

Comparative tables

Table 1
Banknotes and coin in circulation
 End of year

	Total (USD millions) ¹					Value per inhabitant (USD) ¹				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Belgium	11,953	12,694	12,055	11,045	6,257	1,174	1,244	1,179	1,078	609
Canada	20,704	20,698	25,518	23,539	23,697	688	682	834	762	759
France	44,584	48,303	44,907	41,500	25,822	745	804	745	685	424
Germany	137,688	144,327	131,706	117,149	59,928	1,678	1,759	1,604	1,425	728
Hong Kong SAR	10,404	10,479	12,807	11,770	13,035	1,603	1,601	1,938	1,766	1,938
Italy	61,080	69,410	66,124	64,632	50,806	1,062	1,205	1,147	1,120	877
Japan	405,887	471,446	581,944	539,144	507,160	3,217	3,728	4,594	4,248	3,984
Netherlands	19,205	19,974	17,400	15,753	8,055	1,231	1,272	1,101	989	502
Singapore	6,389	6,110	6,792	6,520	6,412	1,684	1,558	1,719	1,623	1,552
Sweden	9,370	9,579	10,231	9,409	9,162	1,059	1,082	1,155	1,061	1,030
Switzerland	19,796	21,858	19,830	19,562	21,418	2,783	3,065	2,767	2,715	2,950
United Kingdom	40,116	42,339	45,612	45,057	47,102	680	715	767	754	786
United States	428,100	463,300	521,500	535,200	584,900	1,597	1,713	1,911	1,944	2,052
CPSS ²	1,215,277	1,340,519	1,496,425	1,440,281	1,363,754	1,654	1,815	2,016	1,930	1,799

Note: For an explanation of the footnotes refer to the end of the table. Please refer to the individual country tables for detailed explanation.

Table 1 (cont)

	As a percentage of GDP					As a percentage of narrow money				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Belgium	5.0	4.8	5.1	4.8	2.8	26.5	23.8	20.4	19.3	11.8
Canada	3.4	3.5	3.8	3.3	3.5	14.2	14.5	15.6	13.7	13.0
France	3.3	3.2	3.3	3.1	2.0	13.1	12.9	12.7	11.9	7.4
Germany	6.7	6.4	6.6	6.2	3.3	27.1	24.1	23.5	21.9	11.3
Hong Kong SAR	6.1	6.4	8.1	7.2	7.9	42.8	45.5	48.5	45.0	44.2
Italy	5.4	5.5	5.9	6.0	4.7	16.1	16.1	14.4	14.3	11.3
Japan	10.1	10.5	11.7	12.1	13.1	25.8	25.3	24.8	25.0	23.7
Netherlands	5.3	4.8	4.6	4.2	2.1	15.7	14.1	12.8	11.4	5.7
Singapore	7.6	7.4	8.0	7.1	7.7	38.9	37.2	36.4	33.9	32.9
Sweden	4.1	4.1	4.3	4.3	4.5	nav	nav	nav	nav	nav
Switzerland	7.8	7.9	8.2	7.9	8.7	15.6	15.5	15.3	15.8	16.7
United Kingdom	3.0	3.0	3.1	3.2	3.3	5.0	5.0	5.0	5.0	5.0
United States	5.1	5.3	5.6	5.4	5.8	39.0	41.4	45.4	48.1	48.6
CPSS ²	5.9	6.4	6.8	6.5	6.2	23.3	23.1	23.6	23.7	21.9

¹ Converted at end-of-year exchange rates.

CPSS: ² Sum or average excluding those countries where data are not available.

Table 2
Transferable deposits held by non-banks
 End of year

	Value per inhabitant (USD) ¹					As a percentage of GDP					As a percentage of narrow money				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Belgium	3,261	3,984	4,609	4,504	4,558	14.0	15.5	19.9	20.0	20.9	73.5	76.2	79.6	80.8	88.2
Canada	4,169	4,010	4,512	4,818	5,091	20.3	20.4	20.3	20.9	23.2	85.8	85.5	84.4	86.3	87.0
France	4,913	5,436	5,127	5,080	5,323	21.5	21.4	22.7	23.3	25.1	86.8	87.1	87.3	88.1	92.6
Germany	4,515	5,542	5,220	5,080	5,712	18.0	20.1	21.6	22.2	25.8	72.9	75.9	76.5	78.1	88.7
Hong Kong SAR	2,140	1,915	2,061	2,160	2,448	8.1	7.7	8.6	8.9	10.0	57.2	54.5	51.5	55.0	55.8
Italy	5,379	6,179	6,798	6,704	6,858	27.4	28.4	35.2	35.7	37.1	81.7	82.4	85.6	85.7	88.7
Japan	9,246	10,988	13,931	12,748	12,854	29.0	31.0	35.4	36.2	42.4	74.2	74.7	75.2	75.0	76.3
Netherlands	6,609	7,740	7,499	7,710	8,294	28.3	29.4	31.5	32.8	35.2	84.3	85.9	87.2	88.6	94.3
Singapore	2,644	2,625	3,007	3,158	3,167	12.0	12.4	13.9	13.8	15.8	61.1	62.8	63.6	66.1	67.1
Sweden	10,487	10,503	10,678	9,972	9,867	40.2	39.7	40.2	40.0	42.8	nav	nav	nav	nav	nav
Switzerland	8,561	9,682	8,714	8,234	8,462	23.9	25.0	25.7	23.9	24.8	47.9	48.9	48.2	47.9	47.8
United Kingdom	12,997	13,718	14,471	14,225	14,960	57.0	57.2	59.0	60.0	62.7	95.0	95.0	95.0	95.0	95.0
United States	2,464	2,398	2,266	2,066	2,143	7.9	7.4	6.7	5.8	6.1	60.2	57.9	53.9	51.2	50.7
CPSS ²	5,452	6,034	6,547	6,219	6,403	19.4	21.3	22.1	20.8	22.1	75.5	75.8	75.6	75.4	77.2

Note: Please refer to the individual country tables for detailed explanation.

¹ Converted at end-of-year exchange rates.

CPSS: ² Average excluding those countries where data are not available.

Table 3
Settlement media used by banks
End of year

	Banks' reserves at central bank									
	USD billions ¹					As a percentage of narrow money				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Belgium	neg	1.0	7.4	6.7	6.7	0.1	1.8	12.5	11.8	12.6
Canada	0.3	0.4	0.9	0.3	0.3	0.2	0.3	0.6	0.2	0.2
France ²	3.8	19.4	24.1	26.0	26.3	1.1	5.2	6.8	7.4	7.5
Germany	23.4	27.7	33.5	33.0	34.3	4.6	4.6	6.0	6.2	6.5
Hong Kong SAR ³	neg	0.3	1.0	0.1	0.1	0.2	1.4	3.9	0.3	0.3
Italy	47.6	11.9	12.2	11.4	11.5	12.6	2.8	2.7	2.5	2.6
Japan	27.7	33.2	94.9	36.9	82.6	1.8	1.8	4.0	1.7	3.9
Netherlands	3.0	9.1	7.3	8.7	9.0	2.5	6.4	5.4	6.3	6.3
Singapore	4.6	3.3	4.5	3.3	3.8	28.0	19.9	24.2	17.1	19.3
Sweden	0.3	0.2	0.5	neg	neg	nav	nav	nav	nav	nav
Switzerland	4.2	5.6	6.6	4.7	4.7	3.3	4.0	5.1	3.8	3.7
United Kingdom	4.5	2.6	3.6	2.5	2.7	0.6	0.3	0.4	0.3	0.3
United States	18.3	15.6	12.4	13.5	17.8	1.7	1.4	1.1	1.2	1.5
CPSS ⁴	137.8	130.2	208.9	147.2	199.6	2.7	2.3	3.3	2.4	3.2

Note: For an explanation of the footnotes refer to the end of the table. Please refer to the individual country tables for detailed explanation.

Table 3 (cont)

	Transferable deposits at other banks									
	USD billions ¹					As a percentage of narrow money				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Belgium	4.9	5.4	6.5	6.6	11.7	10.9	10.1	11.0	11.5	22.0
Canada	3.7	4.2	5.2	4.5	3.3	2.5	2.9	3.2	2.6	1.8
France ²	149.1	183.9	190.7	169.2	165.9	44.0	49.1	53.9	48.4	47.4
Germany	238.9	281.9	114.9	105.5	108.5	47.0	47.1	20.5	19.7	20.5
Hong Kong SAR ³	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap
Italy	55.0	64.2	59.3	88.1	75.0	14.5	14.9	12.9	19.5	16.7
Japan	29.9	30.7	103.1	37.8	52.8	1.9	1.6	4.4	1.8	2.5
Netherlands	1.2	25.0	16.4	49.7	26.9	1.0	17.7	12.1	35.9	19.1
Singapore	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	11.9	13.9	11.1	7.9	11.7	nav	nav	nav	nav	nav
Switzerland	23.6	37.2	26.2	30.8	27.4	18.6	26.3	20.3	24.8	21.3
United Kingdom	371.1	357.9	358.9	361.4	404.3	46.1	41.9	39.6	40.4	42.8
United States	29.5	32.8	27.5	32.1	34.9	2.7	2.9	2.4	2.9	2.9
CPSS ⁴	918.9	1,037.0	919.7	893.4	922.4	17.6	17.9	14.5	14.8	14.9

¹ Converted at end-of-year exchange rates.

France: ² Change in reserves policy from 16 October 1998.

Hong Kong SAR: ³ Banks do not maintain reserves with the HKMA as there are no reserve requirements in Hong Kong SAR. The data represent the closing balance of the aggregate balance of settlement accounts.

CPSS: ⁴ Sum or average excluding those countries where data are not available.

Table 4
Institutional framework

	Number of institutions offering payment services ¹		Number of central bank branches ¹		Number of bank branches ¹		Number of post office branches ¹		Others ¹		Total number of branches offering payment services ¹		Number of accounts on which payments can be made ²	
	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
Belgium	11.8	11.2	0.8	0.7	645.1	599.9	135.1	131.1	nap	nap	780.2	731.1	1.2	1.0
Canada ^{3, 4}	62.0	54.1	0.0	0.0	270.3	285.9	nap	nap	173.3	172.4	443.6	458.3	nav	nav
France	27.8	26.9	3.5	3.5	423.5	427.7	272.9	185.5	65.3	64.5	765.2	681.1	1.1	1.1
Germany ⁵	33.3	30.6	1.6	1.6	681.1	640.5	nap	nap	nap	nap	682.9	642.0	1.1	1.1
Hong Kong SAR ⁶	23.1	19.8	0.2	0.1	241.3	218.6	nap	nap	nap	nap	241.4	218.7	nav	nav
Italy	13.6	13.3	1.7	1.7	486.4	503.4	241.3	237.0	nap	nap	729.4	742.2	0.6	0.6
Japan	22.3	19.6	0.3	0.3	315.4	304.3	190.4	189.9	nap	nap	506.0	494.5	nav	nav
Netherlands ⁷	7.1	6.9	0.3	0.2	238.0	218.6	137.4	140.4	nap	nap	375.7	359.3	1.4	1.4
Singapore ⁸	54.0	48.9	0.7	0.7	174.7	150.6	nap	nap	nap	nap	175.0	150.8	nav	nav
Sweden	14.3	15.1	0.1	0.1	225.6	229.3	154.7	151.7	nap	nap	380.3	381.1	nav	nav
Switzerland	46.6	45.2	0.8	0.8	395.5	387.5	469.9	437.6	nap	nap	866.2	825.9	nav	nav
United Kingdom	8.4	8.0	neg	neg	252.0	244.9	307.8	291.9	nap	nap	559.8	536.9	2.7	2.6
United States	74.5	71.2	0.1	0.1	282.4	272.9	nap	nap	nap	nap	282.4	273.0	nav	nav
CPSS ⁹	42.9	40.8	0.7	0.7	359.7	349.2	234.3	214.7	nap ¹⁰	nap ¹⁰	481.8	460.9	nap ¹⁰	nap ¹⁰

Note: Please refer to the individual country tables for detailed explanation.

¹ Per million inhabitants. ² Per inhabitant.

Canada: ³ "Number of central bank branches": there are five branches but only one offers payment services. ⁴ "Others" includes trust and loan companies; local credit unions and caisses populaires; and governmental savings institutions.

Germany: ⁵ Postbank AG is a fully fledged credit institution, and those post office branches which are entrusted with the semi-cashless payment systems on behalf of Postbank AG are included under "Number of bank branches" (and not "Number of post office branches").

Hong Kong SAR: ⁶ "Number of central bank branches" excludes the HKMA's two overseas representative offices (London and New York).

Netherlands: ⁷ "Number of bank branches" excludes the counters of the postal institution.

Singapore: ⁸ As at end-March. The institutions offering payment services include banks and finance companies.

CPSS: ⁹ Average excluding those countries where data are not available. ¹⁰ Statistically not relevant.

Table 5
Cards with a cash function and ATMs

	Number of ATMs per million inhabitants (end of year)					Number of transactions per inhabitant					Average value per transaction (USD) ¹				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Belgium	492	564	606	657	669	15.7	15.6	17.4	19.8	21.5	117.9	118.2	111.3	97.5	92.8
Canada ³	652	775	873	1,034	1,142	43.1	47.3	47.2	48.3	47.8	50.4	62.0	65.3	66.6	69.5
France	452	490	538	580	606	14.0	15.5	17.0	17.9	19.1	66.2	62.8	64.8	56.0	54.7
Germany	505	556	563	580	603	nav	17.1	18.4	20.4	19.4	nav	169.5	155.9	134.2	140.2
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	444	487	524	549	593	7.2	8.5	8.7	9.1	9.7	184.9	178.7	170.6	150.3	144.9
Japan ⁴	924	934	944	922	918	3.0	3.1	3.1	3.2	3.1	481.4	433.8	501.3	532.2	474.4
Netherlands	410	418	422	435	445	25.9	27.1	28.5	29.5	28.0	95.9	96.0	93.7	79.7	88.2
Singapore ⁵	499	483	470	446	435	4.0	4.0	2.6	2.1	2.1	149.4	135.0	140.0	138.2	124.7
Sweden	268	281	291	295	289	35.3	37.6	35.0	36.2	37.7	104.5	108.4	100.2	92.1	81.4
Switzerland	603	642	655	675	694	11.4	11.3	12.2	17.8	19.6	186.6	180.3	173.2	117.0	111.9
United Kingdom	393	415	460	552	612	29.6	31.2	33.1	33.9	36.6	84.5	87.8	88.8	84.5	84.0
United States	616	691	832	991	1,137	41.0	41.4	39.9	46.8	47.7	67.7	68.0	68.0	69.6	68.0
CPSS ⁶	602	652	723	801	875	25.8	25.6	25.5	28.7	29.5	82.2	88.7	89.8	86.2	83.6

Note: For an explanation of the footnotes refer to the end of the table. Please refer to the individual country tables for detailed explanation.

Table 5 (cont)

	Increase in the number of ATMs (%)					Increase in the number of transactions (%)					Increase in the value of transactions (%) ²				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Belgium	24.3	15.0	7.7	8.6	2.1	3.8	-0.2	11.4	14.1	9.2	-8.6	0.1	4.9	-0.1	4.0
Canada ³	5.6	19.9	13.7	19.4	11.6	6.1	10.9	0.5	3.3	0.1	1.3	29.9	7.5	3.8	3.0
France	10.4	8.6	10.3	8.4	5.0	9.0	11.4	10.3	5.5	7.7	-5.6	5.7	13.9	-8.9	5.2
Germany	10.1	10.2	1.3	3.1	4.1	nav	nav	7.7	11.0	-4.7	nav	nav	-1.0	-4.4	-0.5
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	5.0	9.8	7.7	5.0	8.3	12.0	18.2	2.5	5.6	6.6	2.9	14.2	-2.1	-7.0	2.8
Japan ⁴	3.0	1.3	1.2	-2.2	-0.1	4.2	3.3	neg	3.6	-2.2	-7.1	-6.9	15.6	10.0	-12.9
Netherlands	4.0	2.7	1.6	3.7	3.2	1.0	5.2	5.9	4.4	-4.3	-13.1	5.3	3.3	-11.1	5.8
Singapore ⁵	9.2	-0.1	-2.0	-3.3	0.2	10.1	2.0	-34.8	-15.4	2.7	6.6	-7.9	-32.4	-16.5	-7.3
Sweden	-0.4	4.9	3.8	1.4	-1.9	5.1	6.7	-6.9	3.5	4.4	-8.5	10.7	-13.9	-4.9	-7.7
Switzerland	17.4	6.7	2.5	3.7	3.6	8.2	-0.6	8.5	46.9	11.2	-10.4	-4.0	4.2	-0.8	6.5
United Kingdom	4.8	6.0	11.4	20.5	11.1	9.1	6.0	6.4	3.0	8.2	18.0	10.2	7.6	-2.0	7.6
United States	18.6	13.3	21.4	20.3	18.7	2.8	1.8	-2.7	18.3	5.4	2.3	2.3	-2.7	21.1	3.0
CPSS ⁶	10.3	8.9	11.3	11.4	11.0	4.3	4.0	0.3	13.1	4.3	0.9	4.0	1.5	8.7	1.1

¹ Converted at yearly average exchange rates. ² In USD terms, converted using yearly average exchange rates.

Canada: ³ Data on the value of transactions refer to cash withdrawals only.

Japan: ⁴ Data on the volume and value of transactions refer to cash withdrawals only.

Singapore: ⁵ The transactions refer to shared ATM transactions.

CPSS: ⁶ Average excluding those countries where data are not available.

Table 6
Cards with a debit function and POS accepting terminals

	Number of POS terminals per million inhabitants (end of year)					Number of transactions per inhabitant					Average value per transaction (USD) ¹				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Belgium	8,421	9,121	9,746	11,364	14,047	23.6	29.1	34.6	39.8	45.0	59.5	57.5	53.8	47.0	45.1
Canada	10,988	12,982	13,270	14,190	14,843	34.6	44.7	54.3	63.5	71.7	30.6	29.4	29.4	28.5	26.9
France	11,371	12,047	13,261	13,848	14,846	38.5	43.0	48.3	54.3	60.3	52.2	52.2	49.2	42.8	41.5
Germany ³	3,069	4,423	5,761	7,196	5,291	2.8	8.2	10.5	12.7	14.7	74.3	84.7	79.7	67.7	65.7
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	4,886	6,001	7,549	9,884	12,918	2.2	3.0	4.3	5.5	7.3	100.8	90.8	81.5	66.6	61.3
Japan ⁴	155	127	nav	nav	nav	neg	neg	neg	neg	neg	57.9	61.1	243.5	427.1	405.3
Netherlands	7,696	8,533	9,208	9,774	10,333	31.1	37.9	44.3	50.3	59.5	48.8	48.2	48.6	42.9	41.4
Singapore	3,954	4,088	4,506	4,851	5,067	13.4	14.8	16.6	19.1	21.2	45.2	36.5	36.7	35.7	34.9
Sweden	7,778	8,406	9,160	9,822	9,916	13.7	18.1	22.4	28.9	36.6	83.3	76.2	72.7	60.9	54.9
Switzerland	5,834	7,158	8,599	9,375	10,174	13.6	14.9	19.1	23.9	27.8	73.3	63.8	76.0	89.5	100.2
United Kingdom	8,981	10,298	11,765	12,300	12,879	25.9	29.8	35.3	39.9	46.0	50.0	52.2	51.6	50.3	51.7
United States	4,850	6,284	8,610	10,168	12,771	14.6	21.2	27.5	34.7	43.7	41.5	41.6	43.0	43.9	45.9
CPSS ⁵	5,114	6,175	9,144	10,477	11,951	13.9	18.4	22.8	27.4	33.0	47.2	47.8	47.4	45.2	45.8

Note: For an explanation of the footnotes refer to the end of the table. Please refer to the individual country tables for detailed explanation.

Table 6 (cont)

	Increase in the number of POS terminals (%)					Increase in the number of transactions (%)					Increase in the value of transactions (%) ²				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Belgium	5.4	8.6	7.1	16.9	24.0	13.5	23.6	19.0	15.5	13.3	-1.0	19.5	11.4	0.8	8.7
Canada	30.6	19.1	3.1	7.9	5.7	53.6	30.3	22.6	18.0	14.1	44.5	25.2	22.8	14.2	7.9
France	2.6	6.3	10.5	4.9	7.8	9.4	12.1	12.8	13.0	11.5	-7.2	12.1	6.4	-1.7	8.1
Germany ³	60.3	44.1	30.3	25.0	-26.3	5.6	198.9	27.7	20.5	16.7	-22.6	240.8	20.0	2.3	13.3
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	30.9	23.0	25.9	31.1	31.1	72.2	38.7	44.2	28.2	33.0	42.3	24.9	29.5	4.7	22.5
Japan ⁴	-15.1	-17.7	nav	nav	nav	-16.7	neg	-20.0	700	93.8	57.5	5.5	219.1	1,303	83.9
Netherlands	25.1	11.6	8.6	6.9	6.5	30.9	22.6	17.7	14.5	19.1	13.3	21.0	18.8	0.9	15.1
Singapore	14.7	6.9	11.0	9.5	7.4	20.0	13.8	13.5	17.0	14.0	16.3	-8.2	14.4	13.7	11.4
Sweden	12.1	8.1	9.1	7.4	1.3	37.5	32.2	23.8	29.3	27.3	18.6	20.9	18.0	8.4	14.7
Switzerland	25.7	23.0	20.7	9.6	9.4	27.0	9.5	28.9	25.9	17.3	-3.6	-4.7	53.4	48.3	31.3
United Kingdom	-3.6	15.1	14.8	5.0	5.0	18.4	15.6	18.8	13.6	15.6	27.6	20.9	17.4	10.7	18.8
United States	48.5	30.8	38.2	19.1	30.0	58.4	46.5	31.0	27.2	30.4	63.0	46.8	35.3	29.9	36.4
CPSS ⁵	23.3	21.4	23.2	15.3	16.1	33.0	33.3	24.1	21.0	22.4	21.0	35.1	22.9	15.6	24.1

¹ Converted at yearly average exchange rates. ² In USD terms, converted using yearly average exchange rates.

Germany: ³ Figures for 1997 exclude POZ and ELV procedures.

Japan: ⁴ Figures for 1999 and thereafter are not consistent with those up to 1998. Figures up to 1998 are for the local POS services, which are no longer available. Figures for 1999 and thereafter are for the nationwide debit card service launched in January 1999.

CPSS: ⁵ Average excluding those countries where data are not available.

Table 7
Cards with a credit function and accepting terminals

	Number of accepting terminals per million inhabitants (end of year)					Number of transactions per inhabitant					Average value per transaction (USD) ¹				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Belgium	nav	nav	nav	nav	nav	3.9	4.3	4.8	5.2	5.9	110.7	111.1	107.6	94.7	97.3
Canada ³	26,900	27,555	27,233	31,205	32,021	31.8	33.3	37.5	41.2	42.3	64.9	66.2	63.3	65.1	58.6
France	11,371	12,047	13,261	13,848	14,846	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Germany ⁴	13,406	13,911	14,852	16,449	16,252	3.7	3.9	4.1	4.3	4.5	119.4	101.0	100.0	87.6	90.0
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nav	nav	nav	nav	nav	2.5	3.0	4.0	4.7	5.4	104.8	102.0	97.6	84.6	82.6
Japan ⁵	4,393	5,162	5,488	6,069	6,426	10.1	11.8	12.0	15.8	17.6	117.5	96.9	116.6	100.7	85.3
Netherlands ⁶	nav	nav	nav	nav	nav	2.5	2.7	2.8	2.9	3.0	99.8	103.6	105.7	101.5	99.5
Singapore ⁷	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Sweden	7,778	8,406	9,160	9,822	9,916	5.4	5.9	6.4	7.6	8.3	100.7	86.4	92.5	92.7	76.5
Switzerland	nav	nav	nav	nav	nav	8.5	9.8	12.1	10.4	11.1	139.4	136.3	121.7	115.1	114.3
United Kingdom	8,981	10,298	11,765	12,300	12,879	21.2	23.0	25.0	27.1	29.1	88.5	91.7	95.7	93.6	91.2
United States	41,784	41,773	41,400	45,756	46,312	48.1	49.6	53.5	58.8	60.0	81.0	84.2	86.6	88.7	88.6
CPSS ⁸	23,567	24,060	24,383	26,910	27,638	25.6	26.9	29.1	32.5	34.0	84.4	85.5	88.7	88.7	86.7

Note: For an explanation of the footnotes refer to the end of the table. Please refer to the individual country tables for detailed explanation.

Table 7 (cont)

	Increase in the number of accepting terminals (%)					Increase in the number of transactions (%)					Increase in the value of transactions (%) ²				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Belgium	nav	nav	nav	nav	nav	10.5	11.9	9.7	10.6	13.0	-2.7	12.3	6.3	-2.7	16.1
Canada ³	2.7	3.3	-0.3	15.6	3.7	5.9	5.4	13.8	10.7	3.9	11.5	7.5	8.8	14.0	-6.6
France	2.6	6.3	10.5	4.9	7.8	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Germany ⁴	10.0	3.7	6.8	10.9	-1.0	4.6	4.6	6.1	4.4	5.4	-7.2	-11.5	5.0	-8.5	8.2
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	nav	nav	nav	nav	nav	21.6	24.1	30.9	18.8	15.4	7.0	20.8	25.2	3.0	12.7
Japan ⁵	18.5	17.8	6.5	10.8	6.2	12.7	17.4	1.4	32.3	11.8	-2.7	-3.2	21.9	14.3	-5.3
Netherlands ⁶	nav	nav	nav	nav	nav	7.0	8.2	4.6	6.2	1.5	-12.6	12.3	6.8	2.0	-0.5
Singapore ⁷	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	6.6	-13.1	14.7	15.9	1.1
Sweden	12.1	8.1	9.1	7.4	1.3	9.1	8.3	9.6	17.5	10.4	9.8	5.6	13.6	17.9	-0.9
Switzerland	nav	nav	nav	nav	nav	12.6	15.0	23.6	-13.1	7.1	-3.9	12.4	10.4	-17.8	6.3
United Kingdom	-3.6	15.1	14.8	5.0	5.0	11.3	8.7	9.5	8.6	7.8	21.0	12.7	14.2	6.3	5.0
United States	14.3	0.9	neg	11.5	4.8	5.4	4.0	8.8	10.9	5.6	9.3	8.2	11.8	13.6	5.5
CPSS ⁸	12.1	2.6	1.9	11.0	4.5	6.5	5.7	8.7	12.2	6.4	8.1	6.9	12.8	12.3	4.0

¹ Converted at yearly average exchange rates ² In USD terms, converted using yearly average exchange rates.

Canada: ³ Includes both credit and charge cards.

Germany: ⁴ The sum of the number of accepting terminals reported by the individual credit card institutions may result in double-counting.

Japan: ⁵ Includes cards with a delayed debit function.

Netherlands: ⁶ Includes cards with a delayed debit function.

Singapore: ⁷ For both credit and charge cards.

CPSS: ⁸ Average excluding those countries where data are not available.

Table 8

Cards with an e-money function and accepting terminals

	Number of electronic money cards (end of year, in thousands)					Average value per reloading (USD) ¹				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Belgium	1,035	5,606	7,898	8,396	8,543	36.4	32.2	27.9	24.3	27.3
Canada	42	36	58	87	74	nav	nav	nav	nav	nav
France	nav	nav	nav	nav	319	nav	nav	neg	neg	29.8
Germany	35,000	60,700	60,700	60,700	67,333	77.4	60.3	42.7	29.1	25.3
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	62	56	32	45	30	neg	neg	neg	neg	neg
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Netherlands	9,500	17,900	20,100	20,900	21,000	nav	nav	nav	nav	nav
Singapore	683	2,193	3,464	4,697	5,639	nav	nav	nav	nav	nav
Sweden	nav	205	540	593	557	nav	50.3	36.3	36.3	64.5
Switzerland	nav	2,953	3,137	3,355	3,524	nav	nav	nav	nav	nav
United Kingdom	110	140	160	nav	nav	neg	neg	neg	neg	neg
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPSS ²	46,432	89,789	96,089	98,773	107,019	nav ³	nav ³	nav ³	nav ³	nav ³

Note: For an explanation of the footnotes refer to the end of the table. Please refer to the individual country tables for detailed explanation.

Table 8 (cont)

	Number of purchase terminals					Average value per transaction (USD) ¹				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Belgium	21,000	45,649	63,993	67,837	88,847	4.7	4.5	4.0	3.5	4.0
Canada	1,600	1,050	970	1,245	490	nav	neg	neg	neg	neg
France	nav	nav	neg	neg	13,644	nav	nav	neg	neg	3.2
Germany	50,000	60,000	59,732	66,946	80,191	12.0	7.3	3.8	2.5	2.1
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	4,406	3,910	3,605	6,485	6,644	neg	neg	neg	neg	neg
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Netherlands	105,401	107,589	125,807	133,548	148,207	nav	4.2	3.3	2.7	2.5
Singapore	6,491	10,594	14,196	16,270	17,944	9.2	0.8	0.7	1.0	1.2
Sweden	nav	33,938	43,921	43,000	47,000	nav	6.3	5.8	7.5	6.4
Switzerland	nap	18,498	22,948	27,215	31,290	nap	neg	neg	3.3	3.0
United Kingdom	3,537	1,642	1,921	nav	nav	neg	neg	neg	neg	neg
United States	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
CPSS ²	192,435	282,870	337,093	362,546	434,257	nap ³	3.6	2.3	2.2	2.3

¹ Converted at yearly average exchange rates.

CPSS: ² Sum and average excluding those countries where data are not available. ³ Statistically not relevant.

Table 9
Number of cards¹
 Per thousand inhabitants

	Cards with a cash function		Cards with a debit function		Cards with a credit function		Cards with a debit function issued by retailers		Cards with an e-money function		Cards with a cheque guarantee function	
	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
Belgium	1,359.6	1,360.5	1,216.8	1,216.5	289.9	296.2	147.1	152.2	819.4	831.0	374.7	272.0
Canada ²	2,104.9	nav	1,165.8	nav	1,360.1	1,505.9	nap	nap	2.8	2.4	nap	nap
France ³	675.8	711.2	609.2	652.3	nav	nav	nav	nav	nav	5.2	nav	nav
Germany	1,293.7	1,480.2	1,206.7	1,405.3	213.8	227.9	129.0	153.0	738.6	817.7	623.5	689.3
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Italy	366.8	394.4	350.0	370.1	293.9	345.2	nap	nap	0.8	0.5	neg	neg
Japan ⁴	2,523.9	2,554.1	nav	nav	1,758.9	1,820.1	nap	nap	nav	nav	nap	nap
Netherlands ⁵	1,633.0	1,608.2	1,318.9	1,315.2	314.0	311.7	nav	nav	1,312.6	1,309.0	nav	nav
Singapore ⁶	742.2	745.1	742.2	745.1	612.5	681.2	nap	nap	1,169.0	1,365.0	nap	nap
Sweden ⁷	551.5	536.0	515.2	541.5	429.6	418.7	nav	nav	66.8	62.6	nav	nav
Switzerland	1,149.2	1,190.6	725.6	745.2	434.6	451.9	nav	nav	465.7	485.4	739.6	762.1
United Kingdom	1,986.1	2,124.5	832.2	906.0	851.0	936.4	nap	nap	nav	nav	947.3	974.4
United States	2,758.1	2,891.7	851.9	889.4	4,539.3	4,329.5	41.0	40.0	nav	nav	nav	nav
CPSS ⁸	2,011.6	2,112.3	853.2	896.8	2,382.4	2,354.5	nap ⁹	nap ⁹	455.0	365.9	nap ⁹	nap ⁹

Note: Please refer to the individual country tables for detailed explanation.

¹ A card which has several functions is counted in each relevant column (for example, a eurocheque card which can be used to withdraw cash, to make payments and to guarantee cheques is counted under each of these three items). For this reason, the figures should not be added together.

Canada: ² Data on cards with a credit function as at 31 October.

France: ³ Figures for cards with a credit function are not provided. Data were incorrectly reported for the previous years and concerned upmarket cards (privileged cards).

Japan: ⁴ Data on cards with a cash function are at end-March of the following year. Data on cards with a credit function include cards with a delayed debit function, and are at end-March of the current year.

Netherlands: ⁵ Data on cards with a credit function include cards with a delayed debit function.

Singapore: ⁶ Data on cards with a cash and/or debit function are based on a survey of eight banks.

Sweden: ⁷ Data on cards with a credit function include cards with a delayed debit function.

CPSS: ⁸ Average excluding those countries where data are not available. ⁹ Statistically not relevant.

Table 10
Use of cards

Average number of:								
	Cash withdrawals per card with a cash function		Payments per card with a debit function		Payments per card with a credit function		Payments per card with an e-money function	
	2000	2001	2000	2001	2000	2001	2000	2001
Belgium	14.5	15.8	32.7	37.0	18.1	20.0	6.1	7.1
Canada	22.9	nav	54.4	nav	30.3	28.1	nav	nav
France ¹	26.4	26.9	89.2	92.4	nav	nav	nav	8.8
Germany	15.8	13.1	10.5	10.5	20.0	19.7	0.4	0.4
Hong Kong SAR	nav	nav	nav	nav	nav	nav	nav	nav
Italy	24.9	24.6	15.7	19.7	16.0	15.7	neg	neg
Japan ²	1.3	1.2	nav	nav	9.0	9.7	nav	nav
Netherlands ³	18.1	17.4	38.2	45.2	11.4	9.5	1.2	1.5
Singapore ⁴	nav	nav	25.8	28.5	nav	nav	21.3	18.1
Sweden ⁵	65.6	70.2	56.0	67.7	17.6	19.9	4.9	2.7
Switzerland	15.5	16.5	32.9	37.3	24.0	24.5	5.4	5.6
United Kingdom	17.1	17.2	48.0	50.8	31.8	31.1	nav	nav
United States	17.0	16.5	40.7	49.1	12.9	13.8	nav	nav
CPSS ⁶	14.3	14.6	38.8	46.6	13.6	14.4	2.3	2.0

Note: Please refer to the individual country tables for detailed explanation.

France: ¹ Data on payments per card with a credit function are included in those with a debit function.

Japan: ² Data on cards with a credit function include cards with a delayed debit function.

Netherlands: ³ Data on cards with a credit function include cards with a delayed debit function.

Singapore: ⁴ Payments per card with a debit function refer to shared ATM transactions.

Sweden: ⁵ Data on cards with a credit function include cards with a delayed debit function.

CPSS: ⁶ Average excluding those countries where data are not available.

Table 11
Use of cashless payment instruments
 Total number of transactions, in millions

	Cheques					Payments by credit/debit cards				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Belgium	95.8	86.9	80.2	70.7	60.1	279.9	341.4	402.1	462.0	523.4
Canada	1,736.3	1,693.0	1,716.4	1,658.2	1,589.0	1,960.7	2,364.2	2,809.0	3,230.9	3,556.6
France	4,903.0	4,825.4	4,479.6	4,493.7	4,338.6	2,301.6	2,580.1	2,911.6	3,292.4	3,670.7
Germany ²	650.3	596.0	423.5	392.2	319.0	529.4	993.0	1,199.4	1,390.9	1,583.4
Hong Kong SAR	149.9	135.8	134.1	138.6	133.5	nav	nav	nav	nav	nav
Italy	656.8	648.7	665.2	602.0	606.2	265.0	346.8	476.7	589.8	737.2
Japan	283.4	260.1	239.3	225.9	208.9	1,275.7	1,497.5	1,517.8	2,010.6	2,250.3
Netherlands ³	64.9	46.6	26.7	14.2	5.3	524.4	637.1	744.4	848.3	1,001.9
Singapore ⁴	87.7	87.6	92.6	91.7	92.0	66.1	73.4	75.8	85.5	96.5
Sweden	18.0	4.0	4.0	2.0	2.0	169.0	213.0	255.0	323.0	400.0
Switzerland ⁵	9.3	7.7	6.7	11.2	7.2	157.6	175.9	223.0	243.5	282.1
United Kingdom	3,090.0	2,986.0	2,859.0	2,699.0	2,565.0	2,631.0	2,960.0	3,406.0	3,788.0	4,257.0
United States ⁶	46,569.4	45,169.7	43,812.1	42,500.0	41,222.6	16,817.3	19,153.1	22,106.4	25,734.9	29,542.8
CPSS ⁷	58,341.8	56,547.5	54,539.3	52,899.3	51,149.3	26,977.7	31,335.4	36,127.2	41,999.8	47,901.9

Note: For an explanation of the footnotes refer to the end of the table. Please refer to the individual country tables for detailed explanation.

Table 11 (cont)

	Credit transfers					Direct debits				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Belgium	697.3	674.7	723.0	656.8	752.4	117.9	117.4	142.3	166.2	176.8
Canada	391.7	463.5	508.5	569.5	591.3	318.5	361.9	405.4	444.4	488.5
France	1,859.8	1,951.8	2,050.7	2,093.6	2,175.5	1,430.3	1,577.9	1,730.6	1,968.6	2,063.5
Germany ²	5,387.3	6,216.6	7,025.3	6,446.3	6,957.9	4,867.7	4,600.5	4,806.0	5,026.7	5,080.3
Hong Kong SAR	13.5	14.8	15.5	16.6	18.1	31.7	32.7	33.5	35.2	37.1
Italy	976.0	971.4	1,003.4	1,018.6	1,038.3	290.1	329.8	496.7	569.8	610.6
Japan	1,105.5	1,143.2	1,166.9	1,215.4	1,269.2	nav	nav	nav	nav	nav
Netherlands ³	1,053.1	1,075.5	1,086.2	1,140.4	1,182.7	642.8	722.6	785.0	836.2	873.8
Singapore ⁴	15.1	15.7	13.9	14.6	16.8	23.2	20.7	17.4	17.3	19.0
Sweden	660.0	633.0	712.0	715.0	697.0	65.0	74.0	85.0	91.0	98.0
Switzerland ⁵	505.0	554.0	586.0	545.2	503.0	25.0	27.0	30.4	46.1	47.6
United Kingdom	1,659.0	1,726.0	1,797.0	1,845.0	1,931.0	1,584.0	1,736.0	1,863.0	2,010.0	2,152.0
United States ⁶	2,488.6	2,899.2	3,167.8	3,486.1	3,890.3	1,347.2	1,530.9	1,676.9	1,947.3	2,385.4
CPSS ⁷	16,811.9	18,339.3	19,856.3	19,763.1	21,023.4	10,743.4	11,131.3	12,072.1	13,158.7	14,032.6

Note: For an explanation of the footnotes refer to the end of the table. Please refer to the individual country tables for detailed explanation.

Table 11 (cont)

	Card-based e-money					Total ¹				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Belgium	9.4	28.2	45.5	51.3	60.5	1,200.4	1,248.5	1,393.0	1,407.0	1,573.1
Canada	nav	nav	nav	nav	nav	4,407.2	4,882.6	5,439.3	5,903.0	6,225.4
France	nap	nap	nav	nav	2.8	10,494.7	10,935.1	11,172.5	11,848.3	12,248.3
Germany ²	4.2	13.6	20.7	26.6	29.4	11,438.9	12,419.7	13,474.9	13,282.7	13,970.0
Hong Kong SAR	nav	nav	nav	nav	nav	195.0	183.3	183.2	190.3	188.8
Italy	neg	neg	neg	neg	neg	2,187.9	2,296.7	2,642.0	2,780.2	2,992.3
Japan	nav	nav	nav	nav	nav	2,664.6	2,900.8	2,924.0	3,451.9	3,728.4
Netherlands ³	nav	17.0	22.0	25.0	31.0	2,285.2	2,498.8	2,664.3	2,864.1	3,094.7
Singapore ⁴	0.7	26.3	77.0	100.1	102.2	192.7	223.7	276.6	309.1	326.4
Sweden	nav	2.0	4.2	2.9	1.5	912.0	926.0	1,060.2	1,133.9	1,198.5
Switzerland ⁵	nap	4.1	10.7	18.0	19.8	696.9	768.7	856.8	864.0	859.7
United Kingdom	nav	nav	nav	nav	nav	8,964.0	9,408.0	9,925.0	10,342.0	10,905.0
United States ⁶	nav	nav	nav	nav	nav	67,222.5	68,752.9	70,763.2	73,668.3	77,041.1
CPSS ⁷	nap ⁸	91.2	180.0	223.9	247.1	112,847.7	117,444.7	122,775.0	128,044.9	134,354.4

¹ Sum of the available data.

Germany: ² Payments by debit cards in 1997 exclude POZ and ELV procedures.

Netherlands: ³ Payments by credit/debit cards include cards with a delayed debit function.

Singapore: ⁴ Interbank transactions only. Payments by credit/debit cards exclude credit card transactions. Credit transfers include large-value transactions (MEPS).

Switzerland: ⁵ Includes eurocheques, bank cheques, Swiss banker traveller's cheques and, as from 2000, Postcheques.

United States: ⁶ A Federal Reserve study of the cheque clearing system, published in August 2002, estimated that the number of cheques paid in the United States was 49,500 million in 1995 and 42,500 million in 2000. Values for other years are derived from these estimates.

CPSS: ⁷ Sum and average excluding those countries where data are not available. ⁸ Statistically not relevant.

Table 12
Use of cashless payment instruments
 Total number of transactions per inhabitant

	Cheques					Payments by credit/debit cards					Credit transfers				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Belgium	9.4	8.5	7.8	6.9	5.8	27.5	33.5	39.3	45.1	50.9	68.5	66.1	70.7	64.1	73.2
Canada	57.7	55.8	56.1	53.7	50.9	65.2	77.9	91.8	104.6	114.0	13.0	15.3	16.6	18.4	18.9
France	81.9	80.4	74.3	74.2	71.2	38.5	43.0	48.3	54.3	60.3	31.1	32.5	34.0	34.6	35.7
Germany ²	7.9	7.3	5.2	4.8	3.9	6.5	12.1	14.6	16.9	19.2	65.7	75.8	85.6	78.4	84.5
Hong Kong SAR	23.1	20.8	20.3	20.8	19.9	nav	nav	nav	nav	nav	2.1	2.3	2.4	2.5	2.7
Italy	11.4	11.3	11.5	10.4	10.5	4.6	6.0	8.3	10.2	12.7	17.0	16.9	17.4	17.6	17.9
Japan	2.2	2.1	1.9	1.8	1.6	10.1	11.8	12.0	15.8	17.7	8.8	9.0	9.2	9.6	10.0
Netherlands ³	4.2	3.0	1.7	0.9	0.3	33.6	40.6	47.1	53.3	62.5	67.5	68.5	68.7	71.6	73.7
Singapore ⁴	23.1	22.3	23.4	22.8	22.3	17.4	18.7	19.2	21.3	23.4	4.0	4.0	3.5	3.6	4.1
Sweden	2.0	0.5	0.5	0.2	0.2	19.1	24.1	28.8	36.4	45.0	74.6	71.5	80.4	80.6	78.3
Switzerland	1.3	1.1	0.9	1.6	1.0	22.2	24.7	31.1	33.8	38.9	71.0	77.7	81.8	75.7	69.3
United Kingdom	52.4	50.4	48.0	45.2	42.8	44.6	50.0	57.2	63.4	71.0	28.1	29.1	30.2	30.9	32.2
United States ⁵	173.7	167.0	160.5	154.3	144.6	62.7	70.8	81.0	93.5	103.7	9.3	10.7	11.6	12.7	13.6
CPSS ⁶	79.4	76.6	73.5	70.9	67.5	37.0	42.8	49.1	56.8	63.8	22.9	24.8	26.7	26.5	27.7

Note: For an explanation of the footnotes refer to the end of the table. Please refer to the individual country tables for detailed explanation.

Table 12 (cont)

	Direct debits					Card-based e-money					Total ¹				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Belgium	11.6	11.5	13.9	16.2	17.2	0.9	2.8	4.4	5.0	5.9	117.9	122.4	136.3	137.3	153.0
Canada	10.6	11.9	13.2	14.4	15.7	nav	nav	nav	nav	nav	146.5	161.0	177.8	191.2	199.5
France	23.9	26.3	28.7	32.5	33.9	nap	nap	nav	nav	neg	175.4	182.1	185.3	195.6	201.1
Germany ²	59.3	56.1	58.5	61.2	61.7	0.1	0.2	0.3	0.3	0.4	139.4	151.4	164.2	161.6	169.7
Hong Kong SAR	4.9	5.0	5.1	5.3	5.5	nav	nav	nav	nav	nav	30.0	28.0	27.7	28.6	28.1
Italy	5.0	5.7	8.6	9.9	10.5	neg	neg	neg	neg	neg	38.0	39.9	45.8	48.2	51.7
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav	21.1	22.9	23.1	27.2	29.3
Netherlands ³	41.2	46.0	49.7	52.5	54.5	nav	1.1	1.4	1.6	1.9	146.4	159.1	168.5	179.9	192.9
Singapore ⁴	6.1	5.3	4.4	4.3	4.6	0.2	6.7	19.5	24.9	24.7	50.8	57.0	70.0	76.9	79.0
Sweden	7.3	8.4	9.6	10.3	11.0	nav	0.2	0.5	0.3	0.2	103.1	104.6	119.7	127.8	134.7
Switzerland	3.5	3.8	4.2	6.4	6.6	nap	0.6	1.5	2.5	2.7	98.0	107.8	119.5	119.9	118.4
United Kingdom	26.8	29.3	31.3	33.6	35.9	nav	nav	nav	nav	nav	151.9	158.8	166.8	173.1	181.9
United States ⁵	5.0	5.7	6.1	7.1	8.4	nav	nav	nav	nav	nav	250.8	254.2	259.3	267.3	270.3
CPSS ⁶	17.7	18.2	19.6	21.2	22.3	nap ⁷	0.5	1.0	1.2	1.0	156.9	162.9	169.9	176.6	182.2

¹ Sum of the available data.

Germany: ² Payments by debit cards in 1997 exclude POZ and ELV procedures.

Netherlands: ³ Payments by credit/debit cards include cards with a delayed debit function.

Singapore: ⁴ Interbank transactions only. Payments by credit/debit cards exclude credit card transactions. Credit transfers include large-value transactions (MEPS).

United States: ⁵ A Federal Reserve study of the cheque clearing system, published in August 2002, estimated that the number of cheques paid in the United States was 49,500 million in 1995 and 42,500 million in 2000. Values for other years are derived from these estimates.

CPSS: ⁶ Sum and average excluding those countries where data are not available. ⁷ Statistically not relevant.

Table 13
Relative importance of cashless payment instruments
 Percentage of total volume of cashless transactions¹

	Cheques					Payments by credit/debit cards					Credit transfers				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Belgium	8.0	7.0	5.8	5.0	3.8	23.3	27.3	28.9	32.8	33.3	58.1	54.0	51.9	46.7	47.8
Canada	39.4	34.7	31.6	28.1	25.5	44.5	48.4	51.6	54.7	57.1	8.9	9.5	9.3	9.6	9.5
France	46.7	44.1	40.1	37.9	35.4	21.9	23.6	26.1	27.8	30.0	17.7	17.9	18.4	17.7	17.8
Germany ²	5.7	4.8	3.1	3.0	2.3	4.6	8.0	8.9	10.5	11.3	47.1	50.1	52.1	48.5	49.8
Hong Kong SAR	76.8	74.1	73.2	72.8	70.7	nav	nav	nav	nav	nav	6.9	8.0	8.5	8.7	9.6
Italy	30.0	28.2	25.2	21.7	20.3	12.1	15.1	18.0	21.2	24.6	44.6	42.3	38.0	36.6	34.7
Japan	10.6	9.0	8.2	6.5	5.6	47.9	51.6	51.9	58.2	60.4	41.5	39.4	39.9	35.2	34.0
Netherlands ³	2.8	1.9	1.0	0.5	0.2	22.9	25.5	27.9	29.6	32.4	46.1	43.0	40.8	39.8	38.2
Singapore ⁴	45.5	39.2	33.5	29.6	28.2	34.3	32.8	27.4	27.7	29.6	7.8	7.0	5.0	4.7	5.1
Sweden	2.0	0.4	0.4	0.2	0.2	18.5	23.0	24.1	28.5	33.4	72.4	68.4	67.2	63.1	58.2
Switzerland	1.3	1.0	0.8	1.3	0.8	22.6	22.9	26.0	28.2	32.8	72.5	72.1	68.4	63.1	58.5
United Kingdom	34.5	31.7	28.8	26.1	23.5	29.3	31.5	34.3	36.6	39.0	18.5	18.3	18.1	17.8	17.7
United States ⁵	69.3	65.7	61.9	57.7	53.5	25.0	27.9	31.2	34.9	38.3	3.7	4.2	4.5	4.7	5.0
CPSS ⁶	51.7	48.1	44.4	41.3	38.1	23.9	26.7	29.4	32.8	35.7	14.9	15.6	16.2	15.4	15.6

Note: For an explanation of the footnotes refer to the end of the table. Please refer to the individual country tables for detailed explanation.

Table 13 (cont)

	Direct debits					Card-based e-money				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Belgium	9.8	9.4	10.2	11.8	11.2	0.8	2.3	3.3	3.6	3.8
Canada	7.2	7.4	7.5	7.5	7.8	nav	nav	nav	nav	nav
France	13.6	14.4	15.5	16.6	16.8	nap	nap	nav	nav	neg
Germany ²	42.6	37.0	35.7	37.8	36.4	neg	0.1	0.2	0.2	0.2
Hong Kong SAR	16.2	17.8	18.3	18.5	19.7	nav	nav	nav	nav	nav
Italy	13.3	14.4	18.8	20.5	20.4	neg	neg	neg	neg	neg
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Netherlands ³	28.1	28.9	29.5	29.2	28.2	nav	0.7	0.8	0.9	1.0
Singapore ⁴	12.0	9.2	6.3	5.6	5.8	0.4	11.8	27.8	32.4	31.3
Sweden	7.1	8.0	8.0	8.0	8.2	nav	0.2	0.4	0.3	0.1
Switzerland	3.6	3.5	3.5	5.3	5.5	nap	0.5	1.2	2.1	2.3
United Kingdom	17.7	18.5	18.8	19.4	19.7	nav	nav	nav	nav	nav
United States ⁵	2.0	2.2	2.4	2.6	3.1	nav	nav	nav	nav	nav
CPSS ⁶	9.5	9.5	9.8	10.3	10.4	nap ⁷	0.1	0.1	0.2	0.2

¹ Where the total is the sum of the available data.

Germany: ² Payments by debit cards in 1997 exclude POZ and ELV procedures.

Netherlands: ³ Payments by credit/debit cards include cards with a delayed debit function.

Singapore: ⁴ Interbank transactions only. Payments by credit/debit cards exclude credit card transactions. Credit transfers include large-value transactions (MEPS).

United States: ⁵ A Federal Reserve study of the cheque clearing system, published in August 2002, estimated that the number of cheques paid in the United States was 49,500 million in 1995 and 42,500 million in 2000. Values for other years are derived from these estimates.

CPSS: ⁶ Average excluding those countries where data are not available. ⁷ Statistically not relevant.

Table 14
Relative importance of cashless payment instruments
 Percentage of total value of cashless transactions¹

	Cheques					Payments by credit/debit cards					Credit transfers				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Belgium	2.9	3.2	0.6	0.5	0.6	0.2	0.2	0.1	0.2	0.2	96.7	96.3	98.9	99.0	99.0
Canada	97.0	96.5	21.5	14.5	12.7	0.7	0.8	0.5	0.6	0.5	1.8	2.1	77.5	84.8	86.1
France	3.9	2.6	2.9	2.9	2.4	0.2	0.1	0.2	0.2	0.2	95.1	96.6	96.2	96.2	96.6
Germany	7.9	7.1	3.6	3.1	2.7	0.2	0.3	0.3	0.4	0.4	78.2	78.1	83.2	85.4	84.2
Hong Kong SAR	97.3	94.2	93.2	93.1	90.6	nav	nav	nav	nav	nav	2.3	5.0	6.0	6.1	8.4
Italy	3.3	2.9	3.7	3.2	3.0	0.1	0.1	0.1	0.1	0.1	95.9	96.2	94.6	95.1	95.1
Japan	3.0	2.4	2.7	2.7	3.0	neg	neg	neg	0.1	0.1	96.9	97.5	97.2	97.3	96.9
Netherlands ²	0.2	0.1	0.1	0.1	neg	1.0	1.2	1.3	1.3	1.4	93.9	93.8	93.4	93.5	93.6
Singapore ³	5.9	4.9	5.1	4.7	3.6	0.1	0.2	0.2	0.2	0.2	93.7	94.8	94.6	95.0	96.1
Sweden	nav	0.5	0.4	0.3	0.2	1.6	1.9	2.3	2.6	3.2	95.8	94.9	94.3	93.9	93.3
Switzerland	neg	neg	neg	0.1	neg	neg	neg	0.1	0.1	0.1	99.8	99.8	99.8	99.7	99.7
United Kingdom	5.0	4.4	2.8	2.5	2.2	0.3	0.3	0.2	0.2	0.2	93.8	94.4	96.3	96.6	97.0
United States ⁴	5.8	5.5	5.6	5.4	4.9	0.2	0.2	0.2	0.3	0.3	93.0	93.3	93.0	93.2	93.8
CPSS ⁵	5.6	5.0	4.5	4.3	4.1	0.1	0.1	0.2	0.2	0.2	93.3	93.8	94.3	94.6	94.6

Note: For an explanation of the footnotes refer to the end of the table. Please refer to the individual country tables for detailed explanation.

Table 14 (cont)

	Direct debits					Card-based e-money				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Belgium	0.3	0.3	0.3	0.3	0.3	neg	neg	neg	neg	neg
Canada	0.6	0.7	0.5	0.5	0.6	nav	nav	nav	nav	nav
France	0.8	0.6	0.7	0.8	0.8	nap	nap	nav	nav	neg
Germany	13.7	14.4	12.8	11.1	12.8	neg	neg	neg	neg	neg
Hong Kong SAR	0.4	0.8	0.8	0.8	1.0	nav	nav	nav	nav	nav
Italy	0.8	0.9	1.6	1.6	1.7	neg	neg	neg	neg	neg
Japan	nav	nav	nav	nav	nav	nav	nav	nav	nav	nav
Netherlands ²	4.9	4.9	5.2	5.1	5.0	nav	neg	neg	neg	neg
Singapore ³	0.2	0.2	0.2	0.2	0.2	neg	neg	neg	neg	neg
Sweden	2.5	2.7	3.0	3.2	3.3	nav	neg	neg	neg	neg
Switzerland	0.1	0.1	0.1	0.2	0.2	nap	neg	neg	neg	neg
United Kingdom	1.0	1.0	0.7	0.7	0.6	neg	neg	nav	nav	nav
United States ⁴	1.0	1.1	1.2	1.1	1.1	nav	nav	nav	nav	nav
CPSS ⁵	0.9	1.0	1.0	1.0	1.1	nap ⁶	neg	neg	neg	neg

¹ Where the total is the sum of the available data.

Netherlands: ² Payments by credit/debit cards include cards with a delayed debit function.

Singapore: ³ Interbank transactions only. Payments by credit/debit cards exclude credit card transactions. Credit transfers include large-value transactions (MEPS).

United States: ⁴ A Federal Reserve study of the cheque clearing system, published in August 2002, estimated that the number of cheques paid in the United States was 49,500 million in 1995 and 42,500 million in 2000. Values for other years are derived from these estimates.

CPSS: ⁵ Average excluding those countries where data are not available. ⁶ Statistically not relevant.

Table 15
Features of selected interbank funds transfer systems
 End of 2001, unless otherwise noted

	Type ¹	Owner/manager ²	Number of participants		Processing ³	Settlement ⁴	Membership ⁵
			Total	of which: direct			
Belgium							
ELLIPS	L	B+CB	96	17	RTT	RTGS	O
Clearing House	R	B+CB	94	34	RTT	N	O
CEC	R	B+CB	94	33	RTT	N	O
Canada							
LVTS	L	PA	14	14	RTT	N	O
France							
CH Paris	R	B/PA	331	27	M	N	RM
CH Province	R	CB	267	219	M	N	O
SIT	R	CB+B/PA	677	17	RTT	N	O
CREIC	R	B/CB	28	28	ACH	N	O
TBF	L	CB	646	195	RTT	RTGS	O
PNS	L	CB+B/PA	468	24	RTT	N/BN/RTGS	RM
Germany							
RPS (former DTA)	R	CB	2,325	2,325	ACH	GS	O
RTGS ^{plus 9, 10}	L	CB	1,612	59	RTT	RTGS	RM
ELS ⁹	nap	nap	nap	nap	nap	nap	nap
EAF (former EAF2) ⁹	nap	nap	nap	nap	nap	nap	nap
Hong Kong SAR							
HKD CHATS	All value	CMA ¹¹	134	134	RTT	RTGS	RM
USD CHATS	All value	B	180	65	RTT	RTGS	O
Italy							
BI-REL	L	CB	863	682	RTT	RTGS	RM
Local Clearing	R	CB	124	124	RTT ¹⁴	N	O
Retail	R	CB ¹⁵	nav	209	ACH	N	O
Japan							
FXYCS	L	B	244	40	RTT	N/RTGS	RM
BOJ-NET Funds Transfer System	L	CB	383	383	RTT	RTGS	RM

Note: For an explanation of the footnotes refer to the end of the table.

Table 15 (cont)

	Type ¹	Owner/manager ²	Number of participants		Processing ³	Settlement ⁴	Membership ⁵
			Total	of which: direct			
Netherlands							
Interpay	R	B	72	72	ACH	N	RM
TOP	L	CB	164	108	RTT	RTGS	RM
Singapore							
SGDCCS	R	PA	104	40	ACH	N	O
USDCCS	R	PA	53	31	ACH	GS	O
Interbank GIRO	R	PA	45	41	ACH	N	O
EFTPOS	R	B	5	5	RTT	N	RM
MEPS	L	CB	130	86	RTT	RTGS	O
Sweden							
K-RIX	L	CB	20	20	RTT	RTGS	RM
E-RIX	L	CB	15	15	RTT	RTGS	RM
Bankgirot	R	B	21	21	ACH	N	O
Dataclearing	R	B	21	21	ACH	N	O
Postgirot ²¹	R	B	1,200,000	1,200,000	ACH	GS	O
Switzerland							
SIC	L+R	B+CB	313	313	RTT	RTGS	O ²³
DTA/LSV	R	B	155	155	ACH	GS	O ²³
United Kingdom							
CHAPS Sterling	L	B+CB	369	13	RTT	RTGS	RM
CHAPS Euro ²⁴	L	B+CB	85	20	RTT	RTGS	RM
BACS	R	B	62,000	14	ACH	N	RM
Cheque/credit	R	B	516	12	M	N	RM
United States							
Fedwire	L	CB	8,110 ²⁷	8,110 ²⁷	RTT	RTGS	O
CHIPS ²⁶	L	B	58	58	RTT	N/BN	RM
European Union							
EURO1	L	B	73	73	RTT	SOS ²⁸	RM
TARGET ²⁹	L	CB	3,888	1,579	RTT	RTGS	RM

Note: For an explanation of the footnotes refer to the end of the table.

Table 15 (cont)

	Degree of centralisation ⁶	Pricing ⁷	Closing time for same day transactions (local time)	Number of transactions (thousands)		Value of transactions (USD billions) ⁸		Ratio of transactions value to GDP (at annual rate)	
				2000	2001	2000	2001	2000	2001
Belgium									
ELLIPS	C	F	18:00	1,780	1,842	11,720	12,818	51.3	56.3
Clearing House	D	V	15:00	4,190	3,528	97	80	0.4	0.3
CEC	C	F	15:00	885,220	919,044	447	455	2.0	2.0
Canada									
LVTS	C	F	18:30	3,544	3,740	17,105	18,061	24.5	26.1
France									
CH Paris	C	F	nap	682,210	677,765	669	683	0.5	0.5
CH Province	D	N	nap	2,771,691	2,469,057	1,071	883	0.8	0.7
SIT	C	F	13:30	6,485,332	7,131,087	2,264	2,187	1.7	1.7
CREIC	D	V	nap	307,724	270,165	24	21	neg	neg
TBF domestic	C	F	18:00	3,025	3,801	62,765	78,365	48.1	59.8
PNS	C	F	16:00	5,515	8,004	20,117	19,977	15.4	15.3
Germany									
RPS (former DTA)	D	F	nap	2,226,589	2,197,487	2,067	1,971	1.1	1.1
RTGS ^{plus 9,10}	C	F	18:00	nap	4,829	nap	17,392	nap	9.4
ELS ⁹	nap	nap	18:00	21,534	19,031	48,158	44,109	25.8	23.8
EAF (former EAF2) ⁹	nap	nap	nap	12,988	11,014	38,237	31,343	20.5	16.9
Hong Kong SAR									
HKD CHATS	C	F	17:30 ¹²	3,410	3,470	11,678	11,134	70.6	67.9
USD CHATS	C	F	17:30	185 ¹³	691	242 ¹³	931	4.5	5.7
Italy									
BI-REL	C	F	18:00	10,401	10,247	25,584	24,291	23.9	22.3
Local Clearing	C	V	12:00	109,438	105,360	663	641	0.6	0.6
Retail	C	F	nap ¹⁶	1,005,362	1,269,828	1,416	1,551	1.3	1.4
Japan									
FXYCS	C	V ¹⁷	13:45(N)/17:00(G)	9,298	9,564	57,961	56,587	12.2	13.6
BOJ-NET Funds Transfer System	C	V ¹⁷	17:00	4,715	5,046	328,430	156,640	69.0	37.5

Note: For an explanation of the footnotes refer to the end of the table.

Table 15 (cont)

	Degree of centralisation ⁶	Pricing ⁷	Closing time for same day transactions (local time)	Number of transactions (thousands)		Value of transactions (USD billions) ⁸		Ratio of transactions value to GDP (at annual rate)	
				2000	2001	2000	2001	2000	2001
Netherlands									
<i>Interpay</i>	C	F	17:00	2,328,445	2,558,284	1,342	1,409	3.6	3.7
<i>TOP</i>	C	F	18:00	3,725	4,023	16,552	18,514	44.6	48.2
Singapore									
<i>SGDCCS</i>	C	V	16:45 ¹⁸	91,259	91,599	262	233	2.9	2.7
<i>USDCCS</i>	C	V	15:30	390	399	12	11	0.1	0.1
<i>Interbank GIRO</i>	C	V	12:00 ¹⁹	29,980	33,640	42	45	0.5	0.5
<i>EFTPOS</i>	C	V	23:59	76,932	87,728	2.7	3.1	neg	neg
<i>MEPS</i>	C	V	18:30 ²⁰	1,908	2,065	5,542	6,447	60.3	75.3
Sweden									
<i>K-RIX</i>	C	F	17:00	510	655	11,689	10,962	51.1	52.3
<i>E-RIX</i>	C	F	17:00	62	70	1,582	1,265	6.9	6.0
<i>Bankgirot</i>	C	F	. ²²	351,410	345,200	407	376	1.8	1.8
<i>Dataclearing</i>	C	F	. ²²	78,217	66,910	147	107	0.6	0.5
<i>Postgirot</i> ²¹	C	F	. ²²	454,000	450,000	445	367	1.9	1.8
Switzerland									
<i>SIC</i>	C	F	16:15	149,500	161,200	26,425	26,905	110.0	109.4
<i>DTA/LSV</i>	C	F	09:00	105,900	103,700	228	225	0.9	0.9
United Kingdom									
<i>CHAPS Sterling</i>	C	F	17:00	21,705	23,962	74,464	76,189	51.7	53.6
<i>CHAPS Euro</i> ²⁴	C	F	17:00	3,250	2,580	38,358	26,844	26.6	18.9
<i>BACS</i>	C	F	. ²⁵	3,316,213	3,527,340	2,912	3,119	2.0	2.2
<i>Cheque/credit</i>	D	F	. ²⁵	2,033,000	1,940,000	2,202	2,073	1.5	1.5
United States									
<i>Fedwire</i>	C	F	18:30	108,300	112,500	379,756	423,867	38.7	42.0
<i>CHIPS</i> ²⁶	C	F	17:00	59,800	60,400	292,147	311,707	29.7	30.9
European Union									
<i>EURO1</i>	C	F	16:00	24,692	28,633	49,644	58,101	nap	nap
<i>TARGET</i> ²⁹	D	F	18:00	47,980	53,664	263,291	368,469	nap	nap

Note: For an explanation of the footnotes refer to the end of the table.

¹ L = large-value system; R = retail system. ² B = bank(s); CB = central bank(s); PA = payment association. ³ M = manual; ACH = automated clearing house (offline); RTT = real-time transmission. ⁴ N = multilateral netting; BN = bilateral netting; RTGS = real-time gross settlement; GS = other gross settlement. ⁵ O = open membership (any bank can apply); RM = restricted membership (subject to criteria). ⁶ Degree of centralisation: C = centralised (one processing centre where all settlement instructions are processed and accounts settled); D = decentralised (presence of more than one such processing centre). ⁷ Prices charged to participants: F = full cost (including investments); V = variable costs; S = symbolic cost (below variable cost); N = no cost. ⁸ Converted at yearly average exchange rates.

Germany: ⁹ RTGS^{plus}, the new RTGS system, opened for business on 5 November 2001. On the same day, ELS (the former RTGS system) and EAF were closed down. For the time being, ELS serves as a procedure for accessing RTGS^{plus}. ¹⁰ The number of participants solely includes direct participants and indirect participants of the Deutsche Bundesbank. Others, which are addressable via RTGS^{plus}, are not included.

Hong Kong: ¹¹ Central Monetary Authority. ¹² 12:00 on Saturdays. ¹³ From 21 August.

Italy: ¹⁴ Transactions can also be submitted on floppy disk. ¹⁵ System managed by SIA (Interbank Company for Automation) in the name and on behalf of the Bank of Italy. ¹⁶ Except for credit transfers entered before 10:00 which are settled on the same day.

Japan: ¹⁷ Prices are set on the principle that the institutions that are to benefit from online processing should pay the relevant fees.

Singapore: ¹⁸ 13:15 on Saturdays. ¹⁹ 09:00 on Saturdays. ²⁰ 14:45 on Saturdays.

Sweden: ²¹ Postgirot is a "quasi system", ie transfer between accounts in special purpose bank. Non-banks can have accounts. ²² No same day transactions.

Switzerland: ²³ With restriction criteria for remote members.

United Kingdom: ²⁴ Quantitative figures for 2000 include domestic and all cross-border (inward and outward) payments across TARGET. Figures for 2001 exclude inward cross-border payments. ²⁵ No same day transactions.

United States: ²⁶ In January 2001, CHIPCo converted CHIPS from an end-of-day, multilateral net settlement system to a real-time final settlement system that continuously matches, nets and settles payment orders during the operating day. ²⁷ Number of depository institutions that used the Fedwire Funds Transfer Service in 2001. Other Fedwire Funds Transfer participants not included here, are: the US Treasury and any entity specifically authorised by federal statute to use the Reserve Banks as fiscal agents or depositories; entities designated by the Secretary of the Treasury; foreign central banks, foreign monetary authorities, foreign governments and certain international organisations.

European Union: ²⁸ The legal structure of EURO1 is based on the Single Obligation Structure (SOS), whereby on each settlement day, at any given time, each participant will have only one single payment obligation or claim with respect to the community of the other participants as joint creditors/debtors, which will be settled at the end of the day. In accordance with the SOS, no bilateral payments, claims or obligations between participants will be created by the processing of payments in the system. Nor will there be any form of setoff, novation or netting resulting from the continuous adjustment of the participants' single claim or obligation. ²⁹ The RTGS systems of the countries which have adopted the euro and the ECB payment mechanism are integral parts of the TARGET system. The euro RTGS systems of Denmark, Greece, Sweden and the United Kingdom were allowed to connect to TARGET on the basis of a decision taken by the Governing Council of the ECB in July 1998. On 1 January 2001 Greece joined the euro area. The HERMES Payment System in drachmas and the EURO-HERMES System were unified into a single HERMES Payment System. The figure of TARGET participants is based on a survey of direct and indirect participants. The previously published number of indirect participants was an estimate. In addition, there is a substantial change in the number of direct participants due to the fact that EAF closed down when RTGS plus opened for business on 5 November 2001.

Table 16
Operating hours of selected large-value interbank funds transfer systems
 End of 2001

System	Gross or net	Opening/closing time for same day value (local time)	Settlement finality (local time)	Cutoff for all third- party payment orders (local time)	Cutoff for international correspondents' payment orders (local time)	<i>Memo item: standard money market hours (local time)</i>
Belgium ELLIPS	<i>Gross</i>	<i>07:00-18:00</i>	<i>07:00-18:00</i>	<i>17:00</i>	<i>18:00</i>	<i>07:00-18:00</i>
Canada ¹ LVTS	<i>Net</i>	<i>07:00-18:30²</i>	<i>19:30</i>	<i>18:00</i>	<i>18:00</i>	<i>nap³</i>
France TBF	<i>Gross</i>	<i>07:00-18:00</i>	<i>real-time</i>	<i>17:00</i>	<i>nap</i>	<i>09:00-17:00</i>
PNS	<i>Gross/Net</i>	<i>08:00-16:00</i>	<i>real-time</i>	<i>16:00</i>	<i>nap</i>	<i>09:00-17:00</i>
Germany ⁴ RTGS ^{plus}	<i>Gross</i>	<i>07:00-18:00</i>	<i>07:00-18:00</i>	<i>17:00</i>	<i>nap</i>	<i>08:30-18:00</i>
EAF (former EAF2)	<i>nap</i>	<i>nap</i>	<i>nap</i>	<i>nap</i>	<i>nap</i>	<i>nap</i>
ELS	<i>nap</i>	<i>nap</i>	<i>nap</i>	<i>nap</i>	<i>nap</i>	<i>nap</i>
Hong Kong SAR HKD CHATS	<i>Gross</i>	<i>09:00-17:30⁵</i>	<i>09:00-17:30⁵</i>	<i>17:00</i>	<i>17:30</i>	<i>09:00-17:30</i>
USD CHATS	<i>Gross</i>	<i>09:00-17:30</i>	<i>09:00-17:30</i>	<i>17:00</i>	<i>17:30</i>	<i>09:00-17:30</i>
Italy BI-REL	<i>Gross</i>	<i>07:00-18:00</i>	<i>07:00-18:00</i>	<i>17:00</i>	<i>nap</i>	<i>07:00-18:00</i>
Japan FXYCS	<i>Net</i>	<i>09:00-13:45</i>	<i>14:30</i>	<i>13:45</i>	<i>13:45</i>	<i>09:00-17:00</i>
	<i>Gross</i>	<i>09:00-17:00</i>	<i>09:00-17:00</i>	<i>17:00</i>	<i>17:00</i>	<i>09:00-17:00</i>
BOJ-NET Funds Transfer System	<i>Gross</i>	<i>09:00-17:00</i>	<i>09:00-17:00</i>	<i>14:00</i>	<i>14:00</i>	<i>09:00-17:00</i>
Netherlands TOP	<i>Gross</i>	<i>07:00-18:00</i>	<i>07:00-18:00</i>	<i>17:00</i>	<i>17:00</i>	<i>07:00-18:00</i>

Note: For an explanation of the footnotes refer to the end of the table.

Table 16 (cont)

System	Gross or net	Opening/closing time for same day value (local time)	Settlement finality (local time)	Cutoff for all third-party payment orders (local time)	Cutoff for international correspondents' payment orders (local time)	Memo item: standard money market hours (local time)
Singapore MEPS	Gross	06:00-20:00 ^{6,7}	09:00-18:30 ^{8,9}	18:30 ^{10,11}	nap ¹²	09:00-18:30 ⁷
Sweden K-RIX	Gross	07:00-17:00	07:00-17:00	17:00	17:00	09:00-16:15
E-RIX	Gross	07:00-18:00	07:00-18:00	17:00	18:00	09:00-16:15
Switzerland SIC	Gross	18:00-16:15 ¹³	18:00-16:15	15:00	08:00	09:00-16:00
United Kingdom CHAPS Sterling	Gross	06:00-17:00	–	16:00	16:00	07:00-16:00
CHAPS Euro	Gross	06:00-17:00	–	16:00	16:00	–
United States ¹⁴ Fedwire	Gross	00:30-18:30	00:30-18:30	18:00	17:00	08:30-18:30 ¹⁶
CHIPS	Net	00:30-17:00	intra-day ¹⁵	16:30	16:30	08:30-18:30 ¹⁶
European Union EURO1	Net	07:30-16:00	after 16:00	16:00	16:00	07:00-18:00
TARGET	Gross	07:00-18:00	real-time	17:00	nap	07:00-18:00

Canada: ¹ Local times are Eastern time. ² The initialisation period, for collateral pledging/valuation, setting of bilateral limits, etc, begins at 07:00. The payment message exchange period begins at 08:00. ³ No standard hours.

Germany: ⁴ RTGS^{plus}, the new RTGS system, opened for business on 5 November 2001. On the same day, ELS (the former RTGS system) and EAF were closed down. For the time being, ELS serves as a procedure for accessing RGTS^{plus}.

Hong Kong: ⁵ To 12:00 on Saturdays.

Singapore: ⁶ The initialisation period for collateral pledging/valuation, setting of bilateral limits, etc begins at 07:00. The payment message exchange period begins at 08:00. ⁷ To 15:00 on Saturdays. ⁸ For net settlement systems. ⁹ To 14:30 on Saturdays. ¹⁰ For same day clearing. ¹¹ To 14:45 on Saturdays. ¹² MEPS is used for domestic payment orders only.

Switzerland: ¹³ The system is open for input 24 hours a day. Settlement services are limited by the indicated opening and closing times. A value day starts at 18:00 local time on the previous business day and ends at 16:15 on the value day. Third-party payments may be entered for same day settlement until 15:00. Between 15:00 (cutoff 1) and 16:00 (cutoff 2) only cover (bank-to-bank) payments are accepted for same day settlement. From 16:00 to 16:15 transactions are restricted to the processing of lombard credits (collateralised loans from the Swiss National Bank at a penalty rate).

United States: ¹⁴ Local times are Eastern time. ¹⁵ Trading occurs among dealers for funds on deposit at Federal Reserve Banks (ie federal funds) as early as 06:30. ¹⁶ Payments over CHIPS become final on completion of settlement, which occurs throughout the day. Rules are designed to ensure that settlement takes place no later than 18:00.

Table 17
Features of selected securities settlement systems
 End of 2001

Name of system	Belgium			Canada		France	
	NBB SSS	Euronext-CIK	Euroclear	SSS/BBS	DCS	RGV	RELIT
Type of securities ¹	G, O	E, O	G, E, O	S, B, O	B, G, O	B, C, G, O	B, C, G, O, S
Owner/manager ²	CB	B	B	B, SE, O	B, SE, O	Euroclear France	Euroclear France
Number of participants	130	104	1,750	107	82	658 ⁸	
<i>of which: direct participants</i>	130	104	1,750	<i>nav</i>	6	331 ⁸	
Settlement of cash leg ³	G	G	G/N	N	N	RTGS	N
Securities settlement (delivery) ³	G	N	G/N	N	G	RTGS	GS
Delivery lag (T+n)	T+2, T+3 ⁵	T+3	T+3, T+n (OTC)	T+3	T+0, T+1 ⁷	from T to T+100	from T to T+30
DVP mechanism	DVP1	DVP1	DVP1	3	2	DVP1	DVP2
Intraday finality	Yes	Yes	Yes	No	Yes	Yes	No
Central securities depository	NBB	CIK	Euroclear (Eurobonds) + Others	CDS	CDS	Euroclear France	
Cash settlement agent ²	NBB	NBB	Euroclear/NBB	B	CB	CB	
Number of transactions (thousands)	145	356	161,000 (before netting) ⁶	31,400	1,780	31,400 ⁸	
Value of transactions (USD billions) ⁴	2,483	90	117,000 ⁶	1,520	18,570	39,047 ⁸	
Ratio of transactions value to GDP (at annual rate)	10.9	0.4	nap	2.2	26.8	29.8 ⁸	

Note: For an explanation of the footnotes refer to the end of the table.

Table 17 (cont)

	Germany	Hong Kong SAR		Italy		
Name of system	Clearstream Banking Frankfurt (CBF)	CCASS	CMU	LDT	EXPRESS	Monte Titoli
Type of securities ¹	G, S, B, O	S, O	G, O	G, S, B, O	G, S, B, O	G, S, B, O
Owner/manager ²	SE	SE	CMA ¹⁰	CB	Monte Titoli	Monte Titoli
Number of participants	422	527	166 ¹¹	281	255 ¹³	1,867
<i>of which: direct participants</i>	422	527	166 ¹¹	281	116 ¹³	653
Settlement of cash leg ³	RTGS, N	G/N	G/N	N	G	nap
Securities settlement (delivery) ³	RTGS, G	G/N	G/N	N	G	G
Delivery lag (T+n)	T+0 to T+40	T+2	T+0	G, B: T+3 ¹² S, O: T+5	T	T
DVP mechanism	DVP1 DVP2/DVP3 ⁹	Yes	Yes	DVP3	DVP1	No
Intraday finality	Yes	No	Yes	No	Yes	nap
Central securities depository	CBF	CCASS	CMU	Monte Titoli	Monte Titoli	Monte Titoli
Cash settlement agent ²	CB	B	CMA ¹⁰	CB	CB	nap
Number of transactions (thousands)	105,121	29,361	43	42,350	97	1,830 ¹⁴
Value of transactions (USD billions) ⁴	nav	989	683	26,090	1,009	nav
Ratio of transactions value to GDP (at annual rate)	nav	6.0	4.2	24.0	0.9	nav

Note: For an explanation of the footnotes refer to the end of the table.

Table 17 (cont)

Name of system	Japan		Netherlands	Singapore		
	BOJ-NET JGB Services	JASDEC ¹⁶	Necigef	CDP	DCSS	MEPS-SGS
ype of securities ¹	G	S	G, B, S	E,O	O	G
Owner/manager ²	CB	B, SE, O	Euroclear	SE	SE	CB
Number of participants <i>of which: direct participants</i>	360 (Book-entry System) / 398 (Registration System)	290	56	85	50	130
Settlement of cash leg ³	RTGS	G/N	RTGS	N	G	RTGS
Securities settlement (delivery) ³	RTGS	G/N	RTGS	G	G	G
Delivery lag (T+n)	T+0 to T+3 ¹⁵	T+3	T+3	T+3	T+n ¹⁹	T+0
DVP mechanism	DVP1	DVP3 ¹⁷	DVP1	DVP2	DVP1	DVP1
Intraday finality	Yes	Yes	Yes	Yes	Yes	Yes
Central securities depository	CB	JASDEC	Necigef	CDP	CDP	CB
Cash settlement agent ²	CB	CB, B	CB, B	B	CB	CB
Number of transactions (thousands)	2,838/23	36,257	3,073	93,066,000 ¹⁸	4.5	47
Value of transactions (USD billions) ⁴	85,650/122	nav	858	74	5	262
Ratio of transactions value to GDP (at annual rate)	20.5/neg	nav	2.2	0.9	neg	3.1

Note: For an explanation of the footnotes refer to the end of the table.

Table 17 (cont)

Name of system	Sweden		Switzerland	United Kingdom		United States	
	Stockholmsbörsen	VPC	SECOM	CREST	CMO	NBES ²⁰	DTC
Type of securities ¹	O	G, E, O	G, B, S, O	G, B, S, O	G, C, O	G	S, O, B
Owner/manager ²	O	B, O	B, O	B, CB, SE, O	B, CB, O	CB	B, SE, O
Number of participants	72	47	433	41,227	64	1,888 ²¹	475
<i>of which: direct participants</i>	72	47	433	<i>nap</i>	<i>nap</i>	1,888 ²¹	475
Settlement of cash leg ³	N	G/N	G	RTGS	N	RTGS	N
Securities settlement (delivery) ³	N	G	G	RTGS	RTGS	RTGS	G
Delivery lag (T+n)	T+3	T+2, T+3	T+3	T+3	T	T, T+1 ²²	T+3 ²³
DVP mechanism	No	DVP2/ DVP3/DVP1	DVP1	DVP1	DVP2	DVP1	DVP2
Intraday finality	Yes	Yes	Yes	Yes	Yes	Yes	No
Central securities depository	OM	VPC	SIS SegalInterSettle	<i>nap</i>	CMO	CB	DTC
Cash settlement agent ²	CB	CB	CB	B, CB	CB	CB	DTC
Number of transactions (thousands)	66,575	7,740	13,400	73,400	200	15,000	350,000
Value of transactions (USD billions) ⁴	386	8,492	3,822	74,909	3,247	212,300	89,000
Ratio of transactions value to GDP (at annual rate)	1.8	40.5	15.5	52.7	2.3	21.1	8.8

Note: For an explanation of the footnotes refer to the end of the table.

¹ B = bonds; C = CDs; G = government securities; S = shares; O = others. ² B = bank(s); CB = central bank(s); SE = stock exchange; O = other. ³ G = gross; N = net; RTGS = real-time gross settlement. ⁴ Converted at yearly average exchange rates.

Belgium: ⁵ For Treasury bills, T+2; for bonds, T+3. ⁶ Including Euroclear France.

Canada: ⁷ Although all securities have the potential for T+0 delivery, money market mutual funds tend to be T+1.

France: ⁸ RGV and RELIT combined.

Germany: ⁹ Mixture of DVP 2 + DVP 3 (securities disposition on a gross basis without finality until final settlement of net cash position).

Hong Kong: ¹⁰ Central Monetary Authority. ¹¹ Recognised dealer for Exchange Fund Bills and Notes.

Italy: ¹² For government bills, T+2. ¹³ Number of accounts. ¹⁴ Free of payment (FOP) transfers not including multilateral net balances from LdT.

Japan: ¹⁵ T+3 is the norm for outright transactions. Most repo transactions are settled on a T+2 to T+3 basis. Settlement for the BOJ's open market operations takes place on a T+0 to T+3 basis.

¹⁶ End-March 2002. ¹⁷ For stocks traded on the Tokyo Stock Exchange and the Osaka Securities Exchange.

Singapore: ¹⁸ Number of securities cleared. ¹⁹ By mutual agreement between counterparties.

United States: ²⁰ NBES is the Federal Reserve's National Book-Entry System. ²¹ Number of depository institutions that used the Federal Reserve's National Book-Entry System in 2001. Other participants not included here, are: the US Treasury and any entity specifically authorised by federal statute to use the Reserve Banks as fiscal agents or depositories; entities designated by the Secretary of the Treasury; foreign central banks, foreign monetary authorities, foreign governments and certain international organisations. ²² Securities are settled on a same-day basis within the Federal Reserve's National Book-Entry System. The market convention for the settlement of repurchase agreements is T+0. The convention for government securities is T+1. ²³ The market convention for the settlement of corporate equities is T+3.

Table 18
Direct participants in CPSS real-time gross settlement systems
 End of 2001

	Belgium	Canada	France	Germany ¹		Hong Kong SAR		Italy	Japan
Name of system	ELLIPS	nap	TBF	RTGS ^{plus}	ELS	HKD CHATS	USD CHATS	BI-REL	BOJ-NET Funds Transfer System
Direct participants	17	nap	195	59	nap	134	65	682	383
Credit institutions	15	nap	165	58	nap	134	64	671 ³	325
Central bank	1	nap	1	1	nap	1 ²	1	1	0
Non-banks	1	nap	29	0	nap	0	0	10 ⁴	58 ⁵
<i>of which:</i>									
<i>public authorities</i>	0		0					1	0
<i>postal administration</i>	1		1					1	0
<i>supervised financial institutions</i>	0		28					6	52

Note: For an explanation of the footnotes refer to the end of the table.

Table 18 (cont)

Name of system	Netherlands	Singapore	Sweden		Switzerland	United Kingdom		United States	European Union
	TOP	MEPS	K-RIX	E-RIX	SIC	CHAPS Sterling	CHAPS Euro	Fedwire	TARGET ⁸
Direct participants	108	86	20	15	313	13	20	8,110 ⁷	1,579
Credit institutions	97	85	15	10	299	12	19	8,110 ⁷	1,484
Central bank	1	1	1	1	1	1	1	nav	15
Non-banks	10 ⁶	0	4	4	13	0	0	nav	80 ⁹
<i>of which:</i>									
<i>public authorities</i>	2		0	0	1				5
<i>postal administration</i>	0		0	0	1				2
<i>supervised financial institutions</i>	4		4	4	11				65

Germany: ¹ RTGS^{plus}, the new RTGS system, opened for business on 5 November 2001; For the time being, ELS serves only as procedure for accessing RTGS^{plus}.

Hong Kong: ² The central bank is not a direct participant.

Italy: ³ Of which: 31 branches of other EU banks; 13 branches of non-EU banks; 1 remote participant. ⁴ Includes, amongst others, Cassa Compensazione e Garanzia (clearing house) and Monte Titoli (Central Securities Depository).

Japan: ⁵ Includes, amongst others, stock exchanges, a bankers' association and the Deposit Insurance Corporation of Japan.

Netherlands: ⁶ Includes clearing and settlement organisations.

United States: ⁷ Number of depository institutions that used the Fedwire Funds Transfer Service in 2001. Other Fedwire Funds Transfer participants not included here, are: the US Treasury and any entity specifically authorised by federal statute to use the Reserve Banks as fiscal agents or depositories; entities designated by the Secretary of the Treasury; foreign central banks, foreign monetary authorities, foreign governments and certain international organisations.

European Union: ⁸ The figures are preliminary. The substantial change from the previously published figure of direct participants is due to the fact that EAF closed down when RTGS^{plus} opened for business on 5 November 2001. ⁹ Includes, amongst others, other participants (see also footnotes 4 and 6).

Table 19
Direct participants in CPSS large-value payment systems
 End of 2001

	Belgium	Canada	France	Germany	Hong Kong SAR		Italy	Japan
Name of system	nap	LVTS	PNS	EAF¹	HKD CHATS	USD CHATS	nap³	FXYCS
Direct participants		14	24	nap	134	65		40
Credit institutions		13	23	nap	134	64		40
Central bank		1	nap	nap	1 ²	1		0
Non-banks		0	1	nap	0	0		0
<i>of which:</i>								
<i>public authorities</i>			0					
<i>postal administration</i>			1					
<i>supervised financial institutions</i>			0					

	Netherlands	Singapore	Sweden	Switzerland	United Kingdom	United States		European Union
Name of system	nap	MEPS	nap	nap	nap	Fedwire	CHIPS	EURO1
Direct participants		86				8,110	58	73
Credit institutions		85				nav	nav	73
Central bank		1				nav	nav	0
Non-banks		0				nav	nav	nap
<i>of which:</i>								
<i>public authorities</i>								
<i>postal administration</i>								
<i>supervised financial institutions</i>								

Germany: ¹ EAF was closed down when RTGS^{plus}, the new RTGS system, opened for business on 5 November 2001.

Hong Kong: ² The central bank is not a direct participant.

Italy: ³ The only large-value payment system in Italy is BI-REL. For details, please see Table 18.

Table 20
Direct participants in CPSS retail interbank funds transfer systems
 End of 2001

	Belgium		Canada	France		Germany	Hong Kong SAR
Name of system	Clearing House	CEC	ACSS	CH and CREIC	SIT	RPS	nap
Direct participants	34	33	12	246	17	2,325	
Credit institutions	31	29	11	242	15	2,324	
Central bank	1	1	1	1	1	1	
Non-banks	2	3	0	3	1	0	
<i>of which:</i>							
<i>public authorities</i>	1	2		2	0		
<i>postal administration</i>	1	1		1	1		
<i>supervised financial institutions</i>	0	0		0	0		

	Italy		Japan		Netherlands	Singapore		
Name of system	BI-COMP		Zengin system	Tokyo Clearing House	Interpay	SGDCCS	IBG	EFTPOS
	Local Clearing	Retail						
Direct participants	124	209	154	121	72	40	41	5
Credit institutions	121 ¹	207 ²	154	119	72	39	41	5
Central bank	1	1	0	1	0	1	0	0
Non-banks	2	1	0	1	0	0	0	0
<i>of which:</i>								
<i>public authorities</i>	1	0		0				
<i>postal administration</i>	1	1		1				
<i>supervised financial institutions</i>	0	0		0				

Note: For an explanation of the footnotes refer to the end of the table.

Table 20 (cont)

Name of system	Sweden			Switzerland	United Kingdom		United States
	Bankgirot	Dataclearing	Postgirot	DTA/LSV	BACS	Cheque and credit clearing	nav
Direct participants	21	21	1,200,000	155	14	12	nav
Credit institutions	21	21	0	155	13	11	nav
Central bank	0	0	0	0	1	1	nav
Non-banks	0	0	1,200,000	0	0	0	nav
<i>of which:</i>							
<i>public authorities</i>			1,200,000				
<i>postal administration</i>			0				
<i>supervised financial institutions</i>			0				

Italy: ¹ Of which: 2 branches of other EU banks. ² Of which: 15 branches of other EU banks and 6 branches of non-EU banks.

Table 21
Access criteria for CPSS real-time gross settlement systems
 End of 2001

	Belgium	Canada	France	Germany ¹		Hong Kong SAR	Italy	Japan
Name of system	ELLIPS	nap	TBF	RTGS^{plus}	ELS	HKD RTGS	BI-REL	BOJ-NET Funds Transfer System
Access criteria	+		+	+	nap	+	+	+
Written rules	+		+	+	nap	+	+	+
Minimum level of data or ratios representative of financial strength	+		–	–	nap	+	–	+
Minimum number of transactions	–		–	–	nap	–	–	– ⁴
Payment of an entry fee	+		+	–	nap	+	–	–
Approval from the owner/manager or the direct participants	+		+	+ ²	nap	+	+ ³	+ ⁵
Approval from the local central bank	+		+	+	nap	+	+	+
Technical requirements	+		+	+	nap	+	+	+
Removal rules	+		+	+	nap	+	+	+

Note: For an explanation of the footnotes refer to the end of the table.

Table 21 (cont)

Name of system	Netherlands	Singapore	Sweden		Switzerland	United Kingdom	United States
	TOP	MEPS	K-RIX	E-RIX	SIC	CHAPS Sterling/Euro	Fedwire
Access criteria	+	+	+	+	+	+	+
Written rules	+	+	+	+	+	+	+
Minimum level of data or ratios representative of financial strength	-	+	+	+	-	-	-
Minimum number of transactions	-	-	-	-	-	-	-
Payment of an entry fee	-	-	+	+	+	+	-
Approval from the owner/manager or the direct participants	+ ⁶	+	+	+	+	+	+
Approval from the local central bank	+	+	+	+	+	+	+
Technical requirements	+	+	+	+	+	+	+
Removal rules	+	+	+	+	+	+	+

Key: + = yes; - = no.

Germany: ¹ RTGS^{plus}, the new RTGS system, opened for business on 5 November 2001; for the time being, ELS serves as a procedure of accessing RTGS^{plus}. ² The owner/manager is the central bank.

Italy: ³ The owner/manager is the central bank.

Japan: ⁴ To open a current account at the Bank of Japan, securities companies are required to meet certain standards on market presence set by the Bank of Japan. ⁵ The owner/manager is the central bank.

Netherlands: ⁶ The owner/manager is the central bank.

Table 22
Access criteria for other CPSS large-value payment systems
 End of 2001

	Belgium	Canada	France	Germany	Hong Kong SAR	Italy	Japan
Name of system	nap	LVTS	PNS	EAF¹	USD RTGS	nap³	FXYCS
Access criteria		+	+	nap	+		+
Written rules		+	+	nap	+		+
Minimum level of data or ratios representative of financial strength		–	–	nap	+		+
Minimum number of transactions		–	–	nap	–		+
Payment of an entry fee		+	+	nap	+ ²		+
Approval from the owner/manager or the direct participants		+	+	nap	+		+
Approval from the local central bank		–	+	nap	+		+
Technical requirements		+	+	nap	+ ²		+
Removal rules		+	+	nap	–		+

Note: For an explanation of the footnotes refer to the end of the table.

Table 22 (cont)

	Netherlands	Singapore	Sweden	Switzerland	United Kingdom	United States	European Union
Name of system	nap	nap	nap	nap	nap	CHIPS	EURO1
Access criteria						+	+
Written rules						+	+
Minimum level of data or ratios representative of financial strength						+	+
Minimum number of transactions						-	-
Payment of an entry fee						-	+
Approval from the owner/manager or the direct participants						+	+
Approval from the local central bank						-	-
Technical requirements						+	+
Removal rules						+	+

Key: + = yes; - = no.

Germany: ¹ EAF was closed down when RTGS^{plus}, the new RTGS system, opened for business on 5 November 2001.

Hong Kong: ² Not applicable to indirect participants.

Italy: ³ The only large-value payment system in Italy is BI-REL. For details please see Table 21.

Table 23
Risk control measures in CPSS large-value net settlement systems
 End of 2001

	Belgium	Canada	France	Germany	Hong Kong SAR	Italy	Japan
Name of system	nap	LVTS	PNS	EAF⁸	nap	nap⁹	FXYCS
1. Settlement in central banks' accounts	+	+	+	nap			nap
2. Same day settlement	+	+	+	nap			nap
3. Compliance with Lamfalussy standards	nap	+	+	nap			nap
a. Legal framework <i>contractual (+) or advisory (-)</i> <i>netting</i>		+ ¹	nap ⁵				
<i>if contractual: legally enforceable (+) or not (-)</i>		+					
b. Participants' awareness		+	+				
c. Risk management <i>monitoring of intraday balance</i>		+					
<i>multilateral limits</i>		+ ²	nap ⁶				
<i>collateral requirements</i>		+	nap ⁶				
<i>intraday closures</i>		+ ³	+ ⁷				
d. Timely settlement completion <i>risk-sharing agreements</i>		+	nap ⁵				
<i>full collateralisation of largest net debit position</i>		+ ⁴	nap ⁶				
e. Fair open access		+	+				
f. Technical reliability		+	+				

Note: For an explanation of the footnotes refer to the end of the table.

Table 23 (cont)

	Netherlands	Singapore	Sweden	Switzerland	United Kingdom	United States	European Union
Name of system	nap	nap	nap	nap	nap	CHIPS	EURO1
1. Settlement in central banks' accounts						+ ¹⁰	+
2. Same day settlement						+	+
3. Compliance with Lamfalussy standards						+	+
a. Legal framework <i>contractual (+) or advisory (-) netting if contractual: legally enforceable (+) or not (-)</i>						+	+
b. Participants' awareness						+	+
c. Risk management <i>monitoring of intraday balance multilateral limits collateral requirements intraday closures</i>						+ - - -	+ + + -
d. Timely settlement completion <i>risk-sharing agreements full collateralisation of largest net debit position</i>						- -	+ +
e. Fair open access						+	+
f. Technical reliability						+	+

Note: For an explanation of the footnotes refer to the end of the table.

Key: + = yes; – = no.

Canada: ¹ The LVTS employs multilateral netting by novation. Once the payment instruction passes the risk controls and is accepted by the system, the bilateral obligations are extinguished and replaced by a multilateral obligation vis-à-vis the system as a whole. ² The LVTS employs bilateral and multilateral limits. ³ Final settlement occurs at the end of the LVTS processing period. However, the risk control mechanisms of the LVTS ensure that, once a payment has passed the risk control mechanisms and been accepted by the system, it is certain to settle and irrevocable. Therefore, the LVTS provides intraday receiver finality. ⁴ The LVTS is certain to settle even if the defaulter with the largest net debit position defaults.

France: ⁵ PNS is a hybrid system; the legal and risk framework is comparable to that of the RTGS system. ⁶ PNS functions on the basis of positive balances, ie multilateral debit cap set to 200. ⁷ Continuous settlement mechanism.

Germany: ⁸ Transformed into a hybrid system in March 1996; the risk situation was comparable to that of a gross settlement system. EAF was closed down when RTGS^{plus}, the new RTGS system, opened for business on 5 November 2001.

Italy: ⁹ There are no large-value net settlement systems in Italy.

United States: ¹⁰ Since January 2001, CHIPS has been a real-time final settlement system that continuously matches, nets and settles payment orders. To facilitate this process, each CHIPS participant is required to transfer, via Fedwire, a pre-established opening position requirement to a CHIPS account at the Federal Reserve Bank of New York. Throughout the day, payment orders are settled with real-time finality on the books of CHIPS against positive positions, simultaneously offset by incoming payment orders, or both. At the end of the day, each participant with a final position requirement must transfer, via Fedwire, its requirement to the CHIPS account at the Federal Reserve Bank of New York.

Table 24a
SWIFT traffic: intra-CPSS message flows in 2001
 Number of messages

From/to	Belgium	Canada	France	Germany	Hong Kong SAR	Italy	Japan	Netherlands
Belgium	12,995,706	353,048	3,727,906	4,105,345	716,344	2,203,562	1,164,432	5,208,089
Canada	366,647	7,158,444	402,969	452,341	351,216	214,254	352,220	145,120
France	3,447,868	393,963	25,415,355	5,969,142	575,098	3,134,653	1,020,489	2,143,824
Germany	4,018,613	398,968	5,880,406	13,159,502	765,380	6,112,299	1,282,659	4,781,369
Hong Kong SAR	550,693	456,753	381,191	727,261	4,461,437	291,873	2,601,265	164,888
Italy	2,168,151	164,562	3,188,759	5,499,486	305,062	5,168,788	512,290	1,018,552
Japan	1,130,503	308,211	872,599	1,234,693	1,681,134	524,895	6,700,827	272,457
Netherlands	4,334,125	160,884	2,103,537	5,258,309	275,948	1,036,059	335,091	23,006,779
Singapore	305,324	132,969	291,150	573,385	1,339,822	119,347	1,785,429	170,535
Sweden	1,100,515	73,647	710,564	1,519,762	145,618	380,183	130,450	591,271
Switzerland	2,041,931	459,655	2,835,950	5,963,165	551,681	1,765,559	1,113,826	1,413,276
United Kingdom	6,161,061	2,031,516	9,871,087	14,035,055	3,825,604	7,128,511	9,410,453	7,954,165
United States	5,410,909	4,622,431	6,989,284	9,458,996	8,679,708	4,968,205	10,535,035	5,017,012
Total CPSS	44,032,346	16,715,051	62,670,757	67,956,442	23,674,052	33,048,188	36,944,466	51,887,337
Total non-CPSS	10,646,353	2,176,168	16,234,868	35,609,990	6,470,854	12,193,496	7,081,394	8,139,593
Total all countries	54,678,699	18,891,219	78,905,625	103,566,432	30,144,906	45,241,684	44,025,860	60,026,930

Source: SWIFT.

Table 24a (cont)

From/to	Singapore	Sweden	Switzerland	United Kingdom	United States	CPSS	Non-CPSS	All countries
Belgium	406,113	417,463	2,719,460	13,861,751	7,733,088	55,612,307	11,281,145	66,893,452
Canada	134,771	64,195	512,291	2,351,642	6,003,923	18,510,333	3,046,059	21,556,392
France	257,652	400,431	2,385,605	18,807,811	11,745,415	75,697,306	12,262,630	87,959,936
Germany	420,787	971,645	4,957,461	19,091,911	15,360,345	77,201,345	29,855,208	107,056,553
Hong Kong SAR	1,465,880	79,766	505,281	4,710,374	8,760,384	25,157,046	8,889,583	34,046,629
Italy	98,257	217,565	1,601,768	11,121,026	6,450,279	37,514,545	8,677,542	46,192,087
Japan	1,199,388	104,198	1,067,379	9,594,033	11,805,166	36,495,483	7,940,034	44,435,517
Netherlands	151,095	419,662	2,045,002	14,602,228	7,202,837	60,931,556	7,023,838	67,955,394
Singapore	2,790,820	74,373	444,930	2,657,771	5,000,492	15,686,347	4,183,204	19,869,551
Sweden	87,968	3,969,098	439,644	5,754,545	3,290,066	18,193,331	6,380,157	24,573,488
Switzerland	402,815	370,595	12,589,813	12,524,420	12,183,276	54,215,962	11,575,189	65,791,151
United Kingdom	1,783,317	3,518,718	6,779,079	76,019,159	35,748,310	184,266,035	35,683,493	219,949,528
United States	3,897,894	1,947,100	11,543,847	29,728,668	67,346,377	170,145,466	81,836,760	251,982,226
Total CPSS	13,096,757	12,554,809	47,591,560	220,825,339	198,629,958	829,627,062	228,634,842	1,058,261,904
Total non-CPSS	4,345,188	5,466,285	12,410,001	50,399,360	75,711,894	246,885,444	228,758,699	475,644,143
Total all countries	17,441,945	18,021,094	60,001,561	271,224,699	274,341,852	1,076,512,506	457,393,541	1,533,906,047

Source: SWIFT.

Table 24b
Geographical breakdown of SWIFT message flows
In 2001

	Messages sent			Messages received		
	Total	To domestic users (% of total)	To other CPSS countries (% of total)	Total	From domestic users (% of total)	From other CPSS countries (% of total)
Belgium	66,893,452	19.43	63.71	54,678,699	23.77	56.76
Canada	21,556,392	33.21	52.66	18,891,219	37.89	50.59
France	87,959,936	28.89	57.16	78,905,625	32.21	47.22
Germany	107,056,553	12.29	59.82	103,566,432	12.71	52.91
Hong Kong SAR	34,046,629	13.10	60.79	30,144,906	14.80	63.73
Italy	46,192,087	11.19	70.02	45,241,684	11.42	61.62
Japan	44,435,517	15.08	67.05	44,025,860	15.22	68.70
Netherlands	67,955,394	33.86	55.81	60,026,930	38.33	48.11
Singapore	19,869,551	14.05	64.90	17,441,945	16.00	59.09
Sweden	24,573,488	16.15	57.88	18,021,094	22.02	47.64
Switzerland	65,791,151	19.13	63.27	60,001,561	20.98	58.33
United Kingdom	219,949,528	34.56	49.21	271,224,699	28.03	53.39
United States	251,982,226	26.73	40.80	274,341,852	24.55	47.85
Total CPSS	1,058,261,904	26.00	53.75	1,076,512,506	24.22	77.07
Total non-CPSS	475,644,143	17.14	51.90	457,393,541	17.82	49.99
Total all countries	1,533,906,047	22.32	70.18	1,533,906,047	22.32	68.99

Source: SWIFT.

Table 24c
SWIFT members, submembers and participants in CPSS countries
 In 2001

	Number of users of the SWIFT network			
	Members	Submembers	Participants	Total number of users
Belgium	23	44	16	83
Canada	14	33	12	59
France	60	120	68	248
Germany	114	113	48	275
Hong Kong SAR	23	154	28	205
Italy	142	78	35	255
Japan	125	101	33	259
Netherlands	25	47	32	104
Singapore	9	155	17	181
Sweden	8	10	12	30
Switzerland	101	87	66	254
United Kingdom	60	293	113	466
United States	96	327	207	630
Total CPSS	800	1,562	687	3,049
Total non-CPSS	1,465	1,581	1,362	4,408
Total all countries	2,265	3,143	2,049	7,457

Source: SWIFT.

Table 24d
Relative share of CPSS countries in SWIFT traffic, membership and shareholding
 In 2001

	Share of messages (%)		Share of total (%)		Share of equity holding	
	Sent	Received	Members	Users	Quantity	Percentage
Belgium	4.36	3.56	1.02	1.00	2,425	2.79
Canada	1.41	1.23	0.62	0.79	1,965	2.26
France	5.73	5.14	2.65	3.33	6,723	7.75
Germany	6.98	6.75	5.03	3.69	6,706	7.74
Hong Kong SAR	2.22	1.97	1.02	2.75	1,802	2.08
Italy	3.01	2.95	6.27	3.42	3,334	3.85
Japan	2.90	2.87	5.52	3.47	4,790	5.53
Netherlands	4.43	3.91	1.10	1.39	3,910	4.51
Singapore	1.30	1.14	0.40	2.43	573	0.66
Sweden	1.60	1.17	0.35	0.40	1,532	1.77
Switzerland	4.29	3.91	4.46	3.41	4,344	5.01
United Kingdom	14.34	17.68	2.65	6.25	5,563	6.42
United States	16.43	17.89	4.24	8.45	16,152	18.63
Total CPSS	68.99	70.18	35.32	40.89	59,819	69.00
Total non-CPSS	31.01	29.82	64.68	59.11	26,871	31.00
Total all countries	100.00	100.00	100.00	100.00	86,690	100.00

Source: SWIFT.