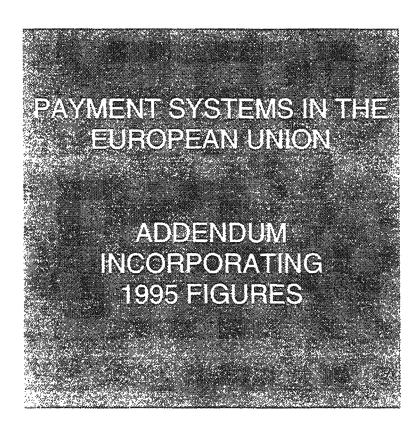
# PAYMENT SYSTEMS IN THE EUROPEAN UNION

ADDENDUM INCORPORATING 1995 FIGURES







## **Contents**

Introduction			V
Statistical data	1.	Belgium	1
	2.	Denmark	11
	3.	Germany	21
	4.	Greece	33
	5.	Spain	43
	6.	France	55
	7.	Ireland	67
	8.	Italy	<b>7</b> 7
	9.	Luxembourg	89
	10.	Netherlands	99
	11.	Austria	109
	12.	Portugal	121
	13.	Finland	131
	14.	Sweden	143
	15.	United Kingdom	153
	16.	Comparative tables	165
Annexes	1.	Methodology for the statistical data	187
	2.	Glossary	195

In accordance with Community practice, countries are listed using the alphabetical order of the national languages.

Data used in this Addendum are as of end-1995 unless otherwise indicated.

Convention used in the tables:

"-" Nil

"n.a." Not available or not applicable;

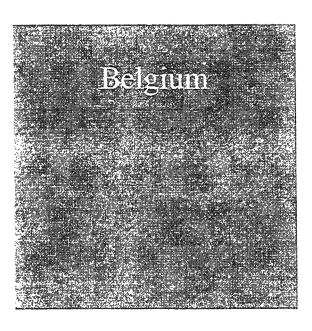
"neg." Negligible.

## Introduction

In April 1996 the European Monetary Institute published a descriptive guide to the payment and securities settlement systems operating in the Member States of the European Union (EU) on both a domestic and a cross-border basis, the so-called "Blue Book". Whilst the intention is to update the descriptive part of the Blue Book every four years, the statistical data will be updated every year.

This "Blue Book Addendum" offers the first update of the country data and comparative tables of the 1996 Blue Book incorporating 1995 figures. The data are presented as time series in order to facilitate the analysis of recent developments. Where possible, these tables follow the presentation used in the report published in December 1993 by the Bank for International Settlements on "Payment Systems in the Group of Ten Countries" (the so-called "Red Book"). However, some tables have been modified and extended in order to reflect the more homogenous situation in Europe.

Annex 1 provides a methodology for the statistical data, Annex 2 is the glossary as published in the 1996 Blue Book.



Basic statistical data (1)

	1991	1992	1993	1994	1995
Population (2) (thousands)	10,001.0	10,045.0	10,084.0	10,116.0	10,156.0
Gross domestic product (BEF billions)	6,733.6	7,098.4	7,268.6	7,626.0	7,923.4
Exchange rate vis-à-vis ECU (2)	42.2224	41.6062	40.4672	39,6620	38.5519

- (1) Since 1990 a new source of data has been used and, therefore, some of these figures may differ from those contained in the Addendum to the "Blue Book", May 1994.
- (2) Average for the year.

#### Table 2

Settlement media used by non-banks (end of year)

					BEF billions
	1991	1992	1993	1994	1995
Notes and coins	417.0	414.1	424.7	396.3	416.2
Transferable deposits (1)	917.6	902.0	1,008.2	1,066.9	1,111.3
Narrow money supply (M1)	1,334.6	1,316.1	1,432.9	1,463.2	1,527.5
Transferable deposits in foreign currencies	n.a.	86.2	102.7	87.3	123.4

(1) In local currency only.

## Table 3

Settlement media used by deposit-taking institutions (end of year)

				B	EF billions
	1991	1992	1993	1994	1995
Required reserves held at central bank	0	0	0	0	0
Free reserves held at central bank (1)	4.05	2.09	1.41	2.05	1.86
Transferable deposits at other institutions (2)	na	199.5	103.5	113.1	128.9

- (1) Average of end-of-month figures.
- (2) Revised figures; payment means held by Belgian credit institutions with other credit institutions (call money and sight accounts, BEF and foreign currencies, in Belgium and abroad).

#### Banknotes and coins

(total value, end of year)

				BI	EF billions
	1991	1992	1993	1994	1995
Total banknotes issued	431.5	430.2	440.6	412.2	445.8
of which:					
BEF 10,000 (1)	**	15.3	80.6	182.6	206.1
BEF 5,000 <sup>(2)</sup>	297.8	279.1	220.8	6.1	0.8
BEF 2,000 <sup>(9)</sup>	*	-	**	100.3	124.2
BEF 1,000	107.3	109.1	111.9	95.6	86.2
BEF 500	12.4	12.6	12.9	13.1	13.5
BEF 100	14.0	14.1	14.4	14.5	15.0
Coins issued	18.6	17.9	18.7	19.2	20.1
of which:					
BEF 500	1.1	0.2	0.2	0.2	0.2
BEF 250	-	300	330	0.1	0.1
BEF 50	6.5	7.1	7.6	7.7	8.1
BEF 20	<i>6.6</i>	6.7	6.8	6.9	7.2
BEF 5	2.4	2.5	2.6	2.7	2.8
BEF 1	1.7	1.1	1.2	1.3	1.4
BEF 0.5	0.3	0.3	0.3	0.3	0.3
Notes and coins held by credit institutions	33.1	34.0	34.6	35.1	49.7
Notes and coins in circulation outside credit institutions	417.0	414.1	424.7	396.3	416.2

- (1) Banknotes with a denomination of BEF 10,000 were first issued on 11th December 1992.
- (2) The NBB started to withdraw the BEF 5,000 banknotes, which were no longer legal tender from 1st December 1994.
- (3) A new banknote was issued with a denomination of BEF 2,000 on 22nd April 1994.

## Table 5

#### Institutional framework

(end of 1995)

Categories	Number of institutions	Number of branches	Number of accounts (thousands)	Value of accounts (BEF billions)
Central bank (1)	1	18	0	0
Credit institutions ®	145	7,749	10,754	1,037
Postcheque	1	1,707	1,201	75
TOTAL	147	9,474	11,955	1,111
Branches of foreign banks	40	59	0	0
of which EC-based	24	0	o	0

- (1) Number of branches: Five of the 23 branches became representation offices, in which no transactions with credit institutions take place
- (2) Number of branches: Non-full size branches excluded.

## Cash dispensers, ATMs and EFTPOS terminals

(end of year)

	1991	1992	1993 <sup>(1)</sup>	1994	1995
Cash dispensers and ATMs					
Number of networks	3	3	15	15	15
Number of machines	1052	1096	2819	3170	3654
Volume of transactions (millions)	80.79	88.33	115.65	120.96	144.32
Value of transactions (BEF billions)	296.71	331.67	458.18	482.08	584.03
EFTPOS terminals					
Number of networks (2)	6	6	6	6	6
Number of points of sale (3)	26,578	32,495	42,903	49,983	55,883
Volume of transactions (millions) (4)	104.06	131.44	157.81	181.96	211.45
Value of transactions (BEF billions) (4)	203.01	276.85	344.43	412.67	482.91

- (1) From 1993 onwards, the ATMs and transactions at ATMs which are part of a self-banking unit (and thus privately run) are added.
- (2) Six companies have their own POS customers, but the transactions pass through a single network, the Banksys network.
- (3) The number of machines stood at 28,253 in 1990; 32,199 in 1991; 40,627 in 1992; 52,984 in 1993; 63,765 in 1994 and 72,892 in 1995.
- (4) Payments by credit cards at POS terminals are added.

## Table 7

Number of payment cards in circulation (1) (end of year)

				į	<u>housands</u>
	1991	1992	1993	1994	1995
Cards with a cash function	6,857	7,792	8,316	8,912	9,461
Cards with a debit/credit function	6,967	7,907	8,431	8,912	9,461
of which:					
cards with a debit function	5,466	6,101	6,434	6,780	7,190
cards with a credit function (2)	1,501	1,806	1,997	2,132	2,271
Cards with a cheque guarantee function (3)	4,653	4,598	4,856	4,660	4,645
Retailer cards	767	913	1,002	1,089	1,221
Prepaid cards (4)	#	•	**	•	,-

- (1) A card with multiple functions may appear in several categories. It is, therefore, not meaningful to add the figures.
- (2) Most cards with a credit function are of the delayed debit type.
- (3) In 1993: Revised figure.
- (4) Not relevant, because the electronic purse "Proton" is still in a test phase.

Table 8

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

				millions		
	1991	1992	1993	1994	1995	
Clearing house	27.28	24.67	22.52	15.88	14.45	
Securities clearing balances	neg.	neg.	neg.	neg.	neg	
Postal drafts and money orders	2.63	2.21	2.19	3.76	3.72	
FX transactions	0.03	*	•	**	-	
Non-resident transactions	~	0.46	0.94	1.15	1.37	
Debits	6.22	5.55	4.82	6.25	5.11	
Ordinary credits	3.88	3.35	2.46	3.01	2.67	
Bilaterally exchanged credits	7.61	7.65	7.16	1.71	1.58	
Province <sup>®</sup>	6.90	5.45	4.95	•	-	
Others	0.01	0.00	0.00	**		
CEC	652.11	695.20	740.25	784.33	826.21	
Direct debits	50.75	56.53	61.94	66.43	71.95	
of which:						
ordinary direct debits	49.27	54.71	59.89	64.07	69.37	
réfunds	0.50	0.49	0.51	0.52	0.63	
unpaid direct debits	0.98	1.33	1.54	1.84	1.95	
Other debit operations	275.35	290.43	306.33	322.14	337.06	
of which:				:		
truncated cheques	110.35	98.85	91.35	84.76	77.47	
ATMs and POS	164.92	191.31	214.61	237.02	259.21	
unpaid cheques <sup>(2)</sup>	0.08	0.27	0.37	0.36	0.38	
Credit transfers	325.94	348.08	371.21	394.64	416.03	
of which:				• .		
ordinary credit transfers	277.70	294.68	308.10	322.90	337.03	
counterparty postal	3.77	3.52	3.34	2.97	2.70	
counterparty ATM-POS	23.82	29.97	40.09	49.26	57.01	
inpayment transfers	20.65	19.91	19.68	19.51	19.30	
Large-value or urgent transfers	0.07	0.16	0.77	1.12	1.17	

<sup>(1)</sup> Since 1994, the volume of transactions in the province has been broken down and classified in the relevant groups.

<sup>(2)</sup> The application has been operating since 1991.

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

	BEF million						
	1991	1992	1993	1994	1995		
Clearing house	187,000	203,067	298,952	337,567	334,353		
Securities clearing balances	5,255	5,531	8,651	11,010	12,522		
Postal drafts and money orders	39	43	42	67	40		
FX transactions	11,841	-	-	•			
Non-resident transactions	**	21,970	71,951	104,193	119,679		
Debits	18,465	18,482	18,632	16,862	14,887		
Ordinary credits	137,951	149,278	191,255	205,305	187,110		
Bilaterally exchanged credits	295	250	234	130	115		
Province (1)	5,833	6,518	8,174		2		
Others	7,321	995	13	***			
CEC	12,335	15,928	21,827	24,512	26,588		
Direct debits	299	341	367	407	440		
of which:	•	•			*		
ordinary direct debits	286	324	350	387	419		
rêfunds	4	5	5	5	6		
unpaid direct debits	9	12	12	15	15		
Other debit operations	1,627	1,699	1,787	1,830	1,859		
of which:							
truncated cheques	1,170	1,158	1,166	1,148	1,123		
ATMs and POS	455	541	610	671	724		
unpaid cheques <sup>(2)</sup>	2	7.	11	. 11	12		
Credit transfers	8,298	9,322	9,733	10,255	10,373		
of which:		• • • • • • • • • • • • • • • • • • • •	•	•	•		
ordinary credit transfers	7,667	8,606	8,937	9,386	9,438		
counterparty postal	46	44	43	39	37		
counterparty ATM-POS	446	532	599	663	719		
inpayment transfers	139	140	154	167	179		
Large-value or urgent transfers	2,111	4,566	9,940	12,020	13,916		
maile season or ailless remaining	4mg f 1 t	~,~~	010,10	7 am 5 To 500 M	s'antan ran		

<sup>(1)</sup> Since 1994, the volume of transactions in the province has been broken down and classified in the relevant groups.

<sup>(2)</sup> The application has been operating since 1991.

Participants in securities settlement systems

	Settling securities	Holding securities accounts on behalf of customers	Settling cash directly in central bank accounts
BNB Clearing	209		
Banks	121	Υ	Υ
Stockbrokers	73	Υ	Υ
ICSD (Cedel / Euroclear)	2	Y	Υ
Others:	0	0	0
- Ministry of Finance	5	Y	Υ
- Public bodies	8	Υ	Υ
CIK	163		
Banks	73	N	Y
Stockbrokers	79	N	Υ
Others:	0	0	0
- CSD (F, CH, NL, DE)	5	N	N
- Local custodian for Luxembourg	1	, N	N
CIK customers			
- Others	5	. N	
BELFOX	43		
Banks	24	Υ	N
Stockbrokers	19	Υ	N

## Table 11

Transfer instructions handled by securities settlement systems: volume of transactions

	1991	1992	1993	1994	1995
BNB Clearing	53,349	80,287	147,180	188,258	198,608
CIK (millions) (1)	261	253	566	664	485
BELFOX (2)	13,369	419,263	1,408,683	1,915,483	2,164,527

- (1) These figures relate to the number of shares and not to the number of transactions.
- (2) Total number of contracts (options and futures).

## Table 12

Transfer instructions handled by securities settlement systems: value of transactions

				E	EF billions
	1991	1992	1993	1994	1995
BNB Clearing	10,989	18,261	35,805	66,148	85,050
CIK	290	316	494	554	547
BELFOX (1)	*	0.5	1.7	4.4	5.8

(1) Premium turnover (options).

Nominal values registered by securities settlement systems (end of year)

				В	EF billions
	1991	1992	1993	1994	1995
BNB Clearing	1,880	3,870	4,781	6,450	7,485
CIK	n.a.	n.a.	n.a.	n.a.	n.a.
BELFOX	-	-	#	-	•

## Table 14

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

					millions
	1991	1992	1993	1994	1995
Cheques issued (1)	193.8	186.4	139.1	124.1	117.1
Payments by debit and credit cards (a)	119.3	144.7	169.2	190.9	211.5
Paper-based credit transfers	5.2	4.6	3.4	3.0	2.7
Paperless credit transfers (2)	506.6	524.0	586.9	642.7	662.9
Direct debits	73.2	81.3	88.5	100.1	104.5
Others	•		**	*	•
TOTAL	898.1	941.0	987.1	1,060.8	1,098.7

- (1) Postal drafts included; until 1992 the figures partly included data relating to cheques used to obtain cash.
- (2) Payments by retailer cards included.
- (3) In-payment transfers included.

## Table 15

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

					BEF billions
	1991	1992	1993	1994	1995
Cheques issued (1)	9,937	12,460	13,246	13,693	12,287
Payments by debit and credit cards (2)	262	331	388	443	508
Paper-based credit transfers	141,592	153,511	196,896	205,305	187,110
Paperless credit transfers (9)	32,808	35,284	58,709	73,984	87,037
Direct debits	430	485	787	1,568	979
Others		-	•		
TOTAL	185,029	202,071	270,026	294,993	287,921

- (1) Postal drafts included; until 1992 the figures partly included data relating to cheques used to obtain cash.
- (2) Payments by retailer cards included.
- (3) In-payment transfers included.

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

	1991	1992	1993	1994	1995
S.W.I.F.T. users	72	76	68	73	72
of which:					
members	<i>36</i>	<i>35</i>	<i>33</i>	34	32
sub-members	<i>35</i>	<i>39</i>	33	<i>36</i>	37
participants	1	2	2	3	3
Memorandum item:					
Total S.W.I.F.T. world-wide	3,648	3,903	4,004	4,623	5,229
of which:					
members	1,963	2,074	2,103	2,412	2,259
sub-members	1,607	1,738	1,802	2,023	2,259
participants	<i>78</i>	91	99	188	277

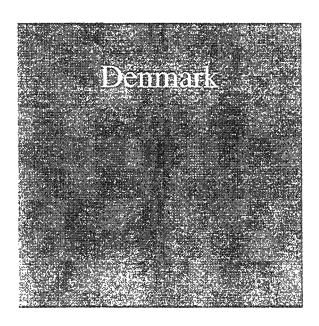
## Table 17

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

	1991	1992	1993	1994	1995
Total messages sent	16,567,543	18,097,152	19,828,726	21,233,594	23,796,106
of which:					
category I	5,347,697	5,751,632	6,145,021	6,331,292	6,660,281
category II	4,698,968	5,030,069	2,697,142	5,350,057	5,606,480
sent/received to/from domestic					•
users	2,524,657	2,920,427	2,488,985	3,907,203	4,452,493
Total messages received	13,868,647	15,086,640	17,234,167	18,910,023	21,003,109
of which:					
category I		5,171,658	3,614,711	5,835,044	6,197,728
category II	300	3,596,967	1,518,477	4,198,073	4,457,184
Memorandum item:					
Global S.W.I.F.T. traffic	3,365,159 <u>,</u> 291 4	405,540,962	457,218,200	518,097,873	582,192,512

## Definitions

- Sub-members: domestic users sponsored by members abroad;
- Participants: users which are not shareholders in S.W.I.F.T.; their message traffic over the network is restricted;
- Category I: customer (funds) transfers;
- Category II: bank (funds) transfers.





Basic statistical data (1)

	1991	1992	1993	1994	1995
Population (2) (thousands)	5,154.0	5,170.0	5,189.0	5,205.0	5,226.0
Gross domestic product: (DKK billions)	827.9	851.3	873.2	933.2	974.2
Exchange rate vis-à-vis ECU (2)	7.9082	7.8119	7.5916	7.5435	7.3280

- (1) Since 1990 a new source of data has been used and, therefore, some of these figures may differ from those contained in the Addendum to the "Blue Book", May 1994.
- (2) Average for the year.

## Table 2

Settlement media used by non-banks

(end of year)

				Ď	KK billions
	1991	1992	1993	1994	1995
Notes and coins	24.24	24.97	25.78	28.95	30.59
Transferable deposits (1)	224.72	218.45	246.40	244.54	253.00
of which held by:					
households <sup>(2)</sup>	n.a.	106.99	113.48	115.84	124.00
corporate sector (9)	n.a.	98.15	117.34	113.92	113.36
other (public sector)	n.a.	13.31	15.58	14.78	15.64

- (1) Sight deposits held by residents in DKK and in foreign currencies.
- (2) Non-business sector.
- (3) Business sector.

## Table 3

Settlement media used by deposit-taking institutions (end of year)

				DKK billions	
	1991	1992	1993	1994	1995
Required reserves held at central bank	0	0	0	0	0
Deposits on current accounts	14.39	3.35	3.39	2.82	2.02
Transferable deposits at other institutions	n.a.	n.a.	n.a.	n.a.	n.a.

## Banknotes and coins

(total value, end of year)

	_			Dł	K billions
	1991	1992	1993	1994	1995
Total banknotes issued	25.56	25.38	26.88	29.71	31.43
of which:					
DKK 1,000	14.03	14.16	15.39	17.29	18.24
DKK 500	3.85	3.81	3.98	4.69	5.31
DKK 100	6.67	6.40	6.50	6.65	6.76
DKK 50	0.63	0.62	0.67	0.70	0.74
DKK 20	0.14	0.12	n.a.	n.a.	n.a.
DKK 10	0.10	0.10	n.a	n.a.	n.a.
Other (1)	0.14	0.17	0.34	0.38	0.39
Coins issued	2.65	2.63	2.78	2.98	3.22
Notes and coins held by credit institutions	3.98	3.05	3.88	3.74	4.06
Notes and coins in circulation outside credit institutions	24.24	24.97	25.78	28.95	30.59

<sup>(1)</sup> Special banknotes in circulation in the Faroe Islands. From 1993 the figure also includes DKK 20 and DKK 10 banknotes.

## Table 5

Institutional framework

(end of 1995)

Categories	Number of institutions	Number of branches	Number of accounts (thousands)	Value of accounts (DKK billions)
Central bank	1	0	Ô	0
Commercial banks and savings banks	175	2,392	n.a.	n.a.
Co-operative and rural banks	27	27	n.a.	n.a.
Post office (Giro Bank)	0	1,250	n.a.	n.a.
TOTAL	203	3,669	8,875	253
Branches of foreign banks	7	7	n.a.	n.a.
of which EC-based	7	7	n.a.	n.a.

Cash dispensers, ATMs and EFTPOS terminals

(end of year)

	1991	1992	1993	1994	1995
Cash dispensers and ATMs					
Number of networks	1	1	1	1	1
Number of machines	370	525	561	741	1,081
Volume of transactions (millions)	n.a.	26.79	n.a.	n.a.	n.a.
Value of transactions (DKK billions)	n.a.	17.90	n.a.	n.a.	n.a.
EFTPOS terminals	· ·				
Number of networks	1	1	1	1	1
Number of points of sale (1)	19,289	22,411	21,778	24,066	26,214
Volume of transactions (millions)	85.7	110.1	134.3	161.8	189.4
Value of transactions (DKK billions)	37.54	39.25	42.60	52.54	62.33

<sup>(1)</sup> Number of machines

## Table 7

Number of payment cards in circulation (1) (end of year)

					thousands
	1991	1992	1993	1994	1995
Cards with a cash function	2,266	2,463	2,709	2,825	2,941
Cards with a debit/credit function	2,266	2,463	2,709	2,825	2,941
of which:					
cards with a debit function	2,104	2,299	2,543	2,658	2,765
cards with a credit function	162	164	166	167	176
Cards with a cheque guarantee function	199	180	132	106	62

<sup>(1)</sup> A card with multiple functions may appear in several categories. It is, therefore, not meaningful to add the figures.

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

					millions
	1991	1992	1993	1994	1995
DN Inquiry and Transfer system	0.349	0.356	0.379	0.347	0.349
DN Retail Clearing	354.762	396.761	460.329	518.646	595.649
Cheques	109.754	100.669	91.234	85.868	73.654
Direct debits	56.287	62.496	68.554	75.285	86.966
Paperless credit transfers	73.092	86.521	122.785	143.619	187.059
Payments by debit cards of which:	111.263	142.090	172.252	207.722	240.865
By EFTPOS	85.675	110,105	134.321	161.833	189.412
By paperslip	25.588	31.985	37.931	45.889	51.453
Payments by credit cards	4.366	4.985	5.504	6.152	7.105

## Table 9

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

				D	KK billions
	1991	1992	1993	1994	1995
DN Inquiry and Transfer system	12,571	16,340	25,238	24,153	18,875
DN Retail Clearing	2,050	2,192	2,553	2,831	3,138
Cheques	1,245	1,119	1,128	1,155	1,018
Direct debits	212	223	180	197	227
Paperless credit transfers	540	793	1,185	1,403	1,806
Payments by debit cards of which:	50	53	56	<b>71</b>	82
By EFTPOS	<i>38</i>	39	43	53	62
By paperslip	12	14	13	18	20
Payments by credit cards	3	4	4	5	5

Participants in securities settlement systems

	Settling securities	Holding securities accounts on behalf of customers	Settling cash directly in central bank accounts
VP	88	183	168
Banks	80	160	160
Stockbrokers	5	5	5
Cedel / Euroclear	1	1	1
Mortgage credit institutions	2	17	2

## Table 11

Transfer instructions handled by securities settlement systems: volume of transactions

					millions
	1991	1992	1993	1994	1995
VP		**************************************	<u></u>	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Government securities	3.5	3.3	3.8	3.9	3.5
Bonds	)	)	)	)	)
Shares	)	)	.)	)	)
CDs	n.a.	n.a.	n.a. 🕝	n.a.	n.a
Futures	n.a.	n.a.	n.a.	n.a.	n.a.
Options	n.a.	n.a.	n.a.	n.a.	n.a.
Others	n.a.	n.a.	n.a.	n.a.	n.a

## Table 12

Transfer instructions handled by securities settlement systems: value of transactions

DKK billions		
1994	1995	
17,478	17,754	
· )	)	
76	68	
n.a.	n.a.	
	n.a. n.a.	

Nominal values registered by securities settlement systems (end of year)

				DKK billions		
	1991	1992	1993	1994	1995	
VP						
Government securities	1,285	1,343	1,553	1,543	1,627	
Bonds	)	)	)	)	)	
Shares	62	67	68	74	78	
CDs	n.a.	n.a.	n.a.	n.a.	n.a.	
Others	n.a.	n.a.	n.a.	n.a.	n.a.	

## Table 14

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

					millions
	1991	1992	1993	1994	1995
Cheques issued	134.6	124.3	117.6	107.5	93.5
of which truncated	134.6	124.3	117.6	107.5	93.5
Payments by debit and credit cards	115.6	147.1	177.8	213.9	248.0
Paperless credit transfers	n.a.	n.a.	n.a.	n.a.	n.a.
customer initiated	n.a.	n.a.	n.a.	n.a.	n.a.
interbank/large-value	0.3	0.4	0.4	0.3	0.3
Direct debits	56.3	62.5	68.6	75.3	87.0
TOTAL	306.5	333.9	364.0	396.7	428.5

## Table 15

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

				DI	KK billions
	1,991	1,992	1,993	1994	1995
Cheques issued	1,585	1,472	1,437	1,473	1,276
of which truncated	1,585	1,472	1,437	1,473	1,276
Payments by debit and credit cards	53	57	60	76	87
Paperless credit transfers	n.a.	n.a.	n.a.	n.a.	. n.a.
customer initiated	ņ.a.	n.a.	n.a.	n.a.	n.a.
interbank/large-value	12,571	16,274	25,238	24,153	18,875
Direct debits	212	223	180	197	227
TOTAL	14,421	18,026	26,915	25,899	20,465

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

	1991	1992	1993	1994	1995
S.W.I.F.T. users	40	40	38	35	36
of which:					
members	<i>35</i>	34	<i>32</i>	30	31
sub-members	5	6	6	5	5
participants	*	•	-	•	-
Memorandum item:					
Total S.W.I.F.T. world-wide	3,648	3,903	4,004	4,623	5,229
of which:					
members	1,963	2,074	2,103	2,412	2,259
sub-members	1,607	1,738	1,802	2,023	2,259
participants	<i>78</i>	91	99	188	277

## Table 17

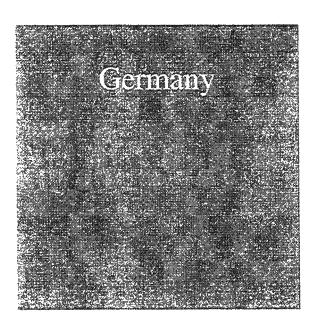
S.W.I.F.T. message flows to/from domestic users

·	1991	1992	1993	1994	1995
Total messages sent	5,931,152	6,263,619	6,527,033	6,586,912	7,180,779
of which:		•			
category I	1,297,143	1,592,838	1,751,452	2,021,197	2,359,033
category II	2,192,747	2,228,596	2,206,205	2,087,615	2,118,840
sent/received to/from					
domestic users	850,211	900,143	990,036	1,002,745	1,053,617
Total messages received	5,010,850	5,397,400	5,744,866	5,911,734	6,397,247
of which:		* · · · · · · · · · · · · · · · · · · ·			
category I	n.a,	1,693,453	1,776,326	1,928,935	2,062,300
category II	n.a.	1,097,959	1,307,152	1,331,041	1,400,163
Memorandum item:					
Global S.W.I.F.T. traffic	365,159,291	405,540,902	457,218,200	518,097,873	582,192,512

## Definitions

- Sub-members: domestic users sponsored by members abroad;
- Participants: users which are not shareholders in S.W.I.F.T.; their message traffic over the network is restricted;
- Category I: customer (funds) transfers;
- Category II: bank (funds) transfers.

·		



Basic statistical data (1)

	1991	1992	1993	1994	1995
Population (2) (thousands)	79,984.0	80,595.0	81,180.0	81,418.0	81,581.0
Gross domestic product (DEM billions)	2,853. <del>6</del>	3,075.6	3,154.9	3,320.3	3,459.8
Exchange rate vis-à-vis ECU (2)	2.0507	2.0210	1.9368	1.9248	1.8738

- (1) Since 1990 a new source of data has been used and, therefore, some of these figures may differ from those contained in the Addendum to the "Blue Book", May 1994.
- (2) Average for the year.

## Table 2

Settlement media used by non-banks

 $(end\ of\ year)$ 

	•			DE	M billions
	1991	1992	1993	1994	1995
Notes and coins	171.8	200.5	212.0	225.9	237.5
Transferable deposits	445.0	469.5	527.8	541.1	580.8
of which held by:					
households	253.7	288.5	327.3	333.1	352.0
corporate sector	149.2	152.1	158.8	174.7	197.3
other	42.1	28.9	41.7	33.3	31.5
Narrow money supply (M1)	604.0	669.6	726.3	764.1	816.1

## Table 3

Settlement media used by deposit-taking institutions

(end of year)

					DE	M billions
	1991	1992	1993	1994	1995	
Required reserves held at central bank (1)	73.6	85.2	59.6	43.6	36.5	
Free reserves held at central bank	1.4	1.2	8.0	0.8	0.8	
Transferable deposits at other institutions	226.9	301.2	380.2	342.8	363.9	

<sup>(1) 1991</sup> to 1994 without deductible cash balances.

Table 4

## Banknotes and coins

(total value, end of year) (1)

				DE	M billions
	1991	1992	1993	1994	1995
Total banknotes issued	181.3	213.4	224.2	236.1	248.4
of which					
DEM 1,000	46.9	64.3	68.5	75.0	81.1
DEM 500	21.5	24.0	24.3	25.7	26.1
DEM 200	9.6	11.5	11.6	11.3	10.8
DEM 100	73.8	82.1	86.8	90.7	95.9
DEM 50	18.3	19.4	20.3	20.4	21.1
DEM 20	6.7	7.4	7.7	7.9	8.1
DEM 10	4.2	4.4	4.7	4.8	5.0
DEM 5	0.3	0.3	0.3	0.3	0.3
Coins issued	13.3	13.9	14.4	14.8	15.1
of which					
DEM 10	1.8	1.9	2.0	2.2	2.3
DEM 5	5.3	5.3	5.4	5.5	5.6
DEM 2	1.8	2.0	2.1	2.1	2.2
DEM 1	2.1	2.2	2.2	2.3	2.3
DEM 0.50	1.0	1.0	1.1	1.1	1.1
DEM 0.10	0.8	0.9	0.9	1.0	1.0
DEM 0.05	0.3	0.3	0.3	0.3	0.3
DEM 0.02	0.1	0.1	0.2	0.1	0.1
DEM 0.01	0.1	0.2	0.2	0.2	0.2
Notes and coins held by credit institutions	22.8	26.8	26.7	25.0	26.0
Notes and coins in circulation outside credit institutions (2)	171.8	200.5	212.0	225.9	237.5

<sup>(1)</sup> Differences between sums and individual figures due to rounding.

<sup>(2)</sup> Identical to Table 2, "Notes and coins".

#### Institutional framework

(end of 1995)

Categories	Number of institutions	Number of branches	Number of accounts (thousands) (1)	Value of accounts (DEM billions)
Central bank (2)	1	178	36	0.9
Commercial banks (3)	384	27,824	20,400	219.0
Savings banks	637	20,141	37,200	233.6
Co-operative and rural banks	2,595.0	19,843.0	22,600.0	127.3
TOTAL	3,617.0	67,986.0	80,236.0	580.8
Branches of foreign banks	69.0	114.0	23.0	2.6

<sup>(1)</sup> Partly estimated.

<sup>(2)</sup> As a legal entity the Deutsche Bundesbank comprises the Central Office (in Frankfurt am Main) and nine Land Central Banks as well as 177 branches.

<sup>(3)</sup> Including mortgage banks, installment sales financing institutions, banks with special functions and Deutsche Postbank AG (fully fledged credit institution since 1.1.95)

Cash dispensers, ATMs and EFTPOS terminals (1)

	1991	1992	1993	1994	1995
Cash dispensers and ATMs					
Number of networks	4	4	4	4	4
Number of machines	13,750	19,000	25,000	29,400	35,700
Volume of transactions (millions)	n.a.	n.a.	n.a.	935	1,100
Value of transactions (DEM billions)	n.a.	n.a.	n.a.	238.5	310.0
EFTPOS terminals					
Number of networks (2)	18	19	18	18	19
Number of machines (2)	34,673	51,806	28,000	62,500	70,048
Volume of transactions (millions) (3)	20.2	28.0	69.1	104.0	149.4
Value of transactions (DEM billions) (3)	1.8	1.9	6.2	10.8	20,5

- (1) Partly estimated.
- (2) From 1993 onwards, "electronic cash" and "POZ procedures" only.
- (3) From 1993 onwards, "electronic cash" and "POZ procedures" only. In 1991 and 1992 "electronic cash" and other debit card procedures.

#### Table 7

Number of payment cards in circulation (1) (end of year)

			•		thousands
	1991	1992	1993	1994	1995
Cards with a cash function	n.a.	n.a.	n.a.	n.a.	n.a.
Cards with a debit/credit function	33,528	39,272	44,842	47,353	74,337
of which:					
cards with a debit function (a)	27,424	31,863	35,901	37,113	62,597
delayed debit cards	6,104	7,409	8,941	10,240	11,740
cards with a credit function (3)	n.a.	n.a.	n.a.	n.a.	n.a.
Cards with a cheque guarantee function	27,424	31,863	35,901	37,113	38,479
Retailer cards	1,500	3,000	n.a.	4,500	4,800
Multi-purpose prepaid cards	n.a.	n.a.	n.a.	n.a.	n.a.

- A card with multiple functions may appear in several categories. It is, therefore, not meaningful to add the figures. Partly
  estimated.
- (2) Eurocheque cards, eligible for cash and debit functions, if they are issued with a Personal Identification Number (PIN) and for 1995 including bank customer cards (24,118 thsd).
- (3) Most of the so-called "credit cards" do not have a credit option (the periodic invoice has to be paid immediately after receipt). Therefore "credit cards" appear under "delayed debit cards".

Payment instructions handled by selected interbank funds transfer systems: volume of transactions (1)

					millions
	1991	1992	1993	1994	1995
Retail payments	2762.2	2649.5	2613.5	2355.1	2272.2
Maschinell-optische Beleglesung (MAOBE) (2)	577.3	511.7	393.5	248.0	115.3
Collection items	230.2	214.9	155.5	86.0	26.7
Credit transfers	347.1	296.8	238.0	162.0	88.6
Belegioser Datenträgeraustausch (DTA) ®	2184.9	2137.8	2220.0	2107.1	2156.9
Collection items	1788.3	1693.3	1702.2	1496.9	1499.1
Credit transfers	396.6	444.5	517.8	610.2	657.8
Large-value payments	426.2	463.5	483.8	477.6	33.1
Gross-settlement procedures	83.2	74.5	56.5	34.3	13.6
Eiliger Zahlungsverkehr (EIL-ZV) (*)	3.0	2.6	3.4	4.0	5.5
Platzüberweisungsverkehr (5)	80.2	71.9	53.1	30.3	8.1
Net settlement procedures	343.0	389.0	427.3	443.3	19.5
Konventionelle Abrechnung (6)	338.0	381.2	416.4	430.6	1.7
Collection items (conventional) m	44.8	57.2	95.4	150.8	0.7
Local credit transfers (conventional) (7)	293,2	324.0	321.0	279.8	1.0
Elektronische Abrechnung Frankfurt (EAF) (6	5.0	7.8	10.9	12.7	17.8

- (1) This table does not include figures relating to IFTS which are not operated by the Deutsche Bundesbank.
- (2) Machine-optical voucher reading, excluding payments submitted in a paper-based form which were converted and passed on in a paperless form by the Bank's regional computer centres/payment units (BSE/GSE cheques and EZÜ/BZÜ credit transfers).
- (3) Paperless exchange of data media, including payments submitted in a paper-based form which were converted and passed on in a paperless form by the Bank's regional computer centres/payment units (BSE/GSE cheques and EZÜ/BZÜ credit transfers).
- (4) Express electronic credit transfer system.
- (5) Express paper-based local credit transfer system. Reduction due to shift caused by conversion obligation: previous paper-based payments shifted to EIL-ZV and DTA.
- (6) Daily local clearing system.
- (7) Statistical recording changed in 1995: settled delivery envelopes (clearing items) instead of individual payments therein.
- (8) Electronic clearing Frankfurt.

Payment instructions handled by selected interbank funds transfer systems: value of transactions (1)

	DEM billions						
	1991	1992	1993	1994	1995		
Retail payments	4,726.4	4,846.1	4,822.1	4,688.7	4,699.4		
Maschinell-optische Beleglesung (MAOBE) (2)	3,220.7	3,112.9	2,814.4	2,307.3	266.9		
Collection items	2,924.2	2,924.8	2,666.5	2,203.4	240.0		
Credit transfers	296.5	188.1	147.9	103.9	26.9		
Belegloser Datenträgeraustausch (DTA) (5)	1,505.7	1,733.2	2,007.7	2,381.4	4,432.5		
Collection items	887.0	907.4	1,063.8	1,313.9	3,277.1		
Credit transfers	618.7	825.8	943.9	1,067.5	1,155.4		
Large-value payments	137,703.9	160,441.4	195,455.3	204,656.0	187,966.8		
Gross-settlement procedures	18,911,4	22,041.2	27,661.8	30,342.6	32,197.1		
Eiliger Zahlungsverkehr (EIL-ZV) (4)	10,792.2	13,611.0	18,874.6	22,772.4	27,007.5		
Platzüberweisungsverkehr (5)	8,119.2	8,430.2	8,787.2	7,570.2	5,189.6		
Net settlement procedures	118,792.5	138,400.2	167,793.5	174,313.4	155,769.7		
Konventionelle Abrechnung (6)	63,856.3	55,377.1	38,488.5	29,409.9	7,382.3		
Collection items (conventional)	735.7	818.9	827.6	799.9	669.8		
Local credit transfers (conventional)	63,120.6	54,558.2	37,660.9	28,610.0	6,712.5		
Elektronische Abrechnung Frankfurt (EAF) <sup>(7)</sup>	54,936.2	83,023.1	129,305.0	144,903.5	148,387.4		

- (1) This table does not include figures relating to IFTS which are not operated by the Deutsche Bundesbank.
- (2) Machine-optical voucher reading procedure, excluding payments submitted in a paper-based form which were converted and passed on in a paperless form by the Bank's regional computer centres/payment units (BSE/GSE cheques and BZU credit transfers).
- (3) Paperless exchange of data media, including payments submitted in a paper-based form which were converted and passed on in a paperless form by the Bank's regional computer centres/payment units (BSE/GSE cheques and BZU credit transfers).
- (4) Express electronic credit transfer system.
- (5) Express local credit transfer system. Reduction due to shift caused by conversion obligation: previous paper-based payments shifted to EIL-ZV and DTA.
- (6) Daily local clearing system.
- (7) Electronic clearing Frankfurt.

Participants in securities settlement systems (1)

	Settling securities	Holding securities accounts on behalf of customers	Settling cash directly in central bank accounts
Deutscher Kassenverein (DKV)	0	397	395
Banks	0	370	370
Stockbrokers (2)	0	3	3
Securities houses	0	0	0
Insurance companies	0	14	. 14
Foreign central banks	` 0	0	0
Cedel / Euroclear	0	2	0
Others (9)	0	8	8

- (1) Figures 7/96; Due to a new data collecting procedure figures are not comparable with figures of the years before.
- (2) Direct account with DKV (without stockbrokers without direct account with DKV)
- (3) DTC, NY (only oneway through DKV, New York); NECIGEF, Amsterdam; OEKB, Vienna; SEGA, Zurich; SICOVAM, Paris; CIK, Brüssel; JSCC, Tokio; Monte Titoli, Milano.

#### Table 11

Transfer instructions handled by securities settlement systems: volume of transactions

					millions
	1991	1992	1993	1994	1995
Deutscher Kassenverein (DKV)					
Delivery versus payment	16.4	16.5	21.9	20.5	19.0
without countervalue + others	4.1	6.1	5.9	4.7	4.4
TOTAL	20.5	22.6	27.8	25.2	23.4

#### Table 12

Transfer instructions handled by securities settlement systems: value of transactions

				DEM billions		
	1991	1992	1993	1994	1995	
Deutscher Kassenverein (DKV)	2,852	4,663	9,417	9,510	11,878	
Bonds	n.a.	n.a.	n.a.	8,205	9,742	
Shares (including options)	n.a.	n.a.	n.a.	1,305	2,136	

Nominal values registered by securities settlement systems (end of year)

	1991	1992	1993	1994	1995 (*)
Deutscher Kassenverein (DKV)	n.a.	27,316.8	39,137.0	52,197.6	n.a.
Bonds (DEM billions)	n.a.	2,457.1	3,002.1	3,274.1	3,698.4
Shares	n.a.	22,701.9	33,567.6	44,739.9	28,008.3
of which: unit quotations (DEM millions) (including warrants)	n.a.	6,222.6	13,230.9	19,378.3	· :
percentage quotations (DEM millions) (including profit-sharing certificates)	n.a.	16,479.3	20,336.7	25,361.6	28,008.3
Investment fund units (DEM millions)	n.a.	2,157.8	2,567.3	4,183.6	

<sup>(1)</sup> Due to a new data collecting procedure, figures are not comparable with figures of the years before.

Indicators of use of various cashless payment instruments: volume of transactions (1)

					millions
	1991	1992	1993	1994	1995
Cheques issued	880.0	902.0	934.0	903.0	807.0
of which truncated	643.0	658.0	730.0	722.0	645.6
Payments by debit and credit cards	170.3	214.0	293.5	350.5	416.1
Paper-based credit transfers	2,012.3	1,991.2	1,959.1	1,672.2	1,134.2
customer initiated	1,989.0	1,971.0	1,947.8	1,664.7	1,132.2
interbank/large-value <sup>(2)</sup>	23.3	20.2	11.3	7.5	2.0
Paperless credit transfers	2,697.3	3,092.4	3,294.3	3,899.4	4,548.9
customer initiated	2,691.0	3,083.0	3,281.2	3,884.3	4,528.8
interbank/large-value <sup>(2)</sup>	6.3	9.4	13.1	15.1	20.1
Direct debits (3)	3,419.8	4,016.0	4,286.9	4,607.0	4,582.6
TOTAL	9,179.7	10,215.6	10,767.8	11,432.1	11,488.8

- (1) Partly estimated; 1995 adjustment of volume of transactions via cheque, credit transfer, direct debit. Without adjustment there would have been a steady rise of the volume of cashless payment transactions (app. + 6 %).
- (2) Only interbank payments via the Deutsche Bundesbank by *Konventionelle Abrechnung* in Frankfurt, *Elektronische Abrechnung Frankfurt*, *Eiliger Zahlungverkehr* and *Platzüberweisungsverkehr*.
- (3) Including cash dispenser/ATM withdrawals made with eurocheque cards at banks other than the one issuing the card.

#### Table 15

Indicators of use of various cashless payment instruments: value of transactions (1)

				1	DEM billions
	1991	1992	1993	1994	1995
Cheques issued	4,443.0	4,583.0	5,343.0	5,550.0	4,544.0
of which truncated	254.0	261.0	583.0	662.8	908.8
Payments by debit and credit cards	30.0	35.7	48.3	57.2	62.6
Paper-based credit transfers	84,343.0	76,837.7	65,984.4	55,224.8	26,764.2
customer initiated	16,273.0	19,303.0	24,418.6	22,908.5	15,743.2
interbank/large-value <sup>(2)</sup>	68,070.0	57,534.7	41,565.8	32,316.3	11,021.0
Paperless credit transfers	68,349.0	103,156.0	155,854.9	177,993.7	185,615.2
customer initiated	5,424.0	9,508.0	11,333.4	15,528.5	19,634.8
interbank/large-value <sup>(2)</sup>	62,925.0	93,648.0	144,521.5	162,465.2	165,980.4
Direct debits (3)	2,902.2	3,906.1	4,481.7	4,766.8	4,644.5
TOTAL	160,067.2	188,518.5	231,712.3	243,592.5	221,630.5

- (1) Partly estimated; 1995 adjustment of volume of transactions via cheque, credit transfer, direct debit.
- (2) Only interbank payments via the Deutsche Bundesbank by Konventionelle Abrechnung in Frankfurt, Elektronische Abrechnung Frankfurt, Eliliger Zahlungverkehr and Platzüberweisungsverkehr.
- (3) Including cash dispenser/ATM withdrawals made with eurocheque cards at banks other than the one issuing the card.

<b>Participation</b>	in S	W.I.F.T.	by domestic	institutions
I minipation		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	O J GOLLLOUIL	THEORIGAN

	1991	1992	1993	1994	1995
S.W.I.F.T. users	232	238	230	240	253
of which:					
members	150	152	150	149	152
sub-members	81	84	<i>78</i>	88	97
participants	1	2	2	3	4
Memorandum item:					•
Total S.W.I.F.T. world-wide	3,648	3,903	4,004	4,623	5,229
of which:					
members	1,963	2,074	2,103	2,412	2,259
sub-members	1,607	1,738	1,802	2,023	2,259
participants	<i>78</i>	91	99	188	277

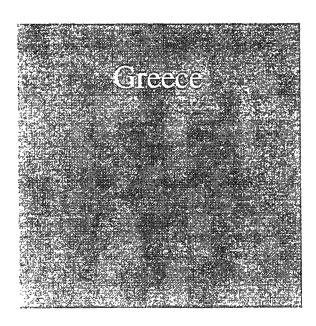
# Table 17

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

	1991	1992	1993	1994	1995
Total messages sent	30,963,599	32,585,476	35,359,560	38,187,536	43,824,742
of which:			•		
category I	11,027,035	11,997,937	12,842,381	13,843,274	15,580,557
category II	6,563 <b>,223</b>	6,747,897	7,245,703	7,557,127	8,373,229
sent/received to/from domestic					
users	5,158,337	5,527,524	6,056,083	6,310,196	6,734,317
Total messages received	42,081,217	44,887,628	48,149,365	51,011,768	56,505,445
of which:					, ,
category I	*	14,832,041	15,490,352	16,438,145	17,759,489
category II	**	18,220,015	20,424,752	21,833,621	24,441,740
Memorandum item:					
Global S.W.I.F.T. traffic	365,159,291	405,540,962	457,218,200	518,097,873	582,192,512

#### Definitions

- Sub-members: domestic users sponsored by members abroad;
- Participants: users which are not shareholders in S.W.I.F.T.; their message traffic over the network is restricted;
- Category I: customer (funds) transfers;
- Category II: bank (funds) transfers.



Basic statistical data (1)

	1991	1992	1993	1994	1995
Population (2) (thousands)	10,259.9	10,321.9	10,379.4	10,409.6	10,462.0
Gross domestic product (GRD billions)	15,848.2	18,238.1	20,609.1	23,196.3	25,863.9
Exchange rate vis-à-vis ECU (2)	255.215	246.886	268.413	287.939	302.989

<sup>(1)</sup> Since 1990 a new source of data has been used and, therefore, some of these figures may differ from those contained in the Addendum to the "Blue Book", May 1994.

#### Table 2

Settlement media used by non-banks

(end of year)

				G	RD billions
	1991	1992	1993	1994	1995
Notes and coins	1,255.5	1,410.1	1,512.0	1,687.7	1,863.5
Transferable deposits (1)	849.7	947.0	1,175.5	1,611.7	1,854.6
of which held by:					
households	204.3	214.4	258.8	431.3	497.2
corporate sector	210.6	217.2	326.0	376.5	434.0
other <sup>(2)</sup>	434.8	515.4	590.7	803.9	923.4
Narrow money supply (M1)	2,105.2	2,357.7	2,687.5	3,299.4	3,718.1

<sup>(1)</sup> Total sight deposits (in local currency).

#### Table 3%

Settlement media used by deposit-taking institutions

(end of year)

				G	RD billions
	1991	1992	1993	1994	1995
Required reserves held at central bank (1)	565.9	638.4	754.0	860.7	1,231.9
of which can be used for settlement	0	. 0	0	0	0
Free reserves held at central bank	0	0	0	0	O.
Transferable deposits at other institutions	153.6	199.7	165.5	363.6	280.1

<sup>(1)</sup> Primary and secondary reserve requirements.

<sup>(2)</sup> Average for the year.

<sup>(2)</sup> Including non-bank financial institutions, public entities and public enterprises.

#### Banknotes and coins

(total value, end of year)

G	ř	?	D	1	η	i	li	0	n	S
v	15	ı	w		*1	ш	ш	N	J	J\$ 1

	1991	1992	1993	1994	1995
Total banknotes issued	1,348,942	1,501,852	1,606,274	1,800,385	2,018,137
of which:					
GRD 10,000					358,018
GRD 5,000	1,182,139	1,342,632	1,455,445	1,654,553	1,522,079
GRD 1,000	129,188	118,750	112,439	108,743	100,503
GRD 500	18,023	19,299	22,167	24,845	26,034
GRD 100	17,731	18,454	13,814	10,262	9,889
GRD 50	1,861	2,717	2,409	1,982	1,614
Coins issued	21,972	27,806	35,324	39,415	42,817
Notes and coins held by credit institutions	115,367	119,567	129,555	152,102	197,402
Notes and coins in circulation outside credit institutions	1,255,547	1,410,091	1,512,043	1,687,698	1,863,552

## Table 5

Institutional framework

(end of 1995)

Categories	Number of institutions	Number of branches (2)	Number of accounts (thousands)	Value of accounts (GRD billions)
Central bank (1)	1	95	2	47
Commercial banks	42	1,833	1,235	1,587
Savings banks	6	6	-	*
Co-operative and rural banks	1	1	•	*
Specialised credit institutions	7	119	19	220
Post office	1	117	•	*
TOTAL	58	2,171	1,256	1,855
Branches of foreign banks	22	87	36	120
of which EC-based	14	44	18	80

<sup>(1)</sup> There are twenty-seven full branches and sixty-seven agencies of the Bank of Greece (which offer payment services only).

<sup>(2)</sup> Including head offices.

Cash dispensers, ATMs and EFTPOS terminals

(end of year)

	1991	1992	1993	1994	1995
Cash dispensers and ATMs					
Number of networks	7	12	12	12	12
Number of machines	472	704	850	1,617	1,350
Volume of transactions (thousands)	n.a.	n.a.	n.a.	40,655	40,720
Value of transactions (GRD millions)	n.a.	n.a.	n.a.	1,198,099	1,683,639
EFTPOS terminals					
Number of networks	1	2	2	3	3
Number of points of sale	1,500	2,500	2,500	11,296	11,316
Volume of transactions (thousands)	n.a.	n.a.	n.a.	7,867	8,410
Value of transactions (GRD millions)	n.a.	n.a.	n.a.	149,407	163,125

# Table 7

Number of payment cards in circulation (1)

(end of year)

			•	t	housands
	1991	1992	1993	1994	1995
Cards with a cash function	815	892	n.a.	667	2,398
Cards with a debit/credit function	815	892	1,114	1,077	1,419
of which:			•	. *	
cards with a debit function	*	*	n.a.	502	361
cards with a credit function	•	•	n.a.	575	1,058
Cards with a cheque guarantee function	n.a.	n.a.	n.a.	n.a.	n.a.
Retailer cards	n.a.	n.a.	n.a.	n.a.	n.a.

<sup>(1)</sup> A card with multiple functions may appear in several categories. It is, therefore, not meaningful to add the figures.

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

					thousands
	1991	1992	1993	1994	1995
Athens Clearing Office	12,077	12,881	15,462	14,611	10,847
Cheques in GRD and exchange	12,039	12,829	15,408	14,558	10,796
Other (Money Market Loan)	38	52	54	53	51
DIAS SA (1)				1,900	6,629
Cheques				1,900	5,052
Eurocheques					1,577

(1) DIAS SA started operating in October 1993.

## Table 9

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

					SRD billions
	1991	1992	1993	1994	1995
Athens Clearing Office	43,590.4	69,768.2	101,362.2	126,438.2	120,028.6
Cheques in GRD and exchange	17,633.4	22,834.3	32,456.2	42,148.7	41,002.2
Other (Money Market Loan)	25,957.0	46,933.9	68,906.0	84,289.5	79,026.4
DIAS SA (1)				1,084.3	3,739.9
Cheques				1,084.3	3,677.3
Eurocheques					62.6

(1) DIAS SA started operating in October 1993.

Participants in securities settlement systems (1)

	Settling securities	Holding securities accounts on behalf of customers	Settling cash directly in central bank accounts
Securities Settlement System	88	88	41
Banks	41	41	41
Stockbrokers	47	47	-

- (1) The Securities Settlement System for securities in book-entry form started operating in mid-1995.
- (2) Each participant holds one customer account for all his customers

#### Table 11

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

	1991	1992	1993	1994	1995
Securities Settlement System					4,318
Government Securities	n.a.	n.a.	n.a.	n.a.	4,318

(1) Bonds are included in the figure of Government Securities.

#### Table 12

Transfer instructions handled by securities settlement systems: (1) value of transactions

	1991	1992	1993	1994	1995
Securities Settlement System					3,574
Government Securities	n.a.	n.a.	n.a.	n.a.	3,574

(1) Bonds are included in the figure of Government Securities.

#### Table 13

Nominal values registered by securities settlement systems (1) (end of year)

	1991	1992	1993	1994	1995
Securities Settlement System					1,702
Government Securities	n.a.	n.a.	n.a.	n.a.	1,702

(1) Bonds are included in the figure of Government Securities.

Indicators of use of various cashless payment instruments: volume of transactions (1)

					thousands
	1991	1992	1993	1994	1995
Cheques issued	n.a.	n.a.	n.a.	n.a.	2,922
Payments by debit and credit cards	n.a.	n.a.	18,000	28,000	22,000
Paper-based credit transfers	n.a.	n.a.	n.a.	822	n.a.
customer initiated	n.a.	n.a.	n.a.	743	n.a.
interbank/large-value	n.a.	n.a.	n.a.	79	n.a.
Paperless credit transfers	n.a.	n.a.	n.a.	2,497	3,333
customer initiated	n.a.	n.a.	n.a.	2,117	2,921
interbank/large-value	n.a.	n.a.	n.a.	380	412
Direct debits	n.a.	n.a.	n.a.	n.a.	846
Others	n.a.	n.a.	n.a.	n.a.	n.a.
TOTAL	n.a.	n.a.	n.a.	n.a.	n.a.

<sup>(1)</sup> These data refer to thirty of the forty banks, including all major banks.

## Table 15

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

				G	RD millions
	1991	1992	1993	1994	1995
Cheques issued	n.a.	n.a.	n.a.	n.a.	8,440,373
Payments by debit and credit cards	n.a.	n.a.	320,000	n.a.	405,885
Paper-based credit transfers	n.a.	n.a.	n.a.	137,559	n.a.
customer initiated	n.a.	n.a.	n.a.	105,917	n.a.
interbank/large-value	n.a.	n.a.	n.a.	31,642	n.a.
Paperless credit transfers	n.a.	n.a.	n.a.	132,940	269,082
customer initiated	n.a.	n.a.	n.a.	30,528	34,291
interbank/large-value	n.a.	n.a.	n.a.	102,412	234,791
Direct debits	n.a.	n.a.	n.a.	n.a.	20,743
Others	n.a.	n.a.	n.a.	n.a.	n.a.
TOTAL	n.a.	n.a.	n.a.	n.a.	n.a.

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

	1991	1992	1993	1994	1995
S.W.I.F.T. users	35	36	37	40	44
of which:					
members	18	18	19	22	24
sub-members	17	18	18	18	20
participants		-	•	•	ж-
Memorandum item:					
Total S.W.I.F.T. world-wide	3,648	3,903	4,004	4,623	5,229
of which:					
members	1,963	2,074	2,103	2,412	2,259
sub-members	1,607	1,738	1,802	2,023	2,259
participants	<i>78</i>	91	99	188	277

## Table 17

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

	1991	1992	1993	1994	1995
Total messages sent	1,456,604	1,679,609	2,090,383	2,558,821	3,054,343
of which:					
category I	505,296	577,953	698,886	833,724	995,550
category II	519,134	592,398	737,499	955,238	1,099,905
sent/received to/from domestic					
users	195,462	232,629	403,575	576,431	689,608
Total messages received	1,658,502	1,909,987	2,221,004	2,599,331	2,982,371
of which:					
category (	n.a.	556,507	635,959	748,822	873,179
category II	n.a.	229,347	316,394	469,224	526,311
Memorandum item:					

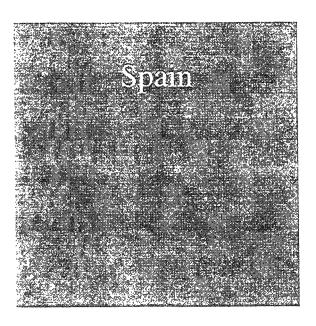
#### Memorandum item:

Global S.W.I.F.T. traffic

365,159,291 405,540,902 457,218,200 518,097,873 582,192,512

#### **Definitions**

- Sub-members: domestic users sponsored by members abroad;
- Participants: users which are not shareholders in S.W.I.F.T.; their message traffic over the network is restricted;
- Category I: customer (funds) transfers;
- Category II: bank (funds) transfers.



Basic statistical data (1)

	1991	1992	1993	1994	1995
Population (2) (thousands)	38,915.6	39,005.7	39,082.6	39,143.4	39,222.0
Gross domestic product (ESP billions)	54,927.3	59,081.4	60,905.1	64,616.8	69,721.6
Exchange rate vis-à-vis ECU (2)	128.4608	132.4428	148.9101	158.9029	163.0

- (1) Since 1990 a new source of data has been used and, therefore, some of these figures may differ from those contained in the Addendum to the "Blue Book", May 1994.
- (2) Average for the year.

## Table 2

Settlement media used by non-banks (1) (end of year)

				E	SP billions
	1991	1992	1993	1994	1995
Notes and coins	5,607	6,025	6,509	7,164	7,535
Transferable deposits	20,190	19,666	20,458	21,589	22,103
Narrow money supply (M1)	25,797	25,691	26,967	28,753	29,638
Deposits in foreign currencies	201	295	444	498	502

(1) Including non-bank financial institutions.

## Table 3

Settlement media used by deposit-taking institutions (end of year)

				ES	SP billions
	1991	1992	1993	1994	1995
Required reserves held at central bank	1,719	1,145	841	936	1,001
of which can be used for settlement	1,719	1,145	841	936	1,001
Free reserves held at central bank	24	11	12	11	14
Transferable deposits at other institutions	191	188	243	285	390

#### Banknotes and coins

(total value, end of year)

				E	SP billions
	1991	1992	1993	1994	1995
Total banknotes issued	5,791	6,210	6,683	7,324	7,708
of which:					
ESP 10,000	2,282	2,756	3,222	3,700	4,003
ESP 5,000	2,949	2,907	2,901	3,027	3,093
ESP 2,000	197	227	263	317	354
ESP 1,000	351	313	291	273	253
Other	12	7	5	5	5
Coins issued	281	297	306	333	360
of which:		•			
ESP 2000	-	***	**	15	28
ESP 500	83	85	<i>86</i>	89	93
ESP 200	21	22	22	22	21
ESP 100	98	101	105	109	115
ESP 50	10	10	10	10	11
ESP 25	<i>35</i>	38	40	42	44
ESP 10	2	2	3	3	3
ESP 5	20	23	23	24	25
ESP 2	0.1	0.1	0.1	0.1	0.1
ESP 1	7	7	7	7	7
Other	5	9	11	11	11
Notes and coins held by credit institutions	464	482	480	493	532
Notes and coins in circulation outside credit institutions	5,607	6,024	6,509	7,164	7,535

## Table 5

Institutional framework

(end of 1995)

Categories	Number of institutions	Number of branches	Number of accounts (1) (thousands)	Value of accounts (ESP billions)
Central bank	, 1	52		
Commercial banks	167	17,728	31,045	11,166
Savings banks	51	14,997	36,446	10,544
Co-operative and rural banks	95	3,186	4,285	1,247
Post office	•			•
TOTAL	314	35,963	71,776	22,957
Branches of foreign banks	57	135	36	109
of which EC-based	34	98	29	<i>78</i>

<sup>(1)</sup> The accounts of foreign branches of Spanish banks are included. However, business in Spain amounts to 99%, both for commercial and savings banks.

Cash dispensers, ATMs and EFTPOS terminals

(end of year)

	1991	1992	1993	1994	1995
Cash dispensers and ATMs					
Number of networks	3	3	3	3	3
Number of machines	17,210	19,704	21,771	23,479	26,708
Volume of transactions (millions)	374	398	460	509	<b>56</b> 5
Value of transactions (ESP billions)	4,422	5,071	6,006	6,803	7,713
EFTPOS terminals					
Number of networks	3	3	3	3	3
Number of machines	217,553	261,949	323,889	400,184	460,560
Volume of transactions (millions)	98	141	227	253	408
Value of transactions (ESP billions)	994	1,244	1,458	1,700	2,867

#### Table 7

Number of payment cards in circulation (1) (end of year)

					thousands
	1991	1992	1993	1994	1995
Cards with a cash function	29,053	32,056	32,565	32,041	31,075
Cards with a debit/credit function	29,053	32,056	32,565	32,041	31,075
of which:					ű.
cards with a debit function	29,053	32,056	32,565	32,041	31,075
cards with a credit function	9,243	9,869	10,384	10,480	10,375
Cards with a cheque guarantee function	*	•		•	*
Retailer cards	n.a.	n.a.	n.a.	n.a.	n.a.

<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 interbank funds transfer systems: volume of transactions

					millions
	1991	1992	1993	1994	1995
Clearing house	554.8	252.4	182.9	112.1	63.8
Retail payments	277.4	250.9	181.1	110.3	61.9
Cheques	25.4	19.1	14.1	10.9	8.5
Paper-based credit transfers		-	-	•	-
Direct debits	144.0	125.0	81.0	43.3	17.9
Bills of exchange	108.0	106.8	86.0	56.1	<i>35.5</i>
Large-value payments (1)	n.a.	1.5	1.8	1.8	1.9
Foreign exchange transactions (2)	n.a.	0.1	0.1	0.1	0.1
Cross-border transfers (3)	n.a.	1.4	1.7	1.6	1.8
SNCE	310.8	355.2	431.9	515.5	582.7
Computer link	119.8	155.3	177.2	188.0	194.7
Cheques	119.8	126.6	126.1	126.9	124.8
Credit transfers	-	28.7	51.1	61.1	69.9
Magnetic tape	191.0	199.9	254.7	327.5	388.0
Cheques	43.8	33.3	20.8	16.6	16.9
Credit transfers	58.3	32.8	21.0	17.0	18.8
Direct debits	58.8	98.4	164.1	224.4	269.6
Petrol cheques	22.5	24.7	24.7	22.7	20.1
Bills of exchange	7.6	10.7	. 24.1	46.8	62.6
STMD	0.60	0.74	0.89	0.89	0.86
Interbank loans market	0.20	0.24	0.30	0.27	0.25
Book-entry debt market	0.38	0.48	0.57	0.60	0.59
Interbank transfers	0.02	0.02	0.02	0.02	0.02

<sup>(1)</sup> Only at the Madrid Clearing House.

<sup>(2)</sup> Peseta leg of foreign exchange transactions.

 $<sup>\</sup>hbox{\ensuremath{\mbox{(3)}}} \ \ \mbox{Large-value transfers from/to non-residents denominated in pesetas.}$ 

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

				1	ESP billions
	1991	1992	1993	1994	1995
Clearing house	60,656	688,637	1,427,594	1,387,959	1,261,007
Retail payments	60,656	55,343	44,511	35,723	22,890
Cheques	32,718	26,670	19,729	14,717	5,476
Paper-based credit transfers	•	**	**	*	
Direct debits	4,979	4,996	3,764	2,586	1,530
Bills of exchange	<i>2</i> 2, <i>9</i> 59	23,677	21,018	18,420	15,884
Large-value payments (1)	n.a.	633,294	1,383,083	1,352,236	1,238,117
Foreign exchange transactions (2)	n.a.	91,075	196,759	202,219	185,011
Cross-border transfers (9)	n.a.	542,219	1,186,324	1,150,017	1,053,106
SNCE	69,483	77,251	81,506	91,826	99,480
Computer link	36,469	49,362	56,477	63,585	60,466
Cheques	36,469	43,175	45,397	49,238	52,104
Credit transfers	•	6,187	11,080	14,347	8,362
Magnetic tape	33,014	27,889	25,029	28,241	39,014
Cheques	15,604	12,571	8,605	8,369	11,329
Credit transfers	15,498	11,947	10,484	9,862	11,087
Direct debits	1,311	2,527	4,332	6,105	8,362
Petrol cheques	<i>57</i>	67	62	54	46
Bills of exchange	544	777	1,546	3,851	8,190
STMD	1,447,960	1,538,977	2,602,096	2,784,127	2,453,898
Interbank loans market	652,457	649,980	859,004	832,726	762,541
Book-entry debt market	773,584	862,924	1,706,043	1,909,184	1,648,929
Interbank transfers	21,919	26,073	37,049	42,217	42,428

<sup>(1)</sup> Only at the Madrid Clearing House.

<sup>(2)</sup> Peseta leg of foreign exchange transactions.

<sup>(3)</sup> Large-value transfers from/to non-residents denominated in pesetas.

Participants in securities settlement systems

	Settling securities	Holding securities accounts on behalf of customers	Settling cash directly in central bank accounts
SACDE	297	120	243
Banks	139	51	136
Savings Banks	50	26	50
Credit co-operatives	35	5	35
Stockbrokers	45	38	16
Insurance companies	7	0	3
Official credit institutions	1	0	1
Mutual funds	13	0	0
International financial organisations	5	0	0
Deposit guarantee funds	2	0	. 2
SCLV	. 104	104	59
Banks	46	46	43
Savings banks	- 6	. 6	6
Credit co-operatives	1	1	. 1
Stockbrokers	51	51	9
ESPACLEAR	113	109	80
Banks	68	67	55
Savings banks	18	15	15
Credit co-operatives	1	1	1
Stockbrokers	26	26	9
Cedel / Euroclear	2	2	0

Transfer instructions handled by securities settlement systems: volume of transactions

				millions
1991	1992	1993	1994	1995
10.03	7.93	7,51	6.69	7.46
9.90	7.80	7.30	6.50	7.30
0.11	0.11	0.14	0.10	0.10
0.02	0.02	0.07	0.09	0.06
*	-	4.61	4,55	4.19
	-	0.5	0.1	0.1
•	•	4.1	4.4	4.0
		0.007	0.05	0.09
5.7	9.4	12.8	11.6	8.9
1.2	4.5	7.7	8.1	6.9
4.5	4.9	5.1	3.5	2.0
	10.03 9.90 0.11 0.02 - - - 5.7 1.2	10.03 7.93 9.90 7.80 0.11 0.11 0.02 0.02 5.7 9.4 1.2 4.5	10.03     7.93     7.51       9.90     7.80     7.30       0.11     0.11     0.14       0.02     0.02     0.07       -     -     4.61       -     -     4.1       -     -     0.007       5.7     9.4     12.8       1.2     4.5     7.7	10.03         7.93         7.51         6.69           9.90         7.80         7.30         6.50           0.11         0.11         0.14         0.10           0.02         0.02         0.07         0.09           -         -         4.61         4.55           -         -         4.1         4.4           -         -         0.007         0.05           5.7         9.4         12.8         11.6           1.2         4.5         7.7         8.1

## Table 12

Transfer instructions handled by securities settlement systems: value of transactions

					ESP billions
	1991	1992	1993	1994	1,995
SACDE	1,319,798	1,444,863	2,538,112	2,879,575	2,631,615
Government securities	950,915	1,143,434	2,249,117	2,638,171	2,396,371
CDs issued by the Banco de España	368,710	301,232	288,315	240,479	234,653
Futures and options	173	197	680	925	591
SCLV	-	***	8,821	20,169	17,514
Bonds	*	**	2,287	1,805	1,722
Shares	*	**	6,531	18,357	15,769
Futures and options		**	2.7	7.3	23.1
ESPACLEAR	1,043	1,584	2,586	2,878	1,910
Bonds	233	764	1,678	2,283	1,600
Commercial paper	810	820	908	595	310

## Table 13

Nominal values registered by securities settlement systems (end of year)

				Έ	SP billions
	1991	1992	1993	1994	1995
SACDE	20,435	21,860	28,318	30,581	34,123
Government securities	17,124	18,550	25,305	27,892	31,792
CDs issued by the Banco de España	3,311	3,310	3,013	2,689	2,331
SCLV	.**	*	6,794	7,835	7,340
Bonds	**	**	2,878	3,372	2,957
Shares	-	**	3,916	4,463	4,383
ESPACLEAR	923	1,584	2,444	2,929	3,554
Bonds	281	799	1,542	2,218	2,805
Commercial paper	642	785	902	711	749

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

					millions
	1991	1992	1993	1994	1995
Cheques issued	252.0	241.0	217.0	212.8	207.2
Payments by debit and credit cards	98.3	141.0	227.0	253.0	408.0
Paper-based credit transfers	**	•		*	-
customer initiated		-	-		**
interbank/large-value	-	-	-	-	
Paperless credit transfers (1)	63.2	68.3	79.2	149.6	187.0
customer initiated	62.6	65.8	<i>76.2</i>	146.6	183.9
interbank/large-value	0.6	2.5	3.0	3.0	3.1
Direct debits	575.5	634.0	695.5	667.0	727.4
Others					
Bills of exchange	128.0	130.0	122.0	136.2	132.7
TOTAL	1,117.0	1,214.3	1,340.7	1,418.7	1,662.3

<sup>(1)</sup> The data for 1991 exclude large-value payments at the Madrid Clearing House.

#### Table 15

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

		•			IEP billions
	1991	1992	1993	1994	1995
Cheques issued	94,684	92,043	82,344	114,937	101,752
Payments by debit and credit cards	994	1,244	1,458	1,700	2,866
Paper-based credit transfers	· <b>"</b>			**	-
customer initiated	-		•	**	
interbank/large-value	*	•	•		**
Paperless credit transfers (1)	1,464,713.0	2,285,437.0	4,156,111.0	4,311,906.0	3,894,882.2
customer initiated	16,753	19,585	23,289	49,938	58,674.2
interbank/large-value	1,447,960	2,265,852	4,132,822	4,286,498	3,836,208.0
Direct debits	21,537	25,729	27,689	22,810	24,597.6
Others			*		
Bills of exchange	26,112	27,168	25,069	30,376	34,040.8
TOTAL	1,608,040	2,431,621	4,292,671	4,481,729	4,058,138

<sup>(1)</sup> The data for 1991 exclude large-value payments at the Madrid Clearing House.

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

	1991	1992	1993	1994	1995
S.W.I.F.T. users	111	117	117	115	119
of which:					
members	56	52	50	52	54
sub-members	<i>55</i>	65	67	63	64
participants	**	•	•	•	1
Memorandum item:					
Total S.W.I.F.T. world-wide	3648	3903	4004	4623	5229
of which:					
members	1963	2074	2103	2412	2259
sub-members	1607	1738	1802	2023	2259
participants	78	91	99	188	277

# Table 17

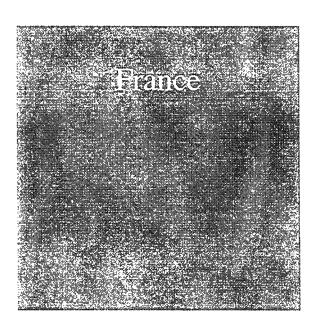
S.W.I.F.T. message flows to/from domestic users

	1991	1992	1993	1994	1995
Total messages sent	7,348,168	10,086,995	11,529,186	12,564,221	13,927,485
of which:					
category I	1,708,449	2,032,529	2,263,748	2,643,318	3,151,216
category II	1,852,473	3,463,874	3,926,640	4,043,649	4,458,351
sent/received to/from domestic					
users	1,110,773	2,518,087	2,920,843	3,086,299	3,388,794
Total messages received	7,782,839	10,019,114	11,299,175	12,158,220	13,528,503
of which:					,
category I	n.a.	2,321,360	2,515,427	2,858,001	3,334,738
category II	n.a.	3,664,058	4,160,771	4,225,242	4,594,817
Memorandum item:					
Global S.W.I.F.T. traffic	365,159,291	405,540,962	457,218,200	518,097,873	582,192,512

#### Definitions

- Sub-members: domestic users sponsored by members abroad;
- Participants: users which are not shareholders in S.W.I.F.T.; their message traffic over the network is restricted;
- Category I: customer (funds) transfers;
- Category II: bank (funds) transfers.

•			



Basic statistical data (1)

	1991	1992	1993	1994	1995
Population (thousands) (2)	57,055.4	57,373.6	57,654.8	57,794.5	58,136.0
Gross domestic product (FRF billions)	6,776.2	7,010.5	7,082.8	7,376.1	7,663.7
Exchange rate vis-à-vis ECU (2)	6.9733	6.8484	6.6330	6.5835	6.5251

<sup>(1)</sup> Since 1990 a new source of data has been used and, therefore, some of these figures may differ from those contained in the Addendum to the "Blue Book", May 1994.

#### Table 2

Settlement media used by non-banks

(end of year)

				F	RF billions
	1991	1992	1993	1994	1995
Notes and coins	254.4	255.5	252.4	252.2	255.8
Transferable deposits (1)	1,354.7	1,351.7	1,376.9	1,419.7	1,566.3
of which held by:		•			
households	715.3	743.7	742.2	748.0	821.5
corporate sector	367.5	352.8	381.7	414.7	439.6
other	271.9	255.2	253.0	257.0	305.2
Narrow money supply (M1) (2)	1,609.1	1,607.2	1,629.3	1,671.9	1,822.1
Memorandum item:					
Transferable deposits in foreign currencles	24.8	34.4	37.2	35.5	46.8

<sup>(1)</sup> Excluding deposits in foreign currencies.

## Table 3

Settlement media used by deposit-taking institutions

(end of year)

				F	RF billions
	1991	1992	1993	1994	1995
Required reserves held at central bank (1)	39.3	7.0	7.4	7.3	5.8
of which can be used for settlement		-	***	-	
Free reserves held at central bank	1.3	0.5	0.9	0.8	1.4
Transferable deposits at other institutions (2) Memorandum item:	2,846.9	2,482.9	2,631.5	2,839.6	3,191.9
Broad money aggregate	5,160.7	5,312.4	5,162.3	5,282.2	5,502.6

<sup>(1)</sup> December monthly average.

<sup>(2)</sup> Average for the year.

<sup>(2)</sup> Narrow money supply (M1): coins, French franc-denominated sight deposits held by non-banks (French overseas territories excluded).

<sup>(2)</sup> Time deposits are included.

#### Banknotes and coins

(total value, end of year)

				FF	RF billions
	1991	1992	1993	1994	1995
Total banknotes issued	263.9	265.3	263.6	266.7	268.9
of which (1):					
FRF 500	134.1	134.2	133.8	129.9	124.3
FRF 200	70.3	73.4	74.5	81.0	87.3
FRF 100	52,4	50.6	47.8	48.3	49.8
FRF 50	<i>5.9</i>	6.0	6.5	6.5	6.5
FRF 20	1.2	1.1	1.0	1.0	1.0
FRF 10	-	-	-	-	•
Coins issued (2)	17.3	18.2	17.1	17.8	18.2
Notes and coins held by credit institutions (2)	15.3	15.6	14.8	15.8	17.0
Notes and coins in circulation outside credit institutions (3)	254.4	255.5	252.4	252.3	255.8
Memorandum item:					
Banknotes held in French overseas territories	11.5	12.4	13.5	16.4	14.3

- (1) Including banknotes issued in French overseas territories.
- (2) Excluding French overseas territories.
- (3) Banknotes issued in French overseas territories are not included.

# Table 5

Institutional framework

(end of 1995)

Categories	Number of institutions	Number of branches	Number of accounts (thousands)	Value of accounts (FRF billions)
Central bank	• 1	211	64	4.0
Commercial banks	421	10,497	18,572	627.2
Savings banks	36	4,243	8,842	156.8
Co-operative and rural banks	153	10,743	23,781	452.8
Post office	. 1	16,973	9,908	180.3
Treasury	1	3,983	945	18.5
TOTAL	613	46,650	62,112	1,439.6
Branches of foreign banks	. 93	n.a.	n.a.	n.a.
of which EC-based	46	n.a.	n.a.	n.a.

Cash dispensers, ATMs and EFTPOS terminals

(end of year)

	1991	1992	1993	1994	1995
Cash dispensers and ATMs					
Number of networks	1	1	1	1	1
Number of machines	16,134	17,432	18,735	20,533	22,850
Volume of transactions (thousands) (1)	633,544	694,364	765,734	818,665	908,714
Value of transactions (FRF millions) (1)	295,515.00	316,492.00	334,083.00	347,406.00	368,590.00
EFTPOS terminals					
Number of networks	1	1	1	1	1
Number of points of sale (2) (3)	510,000	520,000	530,000	540,000	543,000
Volume of transactions (thousands) (3)	1,327,706	1,442,487	1,564,462	1,672,404	1,866,803
Value of transactions (FRF millions) (3)	436,707	475,234	511,289	534,376	590,214

- (1) Including interbank cash withdrawals and cash withdrawals processed through selected interbank payment systems.
- (2) Number of machines.
- (3) Estimated figures.

## Table 7

Number of payment cards in circulation (1)

(end of year)

					thousands
***************************************	1991	1992	1993	1994	1995
Cards with a cash function	19,820	21,072	21,812	22,812	24,430
Cards with a debit/credit function	19,743	20,892	21,466	22,240	23,617
of which:					
cards with a debit function	19,743	20,892	21,466	22,240	23,617
cards with a credit function	345	453	512	579	654
Cards with a cheque guarantee function	82	192	193	n.a.	n.a.
Retailer cards (2)	20,000	20,000	n.a.	n.a.	n.a.

- (1) A card with multiple functions may appear in several categories. It is, therefore, not meaningful to add the figures.
- (2) Estimated figures.

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

					millions
	1991	1992	1993	1994	1995
Clearing houses	3,625.9	3,652.0	3,677.4	3,659.0	3,588.4
Cheques	3,597.0	3,633.4	3,663.5	3,650.0	3,582.1
Credit transfers	5.6	3.8	2.8	2.2	1.6
Bills of exchange	17.8	9.5	6.0	1.9	0.0
Avals de trésorerie	0.6	0.4	0.5	0.4	0.3
Large-value credit transfers	4.9	4.9	4.6	4.5	4.4
CREIC (1) (2)	214.8	230.8	252.6	259.9	281.8
Ordinateur de compensation (2)	1,874.7	1,811.0	1,467.8	635.7	0
Credit transfers	802.2	781.4	657.0	341.7	0
Paperless bills of exchange	126.8	124.3	102.1	49.8	0
Direct debits	620.1	588.1	455.8	156.0	0
Titres Interbancaires de Paiement	17.0	41.2	47.1	23.0	. 0
ATM withdrawals	269.8	229.2	192.7	65.0	0
Card payments	38.8	46.8	13.1	0.2	0
Système Interbancaire de Télécompensation (SIT) (2)	43.7	301.8	764.5	1,791.8	2,588.8
Credit transfers	18.0	107.5	292.3	679.8	1,080.8
LCR and paperless bills of exchange	3.6	10.5	30.5	88.7	129.3
Direct debits	8.2	90.3	258.2	636.5	850.3
Titres Interbancaires de Paiement	0.2	2.5	20.0	55.4	91.1
Card payments	0	0	0	.0	1.9
ATM withdrawals	13.7	. 91.0	163.5	331.4	435.4
Cartes Bancaires (2)	1,288.8	1,397.0	1,554.0	1,677.0	1,872.6
ATM withdrawals	***	1.3	2.6	4.8	7.7
Card payments	1,288.8	1,395.7	1,551.4	1,672.2	1,864.9
Banque de France	46.8	42.7	37.6	34.3	29.4
Public Treasury transfers	44.0	39.6	34.9	32.0	27.3
Interbank credit transfers	0.4	0.9	0.4	0.4	0.4
Large-value credit transfers	1.5	1.3	1.1	0.9	0.9
Telegraphic credit transfers	0.9	0.9	1.2	1.0	8.0
SAGITTAIRE	2.9	3.3	3.9	4.1	4.5

<sup>(1)</sup> Centres Régionaux d'Echanges d'Images-Chèques (truncated cheques).

<sup>(2)</sup> Automated clearing houses.

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

					FRF billions
	1991	1992	1993	1994	1995
Clearing houses	120,023.5	128,371.3	156,778.5	150,624.1	137,412.8
Cheques	11,634.9	11,582.0	11,130.4	11,300.9	11,025.3
Credit transfers	1,228.3	1,275.5	1,277.5	1,244.5	1,312.7
Bills of exchange	509.3	316.1	199.0	36:3	0.0
Avals de trésorerie	71,354.0	73,179.0	79,277.8	71,416.5	62,263.3
Large-value credit transfers	35,297.0	42,018.7	64,893.8	66,625.9	62,811.5
CREIC (1) (2)	119.8	129,1	140.6	143.4	155.0
Ordinateur de compensation (2)	7,178.6	7,661.6	6,731.4	3,463.7	0
Credit transfers	3,104.3	3,458.6	3,292.5	1,913.5	0
Paperless bills of exchange	2,969.3	3,065.5	2,521.6	1,230.5	0
Direct debits	959.7	991.2	786.3	267.4	0
Titres Interbancaires de Paiement	29.0	47.2	54.1	28.4	0
ATM withdrawals	107.9	88.7	73.9	23.8	Ó
Card payments	8.4	10.4	3.0	0.1	0
Système Interbancaire de Télécompensation (SIT) (2)	98.8	234.9	1,615.2	5,454.5	9,348.0
Credit transfers	43.8	103.8	783.1	2,518.6	4,881.5
LCR and paperless bills of exchange	39.1	23.9	434.7	1,825.8	2,950.8
Direct debits	9.8	69.0	320.6	929.0	1,247.8
Titres Interbancaires de Paiement	0.6	2.6	15.3	59.1	112.5
Card payments	0.0	0.0	0.0	0.0	0.5
ATM withdrawals	5.5	35.6	61.5	122.0	154.9
Cartes Bancaires (2)	428.3	465.7	510.0	537.5	594.8
ATM withdrawals	. *	0.8	1.7	3.3	5.1
Card payments	428.3	464.9	508.3	534.2	589.7
Banque de France	40,378.3	42,547.8	44,346.3	43,741.8	36,838.4
Public Treasury transfers	691.8	467.8	457.8	429.8	470.5
Interbank credit transfers	158.6	131.3	199.8	190.5	279.2
Large-value credit transfers	32,015.4	34,466.4	36,022.6	38,107.1	29,645.6
Telegraphic credit transfers	7,512.5	7,482.3	7,666.1	5,014.4	6,443.1
SAGITTAIRE	43,845.0	59,219.0	108,750.0	110,847.0	104,567.0

<sup>(1)</sup> Centres Régionaux d'Echanges d'Images-Chèques (truncated cheques).

<sup>(2)</sup> Automated clearing houses.

Participants in securities settlement systems

	Settling securities	Holding securities accounts on behalf of customers	Settling cash directly in central bank accounts
SATURNE	369	369	369
Banks	229	229	229
Stockbrokers	35	35	35
Securities houses	0	0	0
Insurance companies	1	1	1
Foreign central banks	50	50	50
Cedel / Euroclear	2	2	2
Others	52	52	52
RELIT	253	51	. 51
Banks	202	0	0
Stockbrokers	. )	)	•
Securities houses	)	· · · )	,
Others	51)	51)	51)

# Table 11

Transfer instructions handled by securities settlement systems: volume of transactions

	1991	1992	1993	1994	1995
SATURNE	118,215.0	136,703.0	197,605.0	222,610.0	316,076
Government securities	109,837	126,904	172,254	182,109	248,056
CDs	8,378	6,048	11,597	18,170	38,857
Medium-term notes	*	3,639	9,542	7,859	7,687
Commercial paper		112	4,212	14,472	21,476
RELIT	n.a.	n.a.	13,000,000	15,000,000	12,000,000

## Table 12

Transfer instructions handled by securities settlement systems: value of transactions

	•				FRF billions
	1991	1992	1993	1994	1995
SATURNE	5,577.3	10,717.6	21,278.8	25,763.2	44,041.1
Government securities	5,204.0	10,200.0	19,673.0	23,306.0	40,042.9
CDs	373.3	322.3	936.6	1,470.9	2,597.5
Medium-term notes	•	174.7	436.7	290.3	269.2
Commercial paper		20.6	232.5	696.0	1,131.5
RELIT :	0.0	11,000.0	20,600.0	35,500.0	42,155.0
Government securities	n.a.	11,000.0	20,600.0	25,250.0	34,203.0
Bonds	n.a.	n.a.	n.a.	4,050.0	3,586.0
Shares	n.a.	n.a.	n.a.	6,200.0	4,366.0

Nominal values registered by securities settlement systems (end of year)

					FRF billions
	1991	1992	1993	1994	1995
SATURNE	691.80	944.00	1,328.40	1,590.80	1,834.00
Government securities	557.0	714.7	769.8	898.9	1,018.8
CDs	134.8	69.2	232.0	304.8	389.1
Medium-term notes	*	156.2	279.3	305.6	316.4
Commercial paper	**	3.9	47.3	81.5	109.7
RELIT	1,700.0	5,200.0	6,800.0	6,350.0	6,547.6
Government securities				1570	1,676.6
Bonds		3,100.0	3,800.0	3,650.0	2,269.0
Shares	1,700.0	2,100.0	3,000.0	2,700.0	2,602.0

Indicators of use of various cashless payment instruments: (1) volume of transactions

					millions
	1991	1992	1993	1994	1995
Cheques issued	4,776.4	4,868.7	4,908.9	4,876.4	4,844.7
Payments by debit and credit cards	1,327.7	1,442.5	1,564.5	1,672.4	1,866.8
Paper-based credit transfers	88.3	77.0	66.4	58.2	53.8
customer initiated	80.0	68.6	58.6	51.0	47.0
interbank/large-value	8.3	8.4	7.8	7.2	6.8
Paperless credit transfers	1,302.7	1,404.0	1,472.8	1,556.4	1,676.5
customer initiated	1,299.8	1,400.7	1,468.9	1,552.3	1,672.0
interbank/large-value	2.9	3.3	3.9	4.1	4.5
Direct debits	853.7	979.6	1,057.8	1,205.1	1,320.5
Bills of exchange	163.3	159.3	153.6	151.2	142.6
TOTAL	8,512.1	8,931.1	9,224.0	9,519.7	9,904.9

<sup>(1)</sup> These figures relate to exchanges both in interbank funds transfer systems (official exchanges) and through other circuits (interbank exchanges).

## Table 15

Indicators of use of various cashless payment instruments: (1) value of transactions

				F	RF billions
	1991	1992	1993	1994	1995
Cheques issued	16,276	16,099	15,291	14,255	13,872
Payments by debit and credit cards	437	475	511	534	590
Paper-based credit transfers	149,421	160,075	191,426	183,661	163,884
customer initiated	3,083	2,797	3,366	2,307	2,441
interbank/large-value	146,338	157,278	188,060	181,354	161,443
Paperless credit transfers	50,231	66,280	117,013	119,162	113,760
customer initiated	6,386	7,061	8,263	8,315	9,193
interbank/large-value	43,845	59,219	108,750	110,847	104,567
Direct debits	1,499	1,874	2,314	2,604	1,924
Bills of exchange	3,813	3,690	3,445	3,313	3,217
TOTAL	221,677	248,493	330,000	323,529	297,247

<sup>(1)</sup> These figures relate to exchanges both in interbank funds transfer systems (official exchanges) and through other circuits (interbank exchanges).

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

	1991	1992	1993	1994	1995
S.W.I.F.T. users	192	200	192	203	206
of which:					
members	105	109	98	103	104
sub-members	83	<i>87</i>	91	96	95
participants	4	4	3	4	7
Memorandum item:					
Total S.W.I.F.T. world-wide	3,648	3,903	4,004	4,623	5,229
of which:					
members	1,963	2,074	2,103	2,412	2,259
sub-members	1,607	1,738	1,802	2,023	2,259
participants	78	91	99	188	277

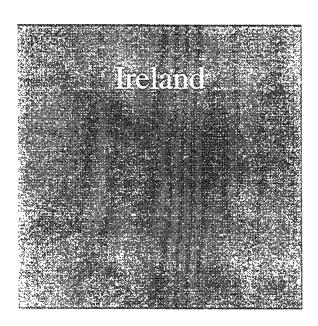
# Table 17

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

	1991	1992	1993	1994	1995
Total messages sent	27,710,200	30,310,818	34,258,946	36,494,832	41,025,110
of which:					
category I	7,999,200	8,533,000	8,966,621	9,608,391	10,379,951
category II sent/received to/from domestic	9,603,300	10,450,100	11,843,080	12,253,787	13,937,393
users	8,226,500	9,386,200	10,963,594	11,455,375	13,405,442
Total messages received of which:	25,896,300	28,460,152	31,836,528	33,446,733	37,811,258
category I	*	8,753,700	9,216,560	9,910,743	10,711,093
category II	**	10,472,800	12,163,096	12,224,274	13,895,771
Memorandum item: Global S.W.I.F.T. traffic	365,159,291	405,540,902	457,218,200	518,097,873	582,192,512

#### Definitions

- Sub-members: domestic users sponsored by members abroad;
- Participants: users which are not shareholders in S.W.I.F.T.; their message traffic over the network is restricted;
- Category I: customer (funds) transfers;
- Category II: bank (funds) transfers.





Basic statistical data (1)

	1991	1992	1993	1994	1995
Population (2) (thousands)	3,526.9	3,549.9	3,563.9	3,571.0	3,578.0
Gross domestic product (IEP billions)	28.2634	29.9718	32.1735	34.7414	38.1808
Exchange rate vis-à-vis ECU (2)	0.7678	0.7609	0.7996	0.7935	0.8155

- (1) Since 1990 a new source of data has been used and, therefore, some of these figures may differ from those contained in the Addendum to the "Blue Book", May 1994.
- (2) Average for the year.

# Table 2

Settlement media used by non-banks

(end of year)

					IEP billions
	1991	1992	1993	1994	1995
Notes and coins	1,365.8	1,386.1	1,539.4	1,656.1	1,844.3
Transferable deposits	1,828.8	1,833.7	2,394.4	2,798.6	3,225.2
Narrow money supply (M1)	3,194.6	3,219.8	3,933.8	4,454.7	5,069.5

# Table 3

Settlement media used by deposit-taking institutions

				IE	P millions
	1991	1992	1993	1994	1995
Required reserves held at central bank	676.9	455.8	681.9	682.0	886.2
of which can be used for settlement	0	0	0	0	0
Free reserves held at central bank	1.9	1.3	27.2	2.6	301.5
Transferable deposits at other institutions	n.a.	n,a.	n.a.	n.a.	n.a.

#### Banknotes and coins

(total value, end of year)

**IEP millions** 1993 1994 1991 1992 1995 Total banknotes issued 1,429.8 1,458.4 1,629.0 1,756.0 1,926.7 of which: IEP 100 6.5 5.8 5.2 4.8 4.6 **IEP 50** 156.5 164.0 186.8 191.2 206.5 IEP 20 921.2 978.9 1,119.8 1,264.1 1,401.1 201.8 **IEP 10** 250.2 222.3 231.4 213.6 IEP 5 78.4 71.3 70.3 79.1 86.1 IEP 1 (1) 16.3 15.4 14.8 14.3 14.1 Other notes (1) 0.7 0.7 0.7 0.7 0.7 Coins issued 165.0 137.8 145.3 144.5 149.9 Notes and coins held by credit institutions 201.8 217.6 234.1 250.1 248.0 Notes and coins in circulation outside credit 1,365.8 1,386.1 1,656.1 1,844.3 1,539.4 institutions

#### Table 5

Institutional framework

(end of 1995)

Categories	Number of institutions	Number of branches	Number of accounts (thousands) (1)	Value of accounts (IEP millions) (1)
Central bank	1	*	neg	24.1
Commercial banks	53	693	5,129	3,324.8
Savings banks (2)	4	89	690	119.2
Building societies	5	201		-
Post office	1	1,927	-	-
TOTAL	64	2,910	5,819	3,468.1
Branches of foreign banks	0	0	0	0
of which EU-based	0	0	0	ø

<sup>(1)</sup> These are current accounts. Increasingly payments can be made through deposit accounts.

<sup>(1)</sup> In the course of withdrawal from circulation.

<sup>(2)</sup> Trustee Savings Bank and state-sponsored credit institutions.

Cash dispensers, ATMs and EFTPOS terminals

(end of year)

	1991	1992	1993	1994	1995
Cash dispensers and ATMs					
Number of networks	3	3	3	3	3
Number of machines	670.0	755.0	785.0	862.0	918.0
Volume of transactions (millions)	45.3	53.7	55.7	56.3	63.9
Value of transactions (IEP millions)	2,013.0	2,524.0	2,799.0	3,178.4	3,555.2
EFTPOS terminals					
Number of networks	0	0	0	0	0
Number of points of sale	0	0	0	0	0
Volume of transactions	0	0	0	0	0
Value of transactions	0	0	0	.0	0

# Table 7

Number of payment cards in circulation (1)

					thousands
	1991	1992	1993	1994	1995
Cards with a cash function	2,752	3,000	3,145	3,359	3,606
Cards with a debit/credit function of which:	664	709	880	974	1,221
cards with a debit function	0	0	0	0	48
cards with a credit function	664	709	880	974	1,173
Cards with a cheque guarantee function	913	954	876	830	865
Retailer cards	n.a.	n.a.	n.a.	n.a.	n.a.

<sup>(1)</sup> A card with multiple functions may appear in several categories. It is, therefore, not meaningful to add the figures.

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

					thousands
	1991	1992	1993	1994	1995
Dublin Bankers' Clearing	143,489.3	136,734.7	147,194.4	151,356.5	142,753.7
Cheques	109,680	92,619	91,291	91,689	91,912
Direct debits	9,954	20,204	18,273	18,863	22,822
Credit transfers - paper	10,320	12,035	15,304	17,653	5,818
Credit transfers - electronic	13,535	11,877	22,326	23,152	22,202
The Central Exchange (cheques) (1)	3,543	6,327	4,305	4,678	n.a.
Special presentations (large-value cheques) (2)	13.8	11.0	9.1	7.4	5.2
Daily Interbank Settlement (paper-based large-value interbank credit transfers)	181	155	150	153	168

- (1) In 1995: The Central Exchange was discontinued in 1995. Members now have interface an with Dublin Bankers' Clearing.
- (2) In 1995: Special Presentation minimum was increased from IEP100,000 to IEP500,000 on 18/11/94.

### Table 9

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

				le le	P billions
	1991	1992	1993	1994	1995
Dublin Bankers' Clearing	156.8	137.9	171.4	313.3	193.7
Cheques	145.7	112.7	133.4	130.7	156.4
Direct debits	2.2	5.5	5.2	5.6	5.2
Credit transfers - paper	7.0	17.8	28.5	172.2	28.8
Credit transfers - electronic	1.9	1.9	4.3	4.8	3.3
The Central Exchange (cheques) (1)	6.1	10.7	7.2	9.1	n.a.
Special presentations (large-value cheques) (2)	16.0	8.6	7,6	8.4	8.0
Daily Interbank Settlement (paper-based large-value interbank credit transfers)	539.0	519.5	929.6	853.1	608.2

- (1) In 1995: The Central Exchange was discontinued in 1995. Members now have interface an with Dublin Bankers' Clearing.
- (2) In 1995: Special Presentation minimum was increased from IEP100,000 to IEP500,000 on 18/11/94.

Participants in securities settlement systems

	Settling securities	Holding securities accounts on behalf of customers	Settling cash directly in central bank accounts
Gilts Settlement Office (GSO)	48	19	8
Banks	11	*	6
Stockbrokers	9	**	ж
Securities houses	17	17	**
Insurance companies	8	•	
Foreign central banks	ā	•	•
Cedel / Euroclear	•	2	**
Authorities	2	**	2
Irish Futures and Options Exchange	1		•

#### Notes:

- 1) Banks and building societies are included in the "bank" category.
- 2) Nominee companies are classified as securities houses. Nominee companies' holdings account for approximately 75% of total stock outstanding.
- 3) Data for banks and securities houses reflect nominee companies of licensed banks operating several accounts under one GSO membership. Banks in this instance are not direct members of the GSO, but hold stock on their own behalf and on behalf of customers.

### Table 11

Transfer instructions handled by securities settlement systems:

volume of transactions

	1991	1992	1993	1994	1995
Gilts Settlement Office (GSO)					
Government securities	20,912	21,517	30,515	29,052	41,104

# Table 12

Transfer instructions handled by securities settlement systems:

value of transactions

	Studie			H	EP millions
	1991	1992	1993	1994	1995
Gilts Settlement Office (GSO)					
Government securities	48,811	52,449	66,158	79,320	139,811

Nominal values registered by securities settlement systems (end of year)

				16	P millions
	1991	1992	1993	1994	1995
Gilts Settlement Office (GSO)					
Government securities	13,727	13,253	14,144	14,439	15,288

### Table 14

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

					millions
	1991	1992	1993	1994	1995
Cheques issued (1)	148.1	151.4	164.3	155.8	154.3
of which truncated	n.a.	n.a.	n.a.	n.a.	n.a.
Payments by debit and credit cards	17.7	20.1	21.1	22.7	28.5
Paper-based credit transfers	20.4	20.0	37.6	38.1	58.3
customer initiated	20.2	19.8	37.4	37.9	58.1
interbank/large-value	0.2	0.2	0.2	0.2	0.2
Paperless credit transfers	25.1	24.1	33.2	35.3	34.7
customer initiated	25.1	24.1	<i>33.2</i>	35.3	34.7
interbank/large-value	0	0	0	0	0
Direct debits	24.2	33.2	31.4	32.4	41.7
TOTAL	235.5	248.8	287.6	284.3	317.5

<sup>(1)</sup> This category does not include the use of payment instruments to obtain cash and does not include travellers' cheques.

#### Table 15

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

				1	EP billions
	1991	1992	1993	1994	1995
Cheques issued (1)	250.3	263.7	323.4	342.1	350.5
of which truncated	n.a.	n.a.	n.a.	n.a.	n.a.
Payments by debit and credit cards	0.8	0.9	0.9	1.0	1.4
Paper-based credit transfers	578.2	565.7	1,187.5	1,119.2	811.7
customer initiated	39.2	46.2	257.9	266.2	203.5
interbank/large-value	539.0	519.5	929.6	853.1	608.2
Paperless credit transfers	4.1	4.2	32.3	35.3	33.0
customer initiated	4.1	4.2	32.3	<i>35.3</i>	33.0
interbank/large-value	0	0	0	0	0
Direct debits	13.8	10.9	33.7	36.4	39.9
TOTAL	847.2	845.4	1,577.8	1,534.0	1,236.5

.....

<sup>(1)</sup> This category does not include the use of payment instruments to obtain cash and does not include travellers' cheques.

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

	1991	1992	1993	1994	1995
S.W.I.F.T. users	18	21	24	38	46
of which:					
members	4	5	7	11	13
sub-members	12	14	15	18	21
participants	2	2	2	9	12
Memorandum item:			•		
Total S.W.I.F.T. world-wide	3,648	3,903	4,004	4,623	5,229
of which:					
members	1,963	2,074	2,103	2,412	2,259
sub-members	1,607	1,738	1,802	2,023	2,259
participants	<i>78</i>	91	99	188	277

# Table 17

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

	1991	1992	1993	1994	1995
Total messages sent	1,254,286	1,558,560	1,701,064	2,002,311	2,485,986
of which:			*		
category I	241,826	310,777	337,317	426,779	562,098
category II	458,818	477,387	513,719	587,531	735,867
sent/received to/from domestic	*				*
users	171,506	258,420	293,511	414,670	635,647
Total messages received	1,595,235	1,810,614	1,973,674	2,206,878	2,679,787
of which:					
category I	n.a.	471,115	531,871	628,096	766,105
category II	n.a.	261,543	280,613	338,556	450,953
Memorandum item:		•		•	
Global S.W.I.F.T. traffic	365,159,291	405,540,902	457,218,200	518,097,873	582,192,512

### Definitions

- Sub-members: domestic users sponsored by members abroad;
- Participants: users which are not shareholders in S.W.I.F.T.; their message traffic over the network is restricted;
- Category I: customer (funds) transfers;
- Category II: bank (funds) transfers.



Basic statistical data (1)

,	1991	1992	1993	1994	1995
Population (2) (thousands)	57,796	57,896	58,090	58,247	58,363
Gross domestic product (ITL billions)	1,429,453	1,504,003	1,550,150	1,641,105	1,774,035
Exchange rate vis-à-vis ECU (2)	1,533.26	1,594.29	1,840,33	1,913.95	2,130.14

- (1) Since 1990 a new source of data has been used and, therefore, some of these figures may differ from those contained in the Addendum to the "Blue Book", May 1994.
- (2) Average for the year.

# Table 2

Settlement media used by non-banks

(end of year)

ITL billions
1995
98,281
490,240
355,924
93,118
41,198
15,971
604,492

- (1) Insurance companies and public authorities.
- (2) Banker's drafts, cashiers' cheques and current accounts at the Treasury.

#### Table 3

Settlement media used by deposit-taking institutions (end of year)

					ITL billions
	1991	1992	1993	1994	1995
Required reserves held at central bank (1)	128,915	129,927	105,796	92,468	73,736
of which can be used for settlement <sup>(2)</sup>	6,445	6,496	7,406	7,397	7,373
Free reserves held at central bank	196	127	121	151	202
Transferable deposits at other institutions	55,016	46,407	52,455	56,352	64,156

- (1) Average reserves for the period from 15th December to 14th January.
- (2) A procedure to mobilise the compulsory reserves was launched on 10th October 1990. Initially only 3% of the compulsory reserves could be mobilised; on 15th October 1991 the share was raised to 5%; on 15th February 1993 it was raised to 7%, and on 15th July 1995 up to 10%.

### Banknotes and coins

(total value, end of year)

					ITL billions
	1991	1992	1993	1994	1995
Total banknotes issued	80,491	89,222	93,508	100,025	103,249
of which:					
ITL 100,000	56,570	63,205	66,862	72,346	74,815
ITL 50,000	18,154	20,018	20,662	21,531	22,177
ITL 10,000	3,882	3,929	3,903	3,996	4,077
ITL 5,000	776	827	848	905	938
ITL 2,000	170	298	346	333	292
ITL 1,000	939	945	887	914	950
Coins in circulation	1,533	1,637	1,722	1,763	1,897
Notes and coins held by credit institutions	5,670	5,242	5,461	5,567	6,865
Notes and coins in circulation outside credit institutions	76,354	85,617	89,769	96,221	98,281

# Table 5

Institutional framework

(end of 1995)

Categories	Number of institutions	Number of branches	Number accounts (thousands) (	Value of accounts (ITL billions)
Central bank	1	98	. **	•
Commercial banks	255	16,822	20,639	393,742
Savings banks	•	•	•	•
Co-operative and rural banks	715	6,618	5,013	89,160
Post office	1	14,500	521	7,338
TOTAL	972	38,038	26,173	490,240
Branches of foreign banks:	52	78	10	1,300
of which EC-based	31	54	.4	540

Cash dispensers, ATMs and EFTPOS terminals

(end of year)

	1991	1992	1993	1994	1995
Cash dispensers and ATMs					
Number of networks	1	1	1	1	1
Number of machines	11,571	13,917	15,227	18,672	21,670
Volume of transactions (thousands) (1)	131,283	162,583	187,407	211,247	244,655
Value of transactions (ITL billions) (1)	38,992	49,168	58,050	66,537	77,480
EFTPOS terminals				·	
Number of networks		**	*	**	*
Number of points of sale	45,711	62,251	77,206	104,051	153,752
Volume of transactions (thousands) (1)	8,500	12,681	17,774	26,095	37,895
Value of transactions (ITL billions) (1)	1,727	2,526	3,398	4,943	7,158

<sup>(1)</sup> Data relating to a sample group of seventy-five banks accounting for approximately 80% of current account deposits in the entire banking system.

# Table 7

Number of payment cards in circulation (1)

					thousands
	1991	. 1992	1993	1994	1995
Cards with a cash function	8,948	10,606	11,295	12,396	13,824
Cards with a debit/credit function of which:	12,991	14,858	16,279	18,210	20,482
cards with a debit function	8,059	9,494	10,555	12,124	13,791
cards with a credit function	4,932	5,364	5,724	6,086	6,691
Cards with a cheque guarantee function (2)	2,323	2,187	1,674	1,766	1,655
Retailer cards	n.a.	n.a.	n.a.	n.a.	n.a.

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

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

					thousands
	1991	1992	1993	1994	1995
LOCAL CLEARING	440,125	292,129	253,189	240,676	235,665
Cheques	436,187	288,458	250,617	238,504	233,698
out-of-town cheques	222,395	96,062	<i>85,703</i>	85,782	90,259
Bills of exchange (1)	1,680	1,430	1,019		
Credit transfers (2)	***	441	325	283	263
Other items (3)	2,258	1,800	1,228	1,889	1,704
MEMORANDA	1,465	1,804	1,896	2,083	1,810
Interbank deposits	722	1,020	1,005	731	725
Foreign operations	600	542	533	562	208
Credit transfers	64	147	187	221	285
Other items (4)	79	95	171	569	592
SIPS	2,311	2,780	3,111	3,526	4,462
RETAIL	125,086	361,783	451,171	489,582	586,865
Cheque truncation	79,162	317,970	321,354	287,179	283,937
Bancomat	45,924	43,813	56,114	61,616	74,383
Collection orders	-	•	73,703	140,333	154,061
Credit transfers	-		•	454	74,484
CENTRALISED ACCOUNTS (5)	949	1,136	1,056	1,016	1,027
Payments between banks and the Banca d'Italia or the Treasury	943	1,116	1,013	973	981
BISS	6	20	43	43	46

<sup>(1)</sup> Since 1994 bills of exchange are included among the "other items".

<sup>(2)</sup> Up to 1991 credit ctransfers are included among the "other items".

<sup>(3)</sup> Includes settlement of securities transactions (up to 1992); payments between the banking system and the Treasury, the Banca d'Italia or the Postal Administration; credit transfers (up to 1991) and Bills of Exchange (from 1994).

<sup>(4)</sup> In particular settlement of securities transactions (from 1993).

<sup>(5)</sup> Debits/credits for the settlement of clearing balances are not included.

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

					ITL billions
	1991	1992	1993	1994	1995
LOCAL CLEARING	5,696,810	6,345,384	4,622,317	4,255,270	3,574,629
Cheques	1,631,530	1,605,684	1,583,041	1,587,415	1,635,293
out-of-town cheques	643,187	606,197	622,365	629,890	659,491
Bills of exchange (1)	48,715	45,193	40,394		
Credit transfers (2)	•	1,024,169	732,001	634,657	593,773
Other items (3)	4,016,565	3,670,338	2,266,881	2,033,198	1,345,563
MEMORANDA	6,332,000	10,450,000	17,067,600	17,972,187	18,408,052
Interbank deposits	5,223,000	8,772,000	11,698,000	11,782,702	11,557,140
Foreign operations	553,000	782,000	987,000	894,808	493,336
Credit transfers	225,000	539,000	716,000	857,732	1,029,143
Other items (4)	331,000	357,000	3,666,600	4,436,945	5,328,433
SIPS	8,273,530	11,994,531	18,293,744	25,928,601	27,377,138
RETAIL	75,368	262,740	492,310	675,298	1,239,833
Cheque truncation	63,643	251,554	288,342	286,985	290,343
Bancomat	11,725	11,186	16,152	17,821	21,303
Collection orders	•	-	187,816	367,504	468,342
Credit transfers	**	-	*	2,988	459,845
CENTRALISED ACCOUNTS (5)	1,650,500	2,873,100	2,619,500	2,428,800	2,737,756
Payments between banks and the Banca d'Italia or the Treasury	1,613,700	2,775,000	2,538,300	2,318,900	2,599,800
BISS	36,800	98,100	81,200	109,900	137,956

- (1) Since 1994 bills of exchange are included among the "other items".
- (2) Up to 1991 credit ctransfers are included among the "other items".
- (3) Includes settlement of securities transactions (up to 1992); payments between the banking system and the Treasury, the Banca d'Italia or the Postal Administration; credit transfers (up to 1991) and Bills of Exchange (from 1994).
- (4) In particular settlement of securities transactions (from 1993).
- (5) Debits/credits for the settlement of clearing balances are not included.

### Table 10

Participants in securities settlement systems (end of 1995)

	Settling securities	Holding securities accounts on behalf of customers	Settling cash directly in central bank accounts
LDT	. 317	n.a.	147
Banks	147	n.a.	147
Stockbrokers	61	n.a.	<b>*</b> *
Securities investment firms	109	n,a.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
CAT	780	n.a.	485
Banks	485	485	485
Stockbrokers	41	41	₩.
Securities investment firms	138	n.a.	*
Others	116		₩.

Transfer instructions handled by securities settlement systems: volume of transactions

	1991	1992	1993	1994	1995
LDT <sup>(1)</sup>	8,062,324	7,714,770	10,777,761	14,127,128	16,236,625
Government securities	2,186,689	2,854,859	4,047,605	5,343,790	8,164,353
Equity bonds	584,130	633,301	930,618	834,641	931,054
Shares	5,291,505	4,226,610	5,799,538	7,948,697	7,141,218
CAT (Government securities)	118,900	156,900	561,176	845,792	960,553

(1) Bilateral credit and debit balances.

# Table 12

Transfer instructions handled by securities settlement systems: value of transactions

		•			IIL billions
	1991	1992	1993	1994	1995
LDT (1)	3,083,221	4,259,516	9,562,669	12,539,583	15,134,844
Government securities	2,922,895	4,053,516	9,264,315	12,100,697	14,801,877
Equity bonds	27,748	25,125	55,547	37,619	45,405
Shares	132,578	180,875	242,807	401,267	287,562
CAT (2) (Government securities)	324,599	586,274	1,884,042	1,743,402	1,575,070

- (1) Bilateral balances.
- (2) Procedure launched in September 1990. Figures refer to the nominal value of securities.

### Table 13

Nominal values registered by securities settlement systems (end of year)

					ITL billions
	1991	1992	1993	1994	1995
CAT (1) (Government securities)	1,118,300	1,277,189	1,445,448	1,686,211	1,797,191

(1) Procedure launched in September 1990.

Indicators of use of various cashless payment instruments: volume of transactions (1)

					millions
	1991	1992	1993	1994	1995
Cheques issued	689.3	674.5	621.6	574.8	563.6
of which truncated	79.1	317.9	321.3	285.2	270.0
Payments by debit and credit cards	63.5	74.8	81.7	100.6	130.6
Paper-based credit transfers	631.3	660.9	697.7	706.0	707.0
customer initiated (2)	628.1	658.0	695.5	703.1	704.3
interbank/large-value	3. <i>2</i>	2.9	2.2	2.9	2.7
Paperless credit transfers	168.7	172.5	178.5	208.4	214.8
customer initiated (2)	164.9	167.9	173.6	203.0	208.8
interbank/large-value	3.8	4.6	4.9	5.4	6.0
Direct debits	62.6	69.0	73.2	78.7	90.9
Others	173.4	167.5	159.0	153.1	157.3
paper-based transactions (3)	87	72	59	47	33
paperless transactions (4)	87	96	100	107	125
TOTAL	1,788.8	1,819.2	1,811.7	1,821.6	1,864.2

<sup>(1)</sup> The figures for payment operations effected by banking instruments have been provided by seventy-five banks accounting for approximately 80% of the current account deposits in all banking systems.

The data on the other payment operations (Banca d'Italia cashier's cheques, postal instruments, credit cards, interbank large-value transfers) related to the entire system.

<sup>(2)</sup> Excluding payments between credit institutions and their customers, and payments to and from accounts held under the same name at the same deposit-taking institution.

<sup>(3)</sup> Collections of commercial bills and paper-based bank receipts executed through the banking system.

<sup>(4)</sup> Collections of electronic bank receipts executed through the banking system.

Indicators of use of various cashless payment instruments: value of transactions (1)

					ITL billions
	1991	1992	1993	1994	1995
Cheques issued	2,156,272	2,223,172	2,170,124	2,108,124	2,190,634
of which truncated	63,643	251,554	288,342	291,749	284,763
Payments by debit and credit cards	11,754	14,291	15,671	19,218	24,718
Paper-based credit transfers	6,330,688	7,191,203	5,596,276	4,709,208	4,331,379
customer initiated (2)	701,174	745,865	791,095	357,110	386,016
interbank/large-value	5,629,514	6,445,338	4,805,181	4,352,098	3,945,363
Paperless credit transfers	18,227,933	26,236,790	38,812,084	47,766,143	49,782,294
customer initiated (2)	3,810,603	4,233,160	4,085,540	4,613,156	4,888,291
interbank/large-value	14,417,330	22,003,630	34,726,544	43,152,987	44,894,003
Direct debits	61,619	73,741	89,095	106,721	116,309
Others	462,658	468,069	452,127	463,821	534,787
paper-based transactions (3)	246,974	218,307	186,729	164,891	133,844
paperless transactions (4)	215,684	249,762	265,398	298,930	400,943
TOTAL	27,250,924	36,207,266	47,135,377	55,173,235	56,980,121

<sup>(1)</sup> The figures for payment operations effected by banking instruments have been provided by seventy-five banks accounting for approximately 80% of the current account deposits in all banking systems.

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> Excluding payments between credit institutions and their customers, and payments to and from accounts held under the same name at the same deposit-taking institution.

<sup>(3)</sup> Collections of commercial bills and paper-based bank receipts executed through the banking system.

<sup>(4)</sup> Collections of electronic bank receipts executed through the banking system.

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

	1991	1992	1993	1994	1995
S.W.I.F.T. users	224	218	215	218	219
of which:					
members	196	188	187	186	182
sub-members	28	30	28	32	36
participants	•	•	•	•	1
Memorandum item:					
Total S.W.I.F.T. world-wide	3,648	3,903	4,004	4,623	5,229
of which:					
members	1,963	2,074	2,103	2,412	2,259
sub-members	1,607	1,738	1,802	2,023	2,259
participants	<i>7</i> 8	91	99	188	277

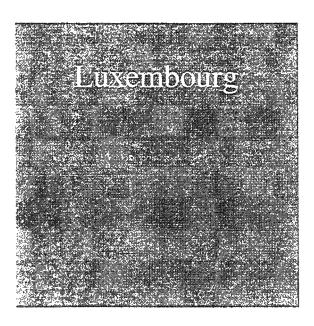
# Table 17

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

	1991	1992	1993	1994	1995
Total messages sent	19,203,007	21,144,390	22,572,543	24,681,961	27,584,947
of which:					
category I	6,110,992	6,695,298	6,845,876	7,596,603	8,360,220
category II sent/received to/from domestic	5,359,223	5,783,865	5,904,935	6,063,052	6,512,180
users	2,944,909	3,465,396	3,751,213	4,235,252	4,959,227
Total messages received of which:	18,148,442	20,008,765	22,189,826	25,066,961	28,480,765
category i	•	6,101,945	6,930,817	8,061,681	9,502,849
category II	*	4,243,352	4,758,663	5,448,679	6,239,393
Memorandum item: Global S.W.I.F.T. traffic	365,159,291	405,540,902	457,218,200	518,097,873	582,192,512

#### Definitions

- Sub-members: domestic users sponsored by members abroad;
- Participants: users which are not shareholders in S.W.I.F.T.; their message traffic over the network is restricted;
- Category I: customer (funds) transfers;
- Category II: bank (funds) transfers.



Basic statistical data (1)

	1991	1992	1993	1994	1995
Population (2) (thousands)	382.8	392.5	398.1	403.8	410.0
Gross domestic product (LUF billions)	372.4	398.2	438.1	468.6	503.28
Exchange rate vis-à-vis ECU (2)	42.2224	41.6062	40.4672	39.6620	38.5519

- (1) Since 1990 a new source of data has been used and, therefore, some of these figures may differ from those contained in the Addendum to the "Blue Book", May 1994.
- (2) Average for the year.

# Table 2

Settlement media used by non-banks

(end of year)

				Ll	JF billions
	1991	1992	1993	1994	1995
Notes and coins	16.1	15.5	16.3	15.7	15.9
Transferable deposits	64.3	67.5	70.8	88.8	86.8
Narrow money supply (M1)	80.4	83.0	87.1	104.5	102.7
Other	0	0	0	0	0

# Table 3

Settlement media used by deposit-taking institutions

				LL	IF billions
	1991	1992	1993	1994	1995
Required reserves held at central bank Free reserves held at central bank	0	0	0	0	0
Transferable deposits at other credit institutions	594.0	660.0	n.a.	n.a.	n.a.
Broad money aggregate	458.5	488.6	n.a.	n.a.	n.a.

#### Banknotes and coins

(total value, end of year)

LUF billions 1991 1992 1993 1994 1995 Total banknotes issued 2,709.3 2,548.0 5,355.6 4,797.6 4,158.4 of which: LUF 5,000 0 0 2,717.7 2,950.6 2,749.0 LUF 1,000 2,469.6 2,398.3 2,316.8 1,613.7 1,191.7 **LUF 100** 239.7 239.6 233.3 217.7 231.2 Coins issued 700.5 686.0 683.9 694.5 699.6 Notes and coins held by credit institutions 4,265.1 4,428.8 3,382.5 3,976.5 4,171.4 Notes and coins in circulation outside credit institutions (1) 16,300 15,700 15,500 16,100 15,500

(1) These data include the Belgian notes and coins which are legal tender in Luxembourg.

### Table 5

#### Institutional framework

(end of 1995)

Categories	Number of institutions	Number of branches	Number of accounts (thousands)	Value of accounts (LUF billions)
Central bank	1	0	0	0
Commercial banks	218	369	1,494	2,800
Savings banks	0	0	0	0
Co-operative and rural banks	2	35	n.a.	n.a.
Post Office	1	0	102	28
TOTAL	222	404	1,596	2,828
Branches of foreign banks	71	n.a.	n.a.	n.a.
of which EC-based	60	n.a.	n.a.	n.a.

Cash dispensers, ATMs and EFTPOS terminals  $\,$ 

(end of year)

	1991	1992	1993 (1)	1994	1995
Cash dispensers and ATMs					
Number of networks	2	2	2	2	2.0
Number of machines	87	120	117	151	187.0
Volume of transactions (millions)	3	3	4	4	3.8
Value of transactions (LUF billions)	13.9	15.5	17.6	20.3	17.3
EFTPOS terminals					
Number of networks	3	3	3	3	3
Number of points of sale (1)			3,340.0	3,663.0	3,340.0
Volume of transactions (millions)	7.4	8.2	8.8	11.8	15.0
Value of transactions (LUF billions)	24.1	27.9	23.5	32.2	39.2

<sup>(1)</sup> Electronic terminals only.

# Table 7

Number of payment cards in circulation (1)

inousands	τη				
1995	1994	1993	1992	1991	
420.9	359.8	331.7	384.4	324.9	Cards with a cash function
485.0	421.6	393.2	384.5	324.8	Cards with a debit/credit function of which:
260.7	209.5	183.7	204.3	164.8	cards with a debit function
224.3	212.1	209.5	180.2	160.0	cards with a credit function
260.7	248.6	239.7	204.3	164.8	Cards with a cheque guarantee function
n.a.	n.a.	n.a.	n.a.	n.a.	Retailer cards
	<i>212.1</i> 248.6	<i>209.5</i> 239.7	<i>180.2</i> 204.3	<i>160.0</i> 164.8	cards with a debit function cards with a credit function Cards with a cheque guarantee function

<sup>(1)</sup> A card with multiple functions may appear in several categories. It is, therefore, not meaningful to add the figures.

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

					millions
	1991	1992	1993	1994	1995
Clearing house	6.1	6.2	6.0	6.3	4.3
Automated clearing house	n.a.	n.a.	n.a.	n.a.	2.2
Large-value systems	n.a.	n.a.	n.a.	n.a.	n.a.

# Table 9

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

				LUF billions		
	1991	1992	1993	1994	1995	
Clearing house	593.0	681.0	808.3	801.4	599.0	
Automated clearing house	n.a.	n.a.	n.a.	n.a.	158.4	
Large-value systems	n.a.	n.a.	n.a.	n.a.	n.a.	

# Table 10

Participants in securities settlement systems

	Settling securities	Holding securities accounts on behalf of customers	Settling cash directly in central bank accounts
CEDEI	na	n.a.	n.a.

Transfer instructions handled by securities settlement systems:

volume of transactions

	1991	1992	1993	1994	1995
CEDEL	8,360,280	8,135,280	9,227,160	9,271,080	9,825,480

# Table 12

Transfer instructions handled by securities settlement systems: value of transactions

LUF billions

	1991	1992	1993	1994	1995
CEDEL	104,329.4	157,260.5	207,994.5	223,766.9	277,868.58
Short and medium-term notes	23,605.6	30,081.9	38,450.5	40,998.2	53,980.59

# Table 13

Nominal values registered by securities settlement systems (end of year)

LUF billions

	1991	1992	1993	1994	1995
CEDEL					
Market value of securities	16,979.6	20,608.8	25,919.6	27,723.9	30,106.89

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

					millions
	1991	1992	1993	1994 <sup>(1)</sup>	1995
Cheques issued	4.0	n.a.	n.a.	2.5	n.a.
Payments by debit and credit cards	10.2	n.a.	n.a.	15.5	n.a.
Credit transfers	15.7	n.a.	n.a.	30.0	n.a.
Direct debits	8.2	n.a.	n.a.	2.0	n.a.
Others	**	n.a.	n.a.		n.a.
TOTAL	38.1	n.a.	n.a.	50.0	n.a.

<sup>(1)</sup> These figures were based on an estimate from an ad hoc enquiry performed in December 1995. Unlike the enquiry of 1991, this enquiry includes the intra-bank credit transfers.

# Table 15

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

				LUI	- millions
	1991	1992	1993	1994 <sup>(1)</sup>	1995
Cheques issued	246	n.a.	n.a.	145	n.a.
Payments by debit and credit cards	38	n.a.	n.a.	49	n.a.
Credit transfers	2,856	n.a.	n.a.	9,644	n.a.
Direct debits	42	n.a.	n.a.	38	n.a.
Others	*	n.a.	n.a.	<b>In</b>	n.a.
TOTAL	,3,182	n.a.	n.a.	9,877	n.a.

<sup>(1)</sup> These figures were based on an estimate from an ad hoc enquiry performed in December 1995. Unlike the enquiry of 1991, this enquiry includes the intra-bank credit transfers.

Inter-bank credit transfers amounted to 17.3 million transactions and to a global value of LUF 4,378.7 million

Inter-bank credit transfers amounted to 17.3 million transactions and to a global value of LUF 4,378.7 million

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

	1991	1992	1993	1994	1995
S.W.I.F.T. users	116	127	128	140	150
of which:					
members	23	20	23	26	29
sub-members	93	107	105	114	121
participants	₩	•	•	*	•
Memorandum item:					
Total S.W.I.F.T. world-wide	3,648	3,903	4,004	4,623	5,229
of which:					
members	1,963	2,074	2,103	2,412	2,259
sub-members	1,607	1,738	1,802	2,023	2,259
participants	<i>7</i> 8	91	99	188	277

# Table 17

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

	1991	1992	1993	1994	1995
Total messages sent	7,918,440	8,778,092	10,269,903	11,334,220	12,280,307
of which:					
category I	1,754,424	186,946	2,064,159	2,212,835	2,496,990
category II	657,813	3,177,649	3,617,697	3,658,917	3,692,809
sent/received to/from domestic					
users	1,100,597	1,404,567	1,748,639	1,952,674	2,158,482
Total messages received	6,248,039	7,301,934	8,651,024	9,611,417	10,784,350
of which:					
category I	n.a.	n.a.	1,026,732	1,051,652	1,158,863
category II	n.a.	n.a.	1,060,877	1,040,092	1,097,793
Memorandum item:					

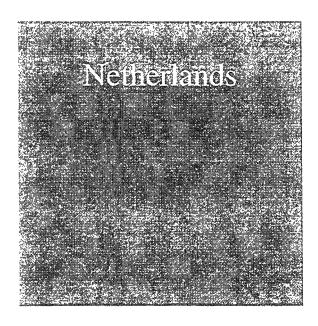
#### Memorandum item:

Global S.W.I.F.T. traffic

365,159,291 405,540,962 457,218,200 518,097,873 582,192,512

#### Definitions

- Sub-members: domestic users sponsored by members abroad;
- Participants: users which are not shareholders in S.W.I.F.T.; their message traffic over the network is restricted;
- Category I: customer (funds) transfers;
- Category II: bank (funds) transfers.



All C hillians

Table 1

Basic statistical data (1)

	1991	1992	1993	1994	1995
Population (2) (thousands)	15,068	15,182	15,290	15,381	15,458
Gross domestic product (NLG billions)	542.6	566.1	579.0	608.4	635.8
Exchange rate vis-à-vis ECU (2)	2.3109	2.2755	2.1757	2.1585	2.0989

<sup>(1)</sup> Since 1990 a new source of data has been used and, therefore, some of these figures may differ from those contained in the Addendum to the "Blue Book", May 1994.

#### Table 2

Settlement media used by non-banks

(end of year)

NLG				
1991	1992	1993	1994	1995
37.0	37.0	37.6	38.1	38.2
92.3	98.1	112.1	114.1	134.7
40.4	41.6	45.6	47.0	51.7
42.3	45.1	53.9	54.5	65.2
9.6	11.3	12.6	12.6	17.8
129.3	135.1	149.7	152.2	172.9
	37.0 92.3 40.4 42.3 9.6	37.0 37.0 92.3 98.1 40.4 41.6 42.3 45.1 9.6 11.3	37.0     37.0     37.6       92.3     98.1     112.1       40.4     41.6     45.6       42.3     45.1     53.9       9.6     11.3     12.6	1991     1992     1993     1994       37.0     37.0     37.6     38.1       92.3     98.1     112.1     114.1       40.4     41.6     45.6     47.0       42.3     45.1     53.9     54.5       9.6     11.3     12.6     12.6

#### Table 3

Settlement media used by deposit-taking institutions (end of year)

**NLG** millions 1991 1993 1994 1995 1992 Required reserves held at central bank 11,361 0 0 12,484 15,783 of which can be used for settlement (1) 0 12,484 15,783 11,361 0 25 37 Free reserves held at central bank 116 32 42 Transferable deposits at other institutions 3,118 2,462 3.061 2,768 1,906

<sup>(2)</sup> Average for the year.

<sup>(1)</sup> As collateral.

### Banknotes and coins

(total value, end of year)

				NL	G billions
	1991	1992	1993	1994	1995
Total banknotes issued	37.3	37.3	37.8	38.3	38.6
of which:					
NLG 1,000	15.5	15.1	15.5	15.8	14.94
NLG 250	4.2	4.3	4.7	5.0	5.25
NLG 100	13.6	13.8	13.4	13.2	13.84
NLG 50	1.5	1.6	1.7	1.8	1.95
NLG 25	1.7	1.7	1.7	1.8	1.81
NLG 10	0.7	0.7	0.8	0.8	0.79
NLG 5	0.1	0.1	0.1	0.1	0.05
Coins issued	2.6	2.6	2.6	2.6	2.7
of which:	•				
NLG 5.00	0.93	0.92	0.91	0.92	0.94
NLG 2.50	0.48	0.48	0.47	0.48	0.48
NLG 1:00	0.66	0.65	0.65	0.66	0.68
NLG 0.25	0.29	0.29	0.28	0.29	0.30
NLG 0.10	0.20	0.20	0.20	0.20	0.21
NLG 0.5	0.07	0.07	0.07	0.07	0.07
Notes and coins held by institutions	2.9	2.9	2.8	2.8	3.1
Notes and coins in circulation outside credit institution	37.0	37.0	37.6	38.3	38.2

# Table 5

Institutional framework

(end of 1995)

Categories	Number of institutions	Number of branches	Number of accounts (thousands)	Value of accounts (NLG billions)
Central bank	1	11	•	
Commercial banks	98	2,453	6,800	74
Savings banks	26	26	100	0
Co-operative and rural banks	1	1,879	5,400	38
Postbank	1	2,132	6,700	22
TOTAL	127	6,501	19,000	135
Branches of foreign banks	25	n.a.	n.a.	n.a.
of which EC-based	11	n.a.	n.a.	n₊a.

Cash dispensers, ATMs and EFTPOS terminals (end of year)

	1991	1992	1993	1994	1995
Cash dispensers and ATMs					
Number of networks	2	2	2	2	2
Number of machines	3,354	3,964	4,461	4,998	5,489
Volume of transactions (millions)	207	262	314	367	425
Value of transactions (NLG billions)	36	45	56	65	74
EFTPOS terminals					
Number of networks	2	2	1	1	1
Number of points of sale	4,038	11,440	24,549	47,588	73,376
Volume of transactions (millions)	32	47	67	126	256
Value of transactions (NLG billions)	2	4	7	14	24

### Table 7

Number of payment cards in circulation (1) (end of year)

					tnousands
	1991	1992	1993	1994	1995
Cards with a cash function	9,273	12,538	13,107	13,988	16,419
Cards with a debit/credit function	1,950	1,500	1,257	1,257	1,493
of which:				•	
cards with a debit function	n.a.	1,500	1,257	1,257	1,493
cards with a credit function	n.a.	n.a.	n.a.	n.a.	n.a.
Cards with a cheque guarantee function	2,213	1,765	1,796	1,297	724
Retailer cards	n.a.	n.a.	n.a.	n.a.	n.a.

<sup>(1)</sup> A card with multiple functions may appear in several categories. It is, therefore, not meaningful to add the figures.

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

					millions
	1991	1992	1993	1994	1995
Interpay (1)	992.6	1,045.8	1,130.5	1,225.4	1,410.9
Cheques	110.5	91.7	71.9	55.8	40.5
Other	882.1	954.1	1,058.6	1,169.6	1,370.4
8007 S.W.I.F.T.	2.0	1.8	1.9	2.0	2.1
Cheques	0	0	0	0	0
Other	2.0	1.8	1.9	2.0	2.1
Central bank FA system	0.5	0.5	0.4	0.4	0.4
Cheques	0	0	0	0	0
Other	0.5	0.5	0.4	0.4	0.4

(1) Former Bankgirocentrale.

# Table 9

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

				N	ILG billions
	1991	1992	1993	1994	1995
Interpay (1)	1,851.8	1,942.0	2,207.4	2,195.0	2,189.1
Cheques	16.2	15.0	11.7	9.2	6.7
Other	1,835.6	1,927.0	2,195.7	2,185.8	2,182.4
8007 S.W.I.F.T.	7,862.0	8,055.0	9,011.0	10,139.7	10,340.7
Cheques	0	0	0	0	0
Other	7,862.0	8,055.0	9,011.0	10,139.7	10,340.7
Central bank FA system	6,694.2	7,658.5	9,300.1	9,182.5	8,450.4
Cheques	0	0	0	0	0
Other	6,694.2	7,658.5	9,300.1	9,182.5	8,450.4

(1) Former Bankgirocentrale.

Participants in securities settlement systems

	Settling securities	Holding securities accounts on behalf of customers	Settling cash directly in central bank accounts
Necigef	53	-	*
Banks (1)	31	***	140
Stockbrokers	15	-	-
Securities houses (2)	2	**	-
Cedel / Euroclear		**	**
CSDs	5	*	
Money market brokers		*	**
Depositories of participants		**	•
Clearing institute central bank	85	-	85
Banks	69	-	69
Stockbrokers		-	•
Securities houses	· •••	**	
Cedel / Euroclear	2		2
CSDs	wer		
Money market brokers	6		6
Depositories of participants	8	-	8

<sup>(1)</sup> Including DNB.

<sup>(2)</sup> Effectenclearing and EOCC.

Transfer instructions handled by securities settlement systems: volume of transactions

					nousands
	1991	1992	1993	1994	1995
Necigef	1,159	1,193	1,323	1,145	1,028
Clearing institute central bank	2	3	2	2	3
Effectenclearing	963	938	1,195	1,155	1,350

### Table 12

Transfer instructions handled by securities settlement systems: value of transactions

	1991	1992	1993	1994	1995
Necigef	n.a.	n.a.	n.a.	n.a.	n.a.
Clearing institute central bank	38.0	49.4	48.5	79.5	100.1
CDs	9.3	12.3	15.7	25.1	49.5
CPs	14.2	21.0	17.0	39.6	37.2
MTNs	14.5	16.1	15.8	14.8	13.4
Effectenclearing (1)	234.1	303.7	509.5	580.1	680.9
Government securities	147.8	207.2	355.8	397.1	432.7
Bonds	12.3	16.2	28.3	27.0	48.5
Shares	74.0	80.3	125.4	156.0	199.7

(1) The figures show the turnover of ASE.

### Table 13

Nominal values registered by the securities settlement systems (end of year)

				NL	.G billions
	1991	1992	1993	1994	1995
Necigef	270.6	309.3	394.7	414.0	425.2
Clearing institute central bank	23.5	33.8	41.3	56.8	66.4
CDs	4.8	7.8	7.0	13.6	15.8
CPs	4.5	4.7	7.1	11.3	16.3
MTNs	14.2	21.3	27.2	31.9	34.3

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

					millions
	1991	1992	1993	1994	1995
Cheques issued	247.0	221.9	180.5	144.8	109.9
Payments by debit and credit cards	32.0	46.6	91.7	192.7	373.3
Paper-based credit transfers	98.0	105.0	101.4	79.1	76.1
customer initiated	98.0	105.0	101.4	79.1	76.1
interbank/large-value	0.0	0.0	0.0	0.0	0.0
Paperless credit transfers	963.0	1,003.1	1,382.2	1,481.0	1,583.9
customer initiated	960.5	1,000.8	1,379.9	1,478.6	1,581.4
interbank/large-value	2.5	2.3	2.3	2.4	2.5
Direct debits	392.0	431.4	479.5	531.0	597.5
TOTAL	1,732.0	1,808.0	2,235.3	2,428.6	2,740.7

#### Table 15

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

				ı	ILG billions
	1991	1992	1993	1994	1995
Cheques issued	33.0	32.0	25.9	21.0	16.1
Payments by debit and credit cards	2.0	3.8	10.0	21.6	36.3
Paper-based credit transfers	45.0	48.0	36.5	26.4	24.8
customer initiated	45.0	48.0	<i>36.5</i>	26.4	24.8
interbank/large-value	0	0	0	.0	0
Paperless credit transfers	17,032.0	18,741.2	21,188.1	22,195.1	21,635.5
customer initiated	2,475.8	3,027.7	2,877.0	2,872.9	2,844.4
interbank/large-value	14,556.2	15,713.5	18,311.1	19,322.2	18,791.1
Direct debits	246.0	226.0	229.8	239.8	259.8
TOTAL	17,358.0	19,051.0	21,490.3	22,503.9	21,972.5

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

	1991	1992	1993	1994	1995
S.W.I.F.T. users	54	55	59	55	62
of which:					
members	<i>30</i>	29	30	27	28
sub-members	23	25	28	28	32
participants	1	1	1	•	2
Memorandum item:					
Total S.W.I.F.T. world-wide	3,648	3,903	4,256	4,623	5,229
of which:					
members	1,963	2,074	2,244	2,412	2,259
sub-members	1,607	1,738	1,887	2,023	2,259
participants	78	91	125	188	277

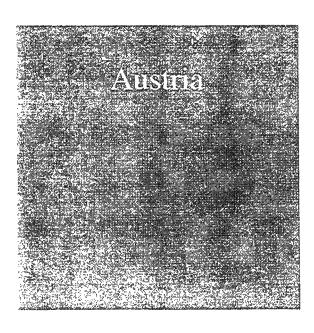
### Table 17

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

	1991	1992	1993	1994	1995
Total messages sent	12,944,496	13,547,572	14,543,442	15,253,265	16,903,885
of which:					
category I	6,071,972	6,310,685	6,474,480	6,508,032	6,747,310
category II	2,790,345	2,733,648	2,912,403	3,107,787	3,275,847
sent/received to/from domestic					
users	1,419,578	1,763,389	1,996,747	1,750,991	1,870,671
Total messages received	12,158,421	12,865,625	13,983,712	14,538,364	16,027,297
of which:					
category I	**	4,941,606	5,169,497	5,279,922	5,498,322
category II	-	1,921,436	2,066,993	2,081,037	2,204,721
Memorandum item:					
Global S.W.I.F.T. traffic	365,159,291	405,540,962	457,218,200	518,097,873	582,192,512

#### Definitions

- Sub-members: domestic users sponsored by members abroad;
- Participants: users which are not shareholders in S.W.I.F.T.; their message traffic over the network is restricted;
- Category I: customer (funds) transfers;
- Category II: bank (funds) transfers.



Basic statistical data (1)

	1991	1992	1993	1994	1995
Population (2) (thousands)	7,813	7,914	7,991	8,030	8,062
Gross domestic product (ATS billions)	1,926.5	2,047.2	2,124.1	2,262.9	2,353.4
Exchange rate vis-à-vis ECU (2)	14.43	14.22	13.63	13.54	13.18

- (1) Since 1990 a new source of data has been used and, therefore, some of these figures may differ from those contained in the Addendum to the "Blue Book", May 1994.
- (2) Average for the year.

### Table 2

Settlement media used by non-banks

(end of year)

				AT	S billions
	1991	1992	1993	1994	1995
Notes and coins (1)	113.3	120.9	127.4	133.6	142.7
Transferable deposits (2)	170.9	180.9	207.2	222.0	266.4
Narrow money supply (M1) (1)	284.2	301.8	334.6	355.6	409.1
Transferable deposits in foreign currencies	19.0	22.0	24.7	27.2	27.9

- (1) Without coins in gold and silver.
- (2) In local currency only.

### Table 3

Settlement media used by deposit-taking institutions

				A	TS billions
	1991	1992	1993	1994	1995
Required reserves held at central bank	57,63	59.08	58.44	61.47	55.10
Free reserves held at central bank (1)	0.41	0.51	0.01	0	0
Transferable deposits at other institutions (2)	170.81	180.86	207.19	222.01	253.19

- (1) Average of end-of-month figures.
- (2) Average of end-of-quarter figures.

#### Banknotes and coins

(total value, end of year)

					ATS millions
	1991	1992	1993	1994	1995
Total banknotes issued (banknotes in circulation)	127,403.03	134,981.39	143,215.89	151,449.92	161,412.77
of which denomination belongs to the new					
series:					
5,000/1	22,900.61	28,759.65	33,471.97	38,294.52	43,878.27
1,000/IV	76,353.18	77,097.82	79,556.04	82,061.12	85,650.17
500/111	10,981.44	11,433.23	11,961.47	12,396.72	12,729.17
100/VI	11,441.84	11,929.66	12,415.95	12,809.57	13,221.72
50/IV	1,988.74	2,062.51	2,118.53	2,194.90	2,241.05
20/V	1,654.21	1,769.31	1,875.94	1,962.02	2,044.26
old series:			•	•	•
1,000/III	802.00	741.97	695.47	660.72	621.79
500/II	346.31	313.95	291.45	274.17	257.08
100/V	443.12	414.49	393.65	377.31	363.35
<i>50/III</i>	198.30	184.67	175.17	168.20	162.60
20/IV	293.28	274.13	260.25	250.67	243.31
Coins issued (coins in circulation)	5,832.40	6,172.59	6,537.94	6,890.62	7,194.56
of which denomination:					
ATS 20	368.59	401.52	435.12	470.57	496.83
ATS 10	2,267.24	2,404.60	2,560.60	2,702.62	2,832.98
ATS 5	1,517.54	1,606.84	1,699.10	1,782.38	1,848.43
ATS 1	1,199.77	1,258.35	1,320.09	1,390.86	1,451.99
ATS 0.50	225.55	235.56	245.27	254.46	263.62
ATS 0.10	236.46	248.39	260.42	272.33	283.32
ATS 0.05	12.87	12.92	12.92	12.97	12.96
ATS 0.02	4.14	4.17	4.18	4.19	4.19
ATS 0.01	0	0	0	0	0.24
Notes and coins held by credit institutions	20,041	20,242	22,309	24,767	25,869.00
Notes and coins in circulation outside credit institutions	113,194	120,912	127,445	133,574	142,738.34

# Table 5

Institutional framework

(end of 1995)

Categories	Number of institutions	Number of branches	Number of accounts (thousands)	Value of accounts (ATS billions)
Central bank	1	. 7	0.7	43,595.0
Credit institutions	1,041	4,686	5,833.0	266,442.0
Postcheque	1	2,341	397.0	15,085,0
TOTAL	1,043	7,034	6,230.7	325,122.0
Branches of foreign banks	7	*	0.1	0.4
of which EC-based	5	**	0.1	0.3

### Cash dispensers, ATMs and EFTPOS terminals

(end of year)

	1991	1992	1993	1994	1995
Cash dispensers and ATMs					
Number of networks (1)	1	1	. 1	1	1
Number of machines (2)	1,796.0	2,060.0	2,558.0	3,063.0	3,390.0
Volume of transactions (millions) (3)	48.5	53.3	57.7	63.5	68.2
Value of transactions (ATS billions) (3)	82.2	95.0	105.6	118.3	129.1
EFTPOS terminals					
Number of networks (1)	1	1	1	1	1
Number of POS terminals	1,050.0	1,496.0	1,831.0	2,410.0	3,382.0
Volume of transactions (millions)	3.2	4.9	6.7	8.9	11.1
Value of transactions (ATS billions)	1.5	2.4	3.5	5.1	7.2

<sup>(1)</sup> APSS network.

# Table 7

### Number of payment cards in circulation

				t	housands
	1991	1992	1993	1994	1995
Cards with a cash function	2,302	2,931	3,243	3,512	3,853
Cards with a debit/credit function of which:	3,022	3,351	3,712	4,022	4,418
cards with a debit function	2,302	2,528	2,779	3,003	3,292
cards with a credit function	720	823	933	1,019	1,126
Cards with a cheque guarantee function	2,358	2,340	2,396	2,324	2,370
Retailer cards Prepaid cards	84	123	188	224	22 17

<sup>(2)</sup> Including vestibule cash dispensers (1990: 588, 1991: 666, 1992: 800, 1993: 994, and 1994: 1,242).

<sup>(3)</sup> Without vestibule cash dispensers.

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

					millions
	1991	1992	1993	1994	1995
EBK (Elektronisches Banken- und	0.33	0.53	0.72	0.89	0.91
Kundenkommunikationssystem)					

# Table 9

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

				A"	S billions
	1991	1992	1993	1994	1995
EBK (Elektronisches Banken- und	3,288	5,160	5,443	6,295	6,370
Kundenkommunikationssystem)					

# Table 10

Participants in securities settlement systems

	Settling securities	Holding securities accounts on behalf of customers	Settling cash directly in central bank accounts
"Arrangement" system (transactions on the Vienna Stock Exchange)	78	*	
Banks	73	•	
Stockbrokers	5	•	*
Securities houses	•	. **	•
Foreign central banks	-	***	•
Cedel / Euroclear		·	•
Direct Settlement (DS) (transactions outside the VSE)	87	0	•
Banks	82	•	•
Stockbrokers	3	-	**
Securities houses	*	**	-
Insurance companies	**	•	-
Foreign central banks	**	•	•
Cedel / Euroclear	1		•
Foreign CSD	1	*	*
ÖTOB-Clearing (for standardised derivative products)	12	12	*
Banks	12	12	
Stockbrokers	700	•	
Securities houses	•	-	
Insurance companies	*		*
Foreign central banks	**	-	
Cedel / Euroclear	*	•	

Transfer instructions handled by securities settlement systems: volume of transactions

	1991	1992	1993	1994	1995
"Arrangement" system (1)	n.a.	n.a.	263,452	298,375	1,016,669
(transactions on the Vienna Stock Exchange)					
Government securities	n.a.	n.a.	5,095	11,176	35,921
Bonds	n.a.	n.a.	41,786	52,431	100,752
Shares	n.a.	n.a.	216,571	234,768	879,996
CDs	n.a.	n.a.	n.a.	)	
Others (warrants, investment certificates)	n.a.	n.a.	)	)	
Futures	-	-		-	
Options	**	*	-	*	
Direct Settlement (DS) system (transactions outside the VSE) (2)	62,078	93,179	77,166	139,914	295,808
Government securities	62,078	93,179	11,043	28,252	93,349
Bonds	)	· )	17,706	39,884	77,377
Shares	)	)	48,417	71,778	125,082
CDs	)	)	)	)	
Others (warrants, investment certificates)	)	)	)	)	
Futures	-	, <b></b>	-	-	
Options	-	•	*		
ÖTOB-Clearing (for standardised derivative products) (3)	21,652	117,448	135,121	124,443	139,929
Government securities	*	*		*	
Bonds		**	-		
Shares	*	-	-		
CDs	*	*	-		
Others (warrants, investment certificates)	•	•	-	-	
Futures	•	4,461	12,734	24,131	28,473
Options	21,652	112,987	122,387	100,312	111,456

<sup>(1)</sup> In 1993: a breakdown into sub-items has been available since week 12.

<sup>(2)</sup> Database: central securities depository (CSD); the DS system was started on 3rd March 1991.

<sup>(3)</sup> ÖTOB started on 4th October 1991.

Transfer instructions handled by securities settlement systems: value of transactions

				<i>F</i>	ATS millions
	1991	1992	1993	1994	1995
"Arrangement" system (1) (transactions on the Vienna Stock Exchange) (2)	62,091	44,856	56,261	64,703	285,815
Government securities	8,263	7,577	5,876	5,579	18,978
Bonds	)	)	)	)	)
Shares	48,457	35,082	48,494	57,298	266,618
CDs	•	-	-		•
Warrants	5,321	2,131	1,804	1,721	121
Investment certificates	50	66	87	105	98
Futures	**	•	*	=	
Options	•	#	-	-	
Direct Settlement (DS) system (transactions outside the VSE) (3)	n.a.	402,504	579,020	1,780,266	2,862,477
Government securities	n.a.	269,637	225,222	778,613	1,422,324
Bonds	n.a.	)	237,528	884,896	1,025,988
Shares	n.a.	132,867	60,537	50,535	246,698
CDs	n.a.	)	55,733	66,222	167,467
Others (warrants, investment certificates	n.a.	)	)	)	)
Futures	•	•		•	•
Options	*	-		**	296
ÖTOB-Clearing (for standardised derivative products) (4)	30,560	191,900	424,860	704,560	515,490
Government securities	=	***	•	-	-
Bonds	-	•	•	•	-
Shares	-	**		*	•
CDs	**	•	*	•	•
Futures	*	10,180	122,890	320,120	44,250
Options	30,560	181,720	301,970	384,440	471,240

<sup>(1)</sup> In 1993: a breakdown into sub-items has been available since week 12.

<sup>(2)</sup> Turnover on the Vienna Stock Exchange (VSE).

<sup>(3)</sup> Database: central securities depository (CSD); the DS system was started on 3rd March 1991.

<sup>(4)</sup> ÖTOB started on 4th October 1991.

Nominal values registered by securities settlement systems (end of year)

					ATS millions
	1991	1992	1993	1994	1995
"Arrangement" system (transactions on the Vienna Stock Exchar	1,140,275 nge) <sup>(1)</sup>	1,181,842	1,443,304	1,448,587	1,552,662
Government securities and bonds	881,149	951,737	1,113,301	1,127,246	1,238,273
Shares, CDs and others	259,126	230,105	330,003	321,341	314,389
Direct Settlement (DS) system (transactions outside the VSE) (2)	876,369	919,203	1,050,851	1,135,401	1,230,233
Government securities and bonds	875,927	918,862	1,050,064	1,133,766	1,229,101
Shares, CDs and others (2)	442	341	787	1,635	1,132

<sup>(1)</sup> Total value.

<sup>(2)</sup> Securities registered by the central securities depository (CSD), for government securities and bonds: nominal value; for shares, CDs and others: in millions of units.

Indicators of use of various cashless payment instruments: volume of transactions (1)

					millions
	1991	1992	1993	1994	1995
Cheques issued	53	46	40	36	33
Payments by debit and credit cards	11	14	17	20	25
Paper-based credit transfers	277	289	304	310	282
Paperless credit transfers	78	87	98	122	150
Direct debits	167	180	188	188	210
Other (EBK)	0.33	0.53	0.72	0.89	0.91
TOTAL	586,33	616.53	647.72	676.89	700.91

<sup>(1)</sup> Apart from the EBK system, only customer-initiated transactions have been counted.

# Table 15

Indicators of use of various cashless payment instruments: value of transactions (1)

				TA	S billions
	1991	1992	1993	1994	1995
Cheques issued	1,018	1,041	996	1,009	1,014
Payments by debit and credit cards	15	18	23	25	32
Paper-based credit transfers	2,850	3,108	3,209	3,407	3,169
Paperless credit transfers	799	1,031	1,221	1,593	2,004
Direct debits	282	341	400	401	457
Other (EBK)	3,288	5,160	5,443	6,295	6,370
TOTAL	8,252	10,699	11,292	12,730	13,046

<sup>(1)</sup> Apart from the EBK system, only customer-initiated transactions have been counted.

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

	1991	1992	1993	1994	1995
S.W.I.F.T. users	n.a.	n.a.	75	77	75
of which:					
members			<i>62</i>	62	61
sub-members			13	15	14
participants			-	•	-
Memorandum item:					
Total S.W.I.F.T. world-wide	3,648	3,903	4,004	4,623	5,229
of which:					
members	1,963	2,074	2,103	2,412	2,259
sub-members	1,607	1,738	1,802	2,023	2,259
participants	78	91	99	188	277

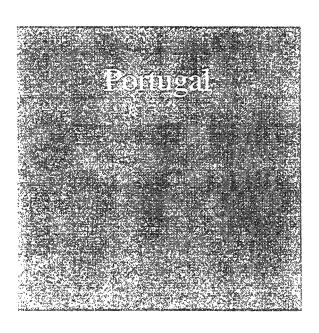
# Table 17

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

	1991	1992	1993	1994	1995
Total messages sent	n.a.	n.a.	10,803,051	11,725,379	12,829,110
of which:					
category I			4,421,615	4,739,357	4,974,386
category II sent/received to/from domestic			2,697,142	2,969,812	3,273,130
users			2,488,985	2,698,880	2,843,140
Total messages received of which:	n.a.	n.a.	8,823,926	9,521,143	10,439,996
category I			3,614,711	3,892,118	4,027,894
category II			1,518,477	1,692,293	1,906,614
Memorandum item:			45T 040 000	F40 007 070	F00 400 F40
Global S.W.I.F.T. traffic	n.a.	n.a.	457,218,200	518,187,873	582,192,512

#### Definitions

- Sub-members: domestic users sponsored by members abroad;
- Participants: users which are not shareholders in S.W.I.F.T.; their message traffic over the network is restricted;
- Category I: customer (funds) transfers;
- Category II: bank (funds) transfers.



Basic statistical data (1)

	1991	1992	1993	1994	1995
Population (2) (thousands)	9,866.6	9,862.4	9,876.1	9,876.1	9,886.0
Gross domestic product (PTE billions)	11,184.2	12,828.7	13,625.6	14,538.5	15,444.5
Exchange rate vis-à-vis ECU (2)	178.660	174.680	188.120	196.910	196.105

<sup>(1)</sup> Since 1990 a new source of data has been used and, therefore, some of these figures may differ from those contained in the Addendum to the "Blue Book", May 1994.

#### Table 2

Settlement media used by non-banks

(end of year)

				P	TE billions
	1991	1992	1993	1994	1995
Notes and coins	683.1	708.2	752.9	795.8	841.0
Transferable deposits	2,041.7	2,500.2	2,808.6	2,965.3	3,348.8
of which held by:					
households	1,186.5	1,420.4	1,607.5	1,732.6	2,086.0
corporate sector	<i>797.9</i>	988.2	991.4	1,057.9	983.5
other	<i>57.3</i>	91.6	209.7	174.8	279.3
Other	95.4	141.5	153.7	93.4	64.5
Narrow money supply (M1)	2,820.2	3,349.9	3,715.2	3,854.5	4,254.3
Deposits in foreign currencies	10.1	54.8	126.5	509.3	178.0

#### Table 3

Settlement media used by deposit-taking institutions

				Ť	TE billions
	1991	1992	1993	1994	1995
Required reserves held at central bank (1)	1,652.1	1,848.4	2,042.2	330.9	264.2
of which can be used for settlement	1,652.1	1,848.4	2,042.2	330.9	264.2
Free reserves held at central bank	n.a.	10.8	7.1	3.7	6.5
Transferable deposits at other institutions Memorandum item:	15.3	10.5	18.1	23.7	46.3
Broad money aggregate	8,223.8	9,292.2	9,843.1	10,783.7	11,664.4

<sup>(1)</sup> Including free reserves held at the central bank.

<sup>(2)</sup> Average for the year.

#### Banknotes and coins

(total value, end of year)

				PT	E billions
	1991	1992	1993	1994	1995
Total banknotes issued	736.2	761.9	808.3	841.2	894.9
of which:	,				
PTE 10,000	217.2	269.2	274.3	281.4	317.0
PTE 5,000	404.7	372.5	408.9	431.4	438.3
PTE 2,000	10.2	33.6	50.0	<i>57.8</i>	68.0
PTE 1,000	<i>87.6</i>	73.3	61.4	<i>56.7</i>	56.8
PTE 500	14.1	13.3	13.7	13.9	14.8
PTE 100	2.4	•	•	•	-
Coins issued	35.7	40.9	41.7	44.4	46.2
of which:					
PTE 200					8.8
PTE 100					13.3
PTE 50	*				5.3
PTE 20					4.0
PTE 10					1.3
PTE 5					1.3
PTE 2.5					1.2
PTE 1					0.4
PTE 0.5					0.1
Commemorative					10.5
Notes and coins held by credit institutions	88.8	94.6	97.1	88.8	97.9
Notes and coins in circulation outside credit institutions	683.1	708.2	752.9	795.8	841.0

#### Table 5

Institutional framework

(end of 1995)

Categories	Number of institutions	Number of branches	Number of accounts (thousands)	Value of accounts (PTE billions)
Central bank	1	12	-	
Commercial banks	47	3489	16403.9	3348.7
Mutual agricultural credit banks and savings banks	188	506	1250.0	204.0
Post office	1	1056	116.0	1.1
Treasury	1	1		*
TOTAL	238	5064	17769.9	3553.8
Branches of foreign banks	11	106	78.4	91.3
of which EC-based	9	103	76.3	88.7

Cash dispensers, ATMs and EFTPOS terminals

(end of year)

	1991	1992	1993	1994	1995
Cash dispensers and ATMs					
Number of networks	1	1	1	1	1
Number of machines	1,265	1,938	2,797	3,329	3,674
Volume of transactions (millions)	55.3	73.5	94.3	116.1	136.8
Value of transactions (PTE billions)	584.4	792.8	1,007.3	1,236.9	1,450.0
EFTPOS terminals					
Number of networks	1	1	1	1	1
Number of points of sale	n.a.	n.a.	n.a.	25,318	29,364
Number of machines	7,097	15,540	27,554	32,700	38,178
Volume of transactions (millions)	21.9	44.7	75.4	90.3	124.2
Value of transactions (PTE billions)	160.3	304.6	448.2	573.7	745.1

### Table 7

Number of payment cards in circulation (1)

				Į.	nousanus
	1991	1992	1993	1994	1995
Cards with a cash function	3,230	4,245	4,799	5,291	6,266
Cards with a debit/credit function of which:	4,004	5,279	6,101	6,759	7,113
cards with a debit function	•	4,649	5,095	5,669	6,266
cards with a credit function	•	630	1,006	1,090	1,298
Cards with a cheque guarantee function	379	399	526	542	564
Retailer cards	55	70	86	91	115
Multi-purpose prepaid cards	**	•	-	•	161

<sup>(1)</sup> A card with multiple functions may appear in several categories. It is, therefore, not meaningful to add the figures.

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

					millions
	1991	1992	1993	1994	1995
Telecompensação (teleclearing)	189.4	207.3	216.4	424.2	485.4
cheques	187.2	202.4	209.6	214.2	219.9
other <sup>(1) (2)</sup>	2.2	4.9	6.8	210.0	265.5
Traditional clearing	13.5	14.0	13.1	12.1	11.6
cheques	7.8	8.5	7.7	6.8	6.6
other (3)	5.7	5.5	5.4	5,3	5.0

- (1) Mainly electronic transfers.
- (2) "Telecompensação/Multibanco" was not included until 1994.
- (3) Mainly payment transfers.

#### Table 9

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

					PTE billions
	1991	1992	1993	1994	1995
Telecompensação (teleclearing)	44,142	49,023	49,258	50,045	53,091
cheques	43,541	47,410	47,030	44,642	46,433
other (1) (2)	601	1,613	2,228	5,403	6,658
Traditional clearing	64,400	105,168	149,842	177,119	154,274
cheques	1,413	1,544	1,489	1,346	1,383
other (3)	62,987	103,624	148,353	175,773	152,891

- (1) Mainly electronic transfers.
- (2) "Telecompensação/Multibanco" was not included until 1994.
- (3) Mainly payment transfers.

Participants in securities settlement systems

	Settling securities	Holding securities accounts on behalf of customers	Settling cash directly in central bank accounts
INTERBOLSA	58	57	58
Banks	36	36	36
Stockbrokers	21	21	21
Securities houses	•	*	*
Insurance companies	-	No.	*
Foreign central banks		**	•
Cedel / Euroclear		**	
Others (Treasury bodies)	1	*	1
SISTEM	119	*	113
Banks	44	*	45
Stockbrokers	7	•	7
Securities houses	3	*	3
Insurance companies	*		*
Foreign central banks			**
Cedel / Euroclear	**	•	•
Others (public bodies)	4	0	4
Others (leasing companies; factoring companies; credit-purchase finance companies)	61	-	54

# Table 11

Transfer instructions handled by securities settlement systems: volume of transactions

	1991	1992	1993	1994	1995
INTERBOLSA	n.a.	n.a.	n.a.	1,016.2	1,510.6
Cash Market (1)	n.a.	n.a.	n.a.	787.7	750.8
Special Market for Wholesale Transactions in Government Securities (1)(2)	n.a.	n.a.	n.a.	228.5	759.8
SISTEM	5.6	7.1	9.5	18.3	5.0
Government Securities	4.4	5.2	7.7	15.7	2.3
Others (securities issued by the Banco de Portugal)	1.2	1.9	1.8	2.6	2.7

<sup>(1)</sup> This figure cannot be subdivided.

<sup>(2)</sup> In 1994: Figure for the period from June to December.

Transfer instructions handled by securities settlement systems: value of transactions

				PT	TE millions
	1991	1992	1993	1994	1995
INTERBOLSA	n.a.	n.a.	4,028	6,597	7,999
Cash Market (1)	n.a.	n.a.	4,028	5,089	3,196
Special Market for Wholesale Transactions in Government Securities (2)	n.a.	n.a.	n.a.	1,508	4,803
SISTEM	16,226	13,393	20,048	27,666	25,200
Government Securities	8,126	5,719	8,902	19,387	6,997
Others (securities issued by the Banco de Portugal)	8,100	7,674	11,146	8,279	18,203

<sup>(1)</sup> This figure cannot be subdivided.

# Table 13

Nominal values registered by securities settlement systems (end of year)

				PT	TE billions
	1991	1992	1993	1994	1995
INTERBOLSA	n.a.	n.a.	5,633	7,075	9,040
Government securities	n.a.	n.a.	3,697	3,785	4,540
Bonds	n.a.	n.a.	766	1,256	1,674
Shares	n.a.	n.a.	1,093	1,882	2,615
CDs	n.a.	n.a.	***	-	-
Participating bonds	n.a.	n.a.	65	113	77
Units of collective investment					
undertakings	n.a.	n.a.	12	39	134
SISTEM	1,605	1,520	1,000	3,179	3,203
Government securities	1,544	1,139	976	1,325	1,348
Bonds	n.a.	n.a.	n.a.	n.a.	n.a.
Shares	n.a.	n.a.	n.a.	n.a.	n.a.
CDs	n.a.	n.a.	n.a.	n.a.	n.a.
Securities issued by the Banco de Portugal	61	381	24	1,854	1,855

<sup>(2)</sup> In 1994: Stock exchange operations only.

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

					millions
	1991	1992	1993	1994	1995
Cheques issued	231.4	252.6	258.8	255.5	236.1
of which truncated	n.a.	n.a.	183.0	187.8	193.7
Payments by debit and credit cards	43.9	79.0	104.1	114.0	140.0
Payments by multipurpose prepaid cards	•	-	-	-	1.6
Paper-based credit transfers	10.3	5.8	5.4	4.3	3.8
customer initiated	n.a.	n.a.	n.a.	n.a.	n.a.
interbank	n.a.	n.a.	n.a.	n.a.	n.a.
Paperless credit transfers	13.7	19.3	25.0	38.0	36.8
customer initiated	n.a.	n.a.	n.a.	n.a.	n.a.
interbank	n.a.	n.a.	n.a.	n.a.	n.a.
Direct debits	17.7	20.4	28.4	43.3	58.5
TOTAL	317.0	377.1	421.7	455.1	476.8

# Table 15

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

				,	PTE billions
	1991	1992	1993	1994	1995
Cheques issued	61,458.7	56,628.7	61,975.5	61,619.0	52,265.4
of which truncated	n.a.	n.a.	6,253.7	6,280.0	6,631.0
Payments by debit and credit cards	364.2	613.5	739.0	743.2	919.1
Payments by multipurpose prepaid cards	-	-	•	•	0.6
Paper-based credit transfers	7,175.4	8,530.4	5,461.1	14,332.3	18,972.3
customer initiated	n.a.	n.a.	n.a.	n.a.	n.a.
interbank	n.a.	n.a.	n.a.	n.a.	n.a.
Paperless credit transfers	1,951.9	5,087.5	6,954.2	7,655.2	16,806.8
customer initiated	n.a.	n.a.	n.a.	n.a.	n.a.
interbank	n.a.	n.a.	n.a.	n.a.	n.a.
Direct debits	738.5	790.5	1,219.7	4,506.8	3,945.6
TOTAL	71,688.7	71,650.6	76,349.5	88,856.5	92,909.8

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

	1991	1992	1993	1994	1995
S.W.I.F.T. users	32	33	38	39	43
of which:					
members	20	20	<i>25</i>	26	<i>2</i> 9
sub-members	12	13	13	13	14
participants	**	**	-	*	*
Memorandum item:					
Total S.W.I.F.T. world-wide	3,648	3,903	4,004	4,623	5,229
of which:					
members	1,963	2,074	2,103	2,412	2,259
sub-members	1,607	1,738	1,802	2,023	2,259
participants	<i>78</i>	91	99	188	277

### Table 17

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

	1991	1992	1993	1994	1995
Total messages sent	2,434,293	2,888,879	3,233,630	3,578,502	4,010,814
of which:				*	
category I	546,012	678,020	754,622	853,872	977,018
category II	728,584	865,797	864,483	883,332	978,193
sent/received to/from domestic					
users	260,134	316,132	373,081	430,960	483,748
Total messages received of which:	2,491,675	2,852,452	3,107,307	3,339,670	3,679,672
category I	n.a.	715,751	803,862	894,471	988,755
category II	n.a.	498,878	541,420	591,849	637,447
A financial and the state of the second					

#### Memorandum item:

Global S.W.I.F.T. traffic

365,159,291 405,540,962 457,218,200 518,097,873 582,192,512

#### Definitions

- Sub-members: domestic users sponsored by members abroad;
- Participants: users which are not shareholders in S.W.I.F.T.; their message traffic over the network is restricted;
- Category I: customer (funds) transfers;
- Category II: bank (funds) transfers.





Basic statistical data (1)

	1991	1992	1993	1994	1995
Population (2) (thousands)	5,014	5,042	5,066	5,088	5,108
Gross domestic product (FIM billions)	491.1	476.8	482.4	507.8	548.9
Exchange rate vis-à-vis ECU (2)	5.0042	5.8020	6.6973	6.1908	5.7086

- (1) Since 1990 a new source of data has been used and, therefore, some of these figures may differ from those contained in the Addendum to the "Blue Book", May 1994.
- (2) Average for the year.

### Table 2

Settlement media used by non-banks

(end of year)

				F	IM billions
	1991	1992	1993	1994	1995
Notes and coins	8.8	9.4	10.4	10.8	12.4
Transferable deposits (1)	121.9	125.4	131.4	143.6	163.5
Narrow money supply (M1)	136.6	134.6	141.8	154.4	175.9
Transferable deposits in foreign currencies	13.2	14.7	14.8	12.8	13.7

(1) Local currency.

#### Table 3

Settlement media used by deposit-taking institutions

				FÍ	M billions
	1991	1992	1993	1994	1995
Required reserves held at central bank	10.4	13.2	6.4	6.5	15.7
Free reserves held at central bank	2.2	6.8	1.8	1.4	1.1
Transferable deposits at other institutions	3.4	8.7	4.2	4.3	2.5

#### Banknotes and coins

(total value, end of year)

				FI	M millions
	1991	1992	1993	1994	1995
Total banknotes issued	13,336	13,209	13,443	12,381	13,625
of which:					
FIM 1,000	3,241	3,376	4,053	3,829	4,440
FIM 500	2,601	2,547	2,593	2,287	2,505
FIM 100	5,951	5,807	5,490	5,196	5,541
FIM 50	939	867	721	647	693
FIM 20	***	•	284	364	396
FIM 10	<i>575</i>	583	273	<i>5</i> 8	50
FIM 5	21	21	21	*	₩
FIM 1	8	8	8		-
Coins issued	1,027	1,044	1,297	1,284	1,365
of which:					
FIM 10		-	208	326	365
FIM 5	374	385	434	416	428
FIM 1	387	385	387	371	390
50 penniä	113	118	114	85	86
20 penniä	46	36	. 31	. •	
10 penniä	<i>77</i>	91	96	86	96
5 penniä	22	21	19	*	**
1 penniä	8	8	8		**
Notes and coins held by credit institutions	5,753	5,104	4,600	3,504	3,210
Notes and coins in circulation outside credit institutions	8,775	9,404	10,394	10,810	12,401
Memorandum items:	•				
Commemorative coins (1)	197	257	255	262	281
Notes and coins which ceased to be legal tender on 1st January 1994 (1)	•	-	•	387	339

<sup>(1)</sup> This item is included in "banknotes and coins in circulation" in the balance sheet of Suomen Pankki.

#### Institutional framework

(end of 1995)

Categories	Number of institutions	Number of branches	Number of accounts (thousands)	Value of accounts (FIM billions)
Central bank (1)	1	4	0.018	13.7
Commercial banks	11	752	8,209	99.4
Savings banks	40	254	602	9.3
Co-operative and rural banks	301	957	3,757	53.2
Post office (2)		937	0	0
TOTAL (3)	353	2,904	12,568	175.6
Branches of foreign banks	4	0	0	0
of which EC-based	4	0	0	0

- (1) Number of accounts: Number of current accounts used for payment settlements.
- (2) Post offices are also used as branches of Postipankki, which is a commercial.
- (3) In "Value of accounts": The TOTAL differs from "Transferable deposits" in Table 2, because the central bank figures are not included in figures in table 2. There are also little differences in defining the concept "non-bank".

### Table 6

### Cash dispensers, ATMs and EFTPOS terminals

	1991	1992	1993	1994	1995
Cash dispensers and ATMs (1)					
Number of networks	3	3	2	. 1	1
Number of machines	3,606	3,798	4,201	4,255	4,394
Volume of transactions (millions)	157.2	182.4	202.0	191.9	210.6
Value of transactions (FIM billions) (2)	58.6	64.9	68.7	72.0	79.8
EFTPOS terminals					
Number of networks (3)	-ek	-	**		*
Number of points of sale	33,500	39,000	42,000	48,000	49,000
Volume of transactions (millions)	161.0	173.8	173.3	195.2	217.3
Value of transactions (FIM billions)	34.2	37.9	39.0	44.9	51.9

- (1) 1991 1993: row "Number of machines" is partly estimated. 1994: exact figures.
- (2) Only cash withdrawals.
- (3) Offline system.

Number of payment cards in circulation (end of year)

				;	thousands
	1991	1992	1993	1994	1995
Cards with a cash function	3,833	3,885	4,013	4,225	4,415
Cards with a debit/credit function	3,241	3,180	3,128	3,153	3,195
of which:					
cards with a debit function	1,953	1,941	1,901	1,956	1,962
delayed debit cards	832	852	835	824	844
cards with a credit function	456	387	392	373	389
Cards with a cheque guarantee function	11	9	9	7	7
Multi-purpose prepaid cards	•	**	•	7	19
Retailer cards	1,562	1,642	1,707	1,726	1,749

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

					thousands
	1991	1992	1993	1994	1995
Banks' payment clearing	336,899	352,889	356,800	373,982	355,858
Giro transfers	223,640	240,885	249,475	275,034	261,878
Debit cards	104,416	105,555	102,011	94,733	91,241
Cheques	8,194	6,138	5,124	4,159	2,739
Banks' bills (1)	649	311	190	56	n.a.
BOF system (2)	140	152	115	105	110
Credit transfers between banks	72	81	66	63	69
Credit transfers between Suomen Pankki and the banks	68	71	49	42	41

- (1) Figures concerning bank bills are included in cheques in 1995 and not available seperately.
- (2) Bank of Finland Interbank Funds Transfer System. The current system for collecting statistical data was introduced in March 1991, and so the figures for years before 1991 are not comparable with those after that.

#### Table 9

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

					FIM billions
	1991	1992	1993	1994	1995
Banks' payment clearing	1,436.7	1,559.9	1,672.2	1,865.4	1,972.6
Giro transfers	642.6	744.1	667.0	845.5	1,002.2
Debit cards	23.5	23.8	22.2	22.1	20.6
Cheques	735.4	775.2	972.7	993.5	949.8
Banks' bills (1)	35.2	16.8	10.3	4.3	n.a.
BOF system (2)	5,365.8	6,349.8	6,653.8	6,356.8	8,507.5
Credit transfers between banks	4,753.2	5,466.0	5,941.7	5,880.6	8,087.0
Credit transfers between Suomen Pankki and the banks	612.6	883.8	712.1	476.2	420.5

- (1) Figures concerning bank bills are included in cheques in 1995 and not available seperately.
- (2) Bank of Finland Interbank Funds Transfer System. The current system for collecting statistical data was introduced in March 1991, and so the figures for years before 1991 are not comparable with those after that.

Participants in securities settlement systems

	Settling securities	Holding securities accounts on behalf of customers	Settling cash directly in central bank accounts
Helsinki Money Market Centre	16	16	14
Banks	9	9	9
Stockbrokers	0	0	0
Securities houses	0	0	0
Insurance companies	1	1	0
Foreign central banks	. 0	0	O O
Cedel / Euroclear	0	0	0
Others	. 6	6	5
Helsinki Stock Exchange	25	. 25	7
Banks	5	5	5
Stockbrokers	16	16	2
Securities houses	. 0	0	0
Insurance companies	0	0	0
Foreign central banks	0	0	0
Cedel / Euroclear	0	0	0
Others	4	. 4	0
Finnish Options Market	26	26	0
Banks	9	9	. 0
Stockbrokers	17	17	0
Securities houses	0	0	0
Insurance companies	0	0	0
Foreign central banks	,Q	.0	0
Cedel / Euroclear	. 0	0	0
Others	0	0	. 0
Finnish Options Exchange	15	15	0
Banks	5	. 5	7 0
Stockbrokers	10	10	0
Securities houses	. 0	0	0
Insurance companies	. 0	. 0	0
Foreign central banks	0	0	0
Cedel / Euroclear	0	0	• 0
Others	0	. 0	0

Transfer instructions handled by securities settlement systems: volume of transactions

	1991	1992	1993	1994	1995
Helsinki Money Market Centre (1)	**	14,369	43,068	44,465	41,050
Government securities	*	208	5,387	7,479	11,922
CDs	*	14,161	37,681	36,986	29,128
Helsinki Stock Exchange (2)	42,300	91,200	240,214	339,264	373,070
Shares	42,300	91,200	240,214	339,264	373,070
Finnish Options Market	697,497	436,360	491,705	1,034,633	1,593,534
Futures	61,588	38,441	76,838	358,160	534,330
Options	635,909	397,919	414,867	676,473	1,059,204
Finnish Options Exchange	13,125	12,318	9,583	47,438	77,703
Futures	6,976	6,041	3,374	22,357	20,306
Options	6,149	6,277	6,209	25,081	57,397

- (1) The electronic clearing and settlement system was launched in April 1992.
- (2) Physical shares cleared and settled since 1991. KATI system since 1992.

# Table 12

Transfer instructions handled by securities settlement systems: value of transactions

				1	FIM millions
	1991	1992	1993	1994	1995
Helsinki Money Market Centre (1)	*	436,705	1,403,313	1,933,791	2,039,475
Government securities	*	11,607	230,844	333,286	570,254
CDs		425,098	1,172,469	1,600,505	1,469,221
Helsinki Stock Exchange (2)	6,600	11,269	49,077	143,600	182,000
Shares	6,600	11,269	49,077	143,600	182,000
Finnish Options Market	21,063	10,586	16,062	91,513	186,200
Futures	1,027	774	1,735	63,659	140,500
Options	20,036	9,812	14,327	27,854	45,700
Finnish Options Exchange	1,423	2,146	5,100	23,800	12,766
Futures	756	1,052	2,993	11,164	12,651
Options	667	1,094	2,107	12,636	115

- (1) The electronic clearing and settlement system was launched in April 1992.
- (2) Includes only trades made in the HETI system in 1991-1993.

**CDs** 

Shares (2)

Helsinki Money Market Centre (1)

Government securities

Helsinki Stock Exchange

Finnish Options Market

Futures and options (3)

Futures and options (3)

Finnish Options Exchange

Nominal values registered by securities settlement systems (end of December)

			F	IM millions
1991	1992	1993	1994	1995
*	65,668	131,278	163,509	136,200
*	4,945	24,328	34,288	40,900
•	60,723	106,950	129,221	95,300
58,982	63,999	136,292	181,559	191,700
58,982	63,999	136,292	181,559	191,700
226	190	598	2,420	3,993

598

646

646

2,420

1,116

1,116

3,993

608

608

- (1) The electronic clearing and settlement system was launched in April 1992.
- (2) Market value of listed shares. The new book-entry system has been introduced gradually since 1992.

226

8

8

190

12

12

(3) Open risk (calculated according to guidelines issued by the Financial Supervision Authority).

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

•					millions
	1991	1992	1993	1994	1995
Cheques issued	9.9	7.4	6.7	5.7	4.0
Payments by debit and credit cards	212.4	218.1	211.5	229.4	246.7
Paper-based credit transfers (1)	206.7	198.5	182.7	172.0	139.5
Paperless credit transfers (1)	162.5	186.9	220.0	241.4	304.3
Direct debits	8.1	10.3	14.8	17.9	25.6
TOTAL	599.6	621.2	635.7	666.4	720.1
Cross-border payments	n.a.	1.8	1.8	1.6	1.7
of which payments to EU countries	n.a.	0.7	0.9	0.7	1.1

(1) From customer to bank.

# Table 15

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

					FIM billions
•	1991	1992	1993	1994	1995
Cheques issued	820	847	1,080	1,058	1,071
Payments by debit and credit cards	49	50	50	54	59
Paper-based credit transfers (1) (2)	3,149	2,985	2,956	2,599	2,200
Paperless credit transfers (1) (2)	3,382	3,857	4,625	5,110	6,068
Direct debits (2)	15	20	28	34	65
TOTAL	7,415.1	7,759.3	8,738.6	8,854.9	9,462.9
Cross-border payments	n.a.	168.6	672.0	289.7	302.7
of which payments to EU countries	n.a.	87.6	126.7	163.9	191.7

<sup>(1)</sup> From customer to bank.

<sup>(2)</sup> Figures are partly estimated.

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

	1991	1992	1993	1994	1995
S.W.I.F.T. users	15	15	13	14	13
of which:		•			
members	10	11	10	10	9
sub-members	5	4	3	4	4
participants	**		***	*	
Memorandum item:					
Total S.W.I.F.T. world-wide	3,648	3,903	4,256	4,623	5,229
of which:					
members	1,963	2,074	2,244	2,412	2,259
sub-members	1,607	1,738	1,887	2,023	2,259
participants	78	91	125	188	277

# Table 17

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

	1991	1992	1993	1994	1995
Total messages sent	3,342,026	3,200,249	3,309,647	3,951,479	4,646,108
of which:					
category I	1,611,184	1,618,821	1,666,967	1,883,044	2,119,344
category II	835,948	810,403	850,441	1,014,105	1,157,502
sent/received to/from domestic			*	1 N	
users	486,577	404,805	430,137	522,748	617,520
Total messages received	2,281,199	2,206,952	2,396,183	2,805,753	3,281,266
of which:		•			
category I	644,674	735,419	862,653	1,054,813	1,167,447
category II	534,757	451,241	476,648	608,804	737,603
			•		

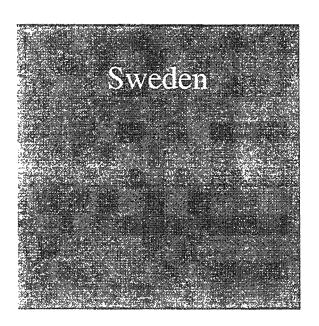
#### Memorandum item:

Global S.W.I.F.T. traffic

365,159,291 405,540,962 457,218,200 518,097,873 582,192,512

#### Definitions

- Sub-members: domestic users sponsored by members abroad;
- Participants: users which are not shareholders in S.W.I.F.T.; their message traffic over the network is restricted;
- Category I: customer (funds) transfers;
- Category II: bank (funds) transfers.





Basic statistical data (1)

	1991	1992	1993	1994	1995
Population (2) (thousands)	8,617	8,668	8,719	8,781	8,860
Gross domestic product (SEK billions)	1,447.3	1,441.7	1,442.2	1,571.0	1,626.2
Exchange rate vis-à-vis ECU (2)	7.4800	7.5300	9.1150	9.1580	9.3319

- (1) Since 1990 a new source of data has been used and, therefore, some of these figures may differ from those contained in the Addendum to the "Blue Book", May 1994.
- (2) Average for the year.

#### Table 2

Settlement media used by non-banks

(end of year)

				51	=K Dillions
· ·	1991	1992	1993	1994	1995
Notes and coins	64.6	64.1	66.8	68.6	68.5
Transferable deposits (1)	543.3	563.5	586.4	617.3	638.0
Narrow money supply (M1)	•	•	•	•	*
Transferable deposits in foreign currencies	19.7	25.7	26.1	21.6	17.2

(1) Local currency.

#### Table 3

Settlement media used by deposit-taking institutions (end of year)

SEK billions

	1991	1992	1993	1994	1995
Required reserves held at central bank (1)	5.4	2.7	4.3	5.0	, Mer
Free reserves held at central bank	19.7	-28.7	-8.3	7.2	-0.8
Transferable deposits at other institutions (2)	138.5	100.9	31.0	62.3	48.8

- (1) Average end-of-month figures.
- (2) Average end-of-quarter figures.

#### Banknotes and coins

(total value, end of year)

				S	EK billions
	1991	1992	1993	1994	1995
Total banknotes issued	73,108	70,741	72,413	72,992	73,064
of which:					
SEK 10,000	170	19	0	0	0
SEK 1,000	41,091	39,299	39,803	39,569	37,841
SEK 500	14,733	15,711	18,384	19,903	22,316
SEK 100	14,669	13,354	12,000	11,298	10,649
SEK 50	1,035	818	261	205	185
SEK 20		1,011	1,525	1,608	1,679
SEK 10	1,313	433	345	315	300
SEK 5	97	96	95	94	94
Total coins issued	2,990	3,205	3,308	3,450	3,596
Notes and coins held by credit institutions	11,543	9,894	8,919	7,848	8,357
Notes and coins in circulation outside credit	64,555	64,051	66,802	68,594	68,303

#### Table 5

institutions

#### Institutional framework

(end of 1995)

Categories	Number of institutions	Number of branch offices	Number of accounts (millions)	Value of accounts (SEK billions)
Central bank	1	15	*	•
Commercial banks (1)	30	3,539	24.4	715.6
Savings banks	89	349	3.1	55.9
TOTAL	120	3,903	27.5	771.5
Branches of foreign banks	11	11	0	. 3
of which EC-based	9	9	0	<b>2.9</b>

<sup>(1)</sup> The Postgirot Bank is included from March 1994. The total number of branches end of 1995 includes 1,289 branches of the Post Office since they provide financial services on account of the Postgirot Bank.

Cash dispensers, ATMs and EFTPOS terminals

(end of year)

	1991	1992	1993	1994	1995
Cash dispensers and ATMs					
Number of networks	2	2	2	2	2
Number of machines	2,221	2,203	2,226	2,281	2,359
Volume of transactions (millions)	208	218	247	270	281
Value of transactions (SEK billions)	152	163	195	218	226
EFTPOS terminals (1)					,
Number of networks	2	2	2	2	2
Number of points of sale	8,916	14,276	26,630	25,536	54,389
Volume of transactions (millions)	33	46	63	77	92
Value of transactions (SEK billions)	17	27	33	48	53

<sup>(1)</sup> Terminals administrated by the two data processing companies BABS and SERVO.

#### Table 7

Number of payment cards in circulation (1) (end of year)

					thousands
	1991	1992	1993	1994	1995
Cards with a cash function (2)	n.a.	5,072	5,162	6,037	6,171
Cards with a debit/credit function (3)	3,769	10,463	11,412	12,076	4,742
of which:				arv.,	
cards with a debit function	2,352	8,946	9,937	10,379	3,525
cards with a credit function	1,417	1,517	1,475	1,697	1,217
Cards with a cheque guarantee function	- 360	· •	*	**	
Retailer cards	4,984	7,245	7,961	9,121	n.a.

<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> Since 1992 a new source of statistics hs been used.

<sup>(3)</sup> As from 1995 cards issued by oil companies and retail trade companies are not included.

Payment instructions handled by selected interbank funds transfer systems: volume of transactions (1)

				tr	ousands
	1991	1992	1993	1994	1995
RIX system	91	79	78	84	119

(1) Clearing and settlement were made on a bilateral net basis until end-1989. Since 1990 RIX has been operating on a gross basis.

#### Table 9

Payment instructions handled by selected interbank funds transfer systems: value of transactions (1)

					SEK billions
	1,991	1992	1993	1994	1995
RIX system	37,634.0	44,520.0	40,898.0	39,920.0	53,591.0

(1) Clearing and settlement were made on a bilateral net basis until end-1989. Since 1990 RIX has been operating on a gross basis.

### Table 10

Participants in securities settlement systems

	Settling securities (1)	Holding securities accounts on behalf of customers	Settling cash directly in central bank accounts
VPC	51	37	14
Banks	17	16	12
Stockbrokers	20	20	•
Insurance companies	5	-	•
Foreign central banks	•		•
Cedel / Euroclear	*	. *	
Others (2) (3)	9	1	2

<sup>(1)</sup> Defined as account operators in the system.

<sup>(2)</sup> Sveriges Riksbank, the National Debt Office and the National Pension Fund (three funds), mortgage institutions (two), the OM Group and its subsidary company VPA.

<sup>(3)</sup> Sveriges Riksbank and the National Debt Office.

Transfer instructions handled by securities settlement systems: volume of transactions

th	OL	10	۵	n	n	e
		10	α	4 1	u	

	1991	1992	1993	1994	1995
VPC				3,000	2,912
Government securities and bonds (1)	•	*	*	500	498
Shares (2)	n.a.	n.a.	n.a.	2,500	2,414

- (1) Includes Sveriges Riksbank certificates.
- (2) Includes private bonds.

### Table 12

Transfer instructions handled by securities settlement systems: value of transactions

#### **SEK billions**

	1991	1992	1993	1994	1995
VPC				47,055	41,547
Government securities and bonds (1)	•	•		46,000	40,428
Shares (2)	n.a.	n.a.	n.a.	1,055	1,119

- (1) Includes Sveriges Riksbank certificates.
- (2) Includes private bonds.

#### Table 13

Nominal values registered by securities settlement systems (end of year)

\$ 6	
CEV	hillions
2000	

	1991	1992	1993	1994	1995
VPC				2,668	2,987
Government securities (1)	-	*	*	921	1,058
Bonds (2)	**		•	702	679
Shares (3)	n.a.	n.a.	n.a.	1,025	1,192
CDs	×	*		20	58

- (1) Includes Sveriges Riksbank certificates.
- (2) Excludes Government bonds.
- (3) Market values. Includes private bonds.

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

					millions
	1991	1992	1993	1994	1995
Cheques issued	77	71	51	n.a.	n.a.
Payments by debit and credit cards	68	62	68	97	111
Paper-based credit transfers	210	165	161	170	189
Paperless credit transfers	388	425	428	435	431
Direct debits	34	37	40	45	50
Others	*	**	-	*	
TOTAL	777	760	748	747	781

# Table 15

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

		•		SE	K billions
	1991	1992	1993	1994	1995
Cheques issued	757	675	487	n.a.	n.a.
Payments by debit and credit cards	43	44	53	79	91
Paper-based credit transfers (1)	1,980	2,115	2,230	1,933	1,946
Paperless credit transfers (1)	3,674	3,380	3,587	4,282	4,405
Direct debits	203	152	205	183	194
Others		•••	-	-	
TOTAL	6,657	6,366	6,562	6,477	6,636

<sup>(1)</sup> From customer to bank.

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

	1991	1992	1993	1994	1995
S.W.I.F.T. users	20	20	19	17	20
of which:					
members	11	11	10	8	8
sub-members	9	9	9	9	11
participants	•	•	•	•	1
Memorandum item:					
Total S.W.I.F.T. world-wide	3,648	3,903	4,004	4,623	5,229
of which:					•
members	1,963	2,074	2,103	2,412	2,259
sub-members	1,607	1,738	1,802	2,023	2,259
participants	78	91	<i>9</i> 9	188	277

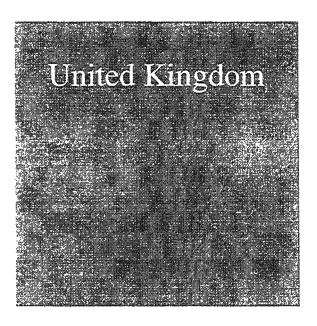
#### Table 17

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

·	1991	1992	1993	1994	1995
Total messages sent	6,701,761	7,088,941	7,447,346	8,701,454	10,019,610
of which;					
category I	2,653,863	2,810,225	2,915,188	3,335,280	3,816,919
category II	1,788,521	1,797,251	1,863,230	2,029,226	2,223,462
sent/received to/from domestic			*	*****	•
users	1,055,822	994,931	984,831	1,213,723	1,455,832
Total messages received of which:	5,766,385	5,879,573	6,040,394	7,021,354	7,971,173
category I	n.a.	1,980,723	2,136,086	2,427,632	2,833,733
category II	n.a.	1,482,130	1,566,639	1,925,165	2,104,694
Memorandum item: Global S.W.I.F.T. traffic	365,159,291	405,540,902	457,218,200 8	518,097,873	582,192,512

#### Definitions

- Sub-members: domestic users sponsored by members abroad;
- Participants: users which are not shareholders in S.W.I.F.T.; their message traffic over the network is restricted;
- Category I: customer (funds) transfers;
- Category II: bank (funds) transfers.



Basic statistical data (1)

	1991	1992	1993	1994	1995
Population (2) (thousands)	57,808	58,007	58,191	58,366	58,483
Gross domestic product (GBP billions)	573.6	595.3	628.4	666.2	698.2
Exchange rate vis-à-vis ECU (2)	0.7011	0.7370	0.7805	0.7756	0.8288

- (1) Since 1990 a new source of data has been used and, therefore, some of these figures may differ from those contained in the Addendum to the "Blue Book", May 1994.
- (2) Average for the year.

#### Table 2

Settlement media used by non-banks

(end of year)

				GE	3P billions
	1991	1992	1993	1994	1995
Notes and coins	15.7	17.0	17.9	18.8	19.9
Narrow money deposits (1)	262.6	340.2	377.6	391.7	417.1
Narrow money supply (M2) (1)	278.3	357.2	395.5	410.5	437.0

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

#### Table 3

Settlement media used by deposit-taking institutions

(end of year)

			•	GE	3P billions
	1991	1992	1993	1994	1995
Cash ratio deposit (1)	1.59	1.41	1.42	1.50	1.69
Free reserves held at central bank	0.03	0.00	0.18	0.10	0.114
Transferable deposits at other credit institutions (2)	46.8	53.1	49.6	55.3	50.1

- (1) Authorised institutions with average eligible liabilities of £10 million or more are liable to lodge with the Bank of England non-operational, non-interest-bearing deposits of 0.35% (as at 31st December 1993) of their eligible liabilities (0.25% for institutions for which Northern Ireland is the main place of business in the UK).
- (2) Includes some time deposits.

#### Banknotes and coins

(total value, end of year)

				GE	P millions
	1991	1992	1993	1994	1995
Total banknotes issued (1)	16,096	16,445	17,315	18,513	19,605
of which:					
GBP 50	2,640	2,801	2,996	2,989	3,205
GBP 20	5,797	6,498	7,337	8,362	9,098
GBP 10	6,323	5,856	5,714	5,945	6,111
GBP 5	1,276	1,232	1,211	1,160	1,135
GBP 1	60	<i>58</i>	<i>57</i>	57	56
Notes held by credit institutions (2) (3) (4)	4,165	3,613	3,662	4,328	4,403
Total coins issued (5)			,	1,958	1,992
of which:					
£1	n.a.	n.a.	n.a.	1,012	1,033
50p	n.a.	n.a.	n.a.	240	223
20p	n.a.	n.a.	n.a.	297	309
10p	n.a.	n.a.	n.a.	134	136
5p	n.a.	n.a.	n.a.	133	140
2p	n.a.	n.a.	n.a.	78	83
1p	n.a.	n.a.	n.a.	64	68
Notes and coins in circulation outside credit institutions (3) (4)	15,715	16,832	17,897	18,752	19,896

- (1) Bank of England banknotes only.
- (2) Not seasonally adjusted.
- (3) Average for the month of December.
- (4) Figures include coins.
- (5) Estimated as at 31st December.

# Table 5

#### Institutional framework

(end of 1995)

Categories	Number of institutions	Number of branches	Number of accounts (millions)	Value of accounts (GBP billions)
Central bank	 1	5	71.4	210.1
Commercial banks	483	12,328	0	0
Building societies	. 80	5,141	45.3	206.9
Post office	. 1	19,490	16.0	1.4
TOTAL	565	36,964	132.7	418.4
Branches of foreign banks	262		:	
of which EC-based	107			

### Cash dispensers, ATMs and EFTPOS terminals

	1991	1992	1993	1994	1995
Cash dispensers and ATMs					
Number of networks	3	3	3	3	3
Number of machines (thousands)	18.1	18.7	19.1	20.0	20.9
Volume of transactions (millions) (1)	1,085	1,169	1,242	1,335	1,471
Value of transactions (GBP billions) (1)	48	56	60	65	72
EFTPOS terminals					***************************************
Number of networks (2)	3	. 3	3	3	3
Number of machines (1)(3)	190,000	220,000	270,000	350,000	505,000
Volume of transactions	n.a.	n.a.	n.a.	n.a.	n,a.
Value of transactions	n.a.	n.a.	n.a.	n.a.	n.a.

<sup>(1)</sup> Estimated figure.

#### Table 7

Number of payment cards in circulation (1) (end of year)

					millions
	1991	1992	1993	1994	1995
Cards with a cash function	73.4	74.0	75.0	77.3	83.7
Cards with a debit/credit function	49.1	51.2	51.7	54.5	59.2
of which:					
cards with a debit function	20.1	22.6	24.1	26.0	28.4
cards with a credit function (2)	29.0	28.6	27.6	28.5	30.8
Cards with a cheque guarantee function (3)	43.0	44.4	44.0	45.5	48.0
Retailer cards (4) (5)	n.a.	8.9	8.5	10.3	13.0

<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> SWITCH, VISA and MasterCard.

<sup>(3)</sup> SWITCH, VISA and MasterCard. The number of points of sale is not available. (Several machines can be installed at one point of sale.)

<sup>(2)</sup> Bank VISA, MasterCard and travel and entertainment (charge cards) cards only (excludes cards issued by some building societies).

<sup>(3)</sup> Includes eurocheque cards.

<sup>(4)</sup> This figure does not include the number of cards issued by smaller retailers.

<sup>(5)</sup> Estimated figure.

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

					millions
	1991	1992	1993	1994	1995
Town Clearing (1) (8)	0.3	0.1	.0.1	<0.1	0.0
CHAPS	8.0	9.1	11.0	11.7	12.6
Cheque and Credit Clearings	2,655	2,577	2,496	2,451	2,377
Cheques (1) (2)	2,472	2,395	2,323	2,278	2,206
Paper-based credit transfers (1) (2)	183	182	173	173	171
BACS	1,702	1,820	1,903	2,058	2,268
Credit transfers (1)	786	819	858	910	969
Direct debits	916	1,001	1,045	1,148	1,299
TOTAL	4,365.3	4,406.1	4,410.1	4,520.7	4,657.6

- (1) Excludes inter-branch items.
- (2) Includes Northern Ireland and Scotland (includes estimates).
- (3) Town Clearing ceased operation on 24 February 1995.

#### Table 9

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

	``		· · · · · · · · · · · · · · · · · · ·	G	BP billions
	1991	1992	1993	1994	1995
Town Clearing (1) (8)	2,228	1,387	1,069	681	59
CHAPS	19,050	20,928	23,545	25,053	26,719
Cheque and Credit Clearings	1,320	1,285	1,300	1,311	1,333
Cheques (1) (2)	1,207	1,175	1,194	1,210	1,234
Paper-based credit transfers (1) (2)	113	. 110	106	101	99
BACS	772	803	836	941	1,054
Credit transfers (1)	484	519	574	657	742
Direct debits	288	284	262	284	312
TOTAL	23,370	24,403	26,750	27,986	29,165

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

Participants in securities settlement systems

	Settling securities	Holding securities accounts on behalf of customers	Settling cash directly in central bank accounts
CGO (f)	297	0	0
Participants	297	n.a.	0
CMO	61	16	0
Banks	41	14	0
Stockbrokers	2	1	0
Securities houses	4	0	0
Discount houses	7	· 1	0
Stock exchange money-brokers	7	0	. 0
ESO	. 23	. 0	0
Banks	. 14	n.a.	. 0
Others	9	n.a.	<u> </u>
TALISMAN	306	. 0	·: 0
Participants	306	n.a.	n.a.
LCH (1)	170	0	0
Participants	170	n.a.	n.a.

<sup>(1)</sup> It is not possible to distinguish different classes of participants.

Transfer instructions handled by securities settlement systems: volume of transactions  $^{(1)}$ 

						thousands
***************************************		1991	1992	1993	1994	1995
CGO (B)						
Government securities		584.0	678.2	736.8	768.4	747.5
CMO (2)		219.1	247.6	267.6	285.3	269.0
Government securities		)	)	)	)	)
Bills of exchange		)	)	)	)	)
Bank CDs		)219.1	)247.6	)267.6	)285.3	)269
Building society CDs		)	)	)	)	)
Commercial paper		)	)	) ·	. )	. )
Stock exchange STCs		)	)	<b>)</b>	)	· )
ESO <sup>(2)(3)</sup>					9.1	. 14.2
Government securities		**		·. **	)	)
Bonds			·	-	)9.1	)14.2
CDs	**.	•	•	-	<b>)</b>	. )
TALISMAN (2)		8,280	8,508	10,344	9,386	9,817
Shares (4)		8,280	8,508	10,344	9,386	9,817
LCH (6)				154,645	219,138	198,561
Futures		*	•	129,746	186,208	168,610
Options			*	24,899	32,930	29,951

- (1) Figures altered from previous edition due to revised method of calculation.
- (2) Volumes include one side of each transaction
- (3) ESO was inaugurated on 31st August 1993.
- (4) Figures represent number of bargains settled.
- (5) Number of contracts.

Transfer instructions handled by securities settlement systems: value of transactions (1)

				G	BP billions
	1991	1992	1993	1994	1995
CGO ®	4,355	6,862	11,725	15,266	16,001
Government securities	4,355	6,862	11,725	15,266	16,001
CMO <sup>(2)</sup>	1,651	2,054	2,344	2,547	3,305
Government securities	1651)	2,054)	2,344)	2,547)	3305)
Bills of exchange	)	)	)	)	)
Bank CDs	)	)	)	)	)
Building society CDs	)	)	)	)	)
Commercial paper	)	)	· )	)	)
Stock exchange STCs	<u> </u>	)	<u>)</u>	)	)
ESO (2) (3) (4)			-1.	58.7	84
Government securities		* .	. *	58.7)	84)
Bonds			•	)	· )
CDs ·			-	)	)
TALISMAN (2)	360	434	564	606	646
Shares (6)	360	434	564	606	646

- (1) Figures altered from previous edition due to revised method of calculation.
- (2) Turnover includes one side of each transaction.
- (3) The ESO was not inaugurated until 31st August 1993.
- (4) Nominal value of securities traded. (Trading is in ECU figures quoted are GBP.)
- (5) Figures represent value of bargains settled.

Nominal values registered by securities settlement systems (end of year)

			GĘ	P billions
1991	1992	1993	1994	1995
122,4	144.1	204.4	227.9	210.9
122.4	144.1	204.4	227.9	210.9
77.3	76.3	79.6	86.4	106.0
7.1	3.8	3.1	5.2	16.7
20.0	21.9	21.5	17.6	17.9
43.7	44.6	44.6	52.5	57.9
6.5	6.0	5.9	7.0	6.2
neg.	neg.	neg.	neg.	neg.
0	0	4.5	4.1	7.3
		3.8	4.3	5.3
**	•	)	)	. )
•	*	)	)	)
•	*	)	) .	• )
573.8	658.8	856.8	811.8	942.7
542.4	629.2	815.4	779.5	906.9
31.4	29.6	41.4	32.3	35,8
	122.4 122.4 77.3 7.1 20.0 43.7 6.5 neg. 0	122.4 144.1 122.4 144.1 77.3 76.3 7.1 3.8 20.0 21.9 43.7 44.6 6.5 6.0 neg. neg. 0 0  573.8 658.8 542.4 629.2	122.4 144.1 204.4 122.4 144.1 204.4 77.3 76.3 79.6 7.1 3.8 3.1 20.0 21.9 21.5 43.7 44.6 44.6 6.5 6.0 5.9 neg. neg. neg. 0 0 4.5 3.8 ) ) 573.8 658.8 856.8 542.4 629.2 815.4	1991       1992       1993       1994         122.4       144.1       204.4       227.9         122.4       144.1       204.4       227.9         77.3       76.3       79.6       86.4         7.1       3.8       3.1       5.2         20.0       21.9       21.5       17.6         43.7       44.6       44.6       52.5         6.5       6.0       5.9       7.0         neg.       neg.       neg.         0       0       4.5       4.1         3.8       4.3         -       -       )       )         -       -       )       )         573.8       658.8       856.8       811.8         542.4       629.2       815.4       779.5

<sup>(1)</sup> In 1993: The ESO was not inaugurated until 31st August 1993.

<sup>(2)</sup> Trading is in ECU; figures are quoted in GBP.

<sup>(3)</sup> Figures are market values of UK companies; other securities traded at the Stock Exchange are not eligible for settlement in TALISMAN.

<sup>(4)</sup> From 1995, includes Alternative Investment Market (AIM)

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

					millions
	1991	1992	1993	1994	1995
Cheques issued (1) (4)	3,126	3,005	2,886	2,802	2,699
large-value (Town)	0	<0.1	<0.1	< 0.1	0
others	3,126	3,005	2,886	2,802	2,699
Payments by card	1,058	1,246	1,407	1,623	1,907
debit	<i>359</i>	522	659	808	1,004
credit <sup>(3)</sup>	<i>699</i>	724	748	815	903
Paper-based credit transfers (2) (4)	477	462	432	415	405
Paperless credit transfers	869	901	936	987	1,045
large-value (CHAPS)	8	9	11	12	13
others <sup>(4)</sup>	861	892	925	975	1,032
Direct debits	916	1,001	1,046	1,148	1,299
TOTAL (5)	6,446	6,615	6,707	6,975	7,355

- (1) Excludes cheques processed at branch level, but includes cheques used by customers to obtain cash from a bank other than their own.
- (2) Excludes items processed at branch level.
- (3) VISA and MasterCard only. Excludes transactions by holders of charge cards (travel and entertainment cards) and retailer cards.
- (4) Includes inter-branch items (values are estimates).
- (5) Excludes postal orders and government payments in cash from post offices against state benefit vouchers.

#### Table 15

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

		•		G	BP billions
	1991	1992	1993	1994	1995
Cheques issued (1) (4)	3,953	2,934	2,587	2,177	1,577.2
large-value (Town)	2,420	1,451	1,095	681	59.3
others	1,533	1,483	1,492	1,496	1,517.9
Payments by card	38.1	44.5	51.2	59.9	70.8
debit	9.5	13.8	17.9	22.4	28.5
credit <sup>(3)</sup>	28.6	30.7	33.3	37.5	42.3
Paper-based credit transfers (2) (4)	645.9	489.5	457.2	397.2	371.2
Paperless credit transfers	19,562	21,470	24,143	25,733	27,486
large-value (CHAPS)	19,050	20,928	23,545	25,052	26,719
others <sup>(4)</sup>	512	542	598	681	767
Direct debits	288	284	262	284	312
TOTAL (5)	24,487.0	25,222.0	27,500.4	28,651.1	29,817.2

- (1) Excludes cheques processed at branch level, but includes cheques used by customers to obtain cash from a bank other than their own.
- (2) Excludes items processed at branch level.
- (3) VISA and MasterCard only. Excludes transactions by holders of charge cards (travel and entertainment cards) and retailer cards.
- (4) Includes inter-branch items (values are estimates).
- (5) Excludes postal orders and government payments in cash from post offices against state benefit vouchers.

Participation in S.W.I.F.T. by domestic institutions (1)

	1991	1992	1993	1994	1995
S.W.I.F.T. users	286	295	309	344	366
of which:					
members	54	<i>57</i>	57	59	62
sub-members	204	210	214	228	235
participants	28	28	38	57	69
Memorandum item:					
Total S.W.I.F.T. world-wide	3,648	3,903	4,004	4,623	5,229
of which:				••	·
members	1,963	2,074	2,103	2,412	2,259
sub-members	1,607	1,738	1,802	2,023	2,259
participants	78	91	99	188	277
			-		

<sup>(1)</sup> The UK and the Isle of Man.

# Table 17

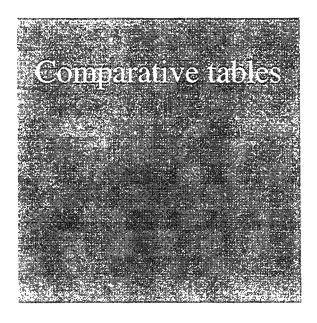
S.W.I.F.T. message flows to/from domestic users (1)

	1991	1992	1993	1994	1995
Total messages sent	43,171,404	48,167,743	54,796,966	60,967,184	71,035,477
of which:	+ 1				
category I	8,106,518	8,851,050	9,537,290	10,352,681	11,181,501
category II	14,799,002	16,109,002	18,110,333	19,379,515	21,654,710
sent/received to/from domestic				48	
users	10,058,121	11,538,743	12,838,570	14,154,000	16,386,855
Total messages received	37,850,280	42,182,121	48,734,436	55,179,903	66,015,464
of which:		4			
category I		10,212,447	11,316,746	12,540,347	13,987,532
category II	<b>164</b>	7,863,519	8,284,102	8,350,297	8,906,827
Memorandum item:				••	
Global S.W.I.F.T. traffic	365,159,291	405.540.902	457,218,200	518.097.873	582.192.512

(1) The UK and the Isle of Man.

#### Definitions

- Sub-members: domestic users sponsored by members abroad;
- Participants: users which are not shareholders in S.W.I.F.T.; their message traffic over the network is restricted;
- Category I: customer (funds) transfers;
- Category II: bank (funds) transfers.





		Total (FCLI millions)	Value p	Value per inhabitant (ECU)	As	As a percentage of GDP	As a p	As a percentage of narrow money (1)
	1994	1995	1994	1995	1994	1995	1994	1995
			000	4 Ca2	7000.2	R 25%	27 1%	27.9%
Belgium	788'8	06/01	200	20.	2 / 3 1	200	?	!
Danmark	3,838	4,174	787	799	3.10%	3.14%	ë, C	ф; С
Germany	117.363	126,751	1,441	1,554	6.80%	6.86%	29.6%	29.1%
Greece	5.861	6.150	563	588	7.28%	7.21%	51.2%	50.1%
Snain	45.084	46,227	1,152	1,179	11.09%	10.81%	24.9%	25.4%
France	38.308	39,203	663	674	3.42%	3.34%	15.1%	14.0%
Ireland	2.087	2.262	584	632	4.77%	4.83%	37.2%	36.4%
la Vale	50.274	46.138	863	791	5.86%	5.54%	16.0%	16.3%
liiyemboiin	396	4	980	1,006	3.35%	3.16%	15.0%	15.5%
Netherlands	17.651	18,200	1,148	1,17	6.26%	6.01%	25.0%	22.1%
Austria	9,866	10.825	1,229	1,343	2.90%	6.06%	37.6%	34.9%
Portinal	4.041	4,289	409	434	5.47%	5.45%	20.6%	19.8%
Finland	1.745	2,172	343	425	2.13%	2.26%	7.0%	7.0%
Sweden	7.491	7,340	853	828	4.37%	4.21%	n.a.	n.a.
United Kingdom	24,177	24,006	414	410	2.81%	2.85%	4.6%	4.6%
EU	338,174	348,946	606	936	5.46%	5.42%	34.3%	33.8%
)	,		•				,	

(1) M1, except for the United Kingdom: M2.

Table 2

Points of entry into the payment system (end of year)

Number of accounts on which payments 1995 0.98 1.83 1.63 0.45 1.80 2.46 <del>8</del>. 1.07 1.23 0.77 2.27 3.11 can be made (per capita) 1994 1.15 0.72 1.84 2.54 1.29 0.97 1.07 4.0 3.93 0.71 offering payment 1995 813 512 723 702 917 802 872 632 4 Total number 42 of branches services (1) 1994 804 807 969 950 394 \* 46 870 468 **461** 1995 n.a n. E.a. 8 8 C. 88 n.a. Others (1) 1994 n,a, 36 e C 5 Ċ. Ę 1995 239 292 248 290 183 145 333 249 post office branches (1)(2) 89 138 107 Ė E.a. Number of 1994 245 293 243 146 286 8 169 188 53 188 œ, n.a. bank branches (1) 463 438 985 1995 219 5 385 528 831 581 41 Number of 1994 255 966 583 422 478 439 780 471 909 4 397 367 461 0,8 0 1995 2,2 <u>.</u> 3.6 80 7 4.2 0.0 Ċ. 1 9.1 0,7 0 central bank branches (1) Number of 1994 2.2 0.3 3 0.8 0.9 N 0.8 3 17 8 D. 9.1 3.7 6 offering payment 1995 69 0 541 ထ 2 ଷ 8 2 4 Institutions services (1) Number of 1994 560 (7) 1  $\infty$ 2 Š 2 က 5 3 3 2 United Kingdom Luxembourg Netherlands Germany (3) Denmark Portugal Belgium Finland Sweden reland Austria Greece France EU Spain

Per 1,000,000 inhabitants.

If the post offices offer payment services.

In "Total number of branches offering payment services" 1994: Excluding the 20,000 post office branches which are entrusted with the semi-cashless payment system on behalf of Postbank AG. 1995: Postbank AG as a fully fledged credit institution appears with its branches under "Number of bank branches", including post office branches which are entrusted with the semi-cashless payment systems on behalf of Postbank AG. E 00 00

Average without countries where data are not available. <u></u>

Cash dispensers and ATMs Table 3

(end of year)

1995 30% 12% 16% -15% 14% 17% 11% 41% 13% **%9** %6 11% 5% Increase in the Ę, 4% of fransactions 14% 15% 12% 23% 2% 1994 16% 12% 8 G. Ġ. Ġ 13% 15% \$0 1995 3% 16% 18% 12% 18% -7% Increase in the of transactions %6 0.2% %91 number 17% 23% 1% n.a 11% 13% 8% 10% -2% 1994 138 %6 e E Ġ 24% 11% 10% 1995 21% 14% 11% 16% 801 2% 15% Increase in the of machines number 13% 10% 32% 10% 23% 59% 20% 19% 1994 18% %06 8% 12% 18 8 1995 9 n.a. 50 얺 89 49 4 7 104 Average value per transaction (ECC) 38 201 1994 8 8 3 8 6 3.5 5.6 17.9 27.5 8.5 13.8 41.2 5,6 1995 4.4 31.7 transactions Number of per capita 4.5 11.8 22.9 3.9 13.0 15.8 10.2 23.9 13.9 1994 7.5 14.2 37.7 30.7 E. Number of machines 1995 393 456 414 360 372 266 438 29 257 98 681 371 per 1,000,000 end of year) inhabitants 994 836 260 42 155 900 355 374 325 381 337 343 369 361 241 38 **United Kingdom** Luxembourg Germany (2) Netherlands Finland (9) Denmark Portugal Sweden Belgium Greece Ireland Austria France Spain E E Italy

(1) Average without countries where data are not available.

in "Increase in the number of transactions" 1995: Partly due to a new data source. ଉ ଉ

In "Average value per transaction": Only cash withdrawals

	Numbe per 1.	Number of POS per 1,000,000 inhabitants		Number of transactions per capita	Average value per transaction (ECU)	e value saction U)	Increas	Increase in the number of POS	Incre of tra	Increase in the number of transactions	Incre of tra	Increase in the value of transactions
	(end of 1994	(end of the year) 394 1995	1994	4 1995	1994	1995	1994	1995	1994	1995	1994	1995
Bolnlim	7.031	5 500	18n	) 90'R	2	50	17%	19%	15%	18%	2006	170/
Denmark	4,624	5,016	31.6		2 &	3 4	÷ = = = = = = = = = = = = = = = = = = =	2 % 1 %	20% 20%	17%	23%	19%
Germany	768	859	6.	80	8	73	123%	12%	51%	44%	74%	%06
Greece	1,085	1,082	0.8	9 0.8	99	3	352%	%0	n.a.	7%	n.a.	%6
Spain	10,224	11,742	8.5	5 10.4	42	43	24%	15%	11%	61%	17%	%69
France	9,343	9,340	28.9	9 32.1	49	48	2%	1%	7%	12%	%	10%
Ireland	0	0		0 0	0	0	0	0	0	0	0	0
Italy	1,786	2,634	9.0	3 0.8	66	88	32%	48%	47%	45%	45%	45%
Luxembourg	9,071	8,146	29.2	36.6	89	89	10%	%6-	34%	27%	37%	22%
Netherlands	3,094	4,747	8.2	16.6	53	45	94%	54%	88%	103%	%46	%69
Austria	300	419		4.1	42	64	32%	40%	33%	25%	46%	41%
Portugal	3,311	3,862	o.	12.6	8	3	19%	17%	20%	38%	28%	30%
Finland	9,434	9,593	38.4	42.5	37	42	14%	2%	13%	11%	15%	16%
Sweden	2,908	6,139	8.8	3 10.4	89	85	%4%	113%	22%	19%	45%	10%
United Kingdom	5,997	8,635	n.a.	7.9.	n.a.	e E	30%	44%	n.a.	n'a	n.a.	n.
E (2)	4.577	5,489	9.4	11.6	69	62	19%	20%	10%	23%	3%	5%

(1) Average without countries where data are not available.

Table 5
Use of payment cards
(end of year)

	irdebit	1995	22	84	9	16	13	79	23	9	0	n.a.	ø	20	11	23	35	27
Average number of	Payments per card with a credit/debit function (2)	1994	21	76	~	56	Φ	75	23	9	37	2,0	2	4	73	8	30	25
Average	ndrawals I with a inction	1995	15	n.a.	œ E	4	8	37	18	22	<b>o</b>	56	4	8	84	46	18	24
	Cash withdrawals per card with a cash function	1994	4	n'a	e U	61	9	98	17	23	- <del></del>	56	₩.	8	45	45	17	25
	cards	1995	120	e :	23	ë E	n, a	n.a	ë C	é	n.a.	n.a.	က	12	342	eë :	222	n.a.
	Retailer cards	1994	108	n.a.	55	j.a.	ë i	, ci	n'a	n.a.	ei E	n'o	<b>58</b>	<u>ග</u>	339	1,039	176	n.a.
ollants	with a uarantee tion	1995	457	짇	472	ei E	*	e.	242	88	989	47	294	25		 	821	381
Number of cards per 1,000 inhabitants	Cards with a cheque guarantee function	1994	461	8	456	n.a.		n.a.	232	30	616	84	289	22		n.a	780	360
r of cards pe	vith a i credit in <sup>(2)</sup>	1995	932	563	. <del>11</del> 6	136	792	406	<u>8</u>	351	1,183	26	548	720	625	535	1,012	657
Numbe	Cards with a debit or a credit function (2)	1994	881	543	582	103	819	385	273	313	1,044	엃	501	684	029	1,375	934	280
	n a cash ion	1995	932	563	ģ	229	792	420	1,008	237	1,027	1,062	478	634	864	697	1,431	617
	Cards with a cash function	1994	881	543	j.a.	2	819	395	941	213	891	606	437	536	830	688	1,324	564
economic de la companya de la compa			Baldiim	Denmark	Germany	Greece	Spain	France	Ireland	<b>\</b>	Luxembourg	Netherlands	Austria	Portugal	Finland	Sweden	United Kingdom	E

Average without countries where data are not available.
 In Germay: 1995 including bank customer cards.

Major Interbank Funds Transfer Systems in the European Union (end-1995)

<b>U</b> D
Ě
SYS
H
VAIL
ĠE.
LAR
€

											200	במבים במבים כי	2000	うりつばくりつびつうく
			. :						trans (Thou	transactions (thousands)	fan Sign	transactions (ECU billions)	trans (ECU	transactions (ECU million)
ε	8	9	€	9	9	8	8)	Name of the system			ı			٠.
			***************************************						1994	1995	1994	1995	1994	1995
ž	83	E	RTGS	0	ပ	>	15.30	DN Inquiry and transfer system	347	349	3,202	2,576	9.23	7.38
	8	E	z	0	ပ	>	12.30	EAF	12,700	17,800	75,282	79,193	5,93	4.45
	8	툳	RTGS	0	۵	ıL	14.30	Eiliger Zahlungsverkehr	4,000	5,500	11,831	14,414	2.96	2.62
ES	80	FE	gs	0	ပ	L	14.00	STMD	890	860	17,521	15,055	19.69	17.51
ES	Δ.	ACH	Z	0	ပ	Ľ,	10.30	Madrid Clearing House	1,750	1,920	8,510	7,596	4.86	3.96
Œ	80	H	Z	¥.	ပ	щ	13.00	SAGITTAIRE	4,100	4,500	16,837	16,025	4.11	3.56
Щ	, co	H	GS	Æ	ပ	တ	15.00	Special Presentations	7	မာ	<del></del>	9	1.43	1.89
Щ !	8	2	SS	NE NE	O	Ø	16.00	Daily Interbank Settlement	153	168	1,075	746	7.05	4.45
! <b> </b> =	8		Z	0	ပ	<b>L</b>	14.00	SIPS	3,526	4,462	13,547	12,852	3.84	2.88
: <b>_</b>	8	E	RTGS	0	ပ	>	17.00	BISS	43	46	25	65	1.34	14.
<u> </u>	83	E	z	0	O	>	16.00	Electronic Memoranda	2,083	1,810	9,390	8,642	4.51	4.77
Z	8	E	RTGS	0	ပ	>	15.30	Central Bank system	400	400	4,254	4,026	10.64	10.07
ź	80	Ą	z	0	ပ	L	11.30	8007 S.W.I.F.T.	2,000	2,100	4,698	4,927	2.35	2.35
¥	ω	E	RTGS	₹	ပ	ш.	13.00	EBK	890	910	465	483	0.52	0.53
Œ	83	E	RTGS	₹	O	ш.	16.30	BOF System	105	110	1,027	1,490	9.78	13.55
SE	80	ᇤ	RTGS	Æ	ပ	L.	16.15	RIX	84	119	4,359	5,743	51.89	48.26
ž	В	E	z	N.	۵	>	15.45	CHAPS*	11,652	12,600	32,301	32,239	2.77	2.56
<b>a</b>	<b>.</b>	E	z	¥.	Ö	L.	14.00	ECU Clearing and Settlement System	1,573	1,585	12,625	11,697	8.03	7.38

(1) Country.(2) Owner/manager.(3) Processing meth

Owner/manager: B = banks; CB = central banks.

Processing method: M = manual; ACH = Automated Clearing House (offline); RTT = Real-Time Transmission. N = muitilateral netting; BN = bilateral netting; RTGS = real-time gross settlement; GS = other gross settlement.

<u>₹</u>

(5) O = open membership (any bank can apply) or RM = restricted membership (subject to criteria).

Geographical access to the system: C = centralised (one processing centre only) or D = decentralised.

9

RTGS from 1996 Q2.

(7) Prices charged to participants: F = full costs ( including investments); V = variable costs; S = symbolic costs (below variable cost).

(8) Closing time for same-day transactions.



# (2) SYSTEMS WHICH PROCESS LARGE-VALUE AND RETAIL TRANSACTIONS

(1) (2) (3) (4) (5) (6) (7) (8) Name of the system  E CB (A) (A) (5) (6) (7) (8) Name of the system  E CB (A) (A) (5) (6) (7) (8) Name of the system  E CB (A) (A) (5) (6) (7) (8) Name of the system  E CB (A) (A) (5) (6) (7) (8) Name of the system  E CB (A) (A) (B) (B) (B) (B) (B) (B) (B) (B) (B) (B						•				S.	Number of	Vali	Value of	Average value of	value of
(2)         (3)         (4)         (5)         (7)         (8)         Name of the system         1994         1995         1994         1994         1994         1994         1994         1994         1994			.1			•		:		trans (thous	actions ands) (9)	fransk (ECU I	sctions oillions)	transa (ECU thou	ctions sands) <sup>(9)</sup>
CB (a) N O C F 13.30 CEC CB M N O C C F 13.30 CEC CB M N O C C F 13.30 Cecroming House of Belgium (excl. CEC) 15,880 14,450 8,511 8,673 536 CB M O D N 12.00 Conventional local credit transfer system 30,300 8,100 3,933 2,770 130 CB M N O D N 13.00 Daily local clearing CB M N O D N 16.00 Athens Clearing Office 14,611 10,847 439 396 30 CB M N O D V 9.30 Local Clearing CB M N O C F 10.30 Clearing House 6,300 4,300 29,400 6,644 5,646 194 CB M N O D V 9.30 Local Clearing CB M N N O D F 10.30 Clearing House CB M N N O D F 10.30 Clearing House CB M N N O D F 10.30 Clearing House CB M N N O D F 14.30 Traditional Clearing CB M N N O D F 14.30 Traditional Clearing CB M N N O D F 14.30 The Banks' Clearing System 73,982 55,858 301 346 11	£	(2)	ල	<b>4</b>	9	9	E	(8)	Name of the system				ı		·
CB         (a)         N         O         C         F         13.30         CEC         44,350         26,210         618         690         1           CB         M         N         O         D         S         14,30         Clearing House of Belgium (excl. CEC)         15,880         14,450         8,511         8,673         536           CB         M         GS         O         D         N         12.00         Conventional local credit transfer system         30,300         14,450         8,511         8,673         536           CB         M         N         O         D         N         13.00         Daily local clearing Office         14,611         10,847         439         3940         35           CB         M         N         O         D         V         16.00         Athens Clearing Office         14,611         10,847         439         3940         35           CB         M         N         O         D         V         16.30         Local Clearing House         40,676         35,665         2,223         1,678         3           CB         M         N         N         10.30         Traditional Clearing House         12										1994	1995	1994	1995	1994	1995
CB         M         N         O         D         S         14.30         Clearing House of Belgium (excl. CEC)         15,880         14,450         8,511         8,673         536           CB         M         GS         O         D         N         12.00         Conventional local credit transfer system         30,300         8,100         3,933         2,770         130           CB         M         N         O         D         N         15.00         Daily local clearing Office         14,611         10,847         439         3940         35           CB         M         N         O         D         V         16.00         Athens Clearing Office         14,611         10,847         439         396         30           CB         M         N         O         D         V         16.30         Athens Clearing House         40,676         35,665         2,223         1,678         9           CB         M         N         O         F         10.30         Traditional Clearing House         6,300         4,300         20         16         1           CB         M         N         M         10.30         Traditional Clearing System         73,9	Ш	85	(a)	z	0	ပ	щ	13.30	OEC	84,330	26,210	618	069		
CB         M         GS         O         D         N         12.00         Conventional local credit transfer system         30,300         8,100         3,933         2,770         130           CB         M         N         O         D         N         13.00         Daily local clearing Office         14,611         10,847         439         3,940         35           B         M         N         O         D         V         16.00         Athens Clearing Office         14,611         10,847         439         396         30           CB         M         N         O         D         V         16.30         Local Clearing House         40,676         35,665         2,223         1,678         9           CB         M         N         O         C         F         10.30         Clearing House         6,300         4,300         20         16         3           CB         M         N         HM         D         N         10.30         Traditional Clearing System         73,982         55,858         301         346         1	Щ	B	Z	z	0	۵	တ	14.30	Clearing House of Belgium (excl. CEC)	15,880		8,511	8,673	536	009
CB         M         N         0         D         N         13.00         Daily local clearing Office         30,600         1,700         15.29         3,940         35           B         M         N         0         D         V         16.00         Athens Clearing Office         14,611         10,847         439         396         30           CB         M         GS         O         D         V         16.00         Banque de France         34,300         29,400         6,644         5,646         194           CB         M         N         O         D         V         9.30         Local Clearing         40,676         35,665         2,223         1,678         9           B         M         N         O         C         F         10.30         Clearing House         6,300         4,300         20         16         3           CB         M         N         HM         D         N         10.30         Traditional Clearing System         73,982         55,858         301         346         1	Щ	CB	2	GS.	0	٥	z	12,00	Conventional local credit transfer system		8,100	3,933	2,770	130	342
B         M         N         O         D         V         16.00         Athens Clearing Office         14,611         10,847         439         396         30           CB         M         GS         O         D         V         9.30         Local Clearing         40,676         35,665         2,223         1,678         9           CB         M         N         O         C         F         10.30         Clearing House         6,300         40,676         35,665         2,223         1,678         9           CB         M         N         O         C         F         10.30         Traditional Clearing         40,676         35,665         2,223         1,678         9           CB         M         N         Inc.30         Traditional Clearing         12,100         11,600         899         787         74           B         (b)         BN         O         D         F         14.30         The Banks' Clearing System         73,982         55,858         301         346         1	Щ	80	Σ	z	0	۵	z	13.00	Daily local clearing	30,600	1,700	15,279	3,940	35	2,318
CB M GS O D N 15.30 Banque de France 34,300 29,400 6,644 5,646 194 CB M N O C F 10.30 Clearing House 6,300 4,300 20 16 3 CB M N RM D N 10.30 Traditional Clearing 73,982 55,858 301 346 1	Œ	Φ	Σ	Z	0	۵	>	16.00	Athens Clearing Office	14,611	10,847	439	396	8	37
CB M N O D V 9.30 Local Clearing 40,676 35,665 2,223 1,678 9  B M N O C F 10.30 Clearing House 6,300 4,300 20 16 3  CB M N RM D N 10.30 Traditional Clearing System 73,982 55,858 301 346 1	Œ	8	Σ	GS	0	۵	z	15,30	Banque de France	34,300	29,400	6,644	5,646	194	192
B         M         N         O         C         F         10.30         Clearing House         6,300         4,300         20         16         3           CB         M         N         RM         D         N         10.30         Traditional Clearing         12,100         11,600         899         787         74           B         (b)         BN         O         D         F         14.30         The Banks' Clearing System         73,982         55,858         301         346         1	<u></u>	8	Σ	z	0	۵	>	9.30	Local Clearing	40,676	35,665	2,223	1,678	0	7
CB M N RM D N 10.30 Traditional Clearing 12,100 11,600 899 787 74 8 (b) BN O D F 14.30 The Banks' Clearing System 73,982 55,858 301 346 1	<b>5</b>	œ	2	z	0	O	ıL	10.30	Clearing House	6,300	4,300	50	16	က	*
B (b) BN O D F 14.30 The Banks' Clearing System 73,982 55,858 301	<b>)</b> —	80	Σ	z	M	٥	Z	10.30	Traditional Clearing	12,100	11,600	899	787	74	68
	,,,,,,,,,	8	<b>@</b>	NO NO	0	۵	L.	14.30	The Banks' Clearing System	73,982	55,858	301	346	<del>y</del>	-

Country.

Owner/manager: B = banks; CB = central banks.

9 6

Clearing House (offline); RTT = Real-Time Transmission. Processing method: M = manual; ACH = Automated 9 13 3

N = multilateral netting; BN = bilateral netting; RTGS = real-time gross settlement; GS = other gross settlement. <u>4</u>

O = open membership (any bank can apply) or RM = restricted membership (subject to criteria). 3

**a** <del>2</del> Geographical access to the system: C = centralised (one processing centre only) or D = decentralised.

ACH and RTT.
Batch processing and transmission.

"Daily local clearing" 1995: Statistical recording method changed in 1995: settled delivery envelops (clearing items) instead of individual payments. Closing time for same-day transactions.

Prices charged to participants: F = tull costs ( including investments); V = variable costs; S = symbolic costs

(below variable cost).

**® 6** 

4.	ਰ
ဖ	ned
<u></u>	₽
-	5
Table C	ల

(3) RETAIL SYSTEMS

			2						Tans	Number of transactions	Valu transa	Value of transactions	Average value transactions	Average value of transactions
ε	8	<u>(5)</u>	€	9	9	E	8	Name of the system					Ĺ	<u> </u>
									1994	1995	1994	1995	1994	1995
Z	GB GB	ACH	z	0	<del>5</del>	S	9.00	DN Retail clearing	519	596	375	428	724	718
DE	8	9	SS	0	۵	>	<u>Q</u>	Machine-optical voucher reading procedure (MAOBE)	248	115	1,199	142	4,834	1,235
出	8	ACH	GS	0	۵	>	2	Paperless exchange of data media (DTA)	2,107	2,157	1,237	2,366	287	1,097
GR	m	ACH	z	0	ပ		19.00	DIAS	1,900	6,629	4	42	8	Ø
ES	ω	≥	z	0	ပ		2	Clearing Houses	9	62	225	5	2,038	2,269
ES	S	E	8	R	ပ		2	SNCE	516	583	278	610	1,121	1,047
Œ	B/CB	<b>=</b>	Z	0	0	٠.	11.00/	Clearing Houses	3,659	3,588	22,879	21,059	6,253	5,869
:							15.00		:	:				
Œ	80	ACH	Z	¥	Δ		11.00	Computer Clearing Centres	636	0	526	0	828	0
Œ	80	₽	Z	0	۵	- 11	<u>Q</u>	CREIC	260	282	প্ল	24	84	\$
Œ	ω	ACH	Z	Æ	Ω		10.30	National system for payment by cards	1,677	1,873	82	9	49	49
Œ	<b>co</b>	H	R	æ	۵	,	13.30	Interbank Teleclearing System (SIT)	1,792	2,589	829	1,433	462	553
Щ	Ω.	Ð	z	Ž	ပ		8	Dublin Bankers' Clearing	151	143	382	238	2,609	1,664
Щ	80	Σ	Z	Æ	ပ	٠.	8	The Central Exchange	IO.	n.a.	-	n.a.	2,452	e ë
<u>_</u>	පී	ACH	z	0	ပ	· · ;.	8	Retail sub-system	490	287	353	582	721	992
ź	m	Ą	z	0	ပ		11.30	Interpay (former BankGiro System)	1,225	1,411	1,017	1,043	830	739
Ь	<b>a</b>	E	Z	Æ	ပ	13	2	Telecompensação	424	485	254	271	599	228
S		ACH	z	0	O		2	Bank Giro System	231	249	224	246	970	988
ξ	ω	Ą	z	Æ	Ç		2	BACS (e)	2,058	2,268	1,213	1,272	230	561
ž	Φ	Σ	z	Æ	۵		2	Cheque and Credit Clearings (e)	2,224	2,159	1,507	1,435	678	999
		,												

ACH for paper-based instruments. © <del>©</del> © Geographical access to the system: C = centralised (one processing centre only) or D = decentralised.

9

9

8

Prices charged to participants: F = full costs ( including investments); V = variable costs; S = symbolic costs (below variable cost).
Closing time for same-day transactions.

**€** 

M and ACH.

Figures exclude Northern Ireland and Scotland.

Owner/manager: B = banks; CB = central banks. 9 13

N = multilateral netting; BN = bllateral netting; RTGS = real-time gross settlement; GS = other gross settlement. Clearing House (offilne); RTT = Real-Time Transmission. Processing method: M = manual; ACH = Automated

O = open membership (any bank can apply) or RM = restricted membership (subject to criteria). 9

Use of cashless payment instruments (total number of transactions, in millions)

	5	Cherines	á	Pavments	Credit	Credit transfers	Ojř	Direct debits		Others	9ĽS	<u> </u>	TOTAL
			. 🗗	by cards								•	
	1994	1995	1994	1995	1994	1995	1994	1995	-	1994	1995	1994	1995
Belgium	124	117	191	211	646	999	8	105	. *		•	1,061	1,099
Denmark	108	94	27.4	248	n.a.	n.a.	22	87		•	•	n.a.	n.a.
Germany (2)	803	807	351	416	5,572	5,683	4,607	4,583		ť	•	11,432	11,489
Greece	n, a	2,922	58	22		n,a,	n.a.	846		n.a.	n. G	n.a.	n.a.
Spain	213	202	253	408	150	187	299	727	٠.	136	133	1,419	1,662
France	4,876	4,845	1,672	1,867	1,615	1,730	1,205	1,321		151	143	9,520	9,905
Ireland	156	154	83	29	73	66	88	42		•	•	284	318
Italy	707	694	107	<del>1</del> 0	362	971	86	113		191	196	2,065	2,144
Luxembourg	ආ	0	16	0	99	0	N	0		,	<b>o</b>	20	0
Netherlands	145	110	193	373	1,560	1,660	531	298	,	,		2,429	2,741
Austria	38	88	8	52	432	432	188	210		-	<del>ģu</del> m	229	701
Portugal	256	236	14	140	45	4	43	29	,	ı	8	455	477
Finand	φ	4	229	247	413	444	18	56		,		999	720
Sweden	eë.	r. e.r.	67	Ξ	605	620	45	8				747	781
United Kingdom	2,802	2,699	1,623	1,907	1,402	1,450	1,148	1,299		1	ŧ	6,975	7,355
€ 3	10,333	12,922	5,130	6,108	13,535	13,976	8,760	10,063	-	480	474	37,780	39,391

(1) Sum without countries where data are not available. (2) 1995: adjustment there would have been a steady rise of volume of cashless payment transactions (app. + 6%).

Use of cashless payment instruments (number of instruments per inhabitant)

	Š	Cheques	ک کے	Payments by cards		Credit transfers	2	Direct debits	epits	Others	2	TOTAL	4
	1994	1995	1994	1995	,,,,,	1994	1995	1994	1995	1994	1995	1994	1995
Belgium	12	12	<b>6</b>	7		\$	99	9	9		ŧ	105	108
Denmark	ā	4	4	47		n.a.	n.a.	4	4	•	ŧ	ë. L	n.a.
Germany (2)	****	9	4	S		89	2	22	26	•	ŧ	140	7
Greece	ej C	0.28	<b>ෆ</b>	~	. :	•	ei ei	n.a.	8	ŧ	1	n.a.	n.a.
Spain	ю	w		2		4	S		19	<b>ෆ</b>	ო	38	42
France	25	88	23	32		28	30	2	23	<b>თ</b>	Q	165	57
Ireland	44	43	9	80		2	56	O)	12		ŧ	80	88
Italy	24	12	, <b>N</b>	N	· · · · ·	17	~	N	Ø	<b>ෆ</b>	ო	32	32
Luxembourg	ဖ	0	88	0		74	0	w	0	\$		124	0
Netherlands	o	1	\$	24		101	107	35	39	•	1	158	171
Austria	4	4	8	m		8	52	23	26		,	\$	87
Portugal	56	24	12	4		4	4	4	9	0	0	46	84
Finland	•		45	84		æ	87	4. 4.	တ		1	131	4
Sweden	<u>e</u>	n'a		<u>a</u>		89	20	ю	ဖ	•		j. D.	n.a
Unifed Kingdom	8	46	28	33		24	25	20	22			120	126
EN (a)	83	88	13	14	:	37	39	27	30	ë	n,a.	106	110

(1) Average without countries where data are not available.
(2) 1995: adjustment of volume of transactions via cheque, credit transfer, direct debit. Without adjustment there would have been a steady rise of volume of cashless payment transactions (app. + 6%).

 
 Table 9

 Use of cashless payment instruments
 (as a percentage of total number of transactions)

	J	Cheques	`.	Payments by cards	ည်	Credit transfers		Direct debits	ŏ	Others
	1994	1995	1994	1995	1994	1995	1994	1995	1994	1995
Belgium	11.7%	10.7%	18.0%	, 19.2%	60.9%	%9'09	9.4%	%9.6	•	
Denmark	n.a.	n.	n,	n.a.	n.a.	e c	œ.	n.a.	n.a.	П.а.
Germany	7.9%	7.0%	3.1%	3.6%	48.7%	49.5%	40.3%	39.9%	*	•
Greece	n.a.	e, c	ei C	n.a.	n.a.	n.a.	e u	n.a.	n.a.	n.a.
Spain	15.2%	12.6%	18.1%	24.8%	10.7%	11.4%	47.6%	44.2%	8.4%	7.1%
France	51.1%	49.0%	17.5%	18.9%	16.9%	17.5%	12.6%	13.4%	1.8%	1.2%
ireland	54.8%	48.6%	8.0%	%0.6	25.8%	29.3%	11.4%	13.1%	*	1
Italy	34.5%	33.7%	5.2%	5.1%	46.9%	47.2%	4.8%	6.5%	8.5%	8.5%
Luxembourg	2.0%	n.a.	31.0%	n.a.	%0:09	n.a.	4.0%	n.a.		•
Netherlands	6.0%	4.0%	7.9%	13.6%	64.2%	%9.09	21.9%	21.8%	ı	•
Austria	5.3%	4.7%	3.0%	3.6%	63.9%	61.7%	27.8%	30.0%	1	•
Portugal	56.1%	49.7%	25.0%	29.5%	9.3%	8.5%	9.5%	12.3%	*	0.3%
Finland	%6.0	%9.0	34.4%	34.3%	62.0%	61.6%	2.7%	3.6%	•	¥
Sweden	n.a.	ë	13.0%	14.2%	81.0%	79.4%	%0.9	6.4%		*
United Kingdom	40.2%	36.7%	23.3%	25.9%	20.1%	19.7%	16.5%	17.7%	*	*
EU ©	27.6%	24.9%	12.2%	12.7%	34,6%	35,4%	25.3%	27.1%	n.a.	n a

(1) Without countries where data are not available.

Table 10 Features of selected securities settlement systems in the European Union

COUNTRY	38		¥	DE	***		ES	
Name of the system	NBB Clearing	중	¢.	BOSCA (1)	DKV	SACDE	ATOS	ESPACLEAR
Type of securities (2)	0 '0	S	G, B, S, O	O,B,O	G, S, B	ပ တ်	S, B	Φ.
Owner/manager (3)	8	B	ş	8	ĸ	80	SE	SE
Number of participants	208	163	215	2,500	397	297	10 t	115
Settlement of cash leg (4)	} z	} z	Z	GS GS	N, RTGS	SS	Z	Z
Securities settlement (delivery)	Z	Z	<b>z</b>	RTGS, GS	RTGS, GS	GS	GS	GS
Delivery lag	T+2, T+3 (10)	T+3 <sup>(11)</sup>	T+3	<b>-</b>	T+0 - 40	<b> -</b> -	T+5	++
DVP mechanism <sup>(7)</sup>	DVP 3	DVP 3	DVP 3	DVP 1	DVP 1+2	DVP 1	DVP 2	DVP 2
Intraday finality (8)	2 2	Z	>	>	>	Z	z	z
Central securities depository	NB8	충	Λb	DKV	DKV	SACDE	SCLV	ESPACLEAR
Cash settlement agent (9)	8	S	CB, B	8	80	STMD (BE)	STMD (BE)	STMD (BE)
Number of transactions (thousands)	661	1,750	3,500	n.a.	23,400	7,460	4,190	8.9
Value of transactions (ECU millions)	2,206,117	14,181	2,432,028	n.a. (12)	6,339,159	16,144,877	107,448	11,718
Ratio of value of transactions to GDP (at annual rate)	10.7	0.07	<b>8</b> 8.	, .	3.43	37.74	0.25	0.03

COUNTRY	GB.	H	<u> </u>	ш	<u>–</u>	<b>Z</b> .	N	AT
Name of the system	SCS (13)	SATURNE	RELT	GSO	TOT	Necigef	Clearing- instituut DNB	DS System
Type of securities (2)	Ø	0,0	B, G, O	g	G, S, B, O	G, S, B	0,0	G, C, B, C, O
Owner/manager (3)	8	SICOVAM SA/ CB	SICOVAM SA	83	8	CB, B, SE	83	۵
Number of participants of which direct participants	176 176	369	202	48 48	317	53 53	85 85	113
Settlement of cash leg (4)	Z	Z	2	Z	2	RTGS	Z	z
Securities settlement (delivery)	. Ta	GS	GS	GS	2	RTGS	Z	GS
Delivery lag	<b>—</b>	From T to	From T to T+30	Ξ	T+3 G, B T+5 S, O (15)	T+3	T, T+3	T+0 - 60
DVP mechanism (7)	DVP 3	DVP2	DVP 2	DVP 2/3	DVP 3	DVP 1	DVP 3	DVP 2
Intraday finality (0)	Z	Z	***************************************	e,	2	>	>	>
Central securities depository	scs	CB for G	SICOVAM SA	GSO	BI-CAT G MONTETITOLI	Necige	83	OeKB
Cash settlement agent (9)	8	8	8	8	O 80	CB, B	8	œ
Number of transactions (thousands)	<b>*</b>	68:02	12,000	4	16,237	1,028	Ø	140
Value of fransactions (ECU millions)		6,749,542	6,460,487	171,438	7,105,094	œ d	47,691	131,376
Ratio of value of transactions to GDP (at annual rate)	*	5.746715	5.5006068			<b>™</b>	0.16	

PT SE UK	SISTEM INTERBOLSA HMMC HSE SOM FOEX VP CGO	TB, CBS <sup>(12)</sup> B, S G, C, O, B S, B, O O	CB INTERBOLSA CB, B, O B, O	119 58 21 25 26 15 15 16 25 26 15	RTGS N RTGS, N N N N RTGS N	RTGS/ N GS N, GS N, GS	T+4 T+2, T+3 T+3 T+2 T+2 T+3 T+2	DVP 1 DVP 3	Z	depository CB/ INTERBOLSA HMMC Central Share SOM FOEX Register	8 8 CB B	ansactions 5 7.7 2,912 748 )269	sactions 128,503 40,789 357,267 31,882 32,618 2,236 4,452,134 19,306,459 n.a.	of transactions 1.63 0.52 3.72 0.33 0.34 0.02 25.5 22.9 n.a.
COUNTRY	Name of the system	Type of securities (2)	Owner/manager <sup>(3)</sup>	Number of participants	Settlement of cash leg (4)	Securities settlement (delivery)	Delivery lag	DVP mechanism <sup>(7)</sup>	Intraday finality (0)	Central securities depository	Cash settlement agent (9)	Number of transactions (thousands)	Value of transactions (ECU millions)	Ratio of value of transactions

### Table 10 (continued)

COUNTRY		ž		Footnotes to Table 10: (1) For monetary policy and payment operations only; the Deutsche Bundesbank acts as an intermediate
Name of the system Type of securities (2)	ESO G, O, B	TALISMAN G, S	ᇹ	custodian. (2) B = bonds; C = CDs; G = government securities; S = shares; O = others. (3) B = banks; CB = central banks; SE = stock exchange; O = others.
Owner/manager (3)	පී	S		<ul> <li>(4) GS = gross settlement, N = net; RTGS = real-time gross settlement.</li> <li>(5) T+2 for Treasury bills. T+3 for OLOs (long-term government bonds).</li> </ul>
Number of participants of which direct participants	88	n.a. <i>306</i>	170	
Settlement of cash leg (4)		Z	. :	DVP 1: In model 1, transfer instructions for both securities and funds are settled on a trade-by-trade basis, with final transfer of the securities from the seller to the buyer (delivery) occurring at the same
Securities settlement (delivery)	85	GS		time as final transfer of the funds from the buver to the seller (payment)
Delivery lag	T-T + 365 (14)	T+5		DVP 2: In model 2, securities transfer instructions are settled on a gross basis with final transfer of
DVP mechanism <sup>(7)</sup>	DVP 2	DVP 2		securities from the seller to the buyer (delivery) occurring throughout the processing cycle, but funds transfer instructions are settled on a net
Intraday finality (8)	<b>&gt;</b>	Z		basis, with final transfers of funds from the buyer to the seller (payment) occuring at the end of the processing cycle.
Central securities depository	EUROCLEAR CEDEL	œ	41 41.40	DVP 3: In model 3, transfer instructions for both securities and funds are settled on a net basis, with final transfers of both securities and funds occurring at the end of the processing cycle.
Cash settlement agent (9)	0	B		(8) $Y = yes; N = no.$
Number of transactions	)14.2	9,817	198,561	<ul><li>(9) B = banks; CB = central banks; SE = stock exchange; O = others.</li><li>(10) T+2 for Treasury Bills, T+3 for bonds.</li></ul>
(thousands) Value of transactions	L'a	779,450	ë.	' - '
(ECU millions) Ratio of value of transactions to GDP (at annual rate)	e d	0.93	ë	<ul> <li>(13) The system has been operating since min-1935.</li> <li>(14) ESO accepts instructions for forward settlement.</li> <li>(15) Since February 1996 - Before that date stock exchange transactions in equities were settled with a T+30/45 delivery lag.</li> </ul>

Table 11 Geographical breakdown of S.W.I.F.T. message flows (in 1995)

		Messages sent	Accountant		Messages received	
	Total (thousands)	To domestic users (% of total)	To other EU countries (% of total)	Total (thousands)	From domestic users (% of total)	From other EU countries (% of total)
Belglum	23,796	18.71%	52.57%	21,003	21.20%	53.78%
Denmark	7,181	14.67%	52.81%	6,397	16.47%	55.18%
Germany	43,825	15.37%	40.62%	56,505	11.92%	48.32%
Greece	3,054	22.58%	47.49%	2,982	23.12%	47.04%
Spain	13,927	24.33%	47.59%	13,529	25.05%	49.93%
France	41,025	32.66%	39.42%	37,811	35,45%	37.99%
Ireland	2,486	25.57%	47.44%	2,680	23.72%	54.63%
Italy	27,585	17.98%	48.28%	28,481	17.41%	49.64%
Luxembourg	12,280	17.58%	54.68%	10,784	20,01%	48.87%
Netherlands	16,904	11.07%	53,56%	16,027	11.67%	53.80%
Austria	12,829	22.16%	47.96%	10,440	27.23%	41.76%
Portugal	4,011	12.06%	65.19%	3,680	13.15%	63.78%
Tinland	4,646	13.29%	54.75%	3,281	16,82%	49.79%
Sweden	10,020	14.53%	52.61%	7,971	18.26%	49.99%
United Kingdom	71,035	23.07%	32.90%	66,015	24.82%	33.48%
Total EU	294,604	20.75%	64.39%	287,586	21.26%	65.97%
Total non-EU	308,971	14.85%	31,68%	315,989	14.52%	33.20%
Total all countries	603,575	17.73%	47.65%	603,575	17.73%	48.81%

Table 12
S.W.I.F.T. traffic: intra-EU message flows (in 1995, number of messages, in thousands)

From / To	H	품	띰	GR.	ES	Œ	쁘	<b>=</b>	3	N N	AT	4	正	SE	š	Total EU	P P	All
Belgium	4,452	218	1,935	5	512	2,158	101	1,052	1,053	2,093	217	178	88		2,591	16,961	6,835	23,796
Denmark	272	1,054	896	27	115	250	36	244	<del>1</del>	223	78	53	127	542	724	4,847	2,335	7,182
Germany	1,244	745	6,734	388	1,061	2,254	187	2,645	828	1,705	1,766	8	242	287	3,848	24,535	19,289	43,824
Greece	75	25	382	069	25	144	o	273	11	78	88	0	<b>©</b>	32	308	2,141	914	3,055
Spain	444	104	1,243	\$	45 3,389 1,184	1,184	26	923	<u>10</u>	277	116	392	43	118	1,532	10,017	3,911	13,928
France	1,892	232	3,414	134	134 1,310 13,405	13,405	127	2,677	693	961	281	451	101	245	3,656	29,579	11,446	41,025
Ireland	99	58	177	80	43	83	636	76	22	28	15	15	<b>©</b>	8	554	1,815	671	2,486
Italy	827	229	3,237	177	833	2,216	88	4,959	713	572	802	191	75	200	3,157	18,276	9,308	27,584
Luxembourg	1,612	128	1,527	9	167	838	24	845	2,158	325	119	99	43	142	861	8,874	3,406	12,280
Netherlands	1,711	191	2,673	8	308	825	83	296	254	1,871	196	107	69	180	1,817	10,925	5,980	16,905
Austria	227	93	3,205	ጃ	48	317	23	919	15	238	2,843	43	46	106	635	8,997	3,833	12,830
Portugal	161	99	425	4	595	395	ħ	287	8	103	35	484	8	46	432	3,099	912	4,011
Finland	2	166	295	<b></b>	2	130	5	<del>1</del>	25	120	\$	8	618	481	553	3,162	1,485	4,647
Sweden	254	657	657 1,158	4	146	301	8	276	161	252	113	23	376	1,456	1,435	6,728	3,292	10,020
United Kingdom	2,390		677 6,373	325	325 1,400 3,263	3,263	200	3,182	1,016	1,616	533	433	387	1,075 1	16,387	39,757	31,281	71,038
Total EU	15,748	15,748 4,586 34,036		2,094	10,144	2,094 10,144 27,769 2,101 19,098	2,101	860'6	7,427	10,492	7,203	2,831	2,251	5,442 3	38,491	189,713	104,898	294,611
Total non-EU	5,256	1,814	5,256 1,814 22,468	890	3,385 10,042	10,042	280	9,383	3,356	5,534	3,238	849	1,030	2,531 2	27,526	97,882	211,090	308,972
Total all countries	21,004	6,400	21,004 6,400 56,504 2,984 13,529 37,811 2,681	2,984	13,529	37,811		28,481	10,783	10,783 16,026 10,441		3,680	3,281	7,973 66,017		287,595	315,988	603,583

Table 13
S.W.I.F.T. members, sub-members and participants

				Number of us	Number of users of S.W.I.F.T. network	network			
	Wei	Members		Sub-members		Participants		Total number of users	
	V	30	***************************************	37		Ø		72	
Designant				, to				98	
Common	****			97		4		253	
Graeca		<b>*</b>		20		*		44	
Snain		54		64		yuu		119	
France	<b>¥</b>	<u> 2</u>		92		1		506	
Ireland		2		₹		12		46	
701	7	82		98		1 y	•	219	
iwambaira		50		121		•	_	150	
Netherlands		28		32		O.		62	
Anetria				4		<b>\$</b>		7.5	
Dogwas		Ø		4		, 1		43	
Finland		· 0		4		•		13	
Sunadan		<b>0</b> 0		-			,	20	
United Kingdom				235		69	e T	366	
Total EU	8	818		806	***	100		1,724	
Total non-EU	1,875	75		1,453		72		3,505	
Total All countries	2 603	50		2.259		277		5,229	

 Table 14

 Relative share of EU countries in S.W.I.F.T. traffic, membership and shareholding

	Share	Share of messages	Share of total		Share of equity holding	
	sent	received	members	siesn	quantity	percentage
Belgium	3.94%	3.48%	1.19%	1,38%	3,252	3.71%
Denmark	1.19%	1.06%	1.15%	%69'0	1,396	1.59%
Germany	7.26%	9:36%	5.64%	4.84%	7,755	8.84%
Greece	0.51%	0.49%	0.88%	0.84%	357	0.41%
Spain	2,31%	2.24%	2.01%	2.28%	2,307	2.63%
France	%08'9	6.26%	3.86%	3.94%	7,899	9.00%
Treland	0.41%	0.44%	0.48%	0.88%	338	0.39%
Italy	4.57%	4.72%	6.76%	4.19%	5,310	6.05%
Luxempourg	2.03%	1.79%	1.08%	2.87%	861	0.98%
Netherlands	2.80%	2.66%	1.04%	1.19%	3,658	4.17%
Austria	2.13%	1,73%	2.27%	1.43%	2,255	2.57%
Portugal	0.66%	0,61%	1.08%	0.82%	803	0.92%
Finland	0.77%	0.54%	0.33%	0.25%	870	0.99%
Sweden	1.66%	1.32%	0.30%	0.38%	1,734	1.98%
United Kingdom	11.77%	10.94%	2.30%	2.00%	6,751	7.70%
Total EU	48.81%	47.64%	30.37%	32.98%	45,546	51.93%
Total non-EU	51,19%	52.36%	69.63%	67.02%	42,177	48.07%
Total all countries	100.00%	100.00%	100.00%	100.00%	87,723	100.00%

### Annex 1 Methodology for the statistical data



### Standard methodology for the statistical data of the Blue Book

### Table 1: Basic statistical data

Population and exchange rate:

Figures are averages for the year.

Population and GDP:

Figures are provided by EUROSTAT (this is particularly important for GDP figures, which are calculated in each EU country according to a specific methodology) and *exchange rates* are provided by the Statistics Division of the EMI on the basis of the daily figures in its database received from EUROSTAT.

### Table 2: Settlement media used by non-banks

Notes and coins: In accordance with monetary statistics, notes and coins represent the

value of cash in circulation in the economy. They exclude the value of notes and coins kept in vaults at central banks or at deposit-taking

institutions mentioned in Table 5.

Transferable deposits: These are deposits which can be used to make cashless payments

using one of the instruments mentioned in Tables 14 and 15. They include deposits in foreign currencies unless these are included in M1; in the latter case, a line should be added below the M1 line to mention

them.

M1: Cash in circulation and sight deposits held by non-banks.

This line does not need to be filled in by countries which no longer

calculate this aggregate.

Others: To be filled in only if M1 includes items other than "notes and coins"

and "transferable deposits".

### Table 3: Settlement media used by deposit-taking institutions

Required reserves held at central bank:

Deposits held at the central bank to fulfil minimum reserve requirements.

Of which can be used as working balances

 if minimum reserves are required to be held as an average over a period of time, the whole required reserves are considered as working balances;

 in some countries only part of the required reserves can be used for payment purposes. This part is mentioned here.

Free reserves held at central bank:

Deposits held at the central bank in excess of *required reserves held at central bank*.

Transferable deposits other institutions:

Deposits held at other institutions (not the domestic *at* central bank) which can be used to make payments.

### Table 4: Banknotes and coins

(end-of-year figures)

Total banknotes issued: Value of banknotes which are part of the liabilities of the central bank.

Notes and coins

held by credit institutions:

Notes and coins in vaults of credit institutions and thus not in circulation (usually available from the bank account figures transmitted to banking supervisors).

Notes and coins in circulation outside credit institutions:

= difference: total banknotes and coins issued less notes and coins held by credit institutions (should be identical to "notes and coins" in Table 2).

### Table 5: Institutional framework

(end-of-year figures)

Columns 1 and 2: Indicate the number of points of entry into the cashless payment

system.

Column 1:

Number of institutions

Any institution which executes cashless payments should be mentioned: even if it does not hold deposits for customers (e.g. because the money transferred is brought-in cash, or debited from a sight account held at

another institution).

Column 2:

Number of branches:

All branches of an institution; as a rule, the head office of the institution is counted as a branch if it offers payment services.

Columns 3 and 4:

Indicates the number of accounts on which cashless payments (see definition in Tables 14 and 15) can be made.

Column 3:

Number of accounts:

The accounts which are mentioned here are those which:

- are held by deposit-taking institutions for non-deposit-taking institutions;
- ◆ can be debited directly using one of the instruments mentioned in Tables 14 and 15.

Column 4:

Value of accounts:

Aggregate amount of deposits held on accounts mentioned in Column 3. As a rule, the total of the first five lines of the last column is identical to "transferable deposits" in Table 2.

Branches of foreign banks:

Branches or agencies of foreign banks. Banks which are foreign- owned, or subsidiaries of foreign banks are not included here.

Of which based in EU countries:

Sub-item to branches of foreign banks, giving the number of branches located in Europe to take into account their specific situation within the single market.

### Table 6: Cash dispensers, ATMs and EFTPOS terminals

(end-of-year figures)

As a rule, all items include systems operated by banks and by non-banks.

Cash dispensers: Electro-mechanical device allowing the authorised user to withdraw

banknotes and, in some cases, coins.

ATMs: Electro-mechanical device allowing the authorised user to withdraw

cash from his account and/or to access a varying range of other services such as balance enquiry, transfer of funds and acceptance of deposits. The ATM may be operated online (with real-time reference to

an authorisation database) or offline.

Number of networks: A network of ATMs is defined as a group of ATMs managed by one or

several service providers for a bank or group of banks. The customer of this bank/group of banks can use any ATM within this network without

being charged additional fees.

Number of machines: As a rule, each terminal is counted as one machine.

EFTPOS: A terminal at a retail location which is designed to capture, and in some

cases also transmit, payment information by electronic means.

Number of points of sale: As a rule, each location (e.g. shop) in which one or several terminals

are installed is counted as one point of sale.

Number of machines: As a rule, each EFTPOS terminal is counted as one machine.

### Table 7: Number of payment cards in circulation

(end-of-year figures in thousands)

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

Travel and entertainment cards are mentioned in the relevant category.

Delayed debit cards are mentioned in the debit category.

Cards with a cash function: All cards enabling the holder to withdraw cash from a cash dispenser.

Cards with a debit/ credit function: Of which

Debit cards: Card enabling the holder to have his purchases directly charged to

funds on his account at a deposit-taking institution (may sometimes be combined with another function, e.g. that of a cash card or cheque

guarantee card).

Delayed debit cards: Card issued by banks indicating that the holder may charge his account

up to an authorised limit. It enables him to make purchases but does not offer extended credit, the full amount of the debt incurred having to be settled at the end of a specified period. The holder is usually

charged an annual fee.

Credit cards: Card indicating that the holder has been granted a line of credit. It

enables him to make purchases and/or draw cash up to a pre-arranged ceiling; the credit granted can be settled in full by the end of a specific period, or can be settled in part, with the balance taken as extended credit. Interest is charged on the amount of any extended credit and the

holder is sometimes charged an annual fee.

Cards with a cheque guarantee function:

Transactions with this card are, in connection with the use of a PIN,

guaranteed by the issuing bank up to a specific amount.

Retailer cards: A card issued by non-banking institutions, to be used at specified retail

outlets. The holder of the card is usually granted a line of credit.

Multi-purpose prepaid cards:

A card "loaded" with a given value, paid for in advance, which can be used at the outlets of several service providers for a wide range of purposes, which has the potential to be used on a national or international scale but may sometimes be restricted to a certain area.

As a rule, only the number of valid cards in circulation is provided, not the number of cards issued, since this figure would not be very

informative if empty or invalid cards were included

### Tables 8 and 9: Payment instructions handled by selected IFTS

IFTS: Interbank Funds Transfer Systems in which most (or all) direct

participants are credit institutions and which are used primarily to

process cashless payments.

As a rule all IFTS are mentioned here, not only those managed by the

central bank, but also those managed by private operators.

Funds Transfer Systems

(FTS):

A formal arrangement, based on private contract or statute law, with multiple membership, common rules and standardised arrangements,

for the transmission and settlement of money obligations arising

between the members

### Table 10: Participants in securities settlement systems

(end-of-year figures)

Securities settlement systems (SSS) are transfer systems which settle transfer instructions for both securities and funds.

As a rule, all SSS are mentioned here, not only those managed by the central bank, but also those managed by private operators.

Figures are provided system by system with categories of various participants (such as banks, stockbrokers, etc.) as sub-items.

Column 2: In some systems certain participants are allowed to maintain both their

own securities accounts and customers' securities accounts, while other participants are not allowed to maintain customers' accounts. In this column, the number of participants allowed to maintain customers'

accounts is specified.

Column 3: In most systems, all participants hold securities settlement accounts but

only some of them hold cash settlement accounts with the central bank to settle their cash positions, while others settle funds indirectly through another participant. In this column, the number of participants allowed

to hold cash settlement accounts is indicated.

### Tables 11 and 12: Transfer instructions handled by securities settlement systems

(volume and value of transactions)

Figures are provided system by system, with categories of various securities (such as government securities, bonds, shares, CDs, futures, options, etc.) as sub-items. Should some of the sub-items not be available, the row is marked "n.a."; if the sub-system does not exist in the country, it is marked "-".

Transfer instructions comprise all transfer instructions entered in the system (including free deliveries). As regards options, all the contracts settled in the system are included.

As far as CDs are concerned, all CDs settled in the system are considered regardless of their issuers (banks, central bank, mortgage institutions).

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

### Table 13: Nominal values registered by securities settlement systems

Figures are provided system by system, with categories of various securities. They refer to the nominal value at the end of the year.

### Tables 14 and 15: Indicators of use of various cashless payment instruments

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

"Payment" is defined in the Blue Book as the "satisfaction and discharge of an obligation by the debtor's irrevocable provision of an unconditional claim on a third party acceptable to the creditor". This definition excludes any funds transfer in which the originator and the beneficiary are the same institution or individual. Therefore, any instrument which is used by banks' customers to obtain cash should not be counted (e.g. cheques used to obtain cash, or ATM withdrawals - although these operations might be included in Tables 8 and 9, whose focus is different). If possible, transfers to and from accounts held under the same name - either with the same institution (e.g. from a cheque account to a savings account), or between two institutions - are excluded.

Strictly speaking, "cashless" means without the involvement of cash. Such a narrow definition would exclude those money (postal) orders, which involve cash at one or both ends of the transaction, as well as the majority of travellers' cheques, which are often paid in cash. It is not realistic to use such a narrow

definition because it is very doubtful whether available statistics would permit a breakdown of the number of money orders or travellers' cheques according to the way they are paid for or settled. Therefore, all payment instruments which involve cashless interbank settlement are included in the statistics.

The distinction between paper-based and paperless credit transfers is based on the interbank exchange: credit transfer orders which are exchanged on a paperless basis between banks are deemed to be paperless even if the originator and/or the beneficiary submitted or received a piece of paper.

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

Although payments made using retailer cards or prepaid cards should theoretically be included with cashless payments, data concerning these instruments are rarely available. EU central banks with information on these fields may include such payments under card payments, but should clearly identify them as sub-items of card payments.

According to the above principles, the following guidelines are followed:

- no distinction is made between payments in foreign and domestic currencies;
- no distinction is made between interbank items (bank A to bank B), inter-branch items (bank A branch to another bank A branch), or intra-branch items (bank A customer to another bank A customer at the same branch): all are included in the statistics;
- transfers to and from the account-holding institution and its customers (e.g. interest or fee payments) are excluded but, where available, are mentioned in a footnote;
- commercial bills are included if funds transfers can be made on the basis of these, without using another medium;
- funds transfers used to settle payment card balances are included (payment between the issuer and the user);
- travellers' cheques, eurocheques and bankers' drafts are included under cheques;
- money orders are included under credit transfers (if the volume is significant they could constitute a sub-item).

### Tables 16 and 17; S.W.I.F.T. tables

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

## Annex 2 Glossary



Advisory netting: see position netting.

Assured payment system (APS): an arrangement in an exchange-for-value system under which completion of timely settlement of a payment instruction is supported by an irrevocable and unconditional commitment from a third party (typically a bank, syndicate of banks or clearing house). See exchange-for-value settlement system.

**Automated clearing house (ACH):** an electronic clearing system in which payment orders are exchanged among financial institutions, primarily via magnetic media or telecommunication networks, and handled by a data-processing centre. See also clearing.

**Automated teller machine (ATM):** an electro-mechanical device that permits authorised users, typically using machine-readable plastic cards, to withdraw cash from their accounts and/or access other services, such as balance enquiries, transfer of funds or acceptance of deposits. ATMs may be operated either online with real-time access to an authorisation database or offline.

**Back-to-back transaction:** a chain of securities transactions among three or more counterparties involving the purchase and sale of a single security, for settlement on a single date. The most simple back-to-back trade is a pair of transactions in which one party agrees to purchase securities from a second party and then agrees to sell them to a third party.

**Bank draft:** a draft drawn by a bank on itself. The draft is purchased by the payer and sent to the payee, who presents it to his bank for payment. That bank presents it to the payer's bank for reimbursement.

**Batch:** the transmission or processing of a group of payment orders and/or securities transfer instructions as a set at discrete intervals of time.

**Beneficial ownership/interest:** the entitlement to receive some or all of the benefits of ownership of a security or other financial instrument (e.g. income, voting rights, power to transfer). Beneficial ownership is usually distinguished from "legal ownership" of a security or financial instrument. See legal ownership.

Bilateral net settlement system: a settlement system in which participants' bilateral net settlement positions are settled between every bilateral combination of participants. See also net credit or debit position.

**Bilateral netting:** an arrangement between two parties to net their bilateral obligations. The obligations covered by the arrangement may arise from financial contracts, transfers or both. See netting, multilateral netting, net settlement.

**Bill of exchange:** a written order from one party (the drawer) to another (the drawee) to pay a specified sum on demand or on a specified date to the drawer or to a third party specified by the drawer. Widely used to finance trade and, when discounted with a financial institution, to obtain credit. See also draft.

**Book-entry system:** an accounting system that permits the transfer of claims (e.g. securities) without the physical movement of paper documents or certificates. See also dematerialisation, immobilisation.

Bulk funds transfer system: see retail funds transfer system.

**Call money:** a loan contract which is automatically renewed every day unless the lender or the borrower indicates that it wishes the funds to be returned within a short period of time.

Capital risk: see principal risk.

Caps: a risk management arrangement whereby limits are placed on the positions that participants in an interbank funds transfer system can incur during the business day; they may be set by each individual participant or by the body governing the transfer system; they can be set in multilateral net, bilateral net or (less commonly) gross terms and can be either a credit cap or a debit cap; for example, bilateral net credit caps, set by an individual participant, will constitute a limit on the credit exposure that that participant will accept vis-à-vis each other participant; in contrast, sender net debit caps, which may for example be set by the governing body of the clearing system based on a particular formula, limit the aggregate value of transfers that an individual participant may send to all other participants over and above its incoming transfers. Sender net debit limits may be either collateralised or uncollateralised.

Card: see cash card, cheque guarantee card, chip card, credit card, debit card, delayed debit card, prepaid card, retailer card, travel and entertainment card.

**Cash card:** a card for use only in ATMs or cash dispensers (often, other cards also have a cash function that permits the holder to withdraw cash).

Cash dispenser: an electro-mechanical device that permits the withdrawal, typically using machinereadable plastic cards, of banknotes (currency) and, in some cases, coins. See also automated teller machine (ATM).

Cashier's cheque: see bank draft.

Central bank liquidity facility: a standing credit facility that can be used by certain designated account holders (e.g. banks) at the central bank. In some cases, the facility can be used automatically at the initiative of the account holder, while in other cases the central bank may retain some degree of discretion. The loans typically take the form of advances or overdrafts on an account holder's current account which may be secured by a pledge of securities (also known as lombard loans in some European countries), of traditional rediscounting of bills or of repurchase agreements.

Central securities depository: a facility for holding securities which enables securities transactions to be processed by book entry. Physical securities may be immobilised by the depository or securities may be dematerialised (i.e. so that they exist only as electronic records). In addition to safekeeping, a central securities depository may incorporate comparison, clearing and settlement functions.

Chaining: a method used in certain transfer systems (mostly for securities) for processing instructions. It involves the manipulation of the sequence in which transfer instructions are processed to increase the number or value of transfers that may be settled with available funds and/or securities balances (or available credit or securities lending lines).

Cheque: a written order from one party (the drawer) to another (the drawee, normally a bank) requiring the drawee to pay a specified sum on demand to the drawer or to a third party specified by the drawer. Cheques are widely used for settling debts and withdrawing money from banks. See also bill of exchange.

Cheque guarantee card: a card issued as part of a cheque guarantee system. This function may be combined with other functions in the same card, e.g. those of a cash card or debit card. See also cheque guarantee system.

Cheque guarantee system: a system to guarantee cheques, typically up to a specified amount, that have been validated by the merchant either on the basis of a card issued to the cheque writer or through a central database accessible to merchants. Validated cheques are guaranteed by the issuer of the guarantee card, the drawee bank or the system operator.

Chip card: also known as an IC (integrated circuit) card or smart card. A card containing one or more computer chips or integrated circuits for identification, data storage or special-purpose processing used to validate personal identification numbers (PINs), authorise purchases, verify account balances and store personal records. In some cases, the memory in the card is updated every time the card is used, e.g. an account balance is updated.

Clearing/Clearance: the process of transmitting, reconciling and, in some cases, confirming payment orders or security transfer instructions prior to settlement, possibly including netting of instructions and the establishment of final positions for settlement. In the context of securities markets this process is often referred to as clearance. Sometimes the terms are used (imprecisely) to include settlement.

Clearing house: a central location or central processing mechanism through which financial institutions agree to exchange payment instructions or other financial obligations (e.g. securities). The institutions settle for items exchanged at a designated time based on the rules and procedures of the clearing house. In some cases, the clearing house may assume significant counterparty, financial or risk management responsibilities for the clearing system. See clearing/clearance, clearing system.

Clearing system: a set of procedures whereby financial institutions present and exchange data and/or documents relating to funds or securities transfers to other financial institutions. The procedures often also include a mechanism for the calculation of participants' bilateral and/or multilateral net positions with a view to facilitating the settlement of their obligations on a net or net net basis. See also netting.

Close-out netting: a special form of netting which occurs following some predefined event such as default. Close-out netting is intended to reduce exposures on open contracts if one party meets certain conditions specified by the contract (e.g. becomes subject to insolvency procedures) before the settlement date (also referred to as default netting, open contract netting or replacement contract netting).

**Confirmation:** a particular connotation of this widely used term is the process whereby a market participant notifies its counterparties or customers of the details of a trade and, typically, allows them time to affirm or question the trade.

Correspondent banking: an arrangement under which one bank provides payment and other services to another bank. Payments through correspondents are often executed through reciprocal accounts (so-called nostro and loro accounts), to which standing credit lines may be attached. Correspondent banking services are primarily provided across international boundaries but are also known as agency relationships in some domestic contexts. A loro account is the term used by a correspondent to describe an account held on behalf of a foreign bank; the foreign bank would in turn regard this account as its nostro account.

Counterparty: the opposite party to a financial transaction, such as a securities trade or swap agreement.

Credit caps: see caps.

Credit card: a card indicating that the holder has been granted a line of credit. It enables the holder to make purchases and/or withdraw cash up to a prearranged ceiling; the credit granted can be settled in full by the end of a specified period or can be settled in part, with the balance taken as extended credit. Interest is charged on the amount of any extended credit and the holder is sometimes charged an annual fee.

**Credit card company:** a company which owns the trademark of a particular credit card, and may also provide a number of marketing, processing or other services to its members using the card services.

**Credit risk/exposure:** the risk that a counterparty will not settle an obligation for full value, either when due or at any time thereafter. In exchange-for-value settlement systems, the risk is generally defined to include replacement cost risk and principal risk.

**Credit transfer:** a payment order or possibly a sequence of payment orders made for the purpose of placing funds at the disposal of the beneficiary. Both the payment instructions and the funds described therein move from the bank of the payer/originator to the bank of the beneficiary, possibly via several other banks as intermediaries and/or more than one credit transfer system.

Credit transfer system (or giro system): a funds transfer system through which credit transfer (or giro) orders and the related information and funds may be transmitted for the purpose of executing credit transfers (or bank/postal giros).

CSD: see central securities depository.

Custody: the safekeeping and administration of securities and financial instruments on behalf of others.

Daylight credit (or daylight overdraft, daylight exposure, intraday credit): credit extended for a period of less than one business day. Daylight credit may be extended by central banks to even out mismatches in payments settlements. In a credit transfer system with end-of-day final settlement, daylight credit is tacitly extended by a receiving institution if it accepts and acts on a payment order even though it will not receive final funds until the end of the business day.

Debit caps: see caps.

**Debit card:** a card enabling the holder to have purchases directly charged to funds on an account at a deposit-taking institution (this may sometimes be combined with another function, e.g. that of a cash card or cheque guarantee card).

**Debit transfer system (or debit collection system):** a funds transfer system in which debit collection orders made or authorised by the payer move from the bank of the payee to the bank of the payer and result in a charge (debit) to the account of the payer; for example, cheque-based systems are typical debit transfer systems.

**Debt book-entry system:** a computerised system for the issue and registration of debt securities in book-entry form. See also book-entry system, share book-entry system.

**Default:** the failure to complete a funds or securities transfer according to its terms for reasons that are not technical or temporary, usually as a result of bankruptcy. Default is usually distinguished from a "failed transaction".

**Delayed debit card:** a card issued by banks indicating that the holder may charge an account up to an authorised limit. It enables purchases to be made but does not offer extended credit, the full amount of the debt incurred having to be settled at the end of a specified period. The holder is usually charged an annual fee.

**Deletion:** a mechanism whereby some or all transfers to/from a defaulting participant are excluded from the settlement process. In a netting scheme, other participants' bilateral and/or multilateral net positions are recalculated. See unwinding.

**Delivery:** the final transfer of a security or financial instrument.

Delivery versus payment system (or DVP, delivery against payment): a mechanism in an exchange-for-value settlement system that ensures that the final transfer of one asset occurs if and only if the final transfer of (an)other asset(s) occurs. Assets could include monetary assets (such as foreign exchange), securities or other financial instruments. See exchange-for-value settlement system, final transfer.

**DVP schemes as defined by the G-10 group:** In model 1, transfer instructions for both securities and funds are settled on a trade-by-trade basis, with final transfer of the securities from the seller to the buyer (delivery) occurring at the same time as final transfer of the funds from the buyer to the seller (payment). In model 2, securities transfer instructions are settled on a gross basis with final transfer of securities from the seller to the buyer (delivery) occurring throughout the processing cycle, but funds transfer instructions are settled on a net basis, with final transfer of funds from the buyer to the seller (payment) occurring at the end of the processing cycle. In model 3, transfer instructions for both securities and funds are settled on a net basis, with final transfers of both securities and funds occurring at the end of the processing cycle.

**Dematerialisation:** the elimination of physical certificates or documents of title which represent ownership of securities so that securities exist only as accounting records.

**Depository:** an agent with the primary role of recording securities either physically or electronically and keeping records of the ownership of these securities.

Direct debit: a pre-authorised debit on the payer's bank account initiated by the payee.

**Direct participant in an IFTS:** a participant in an Interbank Funds Transfer System (IFTS) who is responsible to the settlement agent (or to all other direct participants) for the settlement of its own payments, those of its customers, and those of the indirect participants on whose behalf it is settling.

Discharge: the release from a legal obligation imposed by contract or law.

**Draft:** a written order from one party (the drawer) to another (the drawee) to pay a party identified on the order (payee) or the bearer a specified sum, either on demand (sight draft) or on a specified date (time draft). See bank draft, bill of exchange, cheque.

**EFTPOS:** see point of sale (POS).

**Electronic data interchange (EDI):** the electronic exchange between commercial entities (in some cases also public administrations), in a standard format, of data relating to a number of message categories, such as orders, invoices, customs documents, remittance advices and payments. EDI messages are sent through public data transmission networks or banking system channels. Any movement of funds initiated by EDI is reflected in payment instructions flowing through the banking system. EDIFACT, a United Nations body, has established standards for electronic data interchange.

**Electronic purse:** a reloadable multi-purpose prepaid card which may be used for small retail or other payments instead of coins. See multi-purpose prepaid card.

**End-of-day gross settlement systems:** funds transfer systems in which payment orders are received one by one by the settlement agent during the business day, but in which the final settlement takes place at the end of the day on a one-by-one or aggregate gross basis. This definition also applies to gross settlement systems in which payments are settled in real time but remain revocable until the end of the day.

**Exchange-for-value settlement system:** system which involves the exchange of assets, such as money, foreign exchange, securities or other financial instruments, in order to discharge settlement obligations. These systems may use one or more funds transfer systems in order to satisfy the payment obligations that are generated. The links between the exchange of assets and the payment system(s) may be manual or electronic. See delivery versus payment system.

Face-to-face payment: a payment carried out by the exchange of instruments between the payer and the payee in the same physical location.

**Failed transaction:** a transaction (e.g. a funds or securities transfer) that does not settle on time, usually for technical or temporary reasons.

Final (finality): irrevocable and unconditional.

Final settlement: a settlement which is irrevocable and unconditional.

**Final transfer:** an irrevocable and unconditional transfer which effects a discharge of the obligation to make the transfer. The terms "delivery" and "payment" are each defined to include a final transfer.

Foreign exchange settlement risk: the risk that one party to a foreign exchange transaction will pay the currency it sold but not receive the currency it bought. This is also called cross-currency settlement risk or principal risk; it is also referred to as Herstatt risk, although this is an inappropriate term given the differing circumstances in which this risk has materialised.

Funds Transfer System (FTS): a formal arrangement, based on private contract or statute law, with multiple membership, common rules and standardised arrangements, for the transmission and settlement of money obligations arising between the members. See Interbank Funds Transfer System.

**Fungibility:** a concept that characterises the method of holding securities by a CSD or other financial intermediary in which each of a number of issues of physical or dematerialised securities are held in separate fungible pools. No owner has the right to any particular physical or dematerialised security in a particular pool, but has a right to such an amount of physical or dematerialised securities as shown in its account with a CSD or other financial intermediary.

Giro system: see credit transfer system.

**Gridlock:** a situation that can arise in a funds or securities transfer system in which the failure of some transfer instructions to be executed (because the necessary funds or securities balances are unavailable) prevents a substantial number of other instructions from other participants from being executed. See also failed transaction, queuing, systemic risk.

**Gross settlement system:** a transfer system in which the settlement of funds or securities transfers occurs individually on an order-by-order basis according to the rules and procedures of the system, i.e. without netting debits against credits. See net settlement system, real-time gross settlement.

**Haircut:** the difference between the market value of a security and its collateral value. Haircuts are taken by a lender of funds in order to protect the lender, should the need arise to liquidate the collateral, from losses owing to declines in the market value of the security. See margin.

**Home banking:** banking services which a retail customer of a financial institution can access using a telephone, television set, terminal or personal computer as a telecommunication link to the institution's computer centre.

IC card: see chip card.

**Immobilisation:** the placement of certificated securities and financial instruments in a central securities depository to facilitate book-entry transfers.

**Imprinter:** a mechanical device used to reproduce the name and account number of a cardholder on a paper sales slip. See also imprinter voucher.

**Imprinter voucher:** in card transactions, a sales slip to be signed by the customer on which the name and card number of the customer are imprinted. See also imprinter.

**Indirect participant in an IFTS:** a participant in an IFTS which does not, for whatever reason, settle its own payments on a gross or net payment basis and, therefore, settles them through a direct participant. See direct participant in an IFTS.

**Interbank Funds Transfer System (IFTS):** a funds transfer system in which most (or all) direct participants are credit institutions. See Funds Transfer System (FTS).

**Interlinking:** within the TARGET system, Interlinking provides common procedures and the infrastructure which allow payment orders to move from one domestic RTGS system to another domestic RTGS system. See TARGET system.

**International central securities depository (ICSD):** a central securities depository which clears and settles international securities or cross-border transactions in domestic securities. At the moment, there are two ICSD located in EU countries. Cedel and Euroclear.

Intraday credit: see daylight credit.

**Irrevocable and unconditional transfer:** a transfer which cannot be revoked by the transferor and is unconditional.

**Issuer:** the entity which is obligated on a security or other financial instrument. For example, a corporation or government having the authority to issue and sell a security; or a bank that approves a letter of credit. Issuer is sometimes used to refer to a financial institution that issues credit or debit cards.

Large-value funds transfer system: a funds transfer system through which large-value and highpriority funds transfers are made between participants in the system for their own account or on behalf of their customers. Although, as a rule, no minimum value is set for the payments they carry, the average size of payments passed through such systems is usually relatively large. Large-value funds transfer systems are sometimes known as wholesale funds transfer systems.

Large-value payments: payments, generally of very large amounts, which are mainly exchanged between banks or between participants in the financial markets and usually require urgent and timely settlement.

Legal ownership: the recognition in law as the owner of a security or other financial instrument.

**Letter of credit (L/C):** a promise by a bank or other issuer to a third party to make a payment on behalf of a customer in accordance with specified conditions. Letters of credit are frequently used in international trade to make funds available in a foreign location.

**Limited-purpose prepaid card:** a prepaid card which can be used for a limited number of well-defined purposes. Its use is often restricted to a number of well-identified points of sale within a well-identified location (e.g. a building, corporation or university). In the case of single-purpose prepaid cards, the card issuer and the service provider may be identical (e.g. cards used in public telephones). See prepaid card.

**Liquidity risk:** the risk that a counterparty (or participant in a settlement system) will not settle an obligation for full value when due. Liquidity risk does not imply that a counterparty or participant is insolvent since it may be able to settle the required debit obligations at some unspecified time thereafter.

Loss-sharing rule (or loss-sharing agreement): an agreement between participants in a transfer system or clearing house arrangement regarding the allocation of any loss arising when one or more participants fail to fulfil their obligation: the arrangement stipulates how the loss will be shared among the parties concerned in the event that the agreement is activated.

Magnetic ink character recognition (MICR): a technique, using special MICR machine-readable characters, by which documents (i.e. cheques, credit transfers, direct debits) are read by machines for electronic processing. See optical character recognition (OCR).

Margin: the term margin has at least two meanings. In the futures/commodity markets, a margin is a good faith deposit (of money, securities or other financial instruments) required by the futures clearing system to ensure performance. In the equities markets, a margin is a sum of money deposited by a customer when borrowing money from a broker to purchase shares. The money deposited with the broker is the difference between the purchase value of the shares and the collateral value of the shares. See haircut.

Marking to market: the practice of revaluing securities and financial instruments using current market prices. In some cases unsettled contracts to purchase and sell securities are marked to market and the counterparty with an as yet unrealised loss on the contract is required to transfer funds or securities equal to the value of the loss to the other counterparty.

**Matching (or comparison checking):** the process used by market participants before settlement of a transaction to ensure that they agree with respect to the terms of the transaction.

**Minimum standards of the Lamfalussy report (Lamfalussy standards):** the six minimum standards for the design and operation of cross-border and multi-currency netting schemes or systems.

- Netting systems should have a well-founded legal basis under all relevant jurisdictions.
- II Netting scheme participants should have a clear understanding of the impact of the particular scheme on each of the financial risks affected by the netting process.

- III Multilateral netting systems should have clearly defined procedures for the management of credit risks and liquidity risks which specify the respective responsibilities of the netting provider and the participants. These procedures should also ensure that all parties have both the incentives and the capabilities to manage and contain each of the risks they bear and that limits are placed on the maximum level of credit exposure that can be produced by each participant.
- IV Multilateral netting systems should, at a minimum, be capable of ensuring the timely completion of daily settlements in the event of an inability to settle by the participant with the largest single net debit position.
- V Multilateral netting systems should have objective and publicly disclosed criteria for admission which permit fair and open access.
- VI All netting schemes should ensure the operational reliability of technical systems and the availability of backup facilities capable of completing daily processing requirements.

**Money order:** an instrument used to remit money to the named payee, often used by persons who do not have a cheque account relationship with a financial institution, to pay bills or transfer money to another person or to a company. There are three parties to a money order: the remitter (payer), the payee and the drawee. Drawees are usually financial institutions or post offices. Payees can either cash their money orders or present them to their bank for collection.

**Multilateral net settlement position:** the sum of the value of all the transfers a participant in a net settlement system has received during a certain period of time less the value of the transfers made by the participant to all other participants. If the sum is positive, the participant is in a multilateral net credit position; if the sum is negative, the participant is in a multilateral net debit position.

**Multilateral net settlement system:** a settlement system in which each settling participant settles (typically by means of a single payment or receipt) the multilateral net settlement position which results from the transfers made and received by it, for its own account and on behalf of its customers or non-settling participants for which it is acting. See direct participant in an IFTS, multilateral net settlement position, multilateral netting.

**Multilateral netting:** an arrangement among three or more parties to net their obligations. The obligations covered by the arrangement may arise from financial contracts, transfers or both. The multilateral netting of payment obligations normally takes place in the context of a multilateral net settlement system. See bilateral netting, multilateral net settlement position, multilateral net settlement system.

**Multi-purpose prepaid card:** a prepaid card which can be used at the outlets of several service providers for a wide range of purposes, which has the potential to be used on a national or international scale but may sometimes be restricted to a certain area. See electronic purse, prepaid card.

Net credit or net debit position: a participant's net credit or net debit position in a netting system is the sum of the value of all the transfers it has received up to a particular point in time less the value of all the transfers it has sent. If the difference is positive, the participant is in a net credit position; if the difference is negative, the participant is in a net debit position. The net credit or net debit position at settlement time is called the net settlement position. These net positions may be calculated on a bilateral or multilateral basis.

Net debit cap: see caps, net credit or net debit position.

**Net settlement:** the settlement of a number of obligations or transfers between or among counterparties on a net basis. See netting.

**Net settlement system:** a funds transfer system whose settlement operations are completed on a bilateral or multilateral net basis.

**Netting:** an agreed offsetting of positions or obligations by trading partners or participants. The netting reduces a large number of individual positions or obligations to a smaller number of obligations or positions. Netting may take several forms which have varying degrees of legal enforceability in the event of default of one of the parties. See also bilateral netting, multilateral netting, novation, position netting, substitution.

**Netting by novation:** netting by novation agreements provide for individual forward-value contractual commitments (e.g. foreign exchange contracts) to be discharged at the time of their confirmation and replaced by new obligations forming part of a single agreement. Amounts due under a discharged contract will be added to running balances due between the parties in each currency at each future value date.

Nominee: a person or entity named by another to act on his behalf.

**Novation:** the satisfaction and discharge of existing contractual obligations by means of their replacement by new obligations (whose effect, for example, is to replace gross with net payment obligations). The parties to the new obligations may be the same as those to the existing obligations or, in the context of some clearing house arrangements, there may additionally be substitution of parties. See substitution.

**Obligation:** a duty imposed by contract or law. Obligation is also used to describe a security or other financial instrument, such as a bond or promissory note, which contains the issuer's undertaking to pay the owner.

**Offline:** in the context of payment and settlement systems, this term may refer to the transmission of transfer instructions by users, through such means as voice, written or telefaxed instructions, that must subsequently be input into a transfer processing system. The term may also refer to the storage of data by a transfer processing system on media such as magnetic tape or disk such that the user may not have direct and immediate access to the data. See online.

Online: in the context of payment and settlement systems, this term may refer to the transmission of transfer instructions by users, through such electronic means as computer-to-computer interfaces or electronic terminals, that are entered into a transfer processing system by automated means. The term may also refer to the storage of data by a transfer processing system on a computer database such that the user has direct access to the data (frequently in real time) through input/output devices such as terminals. See offline.

Open offer netting: "netting by open offer" describes a contractual means by which a third party, such as a clearing house, becomes party to a transaction agreed by two separate entities. The third party extends an "open offer" to those entities, with the effect that if they agree the terms of a transaction which satisfies certain pre-agreed conditions, the third party automatically and immediately becomes interposed in that transaction. Two separate, equal and opposite contractual obligations are created, between the clearing house and one party, and between the clearing house and the other entity. If all pre-agreed conditions are met, at no stage does a direct contractual obligation exist between the two entities.

Operational safe custody accounts: securities accounts run by the central bank in which credit institutions can place securities deemed suitable for the backing of central bank operations. The securities held on these accounts are finally deposited with the CSD under the name of the NCB, so that the transfer into a safe custody account results in a transfer between the bank's and the NCB's account with the CSD. The securities deposited with the NCB are generally pledged to the NCB as collateral for (interest-bearing) overnight and (interest-free) intraday lombard loans. They can also be used for open market transactions (repos) based on a general authorisation given to the NCB to acquire securities.

**Optical character recognition (OCR):** a technique, using special OCR machine-readable characters, by which documents (e.g. cheques, credit transfers, direct debits) are read by machines for electronic processing. See magnetic ink character recognition (MICR).

Overnight money (or day-to-day money): a loan with a maturity of one business day.

Oversight of payment systems: a central bank task, principally intended to promote the smooth functioning of payment systems and to protect the financial system from possible "domino effects" which may occur when one or more participants in the payment system incur credit or liquidity problems. Payment systems oversight aims at a given system (e.g. a funds transfer system) rather than individual participants.

**Paperless credit transfers:** credit transfers that do not involve the exchange of paper documents between banks. Other credit transfers are referred to as being paper-based.

**Participant in/Member of an FTS:** a party which participates in a transfer system. This generic term refers to an institution which is identified by a transfer system (e.g. by a bank identification number) and is allowed to send payment orders directly to the system or which is directly bound by the rules governing that transfer system. See direct participant in an IFTS, indirect participant in an IFTS.

**Payment:** the payer's transfer of a monetary claim on a party acceptable to the payee. Typically, claims take the form of banknotes or deposit balances held at a financial institution or at a central bank.

Payment lag: the time-lag between the initiation of a payment order and its final settlement.

**Payment order (or payment instruction):** an order or message requesting the transfer of funds (in the form of a monetary claim on a party) to the order of the payee. The order may relate either to a credit transfer or to a debit transfer.

**Payment system:** a payment system consists of a set of instruments, banking procedures and, typically, interbank funds transfer systems that facilitate the circulation of money.

Payment versus payment (PVP): a mechanism in a foreign exchange settlement system which ensures that a final transfer of one currency occurs if and only if a final transfer of the other currency or currencies takes place.

**PIN** (personal identification number): a numeric code which the cardholder may need to quote for verification of identity. In electronic transactions, it is seen as the equivalent of a signature.

**Point of sale (POS):** this term refers to the use of payment cards at a retail location (point of sale). The payment information is captured either by paper vouchers or by electronic terminals, which, in some cases, are also designed to transmit the information. Where this is so, the arrangement may be referred to as "electronic funds transfer at the point of sale" (EFTPOS).

**Position netting (or advisory netting):** the netting of instructions in respect of obligations between two or more parties which neither satisfies nor discharges those original individual obligations. This is also referred to as payment netting in the case of payment instructions.

**Prepaid card:** a card which contains real purchasing power, for which the customer has paid in advance to the issuer of the card. See limited-purpose prepaid card and multi-purpose prepaid card.

**Principal risk:** the credit risk that a party will lose the full value involved in a transaction. In the settlement process, this term is typically associated with exchange-for-value transactions when there is a lag between the final settlement of the various legs of a transaction (i.e. the absence of delivery versus payment). Principal risk that arises from the settlement of foreign exchange transactions is sometimes called cross-currency settlement risk. See credit risk.

**Provisional transfer:** a conditional transfer in which one or more parties retain the right by law or agreement to revoke the transfer.

**Queuing:** a risk management arrangement whereby transfer orders are held pending by the originator/deliverer or by the system until sufficient cover is available on the originator's/deliverer's clearing account or under the limits set against the payer; in some cases, cover may include unused credit lines or available collateral. See also caps.

Real-time gross settlement (RTGS) system: a gross settlement system in which processing and settlement take place in real time (continuously).

**Real-time transmission, processing or settlement:** the transmission, processing or settlement of a funds or securities transfer instruction on an individual basis immediately after the time it is initiated.

**Receiver finality:** an analytical rather than operational or legal term used to describe the point at which an unconditional obligation arises on the part of the receiving participant in a transfer system to make final funds available to its beneficiary customer on the value date. See final settlement.

**Registration:** the listing of ownership of securities in the records of the issuer or its transfer agent/registrar.

Remote access to a CSD: the facility in a securities settlement system (SSS) in one country ("home country") to become a direct participant in a CSD established in another country ("host country") and, for that purpose, to have a securities account in its own name with the CSD in the host country. See securities settlement system.

Remote access to an IFTS: the facility for a credit institution established in one country ("home country") to become a direct participant in an interbank funds transfer system (IFTS) established in another country ("host country") and, for that purpose, to have a settlement account in its own name with the central bank in the host country, if necessary, without having established a branch in the host country.

**Remote participant:** a participant in a transfer system which has neither its head office nor any of its branches located in the country where the transfer system is based.

**Remote payment:** a payment carried out through the sending of payment orders or payment instruments (e.g. by mail). Contrast with face-to-face payment.

Replacement cost risk: the risk that a counterparty to an outstanding transaction for completion at a future date will fail to perform on the settlement date. This failure may leave the solvent party with an unhedged or open market position or deny the solvent party unrealised gains on the position. The resulting exposure is the cost of replacing, at current market prices, the original transaction. See also credit risk.

Repurchase agreement (repo): a sale and repurchase agreement. An arrangement by which a person with a long securities position sells them to a counterparty while simultaneously obtaining the right and obligation to repurchase them at a specific price on a future date or on demand. Such an agreement is used by persons with a long position in securities, but short on cash with which to obtain financing - similar to a secured borrowing, except that ownership of securities is not retained.

Retail funds transfer system: a funds transfer system which handles a large volume of payments of relatively low value in such forms as cheques, credit transfers, direct debits, ATM and EFTPOS transactions.

**Retail payments:** this term describes all payments which are not covered in the definition of large-value payments. Retail payments are mainly consumer payments of relatively low value and low urgency.

**Retailer card:** a card issued by non-banking institutions, to be used in specified stores. The holder of the card has usually been granted a line of credit.

**Reverse repo:** a purchase and resale agreement. An arrangement by which a person with a short securities position purchases them from a counterparty while simultaneously obtaining the right and obligation to resell them at a specific price on a future date or on demand. Such an agreement is used by persons with a short position in securities, but a long position on cash to obtain securities - similar to secured lending, except that ownership of securities is transferred.

Same-day funds: money balances that the recipient has a right to transfer or withdraw from an account on the day of receipt.

Securities depository (book-entry system): see central securities depository.

Securities settlement system (SSS): a system which permits the transfer of securities: either free of payment (free delivery), for example in the case of pledge; or against payment. Settlement of securities occurs on securities deposit accounts held with the CSD (both private CSDs or an NCB acting as a CSD) or with the central bank (safe custody operational accounts). In the latter case, the central bank acts as the intermediate custodian of the securities. The final custodian is normally a CSD. Settlement of cash occurs in an Interbank Funds Transfer System (IFTS), through a settlement agent.

**Sender finality:** an analytical rather than operational or legal term used to describe the point at which an unconditional obligation arises on the part of the initiating participant in a funds transfer system to make final payment to the receiving participant on the value date. See final settlement.

**Settlement:** an act that discharges obligations in respect of funds or securities transfers between two or more parties. See final settlement, gross settlement system, net settlement, net settlement system.

Settlement agent: an institution that manages the settlement process (e.g. the determination of settlement positions, the monitoring of the exchange of payments, etc.) for transfer systems or other arrangements that require settlement. See final settlement, settlement, settlement institution(s), multilateral net settlement system.

Settlement finality: see final settlement.

**Settlement institution(s):** the institution(s) across whose books transfers between participants take place in order to achieve settlement within a settlement system. See settlement agent, multilateral net settlement system, bilateral net settlement system.

**Settlement lag:** in an exchange-for-value process, the time-lag between entering into a trade/bargain and its discharge by the final exchange of a financial asset for payment. See payment lag.

**Settlement risk:** a general term used to designate the risk that settlement in a transfer system will not take place as expected. This risk may comprise both credit and liquidity risk.

Settlement system: a system used to facilitate the settlement of transfers of funds or financial instruments.

Share book-entry system: a computerised system for the issue and registration of equity securities in book-entry form. See also book-entry system, debt book-entry system.

Standing order: an instruction from a customer to a bank to make a regular payment of a fixed amount to a named creditor.

**Substitution:** the substitution of one party for another in respect of an obligation. In a netting and settlement context the term typically refers to the process of amending a contract between two parties so that a third party is interposed as counterparty to each of the two parties and the original contract between the two parties is satisfied and discharged. See novation.

**S.W.I.F.T.** (Society for Worldwide Interbank Financial Telecommunication): a co-operative organisation created and owned by banks that operates a network which facilitates the exchange of payment and other financial messages between financial institutions (including broker-dealers and securities companies) throughout the world. A S.W.I.F.T. payment message is an instruction to transfer funds; the exchange of funds (settlement) subsequently takes place over a payment system or through correspondent banking relationships.

**Systemic risk:** the risk that the failure of one participant in a transfer system, or in financial markets generally, to meet its required obligations will cause other participants or financial institutions to be unable to meet their obligations (including settlement obligations in a transfer system) when due. Such a failure may cause significant liquidity or credit problems and, as a result, might threaten the stability of financial markets.

TARGET (Trans-European Automated Real-time Gross settlement Express Transfer) system: the TARGET system is defined as a payment system composed of one RTGS system in each of the countries which participate in Stage Three of EMU and the European Central Bank (ECB) payment mechanism. RTGS systems of non-participating countries may also be connected, provided that they are able to process the euro alongside their national currency. The domestic RTGS systems and the ECB payment mechanism are interconnected according to common procedures ("Interlinking") to allow cross-border transfers throughout the European Union to move from one system to another system. See Interlinking.

**Telematics:** the combined use of data-processing and data-transmission techniques.

Teller's cheque: see bank draft.

**Tiering arrangement:** an arrangement which may exist in a funds or securities transfer system whereby participants in one category require the services of participants in another category to exchange and/or settle their transactions. See direct participant in an IFTS and indirect participant in an IFTS.

Trade date: the date on which a trade/bargain is struck.

**Trade-for-trade (gross) settlement:** the settlement of individual transactions between counterparties. See gross settlement system.

**Trade netting:** a consolidation and offsetting of individual trades into net amounts of securities and money due between trading partners or among members of a clearing system. A netting of trades which is not legally enforceable is a position netting.

**Transfer:** operationally, the sending (or movement) of funds or securities or of a right relating to funds or securities from one party to another party by: (1) the conveyance of physical instruments/money; (2) accounting entries on the books of a financial intermediary; or (3) accounting entries processed through a funds and/or securities transfer system. The act of transfer affects the legal rights of the transferor, transferee and possibly third parties in relation to the money balance, security or other financial instrument being transferred.

Transfer system: a generic term covering funds transfer systems and exchange-for-value systems.

**Travel and entertainment card:** a card issued by non-banks indicating that the holder has been granted a line of credit. It enables the holder to make purchases but does not offer extended credit, the full amount of the debt incurred having to be settled at the end of a specified period. The holder is usually charged an annual fee.

**Truncation:** a procedure in which the physical movement of paper payment instruments (e.g. paid cheques or credit transfers) within a bank, between banks or between a bank and its customer is curtailed or eliminated, being replaced, in whole or in part, by electronic records of their content for further processing and transmission.

Ultimate settlement: this term is sometimes used to denote final settlement in central bank money.

**Unwinding (or settlement unwind):** a procedure followed in certain clearing and settlement systems in which transfers of securities or funds are settled on a net basis, at the end of the processing cycle, with all transfers provisional until all participants have discharged their settlement obligations. If a participant fails to settle, some or all of the provisional transfers involving that participant are deleted from the system and the settlement obligations from the remaining transfers are then recalculated. Such a procedure has the effect of transferring liquidity pressures and possibly losses from the failure to settle to other participants, and may, in an extreme case, result in significant and unpredictable systemic risks.

Variation margin (or mark-to-market payments): the amount which is paid by a counterparty to reduce replacement cost exposures resulting from changes in market prices, following the revaluation of securities or financial instruments that are the subject of unsettled trades.

Wholesale funds transfer system: see large-value funds transfer system.

**Zero-hour clause:** a provision in the bankruptcy laws of some countries which may retroactively render transactions of a closed institution ineffective after 0.00 a.m. on the date the institution is ordered to be closed.