BANK FOR INTERNATIONAL SETTLEMENTS

## STATISTICS ON

## PAYMENT SYSTEMS IN

## **ELEVEN DEVELOPED COUNTRIES**

figures for 1991

Basle December 1992

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

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#### FOREWORD

This is the fourth of a regular series of updates of the statistical addendum contained in the manual on "Payment Systems in Eleven Developed Countries", published by the central banks of the Group of Ten countries under the aegis of the Bank for International Settlements. Although considerable improvements have been made in the quality of the statistical data, they are not in all cases complete or uniform and in some cases estimates have had to be made (see the note on the methodology and sources used at the end of this volume). The margin of error is thought, however, to be small enough to allow comparisons of trends in the various countries taken individually or as a group.

Note: In tables a dot instead of a figure means "data not available" or "not applicable".

### TABLE 1

## Relative importance of transferable deposits and number of accounts\* at end-1991

Countries	Value of transferable deposits (USD billions)	Value of transferable deposits per capita (USD)	Number of accounts (millions)	Number of accounts per inhabitant
Belgium	29.0	2,891.3	10.0	1.0
Canada	90.5	3,324.2	•	•
France	379.7	6,708.0	113.0	2.0
Germany	293.5	3,656.0	76.5	1.0
Italy	385.0	6,653.0	24.8	0.4
Japan	1,168.2	9,420.7		•
Netherlands	54.2	3,584.0	16.6	1.1
Sweden	107.6	12,444.0	29.6	3.4
Switzerland	37.8	5,530.0	•	•
United Kingdom	490.5	8,515.0	140.1	2.4
United States	639.5	2,519.0	170.0	0.7

\* For explanation of figures see relevant country table.

### TABLE 2

## Share of currency in circulation in narrow and broad money stock and as a percentage of GNP/GDP\*

Countries	Percentage of narrow money stock		Percentage of broad money stock		Percentage of GNP/GDP	
	1981	1991	1981	1991	1981	1991
Belgium	44.3	31.3	٩	•	10.1	6.0
Canada	39.8	50.1	5.6	6.1	3.0	3.1
France	21.9	17.2	7.8	5.4	5.4	4.3
Germany	33.0	28.4	10.8	10.8	5.5	6.5
Italy	15.7	14.2	9.3	8.7	6.4	5.4
Japan	27.8	33.1	5.8	5.2	8.3	9.5
Netherlands	34.2	25.8	9.2	9.0	6.6	6.9
Sweden	•	•	10.1	9.8	6.2	4.5
Switzerland	38.5	33.0	10.2	6.8	11.0	7.6
United Kingdom	•	5.6		3.1	4.2	2.7
United States	28.1	30.1	5.5	6.5	4.1	4.7

\* For explanation of figures and definitions of money stock see relevant country table.

### **TABLE 3**

## Relative importance of points of entry into the payment system\*

at end-1991

Countries	Number of institutions	Number of branches	Number of inhabitants per branch
Belgium	125	13,320	752
Canada	2,844	13,323	2,045
France	634	42,533	1,331
Germany	4,329	75,078	1,070
Italy	1,044	33,490	1,726
Japan	6,087	69,154	1,793
Netherlands	148	8,235	1,837
Sweden	120	4,946	1,747
Switzerland	446	8,014	853
United Kingdom	631	40,113	1,436
United States	30,141	104,964	2,419

\* For explanation of figures see relevant country table.

### TABLE 4

## Number of cash dispensers, ATMs and EFT POS terminals\*

at end-1991

	Cash dispens	ers and ATMs	EFT POS terminals		
Countries	Number of machines installed	Number of inhabitants per machine	Number of terminals installed	Number of inhabitants per terminal	
Belgium	1,052	9,527	32,199	311	
Canada	13,175	2,068	13,300	2,048	
France	16,134	3,509	203,000	279	
Germany	13,750	5,840	34,673	2,316	
Italy	11,571	4,995	39,175	1,475	
Japan	99,011	1,252	26,359	4,704	
Netherlands	3,354	4,511	4,038	3,747	
Sweden	2,221	3,891	8,878	973	
Switzerland	2,371	2,882	5,183	1,319	
United Kingdom	17,780	3,240	190,000	303	
United States	85,000	2,987	88,000	2,885	

\* For explanation of figures see relevant country table.

### TABLE 5

## Relative importance of cashless payment instruments\*

Countries	Cheques	Payments by credit card	Payments by debit card at EFT POS	Paper- based credit transfers	Paperless credit transfers	Direct debits
Belgium	21.9	2.3	11.2	36.9	21.0	6.6
Canada	64.8	27.5	0.3	•	3.9	3.5
France	57.3	•	15.8	1.0	15.6	10.3
Germany	9.6	1.7	0.2	23.5	27.6	37.4
Italy	42.0	3.2	0.5	36.0	10.0	8.3
Japan	8.5	21.8	0.0	14.0	15.8	39.8
Netherlands	14.3	< 0.5	1.8	5.7	55.4	22.7
Sweden	8.5	1.2	20.6	23.2	42.8	3.7
Switzerland	8.4	5.7	3.0	28.2	51.6	3.1
United Kingdom	48.4	10.7	5.6	7.4	13.7	14.2
United States	81.2	15.9	0.3	•	1.7	0.8

as a percentage of total volume of transactions in 1991

\* For explanation of figures see relevant country table.

. Territorial area: 30,500 sq.kms.

. Population: 10.02 million

. Gross national product in 1991: (USD/BEF) 200.58/6,855 billion

. Per capita GNP: (USD/BEF) 20,014/684,034

. Exchange rate: (BEF per USD) 1991 average: 34.18; end-1991: 31.27

#### A.1 Monetary aggregates

at end-1991

Items	Absolute USD/BEF (billions)	Per capita USD/BEF	Percentage of GNP	Number of accounts (millions)	Number of accounts per inhabitant
Total money supply <sup>1</sup>	181.4 5,673.0	18,102.2 566,054.7	82.8	•	•
Currency <sup>2</sup>	13.3 416.6	1,329.3 41,568.5	6.1	•	•
Transferable deposits	29.0 906.4	2,892.3 90,441.0	13.2	10.0	1.0

<sup>1</sup> Financial assets with a maximum maturity of one year held by non-financial companies and private individuals. <sup>2</sup> Held by non-financial companies and private individuals.

## A.2 Transferable deposits and number of accounts per category of institution at end-1991

Categories of institution	Number of accounts (millions)	Share of market (%)	Value of accounts USD/BEF (billions)	Value of accounts per capita USD/BEF	Share of market (%)
Commercial banks	4.0	40.0	19.1 596.4	1,903.1 59,509.1	65.8
Savings banks	1.6	16.0	2.5 78.8	251.4 7,862.7	8.7
Public credit institutions	3.2	32.0	4.8 149.8	478.0 14,947.1	16.5
Post Office	1.2	12.0	2.6 81.1	258.8 8,092.2	9.0
TOTAL	10.0	100.0	29.0 906.1	2,891.3 90,411.1	100.0

Categories of institution	Number of institutions	Number of branches	Number of inhabitants per branch	
Commercial banks	90	3,420 1	2,930	
Savings banks	28	3,980 <sup>2</sup>	2,518	
Public credit institutions	6	2,7783	3,608	
Subtotal	124	10,178	985	
Post Office	1	3,142	3,190	
TOTAL	125	13,320	752	
Central bank	1	23 4	•	

B.1 Institutional framework

at end-1991

 $^{1}$  127 non-full-size branches excluded.  $^{2}$  7,052 non-full-size branches excluded.  $^{3}$  1,085 non-full-size branches excluded.  $^{4}$  One of which is located in Luxembourg.

### B.2 Cash dispensers, ATMs and EFT POS terminals at end-1991

Cash dispensers and ATMs					EFT POS		
of	Number of cash dispensers	Number of ATMs	Total number of cash dispensers and ATMs	Number of inhabitants per cash dispenser and ATM	Number of networks <sup>1,2</sup>	EFT POS	Number of inhabitants per EFT POS terminal
1	•	959	959	•	6	32,199	311
2	93	•	93	•	•		•
3	•	•	1,052	9,527	•	•	•

<sup>1</sup> Including Postal Cheque Office. <sup>2</sup> Among which 4 non-bank networks (2 large retailers and 2 credit card issuers). <sup>3</sup> Estimate. Some double-counting is inevitable.

C. Relative importance of cashless payment in	nstruments				
in the payment system					

Instruments	Volume of transactions (millions)	Volume per capita	Percentage of total volume	Value of transactions USD/BEF (billions)	Value per capita USD/REF	Percentage of total value
Cheques issued <sup>2</sup>	193.8	19.3	21.9	290.8	29,013.9	
				9,937.9	991,608.5	3.2
Payments by credit card <sup>3</sup>	20.5	2.0	2.3	2.4 83.5	243.8 8,330.7	0.0
Payments by debit card at EFT					0,000.1	0.0
POS	98.8	9.9	11.2	5.2	522.3	
				178.9	17,850.7	0.1
Paper-based		00.7				
credit transfers <sup>4</sup>	326.2	32.5	36.9	8,055.7	803,797.1	90.0
Paperless credit				275,318.1	27,471,373.0	90.0
transfers	185.5	18.5	21.0	589.6	58,829.2	
				20,150.3	2,010,606.7	6.6
Direct debits	58.4	5.8	6.6	9.6	962.3	
				329.6	32,887.6	0.1
TOTAL	883.2	88.1	100.0	8,953.3	893,368.6	
				305,998.3	30,532,657.2	100.0

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<sup>1</sup> Some double-counting is inevitable owing to the settlement at regular intervals of credit card account balances through other payment media. Estimates for all statistics except for payments by debit cards at EFT POS and by credit cards. Interbank (as well as corporate) payments are included in the data for some instruments and therefore considerably inflate them when expressed in value. <sup>2</sup> Postal cheques and drafts included. <sup>3</sup> Including transactions by holders of travel and entertainment cards, and partly data for the Grand Duchy of Luxembourg.<sup>4</sup> Inpayment transfers included.

. Territorial area: 9.9 million sq.kms.

. Population: 27.2 million

. Gross national product in 1991: (USD/CAD) 569.1/652.0 billion

. Per capita GNP: (USD/CAD) 21,050.4/24,118.3

. Exchange rate: (CAD per USD) 1991 average: 1.1458; end-1991: 1.1555; December 1991: 1.1457; end-March 1992: 1.1892

### A.1 Monetary aggregates

at end-1991

Items	Absolute USD/CAD (billions)	Per capita USD/CAD	Percentage of GNP <sup>1</sup>	Number of accounts (millions)	Number of accounts per inhabitant
Total money supply <sup>2</sup>	462.2	16,966.4			
	529.5	19,439.1	81.2	•	•
Currency <sup>3</sup>	17.7	649.8			
	20.3	744.5	3.1	•	•
Transferable deposits	90.5	3,324.2			
	104.1	3,819.2	16.0	•	•

<sup>1</sup> Calculated using Canadian dollar figures to avoid distortions introduced by using different exchange rates to convert to US dollars. <sup>2</sup> M2 +, Table E1, <u>Bank of Canada Review</u>; average-of-Wednesday data for December 1991. <sup>3</sup> Currency outside banks, Table E1, <u>Bank of Canada Review</u>; average-of-Wednesday data for December 1991.

# A.2 Transferable deposits and number of accounts per category of institution

at end-1991

Categories of institution	Number of accounts (millions)	Share of market (%)	Value of accounts USD/CAD (billions)	Value of accounts per capita USD/CAD	Share of market (%)
Chartered banks	•	٠	67.8 77.8	2,490.9 2,853.9	74.7
Local credit unions and caisses populaires	•	•	$10.6\\12.3$	390.6 451.4	11.8
Trust and mortgage loan companies	•	•	10.1	370.4	
Governmental savings institutions <sup>1</sup>	•	•	11.7 2.0 2.3	428.0 $72.3^{2}$ $85.9^{2}$	11.2 2.3
Post Office	•	•	•	•	•
TOTAL	•	•	90.5 104.1	3,324.2 3,819.2	100.0

<sup>1</sup> End of period is 31st March 1992. Operate only in Alberta and Ontario. <sup>2</sup> Based on the population of Alberta and Ontario only, the value of accounts per capita at governmental savings institutions is (USD/CAD) 155.9/185.4.

Categories of institution	Number of institutions	Number of branches	Number of inhabitants per branch
Chartered banks	64 <sup>1</sup>	7,535	3,616
Local credit unions and caisses populaires	2,666	3,744	7,276
Trust and loan companies	1122	1,872	14,553
Governmental savings institutions	23	172	158,3904
Subtotal	2,844	13,323	2,045
Post Office		•	•
TOTAL	2,844	13,323	2,045
Central bank	1	9	•

### **B.1 Institutional framework**

at end-1991

<sup>1</sup> Six operate nationwide. <sup>2</sup> Only a few operate nationwide and not all accept transferable deposits. <sup>3</sup> Operate only in Alberta and Ontario. <sup>4</sup> Based on the population of Alberta and Ontario only, the number of inhabitants per branch is 73,072.

### B.2 Cash dispensers, ATMs and EFT POS terminals

at end-1991

	Cash dispensers and ATMs					EFT POS		
of	Number of cash dispensers	Number of ATMs		per cash dispenser	Number of	Number of EFT POS terminals	Number of inhabitants per EFT POS terminal	
401,2	•	•	13,1751,3	2,068	11	13,3001.4	2,048	

<sup>1</sup> Estimate. <sup>2</sup> Of which three are owned or operated by non-deposit-taking institutions. <sup>3</sup> Of which some 13,150 are owned by member institutions of the Canadian Payments Association. <sup>4</sup> Excluding some 150,000 to 200,000 POS terminals that are used solely for credit card authorisation.

	1991									
Instruments	Volume of transactions <sup>1</sup> (millions)	Volume per capita	Percentage of total volume	Value of transactions <sup>1</sup> USD/CAD (billions)	Value per capita USD/CAD	Percentage of total value				
Cheques issued	2,188.3	81.0	64.8	18,852.2 21,599.7	697,362.8 798,995.0	99.0				
Payments by credit card	926.7	34.3	27.5	54.6 62.5	2,016.6 2,310.4	0.3				
Payments by debit card at EFT POS	10.3	0.4	0.3	0.4 0.5	16.9 19.4	0.02				
Paper-based credit transfers	•					•				
Paperless credit transfers of which:	133.0	4.9	3.9	109.2 125.2	4,044.4 4,633.8	0.6				
<ul> <li>large-value transfers</li> <li>transfers initiated at</li> </ul>	•	•	•	•						
ATMs	28.4	1.0	0.8	1.8 2.1	68.6 78.6	0.02				

3.1

3.5

100.0

3,975.8

4,555.2

930.0

1,065.6

704,370.7

807,024.2

0.6

0.1

100.0

107.4 123.1

25.1

28.8

19,041.5

21,816.7

# C. Relative importance of cashless payment instruments in the payment system

<sup>1</sup> All figures are estimates. <sup>2</sup> Insignificant.

104.6

116.7

3,375.0

3.9

4.3

124.9

\_

direct credits

Direct debits . .

TOTAL ....

. Territorial area: 551.2 thousand sq.kms.

. Population: 56.6 million

. Gross national product in 1991: (USD/FRF) 1,253.3/6,492.0 billion

. Per capita GNP: (USD/FRF) 22,137/114,671

. Exchange rate: (FRF per USD) 1991 average: 5.6421; end-1991: 5.180

#### A.1 Monetary aggregates

at end-1991

Items	Absolute USD/FRF (billions)	Per capita USD/FRF	Percentage of GNP	Number of accounts (millions)	Number of accounts per inhabitant
Total money supply	996.6 5,162.3	17,603 91,184	79.5	•	•
Currency	49.1 254.5	868 4,495	3.9	•	
Transferable deposits	379.7 1,967.1	6,708 34,746	30.3	113.0	2.0

## A.2 Transferable deposits and number of accounts per category of institution at end-1991

Categories of institution	Number of accounts (millions)	Share of market (%)	Value of accounts USD/FRF (billions)	Value of accounts per capita USD/FRF	Share of market (%)
Commercial banks	19.8	17.5	118.2 612.3	2,088 10,815	31.1
Savings banks	39.1	34.6	$\begin{array}{c}101.5\\525.7\end{array}$	1,793 9,286	26.7
Cooperative and rural banks	23.3	20.6	71.2 368.7	1,257 6,513	18.8
Post Office	30.8	27.3	88.9 460.4	1,570 8,132	23.4
TOTAL	113.0	100.0	379.7 1,967.1	6,708 34,746	100.0

Categories of institution	Number of institutions	Number of branches	Number of inhabitants per branch
Commercial banks	426	10,361	5,464
Savings banks	42	4,307	13,145
Cooperative and rural banks	165	10,921	5,184
Subtotal	633	25,589	2,212
Post Office	1	16,944	3,341
TOTAL	634	42,533	1,331
Central bank	1	214	•

## **B.1** Institutional framework

at end-1991

## B.2 Cash dispensers, ATMs and EFT POS terminals at end-1991\*

	Cash dispensers and ATMs					EFT POS		
of	Number of cash dispensers	Number of ATMs	Total number of cash dispensers and ATMs	Number of inhabitants per cash dispenser and ATM	Number of	Number of EFT POS terminals	Number of inhabitants per EFT POS terminal	
1	•	•	16,134	3,509	1	203,000	279	

\*Estimates.

			1991			
Instruments	Volume of transactions (millions)	Volume per capita	Percentage of total volume	Value of transactions USD/FRF (billions)	Value per capita USD/FRF	Percentage of total value
Cheques issued	4,776.4	84.4	57.3	3,142.1 16,276.1	55,500.5 287,492.5	25.9
Payments by credit card		•	•		•	•
Payments by debit card at EFT POS <sup>1</sup>	1,314.5	23.2	15.8	83.6 433.3	1,477.5 7,653.6	0.7
Paper-based credit transfers <sup>2</sup>	85.0	1.5	1.0	7,409.2 38,379.5	130,871.7 677,915.4	60.9
Paperless credit transfers	1,299.8	23.0	15.6	1,232.8 6,385.8	21,775.2 112,795.4	10.1
Direct debits	853.7	15.1	10.3	289.4 1,499.1	5,111.8 26,479.3	2.4
TOTAL	8,329.4	147.1	100.0	12,157.1 62,973.8	214,736.7 1,112,336.2	100.0

# C. Relative importance of cashless payment instruments in the payment system

1991

 $^{1}$  Of which 40% (by volume) did not give rise to electronic payment.  $^{2}$  Credit transfers of a purely interbank nature: 4.9 million operations for a value of FRF 35,297.0 billion.

. Territorial area: 357.0 thousand sq.kms.<sup>1</sup>

. Population: 80.3 million

. Gross national product in 1991: (USD/DEM) 1,583.9 / 2,631.2 billion<sup>2</sup>

. Per capita GNP: (USD/DEM) 24,557 / 40,7942

. Exchange rate: (DEM per USD) 1991 average: 1.6612 (only used for GNP); end-1991: 1.5160

<sup>1</sup> At end-1990. <sup>2</sup> Old Länder only.

### A.1 Monetary aggregates

at end-1991

Items	Absolute USD/DEM (billions)	Per capita USD/DEM	Percentage of GNP	Number of accounts (millions)	Number of accounts per inhabitant
Total money supply					
(M3) <sup>1</sup>	1,053.8	13,123			
	1,597.6	19,895	60.7	•	•
Currency <sup>2</sup>	113.3	1,411			
	171.8	2,139	6.5	٠	•
Transferable deposits <sup>3</sup>	293.5	3,656			
*	445.0	5,542	16.9	76.5	0.95

 $^{1}$  M2 + savings deposits of domestic non-banks at statutory notice.  $^{2}$  Excluding banks' cash balances.  $^{3}$  Sight deposits of domestic non-banks (including deposits held at the central bank).

### A.2 Transferable deposits and number of accounts per category of institution

Categories of institution	Number of accounts (millions) <sup>1</sup>	Share of market (%)	Value of accounts USD/DEM (billions)	Value of accounts per capita USD/DEM	Share of market (%)
Commercial banks <sup>2</sup>	14.8	19.3	105.1 159.4	1,309 1,985	35.8
Savings banks <sup>3</sup>	37.5	49.0	114.2 173.1	1,422 2,156	38.9
banks <sup>3</sup>	19.1	25.0	60.2 91.3	750 1,137	20.5
Postbank	5.1	6.7	14.0 21.2	174 264	4.8
TOTAL	76.5	100.0	293.5 445.0	3,656 5,542	100.0

at end-1991

<sup>1</sup> Accounts of domestic non-banks, partly estimated. <sup>2</sup> Including mortgage banks, instalment sales financing institutions, banks with special functions, other banks and the central bank. <sup>3</sup> Including central institutions.

Categories of institution	Number of institutions	Number of branches <sup>1</sup>	Number of inhabitants per branch	
Commercial banks <sup>2</sup>	418	7,305	10,992	
Savings banks <sup>3</sup>	746	20,630	3,892	
Cooperative and rural banks <sup>3</sup>	3,151	21,234	3,782	
Subtotal	4,315	49,169	1,633	
Postbank	144	25,909	3,099	
TOTAL	4,329	75,078	1,070	
Central bank	135	202 5	•	

#### **B.1** Institutional framework

at end-1991

<sup>1</sup> Branches = total number of bank offices. <sup>2</sup> Including mortgage banks, instalment sales financing institutions, banks with special functions and building and loan associations. <sup>3</sup> Including central institutions. <sup>4</sup> Postal giro offices (Postgiroämter). <sup>5</sup> The Bundesbank as a legal entity comprises the Directorate (in Frankfurt am Main) and 11 Land Central Banks as well as 187 branches in the old Länder; in addition it established the Provisional Administrative Office (Vorläufige Verwaltungsstelle) in Berlin and 15 branches in connection with the monetary union with the former German Democratic Republic (now referred to as the new Länder) as from 1st July 1990.

### B.2 Cash dispensers, ATMs and EFT POS terminals

at end-1991

Cash dispensers and ATMs				EFT POS			
of	Number of cash dispensers	Number of ATMs	Total number of cash dispensers and ATMs	per cash	Number of	Number of EFT POS terminals	Number of inhabitants per EFT POS terminal
4	•	·	13,7501	5,840	18	34,6732	2,316

<sup>1</sup> Of which 12,800 in the eurocheque pool; units not eligible for the pool estimated at 950. Exact breakdown between ATMs and cash dispensers is impossible. <sup>2</sup> Electronic cash (eurocheque card): 14 networks with 10,000 terminals (estimated); banking associations and non-banks (particularly oil companies) as operators; some terminals also accept credit cards. AllCard POS (credit cards and some eurocheque cards): 1,618 terminals, organised by non-banks. Makatel credit card authorisation with electronic clearing: 12,123 terminals, organised by non-banks. Eurocard-START/Lufthansa association of travel agents, with electronic clearing in paperless exchange of data media: 10,932 terminals in 2 networks, organised by non-banks. Excluding terminals that are only used for credit card authorisation and card-operated telephones (Telekarte).

Instruments	Volume of transactions (millions) <sup>1</sup>	Volume per capita	Percentage of total volume	Value of transactions USD/DEM (billions) <sup>1</sup>	Value per capita USD/DEM	Percentage of total value
Cheques issued	880.0	11	9.6	2,930.7	36,497	
~				4,443.0	55,330	15.3
Cheques						
paperless collect. <sup>2</sup>	(643.0)	(8)	(7.0)	(167.5)	(2,086)	
Payments by				(254.0)	(3,163)	(0.9)
credit card <sup>3</sup>	150.1	2	1.77	10.0	222	
creancara	100.1	2	1.7	18.6 28.2	232	
Payments by				20.2	351	0.1
debit card at EFT						
POS <sup>2,4</sup>	20.2	0	0.2	1,2	15	
				1.8	22	0.0
Paper-based						
credit transfers <sup>5</sup>	2,153.0	27	23.5	11,163.4	139,021	
				16,923.7	210,756	58.2
Paperless credit	0.000.0					
transfers <sup>5,6</sup>	2,527.0	31	27.6	3,148.6	39,210	
				4,773.3	59,443	16.4
Direct debits <sup>7</sup>	3,419.8	43	37,4	1,914.4	23,840	
	0,110.0	ÚF.	01.4	2,902.2	23,840 36,142	10.0
				2,002.2	00,144	10.0
TOTAL	9,150.1	114	100.0	19,176.9	238,816	
				29,072.2	362,045	100.0

# C. Relative importance of cashless payment instruments in the payment system

1991

<sup>1</sup> Partly estimated, including payments to/from and within the new Länder. <sup>2</sup> Not included in direct debits in order to avoid double-counting. <sup>3</sup> Excluding retail cards; the card companies' settlements with the retailers (normally credit transfers) and payment of the monthly totals by card holders to card issuers by credit transfer, direct debit or cheque are contained in the corresponding items. <sup>4</sup> Electronic cash transactions only. <sup>5</sup> Excluding interbank transfers. Interbank transfers via central bank, partly estimated:

	Volume of transactions (millions)	Value of transactions USD/DEM (billions)
Express conventional		
local credit transfers	1.2	5,559
		8,427
Clearing house		
credit transfers	207.8	77,662
of which:		117,735
Daily electronic clearing		
(EAF), paperless credit transfers	(5.0)	(36,237)
		(54,936)
Express intercity		
credit transfers	1.3	5,270
		7,989

<sup>6</sup> If the paperless settlement of paper-based credit transfers which are routed into the paperless procedure between banks (EPT procedure) by the bank to which they are first submitted by the bank customer is included, the number of transactions increases to 2,691.0 million. Hence paperless settlement of credit transfers amounts to 57.5%. <sup>7</sup> Including cash dispenser/ATM withdrawals made with eurocheque cards at banks other than that issuing the card.

.

. Territorial area: 301,287 sq.kms.

. Population: 57.8 million

. Gross national product in 1991: (USD/ITL) 1,134.4 / 1,407,349 billion

. Per capita GNP: (USD/ITL) 19,644 / 24,371,000

. Exchange rate: (LIT per USD) 1991 average: 1,240.6; end-1991: 1,151.1

### A.1 Monetary aggregates

at end-1991

Items	Absolute USD/ITL (billions)	Per capita USD/ITL	Percentage of GNP	Number of accounts (millions)	Number of accounts per inhabitant
Total money supply*	763 878,274	13,200 15,195,052	62.4	•	•
Currency	66 76,321	1,147 1,320,433	5.4		•
Transferable deposits	385 442,623	6,653 7,657,837	31.5	24.8	0.4

\* M2: currency, current accounts and time deposits, certificates of deposit, bankers' drafts and cashiers' cheques.

# A.2 Transferable deposits and number of accounts per category of institution

at end-1991

Categories of institution	Number of accounts (millions)	Share of market (%)	Value of accounts USD/ITL (billions)	Value of accounts per capita USD/ITL	Share of market (%)
Commercial banks	12.8	51.6	222 255,544	3,841 4,421,176	57.8
Savings banks	7.0	28.2	97 112,110	1,685 1,939,619	25.3
Cooperative and rural banks	4.5	18.2	59 67,423	1,013 1,166,488	15.2
Subtotal	24.3	98.0	378 435,077	6,539 7,527,284	98.3
Post Office	0.5	2.0	7 7,546	113 130,554	1.7
TOTAL	24.8	100.0	385 442,623	6,653 7,657,837	100.0

Categories of institution	Number of institutions	Number of branches	Number of inhabitants per branch
Commercial banks	181	11,686	4,946
Savings banks	49	2,057	28,099
Cooperative and rural banks	813	5,335	10,834
Subtotal	1,043	19,078	3,030
Post Office	1	14,412	4,011
TOTAL	1,044	33,490	1,726
Central bank	1	98	•

## **B.1** Institutional framework

at end-1991

## B.2 Cash dispensers, ATMs and EFT POS terminals

at end-1991

Cash dispensers and ATMs				EFT POS			
of	Number of cash dispensers	Number of ATMs		per cash dispenser	of	EFT POS	Number of inhabitants per EFT POS terminal
1	•	•	11,571	4,995	•	39,175	1,475

\* Data provided by 75 banks accounting for approximately 80% of the current account deposits of the entire banking system.

Instruments	Volume of transactions (millions)	Volume per capita	Percentage of total volume	Value of transactions USD/ITL (billions) <sup>1</sup>	Value per capita USD/ITL <sup>1</sup>	Percentage of total value
Cheques issued <sup>2</sup>	710.5	12.3	42.0	1,743 2,162,275	30,154 37,409,602	8.0
Payments by credit card	55.0	1.0	3.2	8 10,027	140 173,478	0.0
Payments by debit card at EFT						
POS	8.5	0.1	0.5	1	24 29,879	0.0
Paper-based credit transfers <sup>3</sup>	610.1	10.6	36.0	5,103 6,330,688	88,286 109,527,474	23.3
of which: - interbank or large-value <sup>3</sup>	3.2	0.1	0.2	4,538	78,508	
Paperless credit	0.2			5,629,514	97,396,436	20.7
transfers	168.7	2.9	10.0	14,874 18,452,933	257,339 319,254,896	67.8
of which: - interbank or						
large-value <sup>3</sup>	3.8	0.1	0.2	11,803 14,642,330	204,198 253,327,509	53.8
- others	164.9	2.9	9.7	3,072 3,810,603	53,142 65,927,388	14.0
Direct debits <sup>4</sup> .	140.7	2.4	8.3	205 254,552	3,550 4,404,014	0.9
TOTAL	1,693.5	29.3	100.0	21,935 27,212,202	379,493 470,799,343	100.0

## C. Relative importance of cashless payment instruments in the payment system

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<sup>1</sup> Data on payment by bank instruments have been provided by 75 banks accounting for approximately 80% of the current account deposits of the entire banking system. Data on other payment transactions (Bank of Italy cashiers' cheques, postal instruments, credit cards, interbank or large-value transfers) relate to the entire system. Bills of exchange and paper-based bank receipts are not included; in 1991 97 million such instruments were collected through the banking system. <sup>2</sup> Cheques issued to withdraw cash are not included; such cheques totalled 59 million (volume) and Lit. 38,000 billion (value). <sup>3</sup> Includes inpayments to postal current accounts that are processed electronically but originate from cash payments; such payments totalled 590 million (volume) and Lit. 294,281 billion (value). <sup>4</sup> In 1991, for the first time, direct debits also include electronic bank receipts (RIBA), totalling 78 million (volume) and Lit. 192,933 billion (value). Previously, payments originated by RIBAs were included in paperless credit transfers.

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. Territorial area: 377,750.3 sq.kms.

. Population: 124.0 million

. Gross national product in 1991: (USD/JPY) 3,385.9 / 456,112.8 billion

. Per capita GNP: (USD/JPY) 27,305.6 / 3,678,329.0

. Exchange rate: (JPY per USD) 1991 average: 134.71; end-1991: 125.25

### A.1 Monetary aggregates

at end-1991

Items	Absolute USD/JPY (billions)	Per capita USD/JPY	Percentage of GNP	Number of accounts (millions)	Number of accounts per inhabitant
Total money supply					
$(M3 + CDs) \dots$	6,691.6	53,964.5			
	838,122.5	6,759,052.4	183.8	•	•
Currency	345.9	2,789.5			
-	43,318.3	349,341.1	9.5	•	•
Transferable deposits*	1,168.2	9,420.7			
	146,307.9	1,179,902.4	32.1	•	•

\* Figures for post offices included here are for end-March 1991.

## A.2 Transferable deposits and number of accounts per category of institution

at end-1991

Categories of institution	Number of accounts <sup>1</sup> (millions)	Share of market (%)	Value of accounts USD/JPY (billions)	Value of accounts per capita USD/JPY	Share of market (%)
Commercial banks <sup>2</sup>	283.2	•	819.1 102,588.9	6,605.6 827,329.8	70.1
Financial institutions for small businesses <sup>3</sup>	92.3	•	154.5 19,349.5	1,246.0 156,044.4	13.2
Financial institutions for agriculture, forestry and fisheries <sup>4</sup>			96.7	779.8	
and lisheries*	•	•	12,110.7	97,666.9	8.3
Post Office <sup>1</sup>	79.2	•	97.9 12,258.8	789.3 98,861.3	8.4
TOTAL	•	•	1,168.2 146,307.9	9,420.7 1,179,902.4	100.0

<sup>1</sup> As at end-March 1991. <sup>2</sup> City banks, regional banks, member banks of the Second Association of Regional Banks, longterm credit banks, trust banks. <sup>3</sup> Credit associations, The Shoko Chukin Bank, credit cooperatives, labour credit associations. <sup>4</sup> The Norinchukin Bank, agricultural cooperatives, fishery cooperatives.

Categories of institution	Number of institutions	Number of branches	Number of inhabitants per branch
Commercial banks <sup>1</sup>	153	14,944	8,298
Financial institutions for small businesses <sup>2</sup>	889	11,598	10,691
Financial institutions for agriculture, forestry and fisheries <sup>3</sup>	5,0444	18,5054	6,701
Subtotal	6,086	45,047	2,753
Post Office <sup>4</sup>	1	24,107	5,144
TOTAL	6,087	69,154	1,793
Central bank	1	34	

## **B.1** Institutional framework

at end-1991

<sup>1</sup> City banks, regional banks, member banks of the Second Association of Regional Banks, long-term credit banks, trust banks. <sup>2</sup> Credit associations, The Shoko Chukin Bank, credit cooperatives, labour credit associations. <sup>3</sup> The Norinchukin Bank, agricultural cooperatives, fishery cooperatives. <sup>4</sup> As at end-March 1991.

### B.2 Cash dispensers, ATMs and EFT POS terminals

at end-1991

Cash dispensers and ATMs <sup>1</sup>					EFT POS		
of	Number of cash dispensers	Number of ATMs	Total number of cash dispensers and ATMs	per cash	Number of	Number of EFT POS terminals	Number of inhabitants per EFT POS terminal
26²	27,512	71,499	99,011	1,252	218	26,359	4,704

<sup>1</sup> As at end-March 1991. <sup>2</sup> Of these 26 networks operated by financial institutions, 10 are nationwide proprietary networks (including a postal savings network), 15 are local joint networks and one is a nationwide joint network. Also, there are numerous other networks operated by non-banks, e.g. securities companies, finance companies and department stores.

Instruments	Volume of transactions <sup>1</sup> (millions)	Volume per capita	Percentage of total volume	Value of transactions <sup>1</sup> USD/JPY (billions)	Value per capita USD/JPY	Percentage of total value
Cheques issued <sup>2</sup>	366.3	3.0	8.5	31,081.3 3,892,938.0	250,655.6 31,394,661.3	•
Payments by credit card	934.8	7.5	21.8			,
Payments by debit card at EFT POS	0.7	0.0	0.0	0.01	0.0	
Paper-based <sup>3</sup> credit transfers	601.2	4.8	14.0	424.5 53,165.6	3,423.4 428,754.8	
Paperless credit <sup>4</sup> transfers	676.4	5.5	15.8	13,623.3 1,706,323.1	109,865.6 13,760,670.2	,
Direct debits <sup>5</sup>	1,706.6	13.8	39.8			
TOTAL	4,286.0	34.6	100.0	45,129.1 5,652,426.7	363,944.4 45,584,086.3	•

# C. Relative importance of cashless payment instruments in the payment system

1991

<sup>1</sup> Basically, all figures comprise third-party transactions cleared or settled through interbank arrangements, except payments by credit card, which comprise transactions not cleared or settled through interbank arrangements, and cheques issued, which include banks' transactions for their own account. <sup>2</sup> Transactions through Bill and Cheque Clearing Houses. <sup>3</sup> Comprises document transfers through the "Zengin System" (domestic funds transfer system) and the Post Office. <sup>4</sup> Transactions through the "Zengin System", excluding document transfers. <sup>5</sup> Direct debits for five major public utility charges (electricity, gas, water, telephone and television).

. Territorial area: 41,550 sq.kms.

. Population: 15.1 million

. Gross national product in 1991: (USD/NLG) 313.4/535.9 billion

. Per capita GNP: (USD/NLG) 20,713/35,420

. Exchange rate: (NLG per USD) end-1991: 1.71

### A.1 Monetary aggregates

at end-1991

Items	Absolute USD/NLG (billions)	Per capita USD/NLG	Percentage of GNP	Number of accounts (millions)	Number of accounts per inhabitant
Total money supply	$240.6 \\ 411.5$	15,905 27,198	76.8	•	•
Currency	21.6 37.0	1,430 2,445	6.9	•	•
Transferable deposits	54.2 92.7	3,584 6,129	17.3	16.6	1.1

## A.2 Transferable deposits and number of accounts per category of institution at end-1991

Categories of institution	Number of accounts (millions)	Share of market (%)	Value of accounts USD/NLG (billions)	Value of accounts per capita USD/NLG	Share of market (%)
Commercial banks	4.33	26.1	25.9 44.4	1,715 2,933	47.9
Savings banks	1.70	10.2	2.0 3.4	130 222	3.6
Cooperative banks	4.64	27.9	13.6 23.3	902 1,542	25.2
Post bank	5.95	35.8	12.7 21.7	838 1,433	23.4
TOTAL	16.62	100.0	54.2 92.7	3,584 6,129	100.0

All figures are estimates.

Categories of institution	Number of institutions	Number of branches	Number of inhabitants per branch	
Commercial banks	99	2,571	5,885	
Savings banks	47	848	17,842	
Cooperative banks	1	2,101	7,201	
Postbank*	1	2,715	5,573	
TOTAL	148	8,235	1,837	
Central bank	1	12		

## **B.1** Institutional framework

at end-1991

\* Most of the Postbank branches are at post offices.

## **B.2** Cash dispensers, ATMs and EFT POS terminals at end-1991

Cash dispensers and ATMs					EFT POS		
of	Number of cash dispensers of ATMs		Total number of cash dispensers and ATMs	per cash dispenser	Number of networks		Number of inhabitants per EFT POS terminal
2	3,354	•	3,354	4,511	2	4,038	3,747

Instruments	Volume of transactions (millions)	Volume per capita	Percentage of total volume	Value of transactions USD/NLG (billions)	Value per capita USD/NLG	Percentage of total value
Cheques issued	247.0	16	14,3	19.3	1,275	
Payments by			< 0.5	33.0	2,181	0.2
credit card	•	•	< 0.5	•	•	<0.5
Payments by debit card at EFT				•		
POS	32.0	2	1.8	1.1	70	
Paper-based				1.8	119	0.0
credit transfers	98.0	7	5.7	26.5	1,750	
Paperless credit transfers, of which:				45.3	2,993	0.3
<ul> <li>large-value</li> <li>transfers</li> </ul>	2.0	0	0.1	8,553.8	565,354	
transiers	2.0	v	0.1	14,627.0	966,755	82.6
- others	960.0	63	55.4	1,609.2	106,357	
			1	2,751.7	181,870	15.5
Direct debits	392.0	26	22.7	144.0 246.3	9,518 16,279	1.4
TOTAL	1,732.0	114	100.0	10,353.8 17,705.1	684,325 1,170,196	100.0

# C. Relative importance of cashless payment instruments in the payment system\*

1991

\* All figures with the exception of the large-value transfers are primarily based on real figures, which comprise estimates.

. Territorial area: 411.6 thousand sq.kms.

. Population: 8.6 million

. Gross national product in 1991: (USD/SEK) 257.6/1,429.6 billion

. Per capita GNP: (USD/SEK) 29,801 / 165,384

. Exchange rate: (SEK per USD) 1991 average: 6.0587; end-1991: 5.5500

### A.1 Monetary aggregates

at end-1991

Items	Absolute USD/SEK (billions)	Per capita USD/SEK	Percentage of GNP	Number of accounts (millions)	Number of accounts per inhabitant
Total money supply	119.2 661.8	13,790 76,561	46.3	•	•
Currency	11.7 64.8	1,354 7,496	4.5	•	•
Transferable deposits	107.5 597.0	12,436 69,064	41.8	29.6	3.4

## A.2 Transferable deposits and number of accounts per category of institution at end-1991

Categories of institution	Number of accounts (millions)	Share of market (%)	Value of accounts USD/SEK (billions)	Value of accounts per capita USD/SEK	Share of market (%)
Commercial banks	13.9	47.0	60.5 335.6	6,995 38,824	56.2
Savings banks	11.4	38.5	31.3 173.8	3,623 20,106	29.1
Cooperative and rural banks	2.6	8.8	10.6 58.7	1,224 6,791	9.8
Post Office	1.7	5.7	5.2 28.9	602 3,343	4.9
TOTAL	29.6	100.0	107.6 597.0	12,444 69,064	100.0

Categories of institution	Number of institutions	Number of branches	Number of inhabitants per branch	
Commercial banks	17	1,305	6,623	
Savings banks	101	1,129	7,656	
Cooperative and rural banks	1*	630	13,720	
Subtotal	119	3,064	2,821	
Post Office	1	1,882	4,593	
TOTAL	120	4,946	1,747	
Central bank	1	21	•	

## **B.1 Institutional framework**

at end-1991

\* The 12 cooperative regional banks merged into one unit in 1991.

## B.2 Cash dispensers, ATMs and EFT POS terminals at end-1991

	Cash di	ispensers a	EFT POS				
of	Number of cash dispensers	Number of ATMs	oach	per cash dispenser	Number of	Number of EFT POS terminals	Number of inhabitants per EFT POS terminal
21	2,221	·	2,221	3,891	2	8,8782	973

<sup>1</sup> Bancomat and Minuten. <sup>2</sup> Terminals managed by BABS and SERVO. Retail industry and oil companies have their own terminal systems but they are not included in these figures.

Instruments	Volume of transactions (millions)	Volume per capita	Percentage of total volume	Value of transactions USD/SEK (billions)	Value per capita USD/SEK	Percentage of total value
Cheques issued <sup>1</sup>	77	9	8.5	136 757	15,733 87,574	11.3
Payments by credit card <sup>2</sup>	11	1	1.2	1 5	116 578	0.1
Payments by debit card at EFT POS <sup>3</sup>	187	22	20.6	14 77	<b>1,620</b> 8,908	1.1
Paper-based credit transfers <sup>4</sup>	210	24	23.2	357 1,980	41,300 229,058	29.6
Paperless credit transfers <sup>4</sup>	388	45	42.8	662 3,674	76,584 425,030	54.9
Direct debits	34	4	3.7	37 203	4,280 23,484	3.0
TOTAL	907	105	100.0	1,207 6,696	139,633 774,632	100.0

## C. Relative importance of cashless payment instruments in the payment system

1991

<sup>1</sup> The figures for cheques are partly estimated. They comprise 9 million commercial cheques to a value of SEK 645 billion and 68 million private cheques to a value of SEK 112 billion. <sup>2</sup> Including transactions by holders of travel and entertainment cards. <sup>3</sup> Including paper-based payments made by debit cards. Cards issued by oil companies are included, with the volume and value of transactions being estimated at 127 million and SEK 38 billion respectively. <sup>4</sup> Postal giro and bank giro. The fall compared with previous years is due to the elimination of double-counting.

.

. Territorial area: 41,293 sq.kms.

. Population: 6.834 million

. Gross national product in 1991: (USD/CHF) 241.4 / 346.5 billion

. Per capita GNP: (USD/CHF) 35,323 / 50,702

. Exchange rate: (CHF per USD) 1991 average: 1.43532; December 1991: 1.38767

#### A.1 Monetary aggregates

at end-1991

Items	Absolute USD/CHF (billions)	Per capita USD/CHF	Percentage of GNP	Number of accounts (millions)	Number of accounts per inhabitant
Total money supply <sup>1</sup>	$277.60\ 385.21$	40,620 56,367	111.2	•	•
Currency	18.95 26.30	2,774 3,848	7.6	•	•
Transferable deposits <sup>2</sup>	37.79 52.44	5,530 7,673	15.1	•3	•

<sup>1</sup> M3. <sup>2</sup> Sight deposits. <sup>3</sup> Postal giro account holders: 1.340 million.

## A.2 Transferable deposits and number of accounts per category of institution at end-1991

Categories of institution	Number of accounts (millions)	Share of market (%)	Value of accounts USD/CHF (billions) <sup>1</sup>	Value of accounts per capita USD/CHF	Share of market (%)
Commercial banks <sup>2</sup>	•	•	13.22 18.34	1,934 2,684	35.0
Savings banks <sup>3</sup>	·	•	13.72 19.04	2,008 2,786	36.3
Cooperative and rural banks	•	•	1.24 1.72	181 252	3.3
Post Office	1.340	•	9.61 13.34	1,407 1,952	25.4
TOTAL	·	•	37.79 52.44	5,530 7,674	100.0

 $^1$  Sight deposits.  $^2$  Four big banks.  $^3$  Savings, regional, cantonal and other banks.

Categories of institution	Number of institutions	Number of branches	Number of inhabitants per branch
Commercial banks <sup>1</sup>	4	983	6,952
Savings banks <sup>2</sup>	439	2,015	3,392
Cooperative and rural banks	2	1,192	5,733
Subtotal	445	4,190	1,631
Post Office	1	3,824	1,787
TOTAL	446	8,014	853
Central bank	1	<b>10</b> <sup>3</sup>	•

## **B.1** Institutional framework

at end-1991

<sup>1</sup> Big banks. <sup>2</sup> Savings, regional, cantonal and other banks. <sup>3</sup> Two head offices, 8 branches.

## B.2 Cash dispensers, ATMs and EFT POS terminals at end-1991

	Cash di	spensers a		EFT POS			
of	Number of cash dispensers	Number of ATMs	Total number of cash dispensers and ATMs		Number of	Number of EFT POS terminals	Number of inhabitants per EFT POS terminal
21	2,371	•	2,3712	2,882	<b>2</b> <sup>3</sup>	5,183	1,319

<sup>1</sup> Bancomat and Postomat system. <sup>2</sup> Only cash dispensers. <sup>3</sup> ec - Direct (Tanken), ec- Direct (EFT POS) and Postomat-Plus.

			1991			
Instruments	Volume of transactions (millions)	Volume per capita	Percentage of total volume	Value of transactions USD/CHF (billions)	Value per capita USD/CHF	Percentage of total value
Cheques issued <sup>1</sup>	38.2	5.6	8.4	96.72 138.82	14,152.3 20,313.1	
Payments by credit card <sup>2</sup>	25.9	3.8	5.7	4.22 6.05	616.5 884.8	
Payments by debit card at EFT POS	13.6	2.0	3.0	0.56 0.80	81.74 117.33	
Paper-based credit transfers	128.5	18.8	28.2		•	
Paperless credit transfers <sup>3</sup>	235.5	34.4	51.6	.4	·	
Direct debits <sup>5</sup> ,	14.4	2.1	3.1	•	•	•
TOTAL	456.1	66.7	100.0	43,411.8 <sup>6</sup> 62,309.8 <sup>6</sup>	6.4 <sup>7</sup> 9.1 <sup>7</sup>	

# C. Relative importance of cashless payment instruments in the payment system

<sup>1</sup> Eurocheques, bank cheques, Swiss Bankers' travellers' cheques and postal cheques. <sup>2</sup> Rough estimates (American Express, Diners Club, Eurocard and VISA). <sup>3</sup> Swiss Interbank Clearing, data media exchange system of banks (DTA) and PTT (SAD, including Telegiro). <sup>4</sup> Value of transactions via the Swiss Interbank Clearing (SIC) system: (USD/CHF): 21,202/30,431 billion. <sup>5</sup> Excluding payments by debit cards. <sup>6</sup> Total giro transfers including interbank payments. <sup>7</sup> In millions of USD/CHF.

. Territorial area: 244.1 thousand sq.kms.

. Population: 57.6 million

. Gross national product in 1991: (USD/GBP) 1,017.0/574.5 billion (at nominal market prices)

. Per capita GNP: (USD/GBP) 17,653/9,974

. Exchange rate: (GBP per USD) 1991 average: 0.5650; end-1991: 0.5354

### A.1 Monetary aggregates

at end-1991

Items	Absolute USD/GBP (billions)	Per capita USD/GBP	Percentage of GNP	Number of accounts (millions)	Number of accounts per inhabitant
Total money supply <sup>1</sup> (M <sub>2</sub> )	519.8 278.3	9,025 4,832	48.4	•	•
Currency	29.3 15.7	510 273	2.7	•	•
Transferable deposits <sup>2</sup> .	490.5 262.6	8,515 4,559	45.7	140.13	2.4

 $^1$  M2 comprises M4 private sector holdings of notes and coin and sterling retail deposits with UK banks (all non-interestbearing deposits plus "chequable" sight or time deposits regardless of maturity plus other deposits, excluding CDs, of less than £100,000 and with less than one month to maturity) and building societies (transaction accounts and other deposits of less than £100,000 and up to one month to maturity).  $^2$  M2 less M4 private sector holdings of notes and coin.  $^3$  Estimate for all private sector sterling accounts with UK banks (including Girobank) and for ordinary share and deposit accounts with UK building societies. Accounts with the National Savings Bank are also included. Some types of account which are not included in M2 are included in this estimate of the number of accounts.

## A.2 Transferable deposits and number of accounts per category of institution at end-1991

Categories of institution	Number of accounts (millions)	Share of market (%)	Value of accounts <sup>1</sup> USD/GBP (billions)	Value of accounts per capita USD/GBP	Share of market (%)
Banks	81.02	57.8	270.3 144.7	4,692 2,512	54.8
Building societies	43.3 <sup>3</sup>	30.9	220.0 117.8	3,820 2,045	44.6
Post office (NSB)	15.84	11.3	2.6 1.4	45 24	0.6
TOTAL	140.1	100.0	492.9 263.9	8,557 4,581	100.0

<sup>1</sup> Figures for value of accounts with banks and building societies are compatible with M2. National Savings Bank accounts are not included in M2. <sup>2</sup> All private sector sterling accounts with UK banks (including Girobank). <sup>3</sup> Private sector ordinary share and deposit accounts with UK building societies. <sup>4</sup> National Savings Ordinary Accounts only. National Savings Bank facilities are available at post offices on an agency basis.

Categories of institution	Number of institutions	Number of branches	Number of inhabitants per branch
Banks <sup>1</sup>	520	13,554	4,250
Building societies <sup>2</sup>	110	5,921	9,728
Subtotal	630	19,475	2,958
Post Office (NSB) <sup>3</sup>	1	20,638	2,791
TOTAL	631	40,113	1,436
Central Bank	1	5	•

## **B.1** Institutional framework

at end-1991

<sup>1</sup> Comprises the 520 institutions, other than the Bank of England, which at the end of 1991 were authorised to accept deposits under the Banking Act, 1987. The number of branch offices excludes post offices, at which some Girobank services are provided on an agency basis. <sup>2</sup> In addition to their branch offices, the building societies have a large number of agents (e.g. solicitors, estate agents) where depositors can pay into or withdraw from their accounts. <sup>3</sup> National Savings Bank facilities are available at post offices on an agency basis.

## B.2 Cash dispensers, ATMs and EFT POS terminals at end-1991

Cash dispensers and ATMs			EFT POS		
Number of networks	Number of cash dispensers and ATMs	Number of inhabitants per cash dispenser and ATM	Number of networks	Number of EFT POS terminals	Number of inhabitants per EFT POS terminal
31	17,780²	3,240	33	190,0004	303

<sup>1</sup> Excludes networks operating in Northern Ireland. <sup>2</sup> During 1991 an estimated 1,066 million withdrawals were made from these machines valued at USD90.8 billion (some GBP48.6 billion). <sup>3</sup> Includes only the major schemes in operation in the UK. In-house retailer schemes are excluded. <sup>4</sup> Estimated. Excludes terminals installed by retailers to handle in-house cards on integrated EPOS EFT POS systems.

Instruments	Volume of transactions (millions)	Volume per capita	Percentage of total volume	Value of transactions USD/GBP (billions)	Value per capita USD/GBP	Percentage of total value
Cheques issued <sup>1,2</sup>						
of which:						
Town	0.4	< 0.1	< 0.01	4,520	78,470	
				2,420	42,013	9.9
Other	3,126	54.3	48,4	2,863	49,709	
				1,533	26,614	6.2
Payments by						
credit card <sup>3</sup>	690	12.0	10.7	55	939	
				29	503	0.1
Payments by	070		-	10		
debit card	359	6.2	5.6	18 10	325 174	< 0.1
Paper-based				10	1/4	< 0.1
credit transfers <sup>2</sup>	477	8.3	7.4	1,279	22,211	
				685	11,892	2.8
Paperless credit transfers, of which:						
- large-value	8	0.1	0.1	35,581	617,723	1
transfers <sup>4</sup>				19,050	330,729	77.7
- others <sup>5</sup>	877	15.2	13.6	960	16,668	
				514	8,924	2.1
				538	9,339	
Direct debits	916	15.9	14.2	288	5,000	1.2
				45,814	795,385	
TOTAL <sup>6</sup>	6,453	112.0	100.0	24,529	425,849	100.0

## C. Relative importance of cashless payment instruments in the payment system

1991

<sup>1</sup> Excluding an estimated 657 million cheques processed at branch level, i.e. drawn on the branch at which the payee's account is held and not passing through the clearings (value of transactions is not available). An estimated 466 million cheques (personal and business) were used to obtain cash: such cheques may either be included in the cheques processed at branch level (above) or in the cheque clearing statistics included in table C (breakdown not available). The value of these cheques is also not available. <sup>2</sup> Including inter-branch (values are estimated). <sup>3</sup> VISA and Mastercard only. Transactions by holders of approximately 12 million retailer cards and 1.6 million travel and entertainment cards (American Express and Diners Club) are excluded. <sup>4</sup> Via CHAPS. <sup>5</sup> Including standing orders. <sup>6</sup> Excluding government payments in cash from post offices against state benefit vouchers, and postal orders.

. Territorial area: 9.78 million sq.kms.

. Population: 253.9 million

. Gross national product in 1991: USD 5,764.1 billion

. Per capita GNP: USD 22,703

### A.1 Monetary aggregates

at end-1991

Items	Absolute USD (billions)	Per capita USD	Percentage of GNP	Number of accounts (millions)	Number of accounts per inhabitant
Total money supply (M3) <sup>1,2</sup>					
M1	898.1	3,537	15.6	•	•
M2	3,438.9	13,545	59.7	•	
M3	4,170.9	16,428	72.4	•	•
Currency <sup>3</sup>	270.0	1,063	4.7	*	•
Transferable deposits	639.54	2,519	11.1	1705	0.76

<sup>1</sup> Federal Reserve Statistical Release H.6 (508), Table 1, "Money Stock, Liquid Assets, and Debt Measures", May 28, 1992, p. 7. <sup>2</sup> M1: currency + travellers' cheques + demand deposits + other chequable deposits. M2: M1 + overnight Eurodollars and RPs + money market mutual funds (general purpose and broker dealer only) + money market deposit accounts + savings time deposits. M3: M2 + large time deposits (over USD 100,000) + term RPs and Euro-dollars + money market funds (institutions only). All money supply (M) numbers seasonally adjusted. <sup>3</sup> Federal Reserve Statistical Release H.6 (508), Table 5, "Components of Money Stock, Liquid Assets, and Debt", May 28, 1992, p. 7. <sup>4</sup> Ibid. <sup>5</sup> Estimated. Number of consumer transferable deposit accounts at commercial banks: 77.6 million. <sup>6</sup> Number of consumer accounts per household: 1.2. Number of households: 95.3 million. If all types of transferable deposit accounts are included (individual, partnership and corporation) in the calculation, the number of accounts per household is 1.8.

Categories of institution	Number of accounts <sup>1</sup> (millions)	Share of market (%)	Value of accounts <sup>2</sup> USD (billions)	Value of accounts per capita USD	Share of market (%)
Commercial banks	130	76.5	547.8	2,158	85.7
Savings banks, S & Ls, FSBs & MSBs³	23	13.5	71.8	283	11.2
Credit unions <sup>4</sup>	17	10.0	19.9	78	3.1
Post Offices	•	•	•	•	•
TOTAL	170	100.0	639.5	2,519	100.0

## A.2 Transferable deposits and number of accounts per category of institution at end-1991

<sup>1</sup> Estimated. Includes accounts held by individuals, partnerships and corporations. Number of consumer chequing accounts per household: 1.2; number of households: 95.3 million. Number of consumer transferable demand deposit accounts at commercial banks: 77.6 million. In 1991 there were about 20.5 million commercial enterprises in the United States (4.1 million corporations, 1.6 million partnerships and 14.8 non-farm proprietorships) holding about 52 million accounts. <sup>2</sup> Demand and other chequable deposits. Federal Reserve Statistical Release H.6 (508), Table 4, "Components of Money Stock, Liquid Assets, and Debt," May 28, 1992. Numbers not seasonally adjusted. <sup>3</sup> S&Ls: Savings and Loan Associations; FSBs: Federal Savings Banks; MSBs: Mutual Savings Banks. Number of S&L accounts derived from Federal Reserve Survey of Consumer Finances. <sup>4</sup> Credit Union National Association, Madison, Wisconsin.

Categories of institution	Number of institutions	Number of branches <sup>1</sup>	Number of inhabitants per branch
Commercial banks <sup>2</sup>	12,272	65,272	3,890
Thrift institutions Savings and loans <sup>3</sup> . Savings banks <sup>4</sup>	1,267 1,145	6,330 11,209	40,109 22,650
Credit unions <sup>5</sup>	15,457	22,153	11,461
Post Offices <sup>6</sup>	28,912	39,985	6,350
Total <sup>7</sup>	30,141	104,964	2,419
Central bank <sup>8</sup>	12	37	•

## **B.1** Institutional framework

at end-1991

<sup>1</sup> Total number of offices, including head offices listed in column 1. <sup>2</sup> 919 multibank holding companies controlled 3,511 banks with 69.4% of domestic commercial bank deposits and 72.3% of domestic commercial bank assets. <sup>3</sup> Includes 597 Federal and 670 State savings and loan associations with 5,063 branches (as at June 1992). <sup>4</sup> Includes 359 mutual savings banks with 2,921 branches; 696 Federal and 2 State savings banks with 7,143 branches (as at June 1992); and 88 cooperative banks. <sup>5</sup> Number of credit union branch offices in 1991: 6,966 (Credit Union National Association, Madison, Wisconsin). <sup>6</sup> As post offices are not a point of entry into the payment system except for postal money orders, they are excluded from the totals. <sup>7</sup> Excludes post offices and 760 banking entities. <sup>8</sup> Does not include the Board of Governors, 11 regional cheque processing centres, and two contingency processing sites.

### **B.2** Cash dispensers, ATMs and EFT POS terminals

at end-1991

Cash dispensers and ATMs			EFT POS			
Number of networks	Number of cash dispensers and ATMs	Number of inhabitants per ATM	Number of networks	Number of EFT POS terminals	Number of inhabitants per EFT POS terminal	
75	85,0001.2.3	2,987	232,4	88,0002.5	2,885	

<sup>1</sup> Method of estimating number of terminals changed from previous editions. <sup>2</sup> POS News, Faulkner & Gray Inc. (Chicago). <sup>3</sup> Average 6,360 transactions a month: 70% withdrawals, 8% deposits and 22% balance inquiries and other transactions. Number of cards outstanding: 152.3 million. Average withdrawal: USD 68.89; average deposit: USD 600.94. (The Nilson Report (Los Angeles), issue 529). About 14% of ATMs are dedicated cash dispensers. <sup>4</sup> 10 shared bank networks; 10 proprietary networks; 3 single bank networks(POS News, Faulkner & Gray, Inc. (Chicago)). <sup>5</sup> Does not include dedicated credit authorisation terminals or retail electronic cash register terminals.

Instruments	Volume of transactions (millions)	Volume per capita	Percentage of total volume	Value of transactions USD (billions)	Value per capita USD	Percentage of total value
Cheques <sup>1</sup>	57,484.0	226.4	81.2	66,006.0	259,980.0	13.7
Credit card transactions <sup>2</sup> Payments by	11,241.0	44.3	15.9	485.5	1,912.3	0.1
debit card at POS <sup>3</sup>	238.8	0.9	0.3	6.4	25.4	<0.001
Paper-based giro payments				•		
Large-value paperless credit transfers <sup>4,5</sup> Other credit	102.3	0.4	0.1	409,567.0	1,613,174.0	84.8
transfers by ACH and ATM <sup>6</sup>	1,122.0	4.4	1.6	2,099.3	8,268.6	0.4
Direct debits <sup>7</sup>	582.0	2.3	0.8	4,783.4	18,840.5	1.0
Total	70,770.1	278.7	100.0	482,947.6	1,902,200.8	100.0

## C. Relative importance of cashless payment instruments in the payment system

1991

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<sup>1</sup> Includes 56,797 million commercial cheques valued at USD 65.3 trillion; 418 million travellers cheques valued at USD 22.5 billion; 855 million money orders valued at USD 81.1 billion (including 166 million US Postal Money Orders valued at USD 17.7 billion); and 521 million Federal government cheques valued at USD 723 billion. The Federal Reserve processed 18.7 billion cheques valued at USD 12.2 trillion. The average value of a cheque processed through the Federal Reserve was USD 648; the average value of all cheques processed was about USD 1,150. Thus the total value of all commercial cheques is estimated at USD 65.3 trillion (\$1,150 x 56,797).

<sup>2</sup> The Nilson Report, issue 527 (July 1992) (Los Angeles). Includes all types of credit card transactions (i.e. bank, oil company, telephone, retail store, Discover, travel and entertainment, and other; bank cards include Visa and MasterCard credit cards only (excluding their debit cards); bank card volume: 3.41 billion valued at USD 259.95 billion. Bank cards accounted for 101 million debit transactions valued at USD 5.5 billion and 26 million cash withdrawals valued at USD 2.6 billion. Transaction volume per cardholder for all types of cards: 101.0 valued at USD 4,362; transaction volume per bank cardholder: 42.7 valued at USD 3,262; average amount for all types of credit card transactions: USD 43.19, for bank cards: USD 76.34. There are 111.3 million credit cardholders in the United States holding 1,027.3 million credit cards, of which 79.7 million are bank cardholders holding 220.9 million cards. Payments on credit card accounts (volume and value) are included in cheque data. <sup>3</sup> The Nilson Report, issue 529 (August 1992) (Los Angeles).

<sup>4</sup> Includes Fedwire volume of 64.7 million valued at USD 192.3 trillion and CHIPS volume of 37.6 million valued at USD 217.3 trillion. Does not include transfers between customers of the same bank. Does not include 1991 securities transfers volume of 11.1 million valued at USD 119.0 trillion. Approximately 20% to 25% of CHIPS volume is domestic. This includes incountry FX trades. About 15%, or 54 million, of the 362.3 million messages transmitted via SWIFT related to domestic transactions in the United States.

<sup>5</sup> Approximately 40% of the dollar value of Fedwire transfers is for interbank loan transactions, 10% for Euro-dollar transactions and 10% for commercial transactions. Of the dollar value of CHIPS transactions, 55% is for foreign exchange transactions and 28% for Euro-dollar transactions.

<sup>6</sup> Includes 1,058.6 million ACH credit payments valued at USD 2,092.2 billion (540.6 million commercial payments valued at USD 1,509.2 billion and 518.0 million government payments valued at USD 583.0 billion); 18 million money transfer services (e.g. Western Union) transactions valued at USD 4 billion; and 45.4 million payments via ATMs valued at USD 3.1 billion (it is estimated that between 0.4% and 1% of all ATM transactions are for bill payments. The average figure (0.7%) yields an estimated ATM bill payment volume of 45.4 million valued at USD 3.1 billion for 1991). Does not include commercial "on-us" ACH items originated and received by the same bank, a number which is not known with certainty. "On-us" items are estimated to increase total ACH volume (debits + credits) from 1.6 billion payments valued at USD 6.9 trillion to 1.8 billion payments valued at USD 7.5 trillion.

<sup>7</sup> Includes 578.5 million commercial ACH debit transactions valued at USD 4,679.0 billion and 3.5 million government ACH debit transactions valued at USD 104.4 billion, but not commercial "on-us" items.

## Methodology and sources used for the compilation of Tables C

#### <u>Belgium</u>

The data include estimates for transactions processed outside the interbank clearing procedure (including "on-us" items). These are obtained from a survey carried out by the Belgian Banking Association, the Savings Banks Group and at each public credit institution. Data relating to transactions with payment cards are obtained from a quarterly survey conducted by the central bank (since 1985) at the various companies concerned (PAYSYS). Transactions exchanged in the interbank clearing procedure also include those effected by banks for their own account.

#### Canada\_

The estimates of the volume and value of transactions effected by cheque, paperless direct credit and direct debit are based on data generated by the Automated Clearing Settlement System of the Canadian Payments Association. The volume and value of transactions effected by credit card are estimated on the basis of data on the dollar sales and the number of sales vouchers processed for the two bank credit card plans that are collected by The Canadian Bankers' Association. The estimates of the volume and value of EFT POS transactions are taken from an informal annual survey of EFT POS developments carried out by the Bank of Canada. Finally, the volume and value of bill payments initiated at ATMs are estimated on the basis of data on the volume of all types of transaction effected at cash dispensers and ATMs of chartered banks collected by The Canadian Bankers' Association, figures from a semi-annual census of cash dispensers and ATMs conducted by the Canadian Payments Association, and an estimate of the average value of a bill.

#### France

The figures combine the data relating to all payment instruments, irrespective of whether they are routed via "official" circuits or not.

The statistical data relating to transactions routed via "official" circuits are obtained from Chambres de Compensation (clearing houses) for paper-based instruments and from Ordinateur de Compensation, Centres Régionaux d'Echange d'Images Chèques and Groupement Cartes Bancaires for paperless instruments.

The figures for the transactions that are not routed via "official" circuits are taken from a statistical survey made by the Bank of France with main credit institutions and La Poste.

Statistical data on cheques include postal cheques, those used to obtain cash and truncated cheques.

The transactions relating to payments by credit cards give rise to settlement in the form of a direct debit or, more rarely, a cheque. It is not possible to isolate them and they are not shown in the table.

Payments by debit cards are only routed via "official" circuits. Statistical data are obtained from Groupement Cartes Bancaires for transactions not exchanged through Ordinateur de Compensation.

The figures relating to paper-based credit transfers include Treasury transfers and retail credit transfers submitted to the Bank of France by the credit institutions and La Poste and not exchanged through the clearing houses, and credit transfers of a purely interbank nature. Since 1990 it has been possible to isolate interbank credit transfers (see Footnote 2). Large-value credit transfers are not included in the table.

Paperless credit transfers are bulk operations (mainly wages and pensions).

Statistical data on direct debits include figures for interbank payment orders.

#### Germany

Table C includes only payments made by non-banks, irrespective of whether the issuer of the order is a resident or non-resident.

Interbank payments via the Bundesbank are shown in Footnote 5, broken down between the various procedures used. They also include the banks' transactions for their own account, where these are routed via the Bundesbank. Interbank payments which bypass the Bundesbank and are handled within the banking industry's giro networks are not included.

For statistical reasons the table includes all cheques collected from the bank at which the account is held via the clearing system or used by the account holder to withdraw cash. It therefore also includes cheques made out for the purpose of withdrawing cash over the counter at a bank other than that at which the account is held and hence collected via the clearing system. In addition, the number of cheques collected via the paperless cheque collection (cheque truncation) procedure is shown in brackets.

As regards payments by credit card it should be noted that credit card companies' settlements with retailers (normally credit transfers) and also payment of the monthly totals by card holders to card issuers (by credit transfer, direct debit or cheque) are contained in the corresponding items.

For credit transfers the breakdown between paper-based and paperless credit transfers is determined according to whether the customer submits the order in paperless or paper-based form. The Banks' conversion of customers' paper-based credit transfers into paperless credit transfers is included in Footnote 6.

The figures for paper-based credit transfers also include cash paid in and transferred for crediting to an account held at another branch of the same bank or another bank.

The figures for direct debits include all payments under debit/collection authorisations, which arise out of different underlying transactions (see the relevant section of the Red Book). They thus also include cash withdrawals at cash dispensers and ATMs, where these are effected at a bank other than that at which the account is held. These are collected as direct debits via the clearing system. In addition, the figures also include transactions arising out of eurocheques made out abroad by holders of accounts at German credit institutions and collected by the German clearing agent (Gesellschaft für Zahlungssysteme mbH (GZS) - Payment Systems Company) from the drawee bank by means of a direct debit. Direct debits for collecting the proceeds of truncated cheques are not include; thus double-counting is avoided.

#### <u>Italy</u>

The figures provided in Table C ("Relative importance of cashless payment instruments in the payment system") relate to bank instruments, interbank payments, postal instruments and bank and travel and entertainment (T&E) credit cards.

#### Bank instruments:

- The figures for payment operations effected by bank instruments (bank cheques, bankers' drafts, debit cards used at EFT POS terminals, credit transfers, preauthorised debits) are taken from a sample group of seventy-five banks accounting for approximately 80% of the demand deposits of the entire banking system. Therefore, these statistics do not relate to the entire system but they include, for the banks concerned, the transactions not cleared or settled through interbank arrangements ("on-us" items).
- The item "cheques issued" includes: bank cheques, bankers' drafts, Bank of Italy cashier's cheques; cheques issued to withdraw cash are not included.
- The criterion adopted to distinguish between paperless and paper-based credit transfers refers to the procedures used by the banks to execute the payment orders.
- In 1991, for the first time, the item "direct debits" includes electronic bank receipts (Ri. ba.). Previously the payments originated by the electronic bank receipts were included within the paperless credit transfers.

Interbank transfers:

- Large-value (paper-based and paperless) transfers include transfers of a purely interbank nature effected through the clearing and settlement systems. Transfers between the banking system and the Bank of Italy or the Treasury are also included.

Postal instruments:

- The item "cheques issued" includes postal cheques and postal money orders.
- Inpayments on postal current accounts (generally made in cash or by bankers' draft) are included in "paper-based credit transfers".
- Postal giro payments are considered as "paperless credit transfers" whereas, in the past they were included in "paper-based credit transfers".

Bank and T&E credit cards:

- The item "payments by credit card" comprises payment transactions effected in Italy and abroad by holders of bank and T&E credit cards issued in Italy.

#### <u>Japan</u>

Sources are indicated in the footnotes.

#### **Netherlands**

In principle, all cashless transactions are included, duly corrected for double-counting. Though most figures are based on available statistics, estimates have sometimes had to be made, for instance with respect to market shares and to the volume and value of transactions between customers of the same bank.

### <u>Sweden</u>

The volume and value of cheques transactions of one of the largest commercial bank's have been used to estimate issued cheques for the whole banking sector. In Sweden cheques are filed by the receiving bank. The total amount of cheques is calculated and cleared through the Swedish clearing system.

Figures for credit card transactions volume and value have been based on a special study made by the Swedish Bankers' Association.

For debit cards data have been collected from the two card-administrative companies SERVO and BABS. For the petrol companies estimated figures have been used.

Data on paper-based and paperless credit transfers have been collected from the Postal Giro's and the Bank Giro's annual reports.

#### Switzerland

The sources are stated in the footnotes.

#### United Kingdom

Sources for the statistics included in Table C are documents published by the Association for Payment Clearing Services (APACS) and the British Bankers' Association (BBA). Data in respect of cross-border, foreign exchange and securities transactions are included indistinguishably. Excluded, however, are government payments in cash from post offices against state benefit vouchers as well as postal orders.

### Cheques:

- Split between large-value same-day Town Clearing and the cheques processed through the three-day Cheque Clearing.
- Excludes cheques processed at branch level (a proportion of which will have been used to obtain cash) see Footnote 1.
- Includes some cheques used to obtain cash see Footnote 1.
- Cheques (including eurocheques) written abroad and drawn on UK banks are included in the Cheque Clearing data.
- Includes inter-branch items, i.e. items exchanged between branches of the same bank. The value of inter-branch cheques is estimated.
- Some maturing commercial bills are processed in the Town Clearing and included in the data.
- Travellers' cheques are included in the Cheque Clearing data.

#### Credit cards:

- VISA and Mastercard only. Excludes retailer card and travel and entertainment card transactions.
- Includes cash advances.
- Includes data on transactions carried out abroad with UK-issued cards (no breakdown between domestic and cross-border transactions is available).
- Excludes data on foreign-issued cards used in the United Kingdom.

#### Debit cards:

- Many debit cards have more than one function; transaction data are for the debit card function only.
- Includes debit card transactions at EFTPOS.

#### Paper-based credit transfers:

- Items processed through the three-day Credit Clearing.
- Excludes credits processed at branch level.
- Includes inter-branch items. The value of inter-branch items is estimated.
- Includes transactions involving the payment of cash into accounts.

#### Paperless credit transfers:

- Split between large-value (CHAPS) and "others" (standing orders and other credits processed via BACS, and inter-branch electronic credits).
- The value of inter-branch electronic credits is estimated.
- CHAPS data exclude inter-branch items.

#### Direct debits:

- Items processed via BACS' Direct Debiting Scheme (debit on the debtor's bank account initiated by the creditor, based on the prior written agreement of the debtor).
- Does not include transactions originating from ATM withdrawals.

#### United States

The data are taken directly from sources cited in the footnotes or estimated from data available to the central bank. Total cheque volume, for example, is an estimate based on central bank processing data and its estimated overall market share; total cheque value is based on a 1979 survey that is adjusted for inflation. Some of the data include "on-us" transactions; some do not. Cheque, large-value funds transfers, and credit card data include "on-us" data; credit and debit transfers through the ACH and POS debits do not.