = Other. <sup>3</sup> G = Gross, N = Net. <sup>4</sup> Stock exchange transactions. <sup>5</sup> The book-based system of The Canadian Depository for Securities Limited (CDS). <sup>6</sup> Deliveries free of payments. <sup>7</sup> End-1993. <sup>8</sup> Until 24th March 1995. <sup>9</sup> From 27th March 1995. <sup>10</sup> Next-day funds settlement.

Table 12 (contd.)

	Delivery lag	Central Securities Depository	Cash Settlement Agent	Number of transactions (thousands)	Value of transactions (USD billions) <sup>11</sup>	Ratio of transactions value to GDP (at annual rate)
<b>Belgium</b>						
NBB Clearing .....	T+2/T+5 <sup>12</sup>	NBB	CB	147	1,036.3	5.0
CIK .....	. <sup>13</sup>	CIK	CB	610	14.3	0.1
<b>Canada</b>						
BBS <sup>5</sup> .....	up to T+5	CDS	B <sup>14</sup>	9,900	12,327	22.4
<b>France</b>						
SATURNE .....	T	SATURNE	CB	137	1,987	1.5
RELIT .....	T+3 <sup>15</sup>	SICOVAM	CB	.	4,821	3.7
<b>Germany</b>						
DKV .....	T+0-40	DKV	CB	21,900 <sup>16</sup>	5,693 <sup>16</sup>	3.0
<b>Italy</b>						
Securities Settlement Procedures:						
Daily Procedure .....	T+3	CAT	CB	.	5,922	6.0
Monthly Procedure ..	T+15/45	Monte Titoli	CB	.	154	0.2
CAT .....	T	CAT	. <sup>6</sup>	561.2	1,197	1.2
<b>Japan</b>						
JGB registration .....	T+10 <sup>17</sup>	CB	CB	368.0	10,050	2.4
JGB book-entry .....	T+10 <sup>17</sup>	CB	CB	395.9	22,554	5.3
<b>Netherlands</b>						
Stock Exchange .....	T+7	Negicef	KAS-ASS	.	274.0	88.7
CB Clearing Institute .	T/T+7	CB	CB	2	32.5	10.5
<b>Sweden</b>						
VPC .....	T+3	VPC	CB	769	24.5	0.12
OM .....	T+2	.	CB	17,155	1,277	5.2
<b>Switzerland</b>						
SECOM .....	T+3	SEGA	CB	4,617	443	1.9
<b>United Kingdom</b>						
CGO .....	T+1	.	CB	736.8	17,605	18.6
CMO .....	T	CB	CB	267.6	3,520	3.7
<b>United States</b>						
Fedwire .....	T,T+1	CB	CB	12,000	146,200	22.9
DTC (NDFS) <sup>10</sup> .....	T+5	DTC	DTC	98,300	27,800	4.4

<sup>11</sup> Converted at yearly average exchange rate. <sup>12</sup> T+2 for Treasury bills; T+5 for OLOs (long-term government bonds). <sup>13</sup> Seller delivery. <sup>14</sup> A single chartered bank. <sup>15</sup> When processed by the "SLAB" system (special delivery service by bilateral agreements), the delivery occurs same day. <sup>16</sup> Delivery-versus-payment settlements only. <sup>17</sup> T+10 or less.

Table 13  
S.W.I.F.T. traffic: intra G-10 messages flows in 1993  
(number of messages, in thousands)

From/To	BE	CA	FR	DE	IT	JP	NL
Belgium .....	3,604	171	2,021	1,984	1,020	300	1,724
Canada .....	138	2,928	226	449	174	253	74
France .....	1,810	239	10,964	3,057	2,338	519	1,054
Germany .....	1,062	306	1,934	6,056	2,085	767	1,531
Italy .....	808	155	2,062	2,774	3,751	394	542
Japan .....	194	231	458	1,050	385	2,519	147
Netherlands .....	1,366	111	714	2,481	517	156	1,997
Sweden .....	219	33	267	972	215	95	202
Switzerland .....	1,231	414	2,217	4,332	1,866	542	974
United Kingdom .....	1,706	892	2,662	5,266	2,215	2,437	1,269
United States .....	1,348	1,964	2,550	5,135	2,219	4,734	2,014
<b>Total G-10 .....</b>	<b>13,487</b>	<b>7,444</b>	<b>26,075</b>	<b>33,557</b>	<b>16,786</b>	<b>12,717</b>	<b>11,529</b>
<b>Total non-G-10 .....</b>	<b>3,748</b>	<b>1,429</b>	<b>5,763</b>	<b>14,593</b>	<b>5,404</b>	<b>6,096</b>	<b>2,455</b>
<b>Total all countries</b>	<b>17,234</b>	<b>8,872</b>	<b>31,838</b>	<b>48,149</b>	<b>22,190</b>	<b>18,812</b>	<b>13,984</b>

From/To	SE	CH	GB	US	Total G-10	Non-G-10	All countries
Belgium .....	183	1,490	1,745	1,904	16,146	3,683	19,829
Canada .....	29	379	731	2,665	8,047	1,837	9,884
France .....	223	1,653	2,888	3,718	28,462	5,797	34,259
Germany .....	498	2,557	3,055	4,642	24,493	10,866	35,360
Italy .....	171	1,719	2,258	2,968	17,602	4,971	22,573
Japan .....	67	496	1,857	5,673	13,078	6,488	19,566
Netherlands .....	164	2	1,347	1,859	10,716	3,828	14,543
Sweden .....	985	262	862	1,062	5,174	2,273	7,447
Switzerland .....	222	5,435	2,913	4,839	24,985	5,977	30,962
United Kingdom .....	686	2,989	12,839	9,458	42,418	12,379	54,797
United States .....	743	3,888	6,635	11,783	43,012	29,617	72,630
<b>Total G-10 .....</b>	<b>3,971</b>	<b>20,870</b>	<b>37,129</b>	<b>50,570</b>	<b>234,133</b>	<b>87,716</b>	<b>321,849</b>
<b>Total non-G10 .....</b>	<b>2,070</b>	<b>6,394</b>	<b>11,605</b>	<b>29,711</b>	<b>89,268</b>	<b>46,102</b>	<b>135,370</b>
<b>Total all countries</b>	<b>6,040</b>	<b>27,264</b>	<b>48,734</b>	<b>80,281</b>	<b>323,400</b>	<b>133,818</b>	<b>457,218</b>

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

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