

BANK FOR INTERNATIONAL SETTLEMENTS

Monetary and Economic Department

**CENTRAL BANK SURVEY OF
FOREIGN EXCHANGE AND DERIVATIVES MARKET ACTIVITY
1995**

Basle

May 1996

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Conventions used

- = reported to be nil
- .. = not reported, suppressed for reasons of confidentiality or not meaningful
- n.a. = not applicable

Owing to rounding and incomplete reporting of various breakdowns, the component items do not always sum to the total for the category in question.

The term "global" is only used to refer to data for which the BIS has made an adjustment for estimated gaps in reporting. The term "total" is used when referring to all reported transactions for a particular item or aggregate.

"Gross-gross", or simply "gross", refers to data for which no adjustment has been made for estimated double-counting; "net-gross" refers to data for which adjustments have been made for estimated local double-counting; and "net-net", or "net", refers to data adjusted for both local and cross-border double-counting.

INTRODUCTION

This report presents the final results and main findings from a survey of foreign exchange and derivatives market activity which was carried out in the spring of 1995 by central banks and monetary authorities in 26 countries in their local markets.¹ The report comprises five parts: Part I is a summary which provides an overview of the main results of the combined survey. Part II discusses in detail the results of the foreign exchange part of the survey. In this part consideration is only given to turnover in traditional foreign exchange market instruments, i.e. spot, outright forward and foreign exchange swap transactions. The results for turnover, notional amounts outstanding and market values of derivative instruments are covered in Part III. Since outright forwards and foreign exchange swaps are also derivative instruments, the relevant turnover data are included in the discussion of both markets. Part IV contains a description of the methodology, detailing definitions, classification principles and compilation procedures. Part V is a statistical annex which contains tables with the detailed survey results.

¹ The preliminary results were released in October (for the foreign exchange part) and December 1995 (for the derivatives part).

I. SUMMARY OF PRINCIPAL GLOBAL AGGREGATES

The triennial Central Bank Survey of Foreign Exchange Market Activity was significantly expanded in the 1995 exercise to include the first attempt to estimate global activity in the world's derivatives markets - particularly the over-the-counter (OTC) markets. The Foreign Exchange Survey had traditionally been confined to foreign exchange turnover alone, though it did include the bulk of activity in foreign exchange derivative instruments (i.e. outright forwards and foreign exchange swaps). The new and old parts of the 1995 survey therefore overlap in this area. Data on derivatives *outstanding* (either notional amounts or gross market values) were collected for the first time for four market risk categories, namely foreign exchange, interest rate, equity and commodity derivatives, as well as turnover data on the full range of foreign exchange and interest rate derivatives. Given that this was the first comprehensive derivatives market survey, no intertemporal comparisons can be made for any of the outstandings data.

1. Foreign exchange market turnover

Global turnover in all traditional foreign exchange market segments (i.e. spot transactions, outright forwards and foreign exchange swaps) reached an estimated daily average of nearly \$1.2 trillion in April 1995. This represented a growth of some 45% over the period since April 1992, somewhat faster than in the 1989-92 triennium. However, allowing for exchange rate movements, total turnover in traditional instruments rose by only 30%, more or less the same as in 1989-92. In current dollar terms, the rate of growth of spot transactions more than doubled to 30%. Even so, turnover in outright forwards and swaps consolidated the dominant position already reached in April 1992. Turnover in foreign exchange futures and options rose, but at a much slower pace than in the earlier period.

2. Derivatives market activity²

(a) At the end of March 1995 the *global notional amount outstanding* of OTC derivative contracts is estimated to have stood at \$47.5 trillion, compared with the preliminary total of \$40.7 trillion published in December 1995, which excluded any estimates for gaps in reporting. Of this, 61% applied to interest rate instruments and a further 37% to foreign exchange instruments (including outright forwards and foreign exchange swaps). Notional amounts of contracts on equity and commodity-related instruments (not shown in the table below) accounted for only 1¼ and ¾% of the total respectively. For exchange-traded contracts, only gross data were collected and therefore the extent of double-counting could not be estimated directly.³ On the extreme assumption of complete double-counting,⁴ net notional amounts outstanding of exchange-traded derivatives stood at a little over \$8 trillion at the end of March 1995, nearly all of which was in interest rate instruments.

(b) *Gross market values*, which were only collected for OTC contracts, are a more meaningful measure of the economic significance of contracts outstanding than notional amounts since they provide a more accurate measure of the transfer of price risk in the derivatives markets. These were estimated at a little over \$2.2 trillion at the end of March 1995, compared with the preliminary total of \$1.7 trillion published in December 1995, which excluded any estimates for gaps in reporting. These figures include intra-group transactions and did not take account of netting and collateral. In contrast to the situation for notional amounts, the gross market value of foreign exchange contracts heavily outweighed that of interest rate products. However, as with notional amounts

² For the list of individual derivative instruments covered by the survey see Part IV, Methodology.

³ Moreover, the survey did not set out to collect *comprehensive* data on exchange-traded derivatives as these are available from the exchanges themselves.

⁴ This would imply that all transactions took place between reporting dealers.

outstanding, the gross market values of OTC equity and commodity-related instruments were very small, some 2½ and 1¼% of the total respectively.

c) Global *turnover* in OTC derivatives (foreign exchange and interest rate contracts only) is estimated to have been \$880 billion per business day in April 1995, in terms of notional amounts. Turnover in exchange-traded derivatives on a comparable basis amounted to a daily average of \$570 billion in the reporting month. While foreign exchange products dominated OTC business, nearly all exchange-traded turnover was in interest rate instruments.

SUMMARY OF GLOBAL AGGREGATES

I. FOREIGN EXCHANGE MARKET TURNOVER¹

Category	April 1989	April 1992		April 1995	
	Daily averages in billions of US dollars	Daily averages in billions of US dollars	Percentage change 1989-92	Daily averages in billions of US dollars	Percentage change 1992-95
Spot transactions	350	400	14	520	30
Outright forwards and swaps	240	420	75	670	60
All "traditional" market segments²	590	820	39	1,190	45
Futures and options ³	30	60		70	
Grand total⁴	620	880	42	1,260	43

¹ Adjusted for local and cross-border double-counting, except for futures and exchange-traded options; including estimated gaps in reporting. ² Spot, outright forward and foreign exchange swap transactions. ³ Including OTC and exchange-traded options. ⁴ As calculated in previous Surveys.

II. DERIVATIVES MARKET ACTIVITY

Outstandings at end-March 1995 (in billions of US dollars)		
Category	OTC contracts ¹	Exchange-traded contracts ²
Notional amounts outstanding	47,530	8,186
<i>of which:</i>		
Foreign exchange	17,700	60
Interest rates	28,850	7,835
Gross market values	2,205	
<i>of which:</i>		
Foreign exchange	1,420	
Interest rates	700	
Turnover in notional amounts in April 1995 (daily averages in billions of US dollars)		
Category	OTC contracts ¹	Exchange-traded contracts ²
Foreign exchange	720	7
Interest rates	160	563
Total	880	570

Note: Data on foreign exchange and derivatives market turnover both include transactions in outright forwards and foreign exchange swaps.

¹ Adjusted for local and cross-border double-counting; including estimated gaps in reporting. The data cover deals in forwards, swaps and options. ² Reported amounts have been halved to adjust approximately for double-counting. The data cover deals in futures and options.

II. FOREIGN EXCHANGE MARKET ACTIVITY

1. Coverage of the survey

The foreign exchange part of the survey was very similar in structure and coverage to that conducted three years earlier, in that the same countries participated and the breakdowns by transaction type and currency remained largely unchanged. The counterparty definition was amended to make it clear that only institutions *participating in the survey* were to be classified as "other dealers", thereby enabling a straightforward elimination of both local and cross-border double-counting in the aggregated global totals. In the 26 countries participating, a total of 2,414 financial institutions reported their turnover data during April 1995 to their respective central banks or monetary authorities (Table F-1). As in April 1992, coverage was comprehensive, with in most cases between 90% and 100% of the foreign exchange markets being covered.

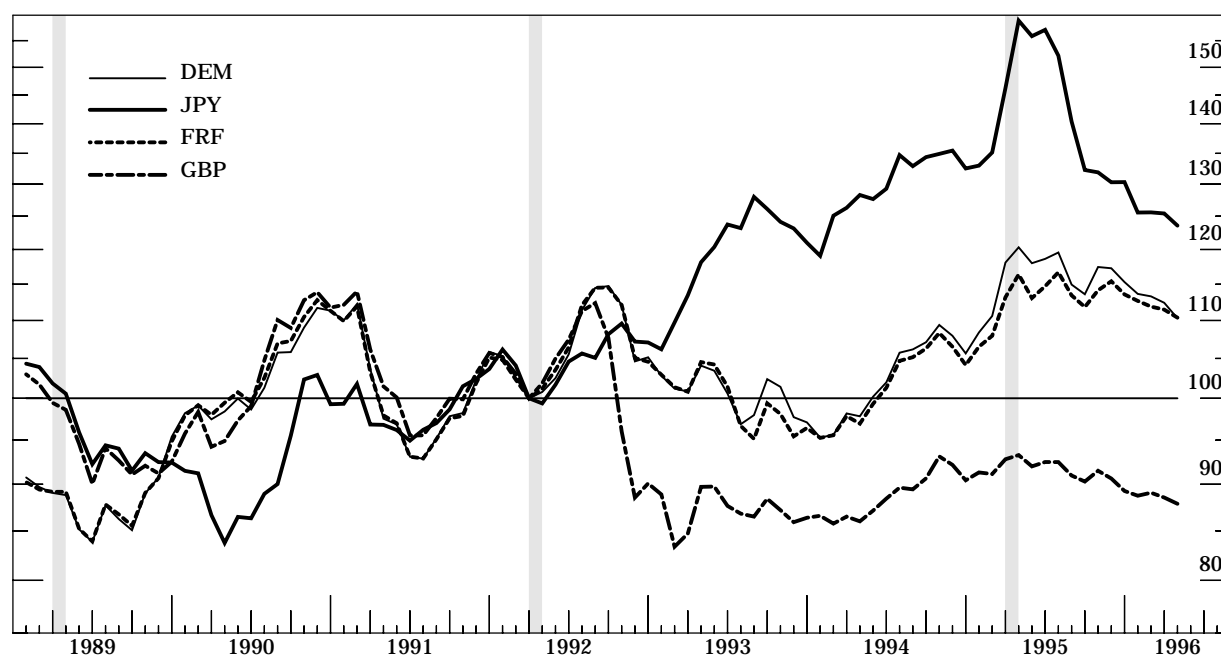
Table F-1
Basic features of the April 1995 foreign exchange market survey

Participating country	Coverage	Number of banks covering 75%	Number of participants*	Number of trading days	Nature of turnover	
					in April	preceding six months
Australia	100%	10 = 70%	75 (72)	17	normal	steady
Austria	86.5%	3 = 70%	10 (13)	18	below	increasing
Bahrain	90-95%	7	80 (72)	20	normal	steady
Belgium	90-95%	10	46 (41)	18	normal	steady / decreasing
Canada	100%	6-7	35 (45)	19	below	increasing
Denmark	95-100%	2-4	16 (11)	17	normal	
Finland	100%	4-5	17 (15)	18	normal	steady
France	95%	7-12	77 (50)	19	below	steady
Germany	90%	10	80 (81)	18	normal	
Greece	100%	21	44 (41)	18	normal	steady
Hong Kong	100%	13-22	376 (375)	17	normal	steady
Ireland	100%	4	21 (25)	18	normal	increasing
Italy	77%	6-8	28 (23)	18	below	increasing
Japan	100%	24	345 (330)	20	normal	steady
Luxembourg	100%	14-15	223 (190)	19	normal / below	steady / decreasing
Netherlands	100%	3-5	33 (37)	18	normal	
New Zealand	99%	4-5	8 (11)	17	normal	steady
Norway	100%	4-5	27 (15)	17	below	steady
Portugal	100%	9	40 (34)	18	normal	increasing
Singapore	100%	25	218 (208)	19	normal	increasing
South Africa	100%	3-5	19 (15)	17	normal	increasing
Spain	100%	12 = 83%	34 (54)	17	above	increasing
Sweden	90%	2-3	5 (43)	18	below	increasing
Switzerland	100%	5	114 (105)	18	normal	steady
United Kingdom	100%	20 = 68%	313 (352)	18	normal	steady
United States	100%	20 = 70%	130 (180)	19	below	

* Number of reporting institutions in 1992 given in brackets.

Approximately two-thirds of the central banks taking part in the survey considered business to have been normal during the survey period, while most others thought that the overall level of turnover had been below normal and only one monetary authority considered it to have been above normal (Table F-1). In April 1992 and April 1989, activity had also been reported as mainly normal or somewhat below normal; hence the data may be considered to be comparable and to reflect the underlying trend of foreign exchange market activity. However, special factors may have influenced the "currency mix" in April 1995. In particular, the Japanese yen reached a postwar peak against the US dollar during the month (Graph F-1), while uncertainties in the run-up to the French presidential election in May occasionally put the French franc under downward pressure.

Graph F-1
Bilateral nominal exchange rates against the US dollar
 (April 1992 = 100, semi-log scale)



Note: Shaded area designates survey month.

2. Global turnover

After adjustment for double-counting and for estimated gaps in reporting, the average daily turnover of global exchange markets in spot, outright forward and foreign exchange swap contracts can be estimated at \$1,190 billion in April 1995 (Table F-2). After excluding currency futures and options contracts, which were included in the published data of earlier surveys, the comparable figures for April 1989 and April 1992 were \$590 billion and \$820 billion respectively.⁵

Percentage changes in estimated global turnover in 1989-92 and in 1992-95 suggest an acceleration in the rate of expansion, from 39% to 45% over the three-year period, or from 12% to 13% on an annualised basis. It should be stressed, however, that the depreciation of the US dollar against most major currencies in the three years to April 1995 was more pronounced than in the preceding three-year period (Graph F-1). This contributed to a rise in the dollar value of the reported

⁵ Including currency futures and options, average daily foreign exchange market turnover was \$620 billion in April 1989, \$880 billion in April 1992 and \$1,260 billion in 1995. Note that no counterparty breakdown was available for exchange-traded business, and therefore the data on currency futures and options contain some double-counting.

transactions and, if a different base currency, say the Deutsche Mark, were used as the numeraire, a large downward adjustment in the growth of reported gross turnover would result. On this basis the growth of turnover would come to about 20% (19% and 21%) in each three-year period. Similarly, if constant exchange rates are used, expansion in the two periods was in the region of 30%. This calculation is based on data which are not adjusted for inter-dealer double-counting, since the currency detail for 1989 is available only on the adjusted basis. The unadjusted growth rates of gross turnover were 33%⁶ and 44%.

Table F-2
Global foreign exchange market turnover in April 1995 and estimated gaps in reporting¹
(daily averages in billions of US dollars)

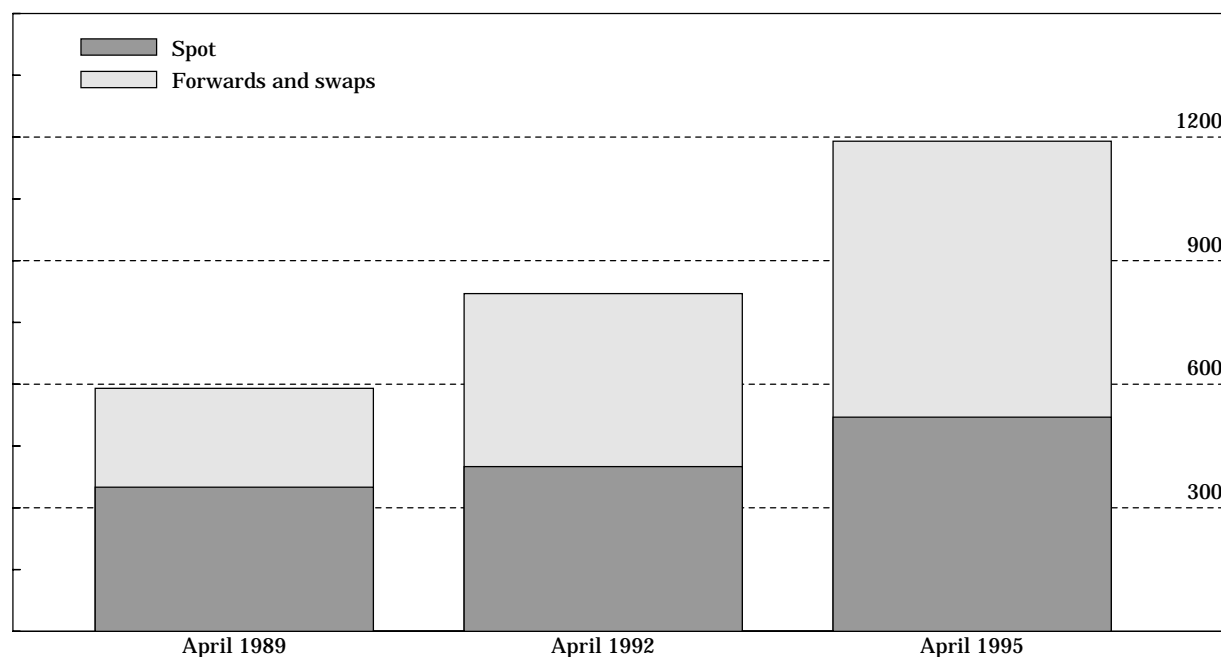
Category	April 1989		April 1992		Percentage change 1989-92	April 1995		Percentage change 1992-95
	Amount	Percentage share	Amount	Percentage share		Amount	Percentage share	
Total reported gross turnover	907		1,293		33	1,864		44
Adjustment for local double-counting ²	- 189		- 217			- 293		
Total reported turnover net of local double-counting ("net-gross")	718		1,076		38	1,572		46
Adjustment for cross-border double-counting ²	- 184		- 291			- 435		
Total reported "net-net" turnover	534	100	785	100	37	1,137	100	45
with other dealers .....	..	..	540	69	..	729	64	35
- local .....	..	..	217	28	..	293	26	35
- cross-border .....	..	..	324	41	..	436	38	35
with others .....	..	..	234	30	..	408	36	74
- local .....	..	..	100	13	..	233	20	..
- cross-border .....	..	..	68	9	..	175	15	..
Estimated gaps in reporting ³	56		35			53		
Estimated global turnover	590	100	820	100	39	1,190	100	45
Spot transactions	350	59	400	49	14	520	44	30
Outright forwards and foreign exchange swaps	240	41	420	51	75	670	56	60
<i>Memorandum item:</i>								
<i>Futures and options</i> ⁴	30		60			70		

¹ Data relate to spot, outright forward and foreign exchange swap transactions. Data for 1989 and percentage change 1989-92 (except for estimated global turnover) based on 21 reporting countries. Data for 1992 and 1995 based on 26 reporting countries. ² The adjustments have in principle been calculated by halving positions vis-à-vis other local reporting dealers and other reporting dealers abroad respectively. For further details see Part IV, Methodology. ³ Estimates have been prepared for less than full coverage of foreign exchange market activity in the reporting countries and less than full coverage of the range of countries in which the surveyed activity took place. ⁴ Currency futures, OTC currency options and exchange-traded currency options only; OTC options adjusted for local and cross-border double-counting; exchange-traded options and futures not adjusted for double-counting; including estimated gaps in reporting.

⁶ Or 35% if futures and options data are included in the 1989-92 comparison.

Graph F-2

**Estimated global foreign exchange market turnover by market segment
in April 1989, April 1992 and April 1995 ***
(average daily turnover, in billions of US dollars)



* Adjusted for local and cross-border inter-dealer double-counting.

3. Currencies traded

Since every foreign exchange transaction involves two currencies, a currency breakdown of exchange transactions in terms of currency *pairs* sums to 100% (Tables F-4 and F-5 and Annex Tables 1-B, 1-C, 1-E, 1-F and 1-G). If alternatively *both* currency sides of every transaction are counted separately, the aggregate of all proportions necessarily amounts to 200% (Table F-3 and Annex Tables 1-A and 1-D).

Overall, the survey showed that the *US dollar* was involved on one side in 83% of all transactions worldwide (Table F-3) and that it thus remained by far the most important currency in the foreign exchange market, partly because of its use as a vehicle currency for cross-trading between other currencies.⁷ As in 1992, seven of the ten most heavily traded currency pairs have the dollar on one side (Table F-4). In the foreign exchange swaps market, its role is even more pronounced, as it is involved in 95% of all deals (Annex Table 1-A). The role of the dollar does, however, vary between currencies. For some, almost all trading takes place in terms of the US dollar, e.g. the Canadian dollar (97%), Australian dollar (95%) and Japanese yen (88%). The US dollar figures less prominently, however, in deals involving European currencies. For sterling, the Swiss franc, the Deutsche Mark and the French franc, the shares are between 73 and 57% (Annex Tables 1-A and 1-B).

Table F-5 supplies a breakdown *by country* of turnover in some major currency pairs as a proportion of turnover in all currencies. Across all markets, 44% of foreign exchange turnover involved the domestic currency of the country concerned, down from 47% in 1992. This implies that the bulk of global foreign exchange turnover now involves cross-currency transactions in which *both*

⁷ Direct comparisons with 1989 are not possible since data on the currency distribution in five countries, including Germany and Luxembourg, are not available.

Table F-3
Use of selected currencies on one side of the transaction
as a percentage of global gross foreign exchange market turnover¹
 (percentage shares)

Currency	April 1989	April 1992	April 1995
US dollar	90	82	83
Deutsche Mark ²	27	40	37
Japanese yen	27	23	24
Pound sterling	15	14	10
French franc	2	4	8
Swiss franc	10	9	7
Canadian dollar	1	3	3
Australian dollar	2	2	3
ECU	1	3	2
Other EMS currencies	3	9	13
Currencies of other reporting countries	3	3	2
Other currencies	19	8	8
All currencies	200	200	200

¹ Number of reporting countries in 1989: 21; in both 1992 and 1995: 26. Data for 1989 and data for Finland in 1992 include options and futures. Data for 1989 cover local currency trading only, except for the US dollar, Deutsche Mark, Japanese yen, pound sterling, Swiss franc and ECU. The figures relate to gross turnover because comparable data on a "net-gross" or "net-net" basis are not available for 1989. ² Data for April 1989 exclude domestic trading involving the Deutsche Mark in Germany.

currencies are foreign. In markets where domestic currency business accounts for 69% or more of turnover (apart from the United States, these are Italy, Japan, Germany, South Africa, Canada, Portugal and Spain), US dollar/domestic currency transactions amount to at least half of total turnover (with the exception of Portugal), compared with an average proportion of 24%.

The *Deutsche Mark* retained, by a wide margin, its role as the second most important currency in the foreign exchange market, although its share has declined from 40% in 1992 to 37% (Table F-3). US dollar/Deutsche Mark trading, which on average accounts for 22% of transactions (Annex Table 1-A), continues to have the largest share of the market, despite having declined from 24% in 1992. As in the previous survey, four of the ten most actively traded currency pairs are those involving the Deutsche Mark (Table F-4). It is the only currency, apart from the US dollar, that is traded in large quantities against a wide range of other currencies. In fact, the US dollar and the Deutsche Mark together account for almost all trading in the Canadian dollar (98%), Australian dollar (97%), Japanese yen (97%), Swiss franc and French franc (both 95%) and sterling (93%). The proportion of US dollar/Deutsche Mark trades is comparatively homogeneous between centres (Table F-5), the share of turnover amounting to between 12 and 20% in the majority of cases. Bahrain, Hong Kong and Singapore report a share of around 25%. Austria and Luxembourg report an even higher share of above 40% owing to the close integration of their financial markets with Germany.

Table F-4

**Reported foreign exchange market turnover net of local and cross-border inter-dealer double-counting
by currency pair in April 1992 and April 1995**

(daily averages in billions of US dollars and percentage shares)

Currency pair	April 1992				April 1995			
	Total	Spot	Outright forwards	Foreign exchange swaps	Total	Spot	Outright forwards	Foreign exchange swaps
All counterparties								
USD/DEM	192.2	30	22	19	253.9	29	19	17
USD/JPY	154.8	16	20	25	242.0	18	22	24
USD/GBP	76.5	9	9	12	77.6	5	6	8
USD/CHF	48.8	6	6	7	60.5	5	5	6
USD/CAD	25.4	2	3	5	51.0	2	5	7
DEM/GBP	23.3	5	3	1	38.2	2	4	4
USD/FRF	18.6	1	2	4	34.4	6	2	1
DEM/JPY	18.2	4	3	0	28.7	2	2	3
USD/AUD	17.9	1	2	3	24.0	4	3	0
DEM/CHF	13.3	3	2	0	21.3	4	1	0
Other	195.9	23	28	24	305.3	23	31	30
All currency pairs	784.9	100	100	100	1136.9	100	100	100
Non-financial customers								
USD/JPY	32.3	19	23	30	42.7	19	26	28
USD/DEM	26.9	22	19	16	32.5	22	18	14
USD/GBP	10.7	8	6	8	9.0	4	4	6
USD/CHF	7.0	6	4	5	9.0	5	5	5
USD/AUD	4.8	3	2	5	6.7	2	4	5
USD/CAD	4.5	2	3	5	6.6	4	2	5
USD/FRF	3.4	2	2	4	6.6	3	4	4
DEM/GBP	3.1	3	3	1	4.6	5	1	1
DEM/JPY	2.7	2	3	1	3.2	3	3	1
DEM/CHF	2.1	2	2	1	2.8	2	1	2
Other	39.4	31	33	24	54.5	31	32	29
All currency pairs	136.9	100	100	100	178.2	100	100	100

Table F-5
Reported foreign exchange market turnover net of local inter-dealer double-counting by major currency pairs and reporting country
in April 1992 and April 1995

(daily averages in billions of US dollars and *percentage shares*)

Country	All currencies		Domestic against other currencies						USD/DEM		USD/JPY		Others			
	1992	1995	Total		Domestic/USD		Domestic/DEM		Domestic/JPY		1992	1995	1992	1995		
			1992	1995	1992	1995	1992	1995	1992	1995						
Australia	29.0	39.5	40	41	38	40	0	0	1	1	22	22	18	14	20	23
Austria	4.4	13.3	24	23	10	12	13	9	0	0	69	56	..	1	..	20
Bahrain	3.5	3.1	1	2	1	2	..	0	..	0	23	26	9	16	67	55
Belgium	15.7	28.1	26	33	16	23	6	8	0	0	19	15	6	6	50	45
Canada	21.9	29.8	65	70	64	69	0	0	0	0	13	13	5	6	17	12
Denmark	26.6	30.5	17	29	9	20	6	6	0	0	21	13	2	2	60	56
Finland	6.8	5.3	52	39	36	19	14	17	..	0	30	16	3	0	15	44
France	33.3	58.0	51	56	24	30	22	22	0	0	20	17	5	7	24	20
Germany	55.0	76.2	83	76	60	50	n.a.	n.a.	4	4	60	50	3	4	14	20
Greece	1.1	3.3	55	49	30	19	17	9	0	15	33	32	2	8	10	12
Hong Kong ...	60.3	90.2	15	17	14	16	..	..	..	..	27	25	25	29	33	29
Ireland	5.9	4.9	8	23	3	13	4	4	..	0	23	19	2	2	67	56
Italy	15.5	23.2	83	82	49	62	24	15	..	1	6	7	..	1	..	10
Japan	120.2	161.3	73	81	67	76	3	4	n.a.	n.a.	14	12	67	76	12	7
Luxembourg	13.2	19.1	5	10	1	4	3	5	0	0	37	42	1	2	57	46
Netherlands ...	19.6	25.5	48	41	27	26	14	11	0	1	19	18	2	3	31	38
New Zealand	4.2	7.1	44	56	41	52	0	0	1	1	20	13	10	12	26	19
Norway	5.2	7.6	45	46	35	30	7	12	0	0	20	16	4	1	31	36
Portugal	1.3	2.4	58	70	10	37	37	20	1	7	25	17	0	1	17	12
Singapore	73.6	105.4	3	6	3	5	0	0	0	0	29	25	27	25	41	44
South Africa	3.4	5.0	62	75	58	71	2	1	0	0	19	14	6	4	13	7
Spain	12.3	18.3	71	69	46	50	19	17	0	0	10	18	2	1	18	11
Sweden	21.3	19.9	51	50	30	28	13	18	0	0	22	19	1	2	26	29
Switzerland ...	65.5	86.5	47	41	30	26	11	11	1	1	23	23	6	7	24	29
United Kingdom	290.5	463.8	24	16	17	11	5	3	0	1	24	22	12	17	40	45
United States	166.9	244.4	89	86	n.a.	n.a.	33	30	21	20	33	30	21	20	11	14
Total	1,076.2	1,571.8	47	44	25	24	10	9	4	4	26	23	19	21	28	30

Note: The columns "Domestic against other currencies", "USD/DEM", "USD/JPY" and "Others" add up to 100%, except in the case of Germany, Japan and the United States and the total for all countries.

With the exception of the United States, where Deutsche Mark/local currency trading accounts for almost one-third of total turnover, direct trades between the *local currency* and the Deutsche Mark tend to take place mostly in European markets, with market shares between 10 and 22% in many cases. This is largely due to the anchor role of the German currency in the EMS. In London and Rome the share of Deutsche Mark/local currency trading has fallen decisively since the previous survey (from 5 to 3% and from 24 to 15% respectively). The absolute decline in turnover (in US dollar terms) in these cases is linked to the movement of exchange rates following the departure of the pound sterling and the Italian lira from the ERM in September 1992. In terms of the local currency of each centre, pound sterling/Deutsche Mark trading increased slightly and turnover in Deutsche Mark/Italian lira grew by 30% over the period.

The *Japanese yen* retained its position as the third most widely traded currency, with 24% of all transactions worldwide. It is involved in two of the ten most widely traded currency pairs (Table F-4), with US dollar/Japanese yen trading in second position, accounting for 21% of all transactions (20% in 1992). The geographical breakdown (Table F-5) shows that US dollar/Japanese yen trading tends to be concentrated in Asian/Pacific centres as well as in the United States and the United Kingdom. While in these markets major shares of total turnover are reported (between 14 and 29%), US dollar/Japanese yen trading accounts for low single percentages in most other markets. The announcement by the Bank of Japan that it will in future trade in the US dollar/Japanese yen markets in Hong Kong and Singapore through the two countries' monetary authorities is consistent with the prominent position of US dollar/Japanese yen trading there. Overall, US dollar/Japanese yen trading showed the strongest increase in Tokyo, rising from 67 to 76% of total turnover in that market, with the most significant rise in cross-currency US dollar/Japanese yen trading taking place in London.

Direct domestic currency business involving the yen is, however, much less significant than that involving the Deutsche Mark. Although practically all markets reported some turnover in Japanese yen/domestic currency, most is accounted for by the US (85%), UK (6%) and German (5%) markets, a position little changed from 1992, when the US accounted for 89% of all trades.

The *pound sterling* retained its position as the fourth most widely traded currency, but owing to a stagnation of turnover its share declined noticeably from 14 to 10%. Since sterling turnover in London itself rose in absolute terms, the change reflects the reduced use of sterling as a trading and reserve currency elsewhere and the ongoing internationalisation of the London market through the growth of trading in other currency pairs.

A notable development concerns the repeated doubling in the *French franc* sector, which increased its share of global turnover from 2 to 4% in 1992 and again to 8% in 1995, overtaking the Swiss franc in the process. A straightforward comparison over time is complicated by the fact that turnover involving the French franc was not reported separately by a number of countries until 1995. If only those countries reporting French franc turnover in 1992 and 1995 were taken into account, its share would be 1 percentage point lower in 1995. Practically all business is accounted for by US dollar/French franc (57%) and Deutsche Mark/French franc trading (38%).

The decline in the relative position of the *Swiss franc* accelerated somewhat, to a share of 7%. Although absolute turnover rose by 22%, this was less than the growth of the market as a whole. Business in the *Canadian dollar* accounted for a steady 3% share and strong absolute growth caused the share of the *Australian dollar* to rise to 3%. A notable fact was the steady proportion (8%) of "other currencies", i.e. the currencies of countries not taking part in the survey.

Turnover in the *European Currency Unit* (ECU) involves almost exclusively the US dollar (70%) or the Deutsche Mark (25%), although minor amounts are reported in almost all currency sectors. The total ECU turnover share declined from 3 to 2%. Adverse supply/demand conditions and uncertainties regarding the future role of the ECU in the EMS may have contributed to the decline. "Other EMS currencies" increased their proportion substantially from 9 to 13%. This 4 percentage point increase was primarily due to higher turnover and improved reporting in certain centres rather than to the inclusion for the first time of the currencies of new EU members.

4. Types of counterparty⁸

As Table F-6 shows, the proportion of reporting dealers' turnover accounted for by local and cross-border inter-dealer business declined from 69 to 64% between 1992 and 1995 and the share of business with non-financial customers declined from 17 to 16%. Correspondingly, the share of business with other financial institutions rose by 8 percentage points. However, in 1995 the definition of "other financial institutions" was amended to cover explicitly any financial institution *not participating* in the survey. Since only 18 countries reported the detailed counterparty breakdowns in 1992 compared with 24 countries in 1995, Table F-6 should be interpreted with some caution. On balance, however, the data suggest that the share of non-reporting financial institutions has increased, presumably owing to greater cross-border investment activity by institutional investors.

Table F-6
Reported foreign exchange market turnover net of local and cross-border inter-dealer double-counting by counterparty in April 1992 and April 1995

(daily averages in billions of US dollars and *percentage shares*)

Counterparty	April 1992		April 1995	
	Billions of US dollars	Percentage shares	Billions of US dollars	Percentage shares
Other dealers	540	69	729	64
- local	217	28	293	26
- cross-border	324	41	436	38
Other financial institutions	97	12	230	20
- local	29	4	112	10
- cross-border	35	4	118	10
Non-financial customers	137	17	178	16
- local	71	9	121	11
- cross-border	33	4	57	5
All counterparties	785	100	1,137	100

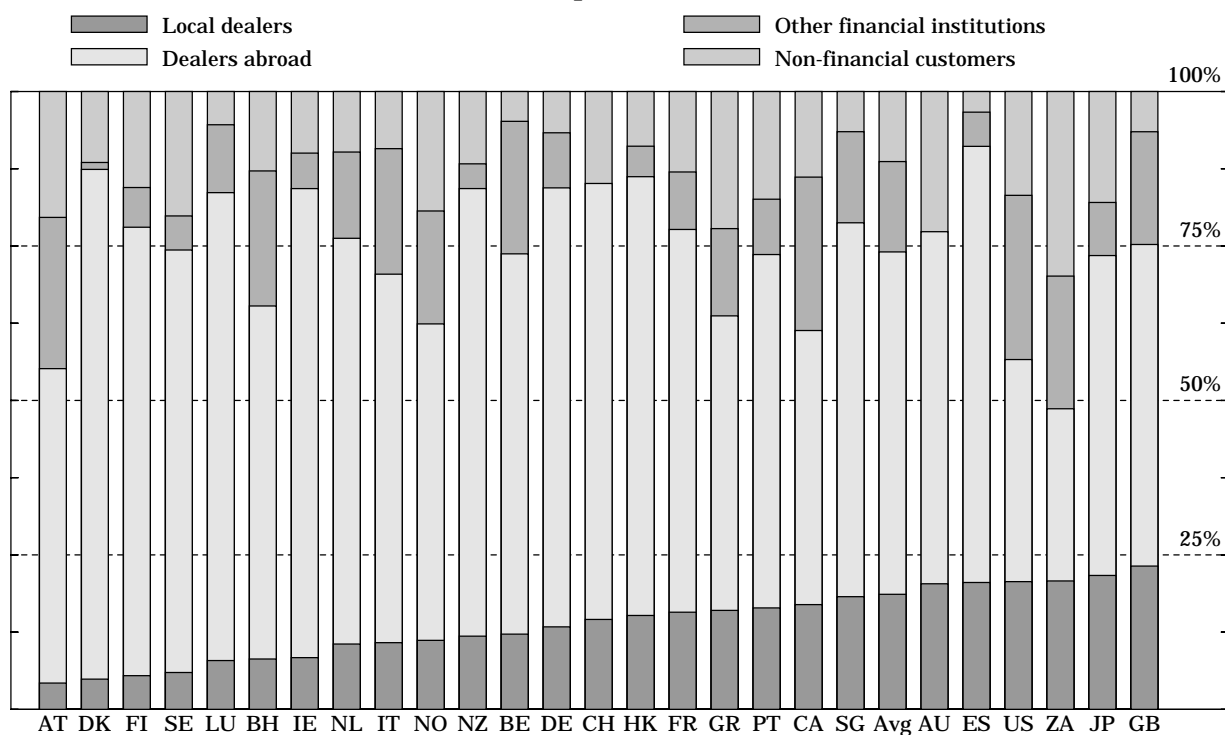
The highly international nature of the foreign exchange market is also evident in Table F-6, with more than half (54%) of business being transacted across borders. Business with non-financial customers has a more local orientation, with about two-thirds of deals being struck in the domestic market in April 1995. On average, almost two-thirds (64%) of foreign exchange market turnover is conducted with other reporting dealers, but only 26% of the total is with resident dealers. Two groups of centres report a particularly large share of local interbank deals (Graph F-3). Firstly, in smaller markets such as South Africa, Spain, Portugal and Greece, recently reduced or abolished exchange controls may still have a lingering influence on local trading patterns. Secondly, the comparatively high share of local deals in the United Kingdom, Japan and the United States may indicate that the local market is so large and liquid that an above-average proportion of deals can be struck with a local counterparty. In addition, many affiliates of foreign banks are resident in these centres. Correspondingly, there is a tendency for all other small markets to have a relatively low share of local dealer business.

⁸ In March 1996 the Bank for International Settlements published a report prepared by the Committee on Payment and Settlement Systems (CPSS) of the G-10 central banks on *Settlement Risk in Foreign Exchange Transactions*. The report shows that current settlement practices expose each counterparty to the risk that it could pay over the funds it sold but not receive the funds it bought. The resulting exposures can be large and can last for several days, raising significant concerns for individual traders and for the international financial system as a whole. The G-10 central bank Governors endorsed a comprehensive strategy under which the private and public sectors can together seek to contain the systemic risk inherent in current arrangements for settling foreign exchange transactions. The CPSS report describes the strategy and presents its underlying analysis.

In some centres cross-border business tends to account for over 50% of total business with non-financial customers, such as Bahrain (91%), Luxembourg (67%) and Switzerland (56%), while the United Kingdom, the United States, France and Singapore report shares of 48 to 43%. In Hong Kong however, the cross-border share of business with non-financial customers (13%) tends to be as low as that in Japan (9%).

Although the share of total turnover accounted for by inter-dealer transactions is very large, the greater part of this is probably generated directly or indirectly by customer business, while some will be the result of position-taking by reporting dealers. Despite the increase in direct cross-currency trading in some markets (Table F-5), most transactions with customers are conducted via two transactions involving the US dollar or Deutsche Mark as vehicle currency. Furthermore, it is known that outright forward orders from customers often result in a chain of hedging transactions by the trading bank, which include spot as well as foreign exchange swap transactions. All these are recorded in the survey and boost the inter-dealer turnover figures.

Graph F-3
Reported foreign exchange market turnover by country and counterparty
in April 1995 *



* Adjusted for local inter-dealer double-counting. "Avg" denotes average of all reporting countries.

5. Geographical patterns

The bulk of foreign exchange market trading takes place in a small number of centres. The same three countries again reported the largest daily turnover, viz. the United Kingdom (\$464 billion), the United States (\$244 billion) and Japan (\$161 billion), accounting for 55% of total reported turnover net of local dealer double-counting, compared with 54% in 1992 (Table F-7 and Annex Tables 2-A to 2-D). On a reporting basis comparable with that of the 1989 survey, the share of these three countries also rose from 57% in 1989 to 58% in 1992. This consistently growing share is, however, due to the very high rate of growth of the market in the United Kingdom (60%), since

activity in the United States grew at exactly the average rate (46%) and growth in Japan (34%) was one of the lower rates recorded, even though it was much higher than the 8% growth seen in 1989-92. For that period Japan reported one of the lowest increases in turnover of all countries, owing in part to an almost 30% decline in customer transactions explained by reduced capital flows, lower volatility in the US dollar/Japanese yen exchange rate and moderated hedging and speculative activity by institutional investors.⁹

Table F-7
Reported foreign exchange market turnover adjusted for
local double-counting by country¹

(daily averages in billions of US dollars)

Country	April 1989		April 1992		Percentage change 1989-92	April 1995		Percentage change 1992-95
	Amount	Percentage share	Amount	Percentage share		Amount	Percentage share	
United Kingdom	184.0	26	290.5	27	58	463.8	30	60
United States	115.2	16	166.9	16	45	244.4	16	46
Japan	110.8	15	120.2	11	8	161.3	10	34
Singapore	55.0	8	73.6	7	34	105.4	7	43
Hong Kong	48.8	7	60.3	6	24	90.2	6	49
Switzerland	56.0	8	65.5	6	17	86.5	6	32
Germany .....	..	..	55.0	5	..	76.2	5	39
France	23.2	3	33.3	3	44	58.0	4	74
Australia	28.9	4	29.0	3	0	39.5	3	37
Denmark	12.8	2	26.6	2	108	30.5	2	15
Canada	15.0	2	21.9	2	46	29.8	2	36
Belgium	10.4	1	15.7	1	51	28.1	2	79
Netherlands	12.9	2	19.6	2	52	25.5	2	30
Italy	10.3	1	15.5	1	50	23.2	1	50
Sweden	13.0	2	21.3	2	64	19.9	1	- 6
Luxembourg .....	..	..	13.2	1	..	19.1	1	44
Spain	4.4	1	12.3	1	180	18.3	1	48
Austria .....	..	..	4.4	0	..	13.3	1	..
Norway	4.3	1	5.2	0	21	7.6	0	46
New Zealand .....	..	..	4.2	0	..	7.1	0	70
Finland ²	3.4	0	6.8	1	..	5.3	0	..
South Africa .....	..	..	3.4	0	..	5.0	0	47
Ireland	5.2	1	5.9	1	13	4.9	0	- 17
Greece	0.4	0	1.1	0	175	3.3	0	..
Bahrain ²	3.0	0	3.5	0	..	3.1	0	..
Portugal	0.9	0	1.3	0	44	2.4	0	80
Total "net-gross" turnover³	717.9	100	1,076.2	100	38	1,571.8	100	46

¹ For the estimated coverage of the foreign exchange market in individual countries see Table F-1. ² Data for 1992 not adjusted for local double-counting. ³ Percentage change 1989-92 based on 21 reporting countries.

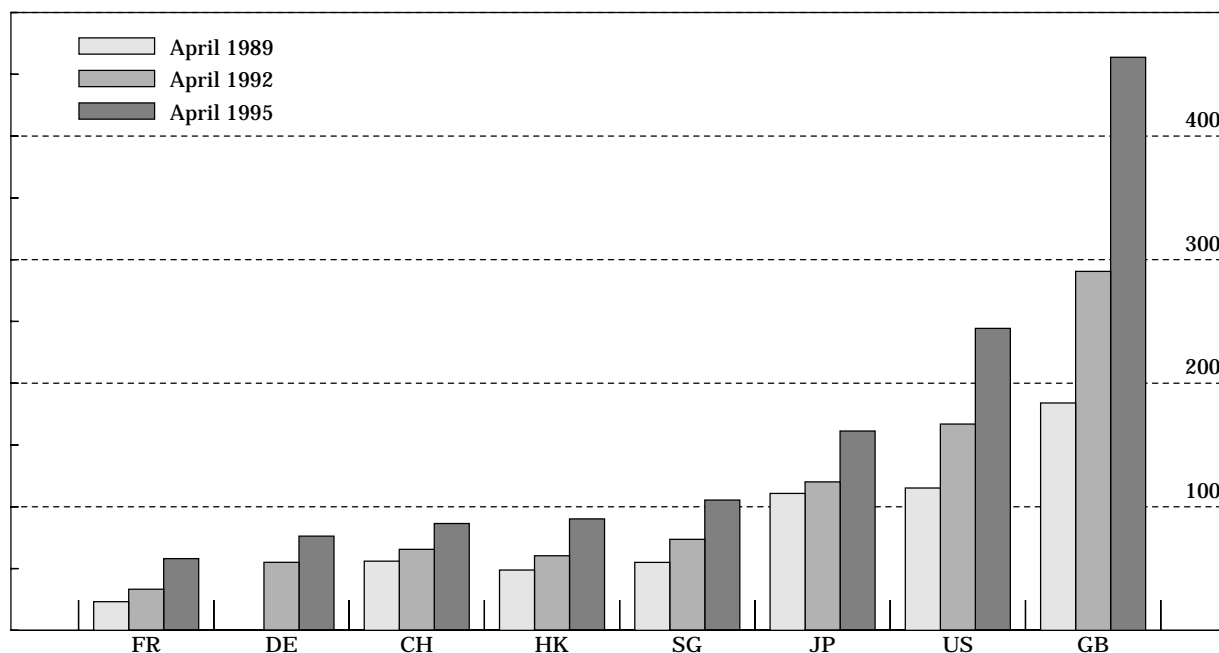
The next four most important centres - Singapore, Hong Kong, Switzerland and Germany, with daily turnover in the \$105 to 76 billion range - enjoyed growth rates of between 32 and 49% over the period as a whole. Growth in Hong Kong was particularly buoyant, allowing that centre to move to fifth position, ahead of Switzerland. France, which at 74% recorded the highest growth rate in foreign exchange turnover among the major centres, reported turnover of \$58 billion

⁹ "Summary of results of the Tokyo Foreign Exchange Market Turnover Survey", *Bank of Japan Quarterly Bulletin*, February 1993, p. 39.

and thus ranked eighth. Ten further countries reported daily turnover in the \$10 to 40 billion range and the remaining eight reported turnover below \$10 billion. Apart from the cases already mentioned, growth was particularly high in Belgium and some of the other smaller markets.

There are considerable differences among centres not only in the scale of business, but also in its composition, depending both on the role of the home currency itself in the international monetary system and on the importance of the country as a trading centre. For example, centres in which domestic currency business accounts for less than 20% of turnover (Bahrain, Singapore, Luxembourg, the United Kingdom and Hong Kong) have clearly specialised in global foreign exchange trading (Table F-5 and Annex Tables 1-D to 1-G). In contrast, in markets where domestic currency business accounts for around 70% or more of turnover, this may be due partly to the use of the domestic currency as a vehicle (United States, Germany, Japan) and partly to the greater prominence of transactions driven by cross-border trade and financial flows rather than cross-currency arbitrage and hedging (Italy, South Africa, Canada, Portugal, Spain).

Graph F-4
Reported foreign exchange market turnover in major centres
in April 1989, April 1992 and April 1995 *
 (average daily turnover, in billions of US dollars)



* Adjusted for local inter-dealer double-counting.

The United Kingdom, the largest single centre for foreign exchange trading, is a case apart, accounting in 1995 for almost one-third (30%) of all foreign exchange turnover globally, up from 27% in 1992. In fact, foreign currency trading is so substantial that a larger share of business in both the US dollar (30%) and the Deutsche Mark (28%) takes place in the United Kingdom than in either the United States (16%) or Germany (10%) (Annex Table 1-D). The share of Deutsche Mark trading taking place in London has even increased slightly since 1992, despite the relatively slow growth of sterling/Deutsche Mark transactions, because US dollar/Deutsche Mark trading in London has increased more than in other centres. Of total turnover in French francs, 31% takes place in London, compared with 25% in Paris. The UK has a 50% market share in ECU turnover and 31% of trading in other EMS currencies.

London is also the second most important site, after their own domestic markets, for the trading of Japanese yen, Swiss francs and Canadian and Australian dollars. Overall, among the major markets with the exception of Singapore, London has the highest proportion of turnover accounted for by non-domestic currencies (84%), overtaking Hong Kong in this respect since 1992 (Table F-5). Reasons that have been cited for this diversified activity are London's favourable position between the Asian and North American time zones and the depth of its capital and derivatives markets, which have allowed business in previously little traded currency pairs to develop quickly.¹⁰

The range of currencies traded in volume in Tokyo, on the other hand, is limited: 76% of all turnover in Japan involves the domestic currency and the US dollar (Table F-5), up from 67% in 1992. Similarly, in Canada trading is also very much focused on the US dollar/Canadian currency pair, which accounts for 69% of total turnover (64% in 1992).

6. Types of transaction

6.1 Spot transactions

In the foreign exchange surveys, spot business is defined as the exchange of two currencies for settlement *within* two business days. Spot trades are simple, highly standardised transactions taking place in a very liquid market. While the spot market used to be the most important segment of the foreign exchange market, accounting as recently as 1989 for 59% of total turnover, this ratio has now almost been inverted, with forward transactions accounting for 56% of the total (Table F-2). Nevertheless, over the period 1992-95, the spot market grew by 30%, to an estimated daily turnover net of local and cross-border inter-dealer double-counting of \$520 billion worldwide (Graph F-2). Broken down by country, turnover has grown most in Canada, France, the United States and Australia, as well as in some smaller markets (Annex Table 2-F).

The currency distribution in the spot market is less diversified than in the forward market, in that the ten most heavily traded currency pairs in the spot market (including Swiss franc/Deutsche Mark trading not shown in Table F-4) account for 77% of total turnover, compared with 73% for the ten largest currency pairs in all market segments together. In contrast, contracts involving the Deutsche Mark tend to account for a greater share of the spot market than of the forward markets. For example, fully 29% of the spot market is accounted for by US dollar/Deutsche Mark trading, compared with a proportion of 19% in the outright forward and 17% in the foreign exchange swaps market. The role of the Deutsche Mark as a vehicle currency appears to be particularly strong in spot turnover between foreign exchange dealers, where the proportion of business involving this currency on one side (57%) almost rivals the 69% of the US dollar. In contrast, in foreign exchange swaps the proportions are 20% for the Deutsche Mark and 97% for the US dollar (Annex Table 1-A).

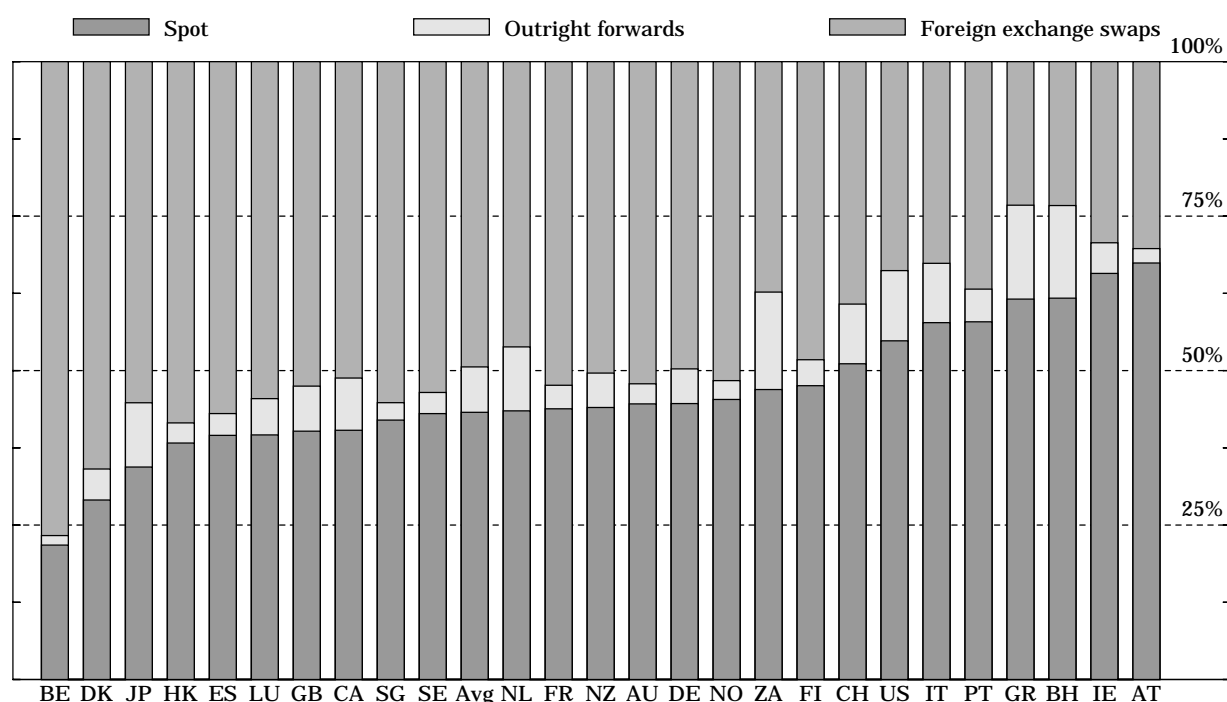
In the *customer* spot market the Deutsche Mark continues to be involved in four of the ten most actively traded currency pairs (including trades involving the Swiss franc, not shown for 1995 in Table F-4), but with Deutsche Mark/French franc transactions with customers outpacing those in sterling/Deutsche Mark.

¹⁰ "The foreign exchange market in London", *Bank of England Quarterly Bulletin*, November 1995, p. 364.

6.2 Outright forwards

Outright forward transactions are defined as the exchange of two currencies for settlement *more than* two business days after the conclusion of the deal. They have increased their share of total transactions by almost 1 percentage point to 7% since 1992. This was due in particular to the three major markets, including a doubling of business in the United States (Annex Table 2-G). Excluding local inter-dealer double-counting, growth in this sector from 1992 to 1995 amounted to 66%, somewhat less than the 82% growth seen on a comparable basis in the 1989-92 period (Annex Table 2-C).

Graph F-5
Reported foreign exchange market turnover by country and market segment
in April 1995 *

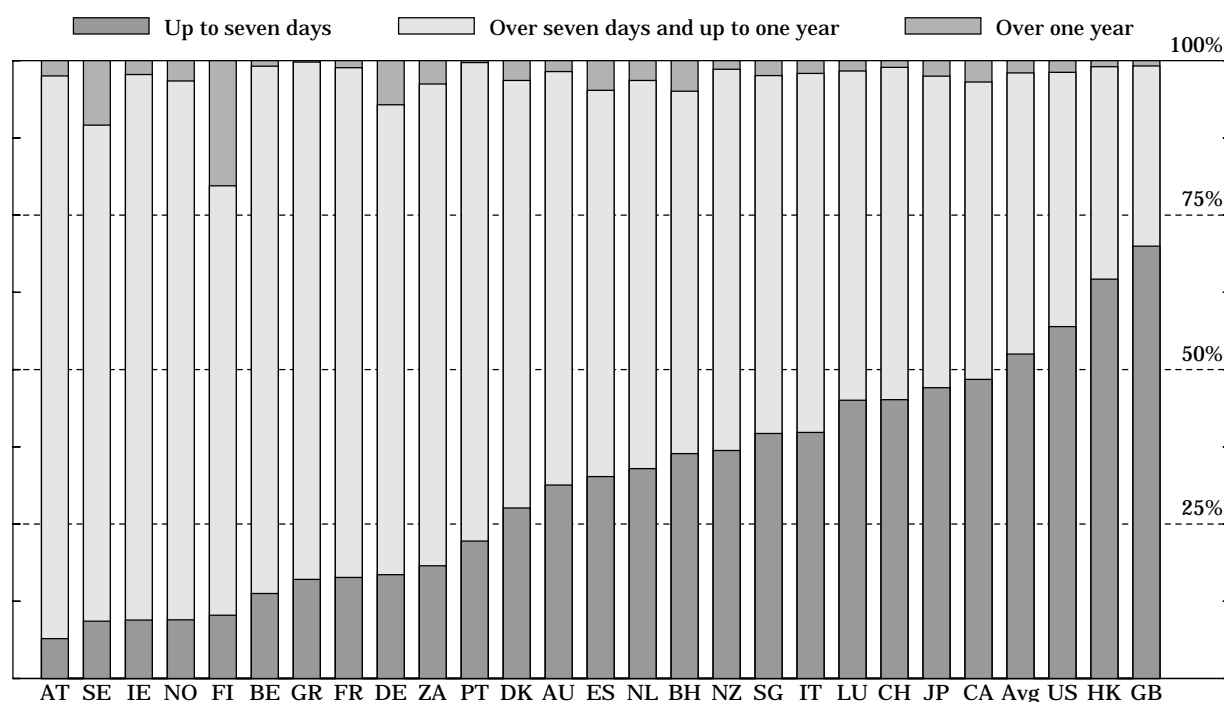


* Adjusted for local inter-dealer double-counting. "Avg" denotes average of all reporting countries.

Outright forward deals are structurally similar to spot transactions in that once the exchange rate for a forward deal has been agreed, the confirmation and settlement procedures are the same as in the cash market. However, the longer the forward period, the greater the risk that the creditworthiness of the counterparty could deteriorate. Non-standard amounts or maturities may leave the market-maker with exposure that is difficult to unwind immediately, and the smaller number of participants and lower volumes in this sector imply somewhat less competitive pricing. In most centres, the amount of business in this sector remains comparatively small (Graph F-5). A relatively large share of business in the market as a whole is conducted with non-financial customers (37%), and another 29% involves transactions with non-reporting financial institutions (Annex Table 1-A). Much higher shares of business with non-financial customers are seen in countries without major foreign exchange markets (Annex Table 1-J). This focus on customer business is also related to the domestic orientation of outright forward trading, with local business accounting for more than half (52%) of total turnover (Annex Table 1-J). Outright forward deals also tend to involve the domestic currency more than other types of business. These factors are consistent with the use of this market segment for hedging the financial and trade risks of commercial customers.

On average, outright forward transactions with a maturity of less than one week and above one week each account for roughly half of the deals. Outright forward transactions with a maturity of more than one year are comparatively rare (except in Finland and Sweden), accounting for only 2% of turnover on average (Graph F-6 and Annex Table 1-L). Short-term transactions with a maturity of seven days or less tend to dominate business in the major centres except Germany and France. In most of the smaller markets, where business reflects to a greater extent the foreign exchange needs of trading in real and financial goods, outright forward transactions tend to mature beyond one week.

Graph F-6
Reported outright forward turnover by country and maturity
in April 1995 *



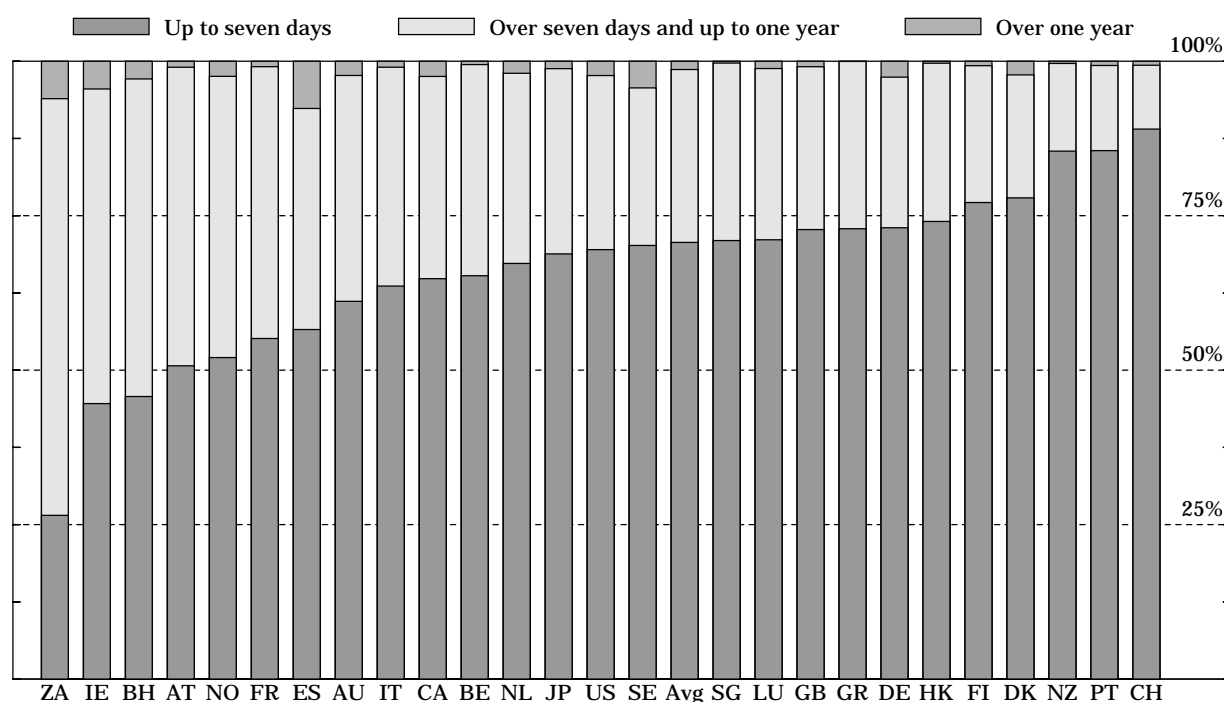
* Adjusted for local inter-dealer double-counting. "Avg" denotes average of all reporting countries.

6.3 Foreign exchange swaps

Of the overall forward market, 85% of all transactions are foreign exchange swaps (Annex Table 1-A), i.e. transactions involving the exchange of two currency amounts on a specific date and a reverse exchange of the same amounts at a later date. The purpose of foreign exchange swaps is to manage liquidity and currency risk by executing foreign exchange transactions at the most appropriate moment. Effectively, the underlying amount is simultaneously borrowed and lent in two currencies, for example by selling dollars for Deutsche Mark for spot value and agreeing to reverse the deal at a fixed future date. Since currency risk is replaced by credit risk, the transaction is conceptually different from spot transactions. It is, however, closely linked, since foreign exchange swaps are often initiated to move the delivery date of foreign currency originating from spot or outright forward transactions to a more optimal point in time. By keeping maturities to less than a week and renewing swaps continuously, market participants maximise their flexibility in reacting to market events.

As can be seen from Graph F-7 and Annex Table 1-M, foreign exchange swaps have on average shorter maturities than outright forwards. Swaps with a maturity of up to one week account on average for 71% of the deals, compared with 53% for outright forwards. As with outright forwards, swaps with maturities over one year are rare. The growing role of foreign exchange swaps is indicative of increasingly sophisticated liquidity and currency risk management by investors. Because liquidity, i.e. the ability to complete large deals without moving prices significantly, is very important to swaps, market activity tends to migrate to the centres which offer the greatest liquidity, creating exceptionally high growth in some of the larger centres such as London (99%), Singapore (75%), Hong Kong (97%), Germany (70%) and France (113%) - see Annex Table 2-D.

Graph F-7
Reported foreign exchange swaps turnover by country and maturity
in April 1995 *



* Adjusted for local inter-dealer double-counting. "Avg" denotes average of all reporting countries.

7. Other features of the foreign exchange market

7.1 Foreign exchange brokers

Foreign exchange transactions can be conducted via two channels: either principals trade directly with an interbank counterparty by telephone, telex or an automated dealing system, or the transaction is intermediated by a foreign exchange broker, who matches the bid and ask quotes of interbank traders. The information collected on brokered deals in certain countries indicated that the share of business going through the brokers' market was mostly stable or lower than three years earlier. Whereas in 1992 virtually all brokered business in the United States had been transacted by voice brokers, i.e. by quoting prices over the telephone between dealing rooms, automated brokerage

(electronic order matching) accounted for 6% of total turnover in 1995.¹¹ Electronic brokers are currently reported to be active only in the spot markets, and trading is concentrated in a limited range of currency pairs. However, within the markets in which they are active, electronic brokers have taken business both from the voice brokers and from direct dealing between banks. In London, three electronic broking systems have started operations since the 1992 survey. These accounted for 5% of total turnover in 1995.¹² In Tokyo, electronic broking was introduced in September 1992 and now accounts for 32% of all brokered spot transactions, or about 4% of total turnover.¹³

7.2 Market concentration

With the exception of the United States, 11% or less of reporting institutions in the six largest centres account for 75% of turnover, while concentration appears lower in the smaller centres (Table F-1). The previous trend towards increasing concentration of business has apparently continued. For instance, in London the ten most active banks - seven of which were in the top ten in 1992 - increased their market share by 1% to 44%, and the top 20 banks increased their market share from 63% in 1992 to 68%. Similarly, in the United States seven of the top ten institutions had been in this group in 1992. The ten most active banks increased their market share from 41 to 47%, while that of the top 20 institutions increased from 60 to 70%. In Tokyo, nine of the 1992 top ten retained this position. The top ten institutions in Tokyo accounted for 51% of total turnover, up from 44% in 1992. Although market concentration has increased, the flux in the composition of the firms with the largest market shares suggests intense competition in these markets.

Transactions in the most actively traded currencies tended to be more widely dispersed than in other currencies. For example, in London the top ten principals in US dollar/Deutsche Mark business have 40% of the market; for the US dollar/Swiss franc market, the share is 66%. In conjunction with the growing turnover in the French franc, the percentage share of the ten principals most active in the US dollar/French franc London market fell continuously from 70% in 1986 to 51% in 1995.

7.3 Market share of foreign banks

Some countries presented aggregate information on the share of business accounted for by dealers of different nationalities, underscoring the international nature of the exchange market. Foreign institutions are present in substantial numbers and with high trading volumes in the large and medium-sized centres. In London, for example, as in 1989 and 1992, foreign-owned institutions accounted for 79% of aggregate turnover. North American dealers reported twice the market share (42%) of their UK counterparts, while Japanese dealers accounted for 10% of turnover in London.

In Tokyo, the transaction volume of foreign banks increased by 63% since 1992 and thus far surpassed the 15% growth reported by Japanese banks. In consequence, foreign-owned institutions' market share rose from 40 to 49%. Foreign institutions recorded particularly dynamic growth in customer transactions (up 85% since 1992), compared with an increase of 18% for domestically-owned banks. Of this, cross-border customer transactions handled by Japanese banks were down 69% since 1992, while such transactions by foreign banks grew by 120%. Foreign banks' share of US dollar/Japanese yen transactions increased from 34% in 1992 to 46%.

¹¹ "April 1995 Central Bank Survey of Foreign Exchange Market Activity in the United States", Federal Reserve Bank of New York, October 1995, p. 10.

¹² "The foreign exchange market in London", *Bank of England Quarterly Bulletin*, November 1995, p. 366.

¹³ "Summary of results of the Tokyo Foreign Exchange Market Turnover Survey", *Bank of Japan Quarterly Bulletin*, February 1996, pp. 90-91.

III. DERIVATIVES MARKET ACTIVITY

The principal aim of this part of the survey was to shed light on the size and structure of the global over-the-counter (OTC) derivatives market, on which limited information had previously been available. Statistics were also collected on OTC market participants' use of exchange-traded derivatives markets, on which some detailed information already existed. For a number of conceptual and statistical reasons, however, the OTC and exchange-traded data are not fully comparable.¹⁴

Table D-1
Basic features of the April 1995 derivatives market survey

Participating country	Coverage	Number of banks covering 75%	Number of participants	Number of trading days	Nature of turnover	
					in April	preceding 6 months
Australia	95%	12	128	17	normal	steady
Austria	82.3%	3	10	18	below	increasing
Bahrain	90-95%	4	80	20	normal	steady
Belgium	90%	5	33	18	normal	steady
Canada	100%	2-8	39	19	below	increasing
Denmark	95-100%	2-4	19	17	below	
Finland	100%	1-5	17	18	normal	steady
France	95%	2-12	94	19	below	normal
Germany	90%	10	31	18	normal	steady
Greece	100%	21	44	18	normal	steady
Hong Kong	100%	11-24	379	17	normal	steady
Ireland	90%	1-4	47	18		
Italy	77%	3-7	28	18	below	increasing
Japan		24	356	20	normal	steady
Luxembourg	100%	10-11	223	19	normal / below	steady / declining
Netherlands		3	19	18	normal	
New Zealand	99%	1-3	8	17	normal	steady
Norway	95%	1-5	27	17	below	steady
Portugal	100%	6	40	18	normal	increasing
Singapore	100%	20	218	19	normal	steady
South Africa	85-95%	1-2	19	17		increasing
Spain	85%	1- 6	34	17	above	increasing
Sweden	85%	5	11	18	below	declining
Switzerland	95%	4	50	18	normal	steady
United Kingdom	90+%	22-25	396	18	normal / below	
United States	90+%	14	51	19	below	increasing

The OTC data collected included notional amounts and market values outstanding on 31st March 1995 of derivatives in the four main categories of market risk (foreign exchange, interest rate, equity and commodity), as well as turnover during April 1995 in foreign exchange and interest rate instruments. In total, 2,401 respondents participated, only slightly fewer than for foreign exchange turnover (Tables D-1 and F-1). Nevertheless, the survey is estimated to have included about 90% of intermediaries active in derivatives markets, thus providing the most comprehensive coverage to date of the global OTC market.

¹⁴ At the conceptual level, the neutralisation or modification of OTC contracts generally involves entering into new contracts. In contrast, exchange-traded positions are neutralised or modified by the closing-out of existing contracts. At the statistical level, no precise adjustment could be made to exchange-traded data for double-counting.

For the OTC totals (but not for the data disaggregated by instrument) an attempt has been made to include a rough estimate of the magnitude of under-reporting both for less than full coverage of derivatives market activity in each reporting country and, in particular, for missing data on foreign exchange forwards and swaps (see below). In the release of the preliminary global results in December 1995 only the reported totals were given. No adjustments have been made to the exchange-traded data.

Table D-2

Global notional amounts and gross market values of OTC derivative contracts outstanding at end-March 1995 and estimated gaps in reporting

(in billions of US dollars)

Category	Total reported gross amounts outstanding	Adjustment for local and cross-border double-counting ¹	Total "net-net" amounts outstanding	of which		Estimated gaps in reporting ¹	Estimated global amounts outstanding
				With other dealers	With counter-parties abroad ²		
Notional amounts outstanding ..	63,763	23,125	40,637	23,125	22,256	6,893	47,530
Gross market values ¹	2,713	940	1,773	914	999	432	2,205

¹ For further details see Table D-3. ² Partly estimated: in the case of equity and commodity derivatives, transactions with counterparties abroad are assumed to have accounted for half of total transactions.

Most reporting countries indicated that derivatives market activity in April 1995 was "normal", though some, including the United States, the United Kingdom and France, suggested that it might have been below normal. It should be stressed, however, that the increased volatility in underlying markets in the preceding months may have temporarily raised the positions outstanding at end-March 1995. Judging by the number of reporting institutions accounting for three-quarters of derivatives business in the various reporting centres, activity was on average somewhat more concentrated than for foreign exchange alone. This being the first comprehensive survey of OTC derivatives market activity, no assessment could be made as to market trends and concentration over time.

1. Over-the-counter (OTC) derivatives markets

1.1 OTC outstandings: notional amounts and gross market values at end-March 1995

After adjustment for double-counting resulting from local and cross-border transactions between reporting institutions, the notional amount of outstanding OTC contracts came to \$40.6 trillion at 31st March 1995.¹⁵ This figure, however, excludes UK data on foreign exchange forwards and swaps, as well as transactions between non-reporting entities. After estimated allowance for these gaps in reporting, global outstandings were estimated at \$47.5 trillion, compared with the preliminary total of \$40.7 trillion quoted in the December 1995 BIS press release, which did not

¹⁵ A detailed discussion of measurement issues is presented in *"Issues of Measurement Related to Market Size and Macroprudential Risks in Derivatives Markets"*, Bank for International Settlements, February 1995.

Table D-3

Global notional amounts and gross market values of OTC derivative contracts outstanding at end-March 1995 and estimated gaps in reporting

(in billions of US dollars)

Category	Foreign exchange		Interest rates		Equity and stock indices		Commodities	
	Notional amounts	Gross market values ¹	Notional amounts	Gross market values ¹	Notional amounts	Gross market values ¹	Notional amounts	Gross market values ¹
Total reported gross amounts outstanding	20,217	1,624	42,377	982	780	74	389	32
Adjustment for local double-counting ²	2,539	189	6,756	145	101	12	36	2
Total reported amounts outstanding net of local double-counting ("net-gross")	17,678	1,435	35,621	837	679	62	353	30
Adjustment for cross-border double-counting ²	4,582	387	8,976	189	100	12	35	2
Total reported "net-net" amounts outstanding	13,095	1,048	26,645	647	579	50	318	28
with other dealers	7,121	533	15,732	351	201	25	71	5
- local	2,539	203	6,756	156	..	..	..	..
- cross-border	4,582	331	8,976	195	..	..	..	..
with others	5,974	515	10,913	295	373	25	245	23
- local	3,144	252	5,493	124	..	..	..	..
- cross-border	2,830	263	5,420	171	..	..	..	..
Estimated gaps in reporting ³	4,605	372	2,205	53	51	5	32	2
Estimated global amounts outstanding	17,700	1,420	28,850	700	630	55	350	30

¹ Gross market values equal gross positive plus gross negative market values. ² The adjustments to notional amounts outstanding have been calculated by halving positions vis-à-vis other local reporting dealers and other reporting dealers abroad respectively. The adjustments to gross market values have been calculated by deducting negative market value exposure to other local reporting dealers and other reporting dealers abroad respectively from the sum of total gross positive and negative market values. In the case of equity and commodity derivatives, local dealers and dealers abroad are each assumed to have accounted for half of total business with other dealers. ³ Estimates have been prepared for less than full coverage of derivatives market activity in the reporting countries. They include estimates for missing data on outright forwards and foreign exchange swaps, which were not collected from survey participants in the United Kingdom.

include any estimates for gaps in reporting. This figure is substantially larger than those provided so far by other reporting bodies.¹⁶ It should be borne in mind, however, that central banks and monetary authorities collected information on activity in a wider range of OTC instruments than previous surveys had. The data collected also included internal transactions where these were conducted on an

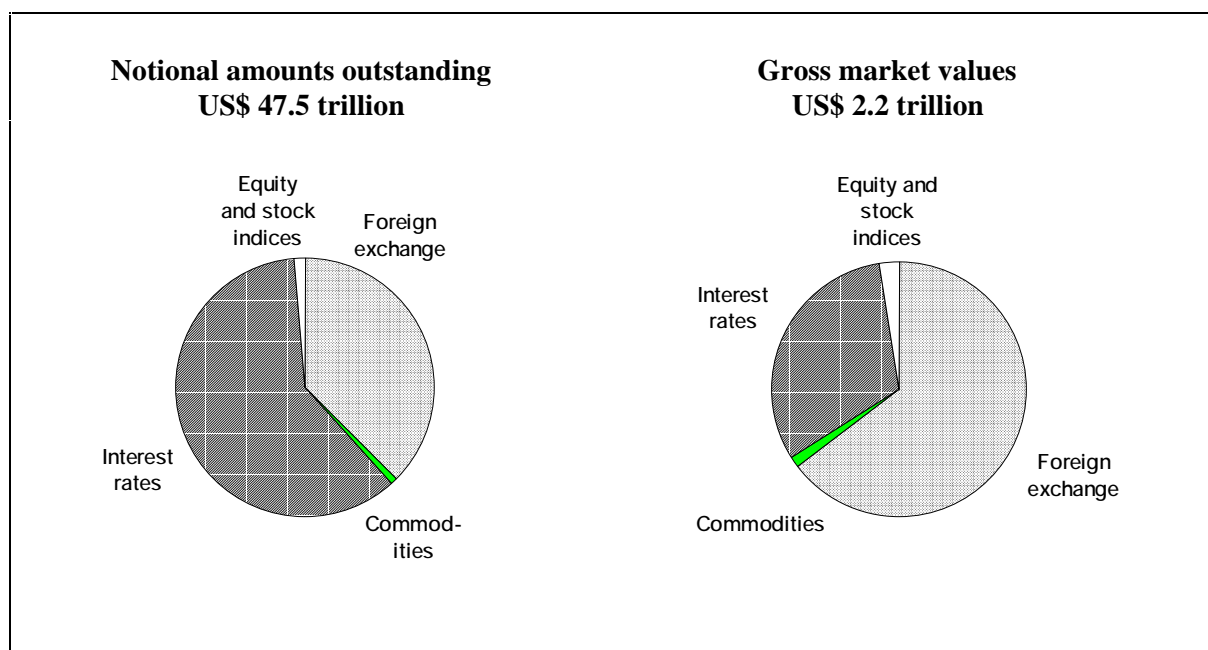
¹⁶ ISDA, for example, put the combined size of the swap and swap-related derivatives market at \$11.3 trillion at the end of 1994.

arm's-length basis. Two features of the aggregate figure are worth noting. First, the global nature of the markets is underlined by the large amount of business contracted with counterparties located abroad (some 55% of reported notional amounts). Second, there was also a predominance of reported business with other dealers (57%), in both local and cross-border trading. This reveals that the market remains the preserve of financial entities, but it may also illustrate the fact that dealers cannot internally offset all their exposures related to customer transactions.

Notional amounts outstanding are useful for comparing OTC and exchange-traded business in relation to underlying markets. They are also relevant in assessing the risk to which firms might be exposed by price changes in the underlying markets. However, notional amounts outstanding do not reflect the payment obligations of the parties or the amounts at risk from counterparty default, which are better measured by gross market values. This indicator represents the cost which would have been incurred had contracts been replaced at prices prevailing on 31st March 1995. On that reporting date, the estimated global gross market value stood at \$2.2 trillion, compared with the preliminary total of \$1.7 trillion published in December 1995, which did not include any estimates for gaps in reporting, or 4.6% of the reported notional amount. Put in a broader perspective, this compares with a total stock of international securities and domestic securities outstanding (in OECD countries) of \$26.3 trillion, and of international banking assets (excluding securities holdings) reported to the BIS of \$8.3 trillion at end-March 1995. It is important to note, furthermore, that gross market values overstate the extent of credit risk exposure in derivatives markets given the existence of netting and collateral arrangements.

Graph D-1

Estimated global amounts outstanding in OTC derivatives markets by market risk category at end-March 1995



Broken down by the four market risk categories, the figures on notional amounts outstanding in Table D-3 and Graph D-1 illustrate the predominance of interest rate products (\$28.9 trillion, or 61% of the estimated global notional values), followed by foreign exchange products (\$17.7 trillion, or 37%). Equity and commodity-related business was much smaller, amounting to \$0.6 trillion and \$0.4 trillion respectively. This latter result may have been influenced to some degree by the less comprehensive coverage of intermediaries active in equity and commodity derivatives markets.

The counterparty breakdown reveals two additional features. First, as could be expected, the share of cross-border deals was somewhat higher for foreign exchange than for interest rate products. Second, the share of inter-dealer business was significantly smaller in the equity and commodity sectors than in the other market risk categories, reflecting the fact that these transactions involve a broader spectrum of market participants than those covered by the survey.

Table D-4

Reported notional amounts and gross market values of OTC derivative contracts outstanding net of local and cross-border inter-dealer double-counting by market risk category and instrument type at end-March 1995

Market risk category and instrument type	Notional amounts outstanding		Gross market values		Gross market values as a percentage of notional amounts outstanding
	In billions of US dollars	Percentage share ¹	In billions of US dollars	Percentage share ¹	
Foreign exchange	13,095	100	1,048	100	8
Forwards and foreign exchange swaps ²	8,699	72	622	71	7
Currency swaps ³	1,957	11	346	22	18
Options ⁴	2,379	17	71	7	3
Other	61	0	10	0	..
Interest rates	26,645	100	647	100	2
Forward rate agreements	4,597	17	18	3	0
Swaps	18,283	69	562	87	3
Options	3,548	13	60	9	2
Other	216	1	7	1	..
Equity and stock indices	579	100	50	100	9
Forwards and swaps	52	9	7	14	13
Options	527	91	43	86	8
Commodities	318	100	28	100	9
Forwards and swaps	208	66	21	78	10
Options	109	34	6	22	6
Total	40,637	-	1,773	-	4

¹ To put the shares accounted for by different foreign exchange instruments on a comparable basis, percentages have been calculated on data that exclude figures for currency swaps and options reported by dealers in the United Kingdom. ² Data are incomplete because they do not include outstanding forwards and foreign exchange swaps positions of market participants in the United Kingdom. ³ Notional amounts excluding data from reporting dealers in the United Kingdom amounted to \$1,307 billion. ⁴ Notional amounts excluding data from reporting dealers in the United Kingdom amounted to \$1,995 billion.

Looking across market risk categories, forward-type transactions accounted for 83% of the total, or a multiple of option-type products. More specifically, swaps accounted for 69% of outstandings in interest rate products, while forwards and foreign exchange swaps amounted to 72% of currency instruments.¹⁷ Currency swaps accounted for only 11% of the latter group. In contrast, the

¹⁷ There is often confusion concerning the definition of the various foreign exchange instruments. An outright foreign exchange forward is a currency trade to settle at some time in the future (usually more than two business days). A foreign exchange swap (in contrast to a currency swap) is the simultaneous purchase and sale of a certain amount of

Table D-5

Reported notional amounts and gross market values of OTC derivative contracts outstanding net of local and cross-border inter-dealer double-counting by underlying market risk factor at end-March 1995

Market risk factor	Notional amounts outstanding		Gross market values	
	In billions of US dollars	Percentage share	In billions of US dollars	Percentage share
Foreign exchange¹	13,095	100	1,048	100
USD/DEM	2,102	16	..	..
USD/JPY	3,565	27	..	..
USD/currencies other than DEM and JPY	5,072	39	..	..
DEM/JPY	223	2	..	..
DEM/currencies other than USD and JPY.....	972	7	..	..
JPY/currencies other than USD and DEM	424	3	..	..
All other pairs of currencies	737	6	..	..
Interest rates²	26,645	100	647	100
US dollar	9,307	35	183	28
Deutsche Mark	3,376	13	54	8
Japanese yen	5,562	21	170	26
Other interest rates	8,400	31	199	31
Equity and stock indices	579	100	50	100
US	123	21	..	..
Japanese	100	17	..	..
European	278	48	..	..
Other	74	13	..	..
Commodities	318	100	28	100
<i>of which:</i>				
Gold ³	147	46	10	36
Total	40,637	-	1,773	-

¹ Data on amounts outstanding of OTC contracts are incomplete because they do not include outstanding forwards and foreign exchange swaps positions of market participants in the United Kingdom. The percentage shares have been calculated on data that exclude figures for currency swaps and options reported by dealers in the United Kingdom. ² Currency breakdown of gross market values partly estimated. ³ Adjustment for local and cross-border double-counting estimated.

much smaller market for equity products was overwhelmingly dominated by option-type instruments, which may reflect their greater use by customers for hedging purposes. In commodity products, which have also so far been used primarily by non-financial entities, options accounted for one-third of the total. The very small size of business in "other products" (see Part IV, Methodology, pages 41 and 42) suggests very limited use of complex instruments. However, this may reflect the fact that very few transactions could not be broken down into standard products as recommended in the survey.

foreign currency for two different value dates without periodic exchange of interest payments. A currency swap is a contract which commits two counterparties to exchange streams of interest payments in different currencies for an agreed period of time and to exchange principal amounts in different currencies at a pre-agreed exchange rate at maturity (see also Part IV, Methodology, page 41).

In terms of gross market values, however, the relative size of the two main market risk categories is reversed. Thus, foreign exchange products predominate, with estimated global amounts outstanding of some \$1.4 trillion, compared with \$0.7 trillion for interest rate products. Forwards and swaps dominate business in the foreign exchange, interest rate and commodity categories, while options account for more than 85% in the equity category.

Accordingly, the ratio between gross market values and notional amounts outstanding was substantially lower for interest rate contracts (2%) than for other broad market risk categories (between 8 and 9%), reflecting the generally lower volatility of the underlying. The fact that the beginning of 1995 was characterised by a fairly high degree of volatility on the foreign exchange markets and a somewhat lower degree of interest rate fluctuations may have exacerbated the differences in the replacement cost of the two sets of products. For specific instrument groups, Table D-4 also shows that the ratio of market to notional values varies widely, from negligible for forward rate agreements to as much as 18% for currency swaps, reflecting differences in their maturity and payment streams.

Breaking down the individual market risk factors, Table D-5 reveals that the three core currencies are heavily involved on one side of foreign-exchange-related transactions. In particular, for notional amounts outstanding, the US dollar is involved on one side in 82% of business, which

Table D-6

Maturity breakdown of notional amounts of reported OTC derivative contracts outstanding net of local and cross-border inter-dealer double-counting by instrument at end-March 1995

Market risk category and instrument	Total in billions of US dollars	Up to 1 year	Over 1 year and up to and including 5 years	Over 5 years
		Percentage shares		
Foreign exchange	13,095	79	16	5
Forwards and foreign exchange swaps ¹	8,699	89	10	1
Currency swaps ²	1,957	25	51	24
Options ³	2,379	89	7	5
Other	61	..	..	..
Interest rates	26,645	44	43	13
Forward rate agreements	4,597	88	12	0
Swaps	18,283	35	49	16
Options	3,548	36	50	14
Other	216	..	..	..
Equity and stock indices	579	61	38	1
Forwards and swaps	52	41	54	5
Options	527	62	37	1
Commodities	318	75	24	1
Forwards and swaps	208	72	26	2
Options	109	80	19	1
Total	40,637	56	34	10

¹ Data are incomplete because they do not include outstanding forwards and foreign exchange swaps positions of market participants in the United Kingdom. ² Notional amounts excluding data from reporting dealers in the United Kingdom amounted to \$1,307 billion. ³ Notional amounts excluding data from reporting dealers in the United Kingdom amounted to \$1,995 billion.

illustrates the fact that the dollar remains the reference currency, even for transactions involving a third currency. The comparable figures for the yen and the Deutsche Mark are 32 and 25% respectively.¹⁸ Only 6% of foreign exchange contracts involved none of the three principal currencies. This latter proportion was nevertheless substantially higher than that reported for exchange-traded business (Table D-10), illustrating the greater variety of currency pairs offered by the OTC market.

The dollar was also the most important currency of denomination of interest rate instruments, accounting for 35% of notional amounts outstanding and 28% of gross market values. These numbers reflect the relative importance of the US dollar in the cash market for tradable assets. The yen and the Deutsche Mark again ranked second and third, with 21 and 13% of notional amounts outstanding respectively.

Table D-7

Global turnover in notional amounts of OTC foreign exchange and interest rate derivative contracts in April 1995 and estimated gaps in reporting

Category	Total		Foreign exchange		Interest rates	
	Daily averages in billions of US dollars	Percentage share	Daily averages in billions of US dollars	Percentage share	Daily averages in billions of US dollars	Percentage share
Total reported gross turnover	1,368		1,114		254	
Adjustment for local double-counting ¹	206		161		45	
Total reported turnover net of local double-counting ("net-gross")	1,162		953		209	
Adjustment for cross-border double-counting ¹	323		265		58	
Total reported "net-net" turnover	839	100	688	100	151	100
with other dealers	529	63	427	62	102	68
- local	207	25	162	23	45	30
- cross-border	322	38	265	39	57	38
with others	310	37	261	38	49	32
- local	179	21	151	22	28	18
- cross-border	131	16	110	16	21	14
Estimated gaps in reporting ² ..	41	5	32	5	9	6
Estimated global turnover ...	880		720		160	

Note: This table and the subsequent tables D-8 and D-9 include data on outright forwards and foreign exchange swaps which are also contained in tables F-2 to F-7.

¹ Adjustments have been made by halving positions vis-à-vis other local reporting dealers and other reporting dealers abroad respectively. ² Estimates have been prepared for less than full coverage of derivatives market activity in the reporting countries.

¹⁸ Since each individual currency in foreign exchange transactions is counted twice by definition, the sum of all currency pairs adds up to 200% of the reported total (see also Part II).

In contrast, European instruments accounted for a large share of equity and stock index products - nearly one-half of the total. Finally, gold-related products accounted for almost half of the notional amounts outstanding in the commodity category.

The predominance of short-term instruments in overall OTC derivatives business (Table D-6) hides considerable variations in the maturity distribution both between market risk categories and between individual instruments within them. On average, the proportion of contracts of less than one year is the highest for foreign exchange (79%) and commodity products (75%). This reflects the fact that a large volume of such business is related to the management of cash books, the hedging of trade flows, the taking of speculative positions and volatility in the underlying market. The main exception to this pattern is in currency swaps, which tend to be more closely related to new longer-term international securities issuance and credit activity.

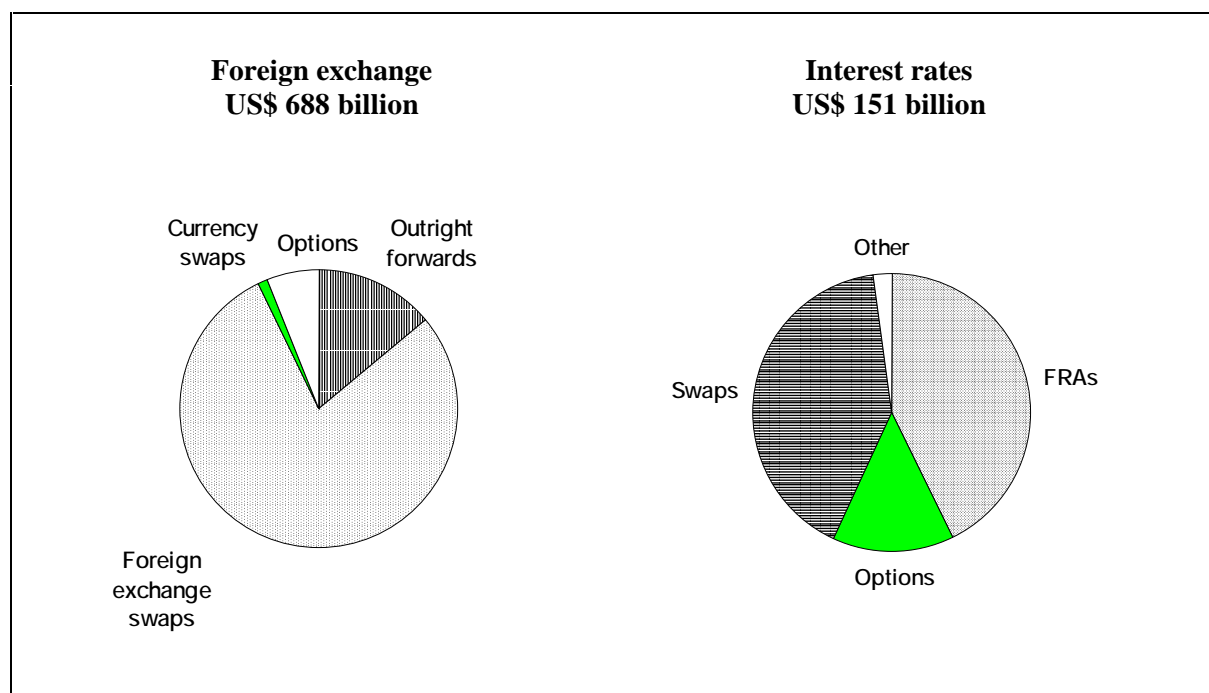
In the case of interest rate instruments, only 44% of contracts outstanding were for less than one year. Whereas FRAs are generally used for the hedging of short-term positions, other interest rate instruments (swaps and options in particular) are structured to meet a wider variety of timing and exposure requirements. However, few instruments have a maturity exceeding five years. This is particularly true of equity and commodity products, only 1% of which are above that threshold.

1.2 OTC turnover in terms of notional amounts in April 1995

The survey only gathered turnover data for OTC derivatives in the foreign exchange and interest rate market risk categories. After adjusting for double-counting and estimated gaps in reporting, global turnover in these two categories combined is put at \$880 billion per business day, compared with a reported preliminary total of \$839 billion in the December 1995 BIS press release, which did not include any estimates for gaps in reporting. Of this, the bulk - \$720 billion - was

Graph D-2

Reported turnover in OTC derivatives markets by instrument at end-March 1995



Note: This graph and the subsequent graph D-3 include data on outright forwards and foreign exchange swaps which are also contained in graphs F-2 to F-7.

accounted for by foreign exchange products, in sharp contrast to the relative size of notional amounts outstanding (Table D-3). This is due to the fact that interest rate products tend to be of longer-term maturity and are somewhat less actively traded than currency products.

In both major groups of products, cross-border deals accounted for just over half of reported "net-net" turnover and inter-dealer transactions for around two-thirds. The share of inter-dealer business with non-residents was also considerably larger than with residents. This greater predominance of inter-dealer activity in cross-border trading applied to both currency (71%) and interest rate products (73%). Turnover data on foreign exchange derivatives were collected in earlier foreign exchange market surveys, and the intertemporal comparisons are set out in Table F-2 in Part II.

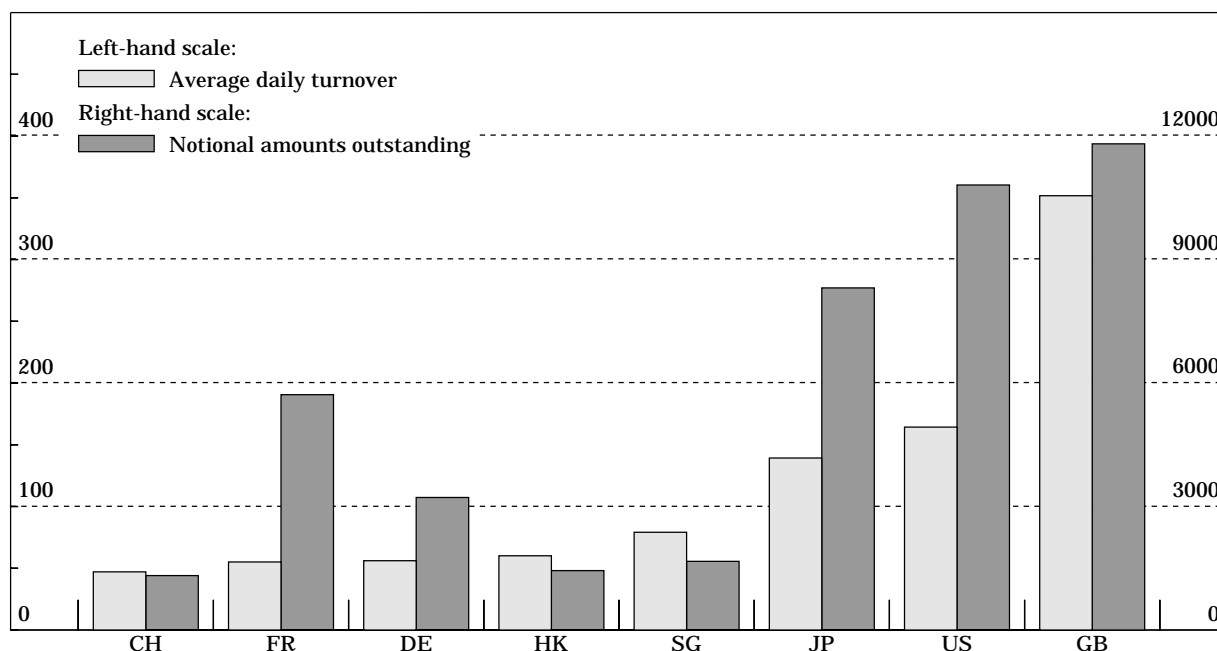
Within the foreign exchange category, foreign exchange swaps were by far the most actively traded OTC derivative instruments (79%). Outright forwards accounted for 14%, options for 6% and currency swaps for 1% of total turnover in foreign exchange contracts (Table D-8 and Graph D-2). The US dollar featured on one side in as much as 92% of all contracts, and the Japanese yen and Deutsche Mark in around 26 and 23% respectively. Broken down by instrument, the US dollar was even more predominant in foreign exchange swaps, while it accounted for a smaller share in outright forwards and options. In non-dollar business, however, options played a much greater role, in excess of one-quarter of the total in the case of the Deutsche Mark against the yen, sterling and the French franc. It should be stressed, however, that the currency composition of option business may have been affected by the volatility of major exchange rates prevailing before and during April 1995.

Daily turnover in interest rate contracts amounted to \$151 billion and was more evenly spread across the instrument categories. FRAs and swaps each accounted for more than 40% of the total, and options for 14%. Contracts on dollar interest rates were less dominant than in foreign

Graph D-3

Reported notional amounts outstanding at end-March 1995 and turnover in April 1995 of OTC foreign exchange and interest rate derivatives by country *

(in billions of US dollars)



* Adjusted for local inter-dealer double-counting. Amounts outstanding were compiled on a book location basis, while turnover data were collected on a trade location basis.

Table D-8

Reported turnover in notional amounts of OTC foreign exchange and interest rate derivative contracts net of local and cross-border inter-dealer double-counting by underlying currency, interest rate and instrument type in April 1995

a. Foreign exchange contracts

Currency pair	All instruments (daily averages in billions of US dollars)	Outright forwards	Foreign exchange swaps	Currency swaps	Options
US dollar against total other currencies	630	12	82	0	5
of which against:					
Deutsche Mark	122	15	76	0	8
Japanese yen	169	13	78	1	8
Pound sterling	53	10	87	0	2
French franc	44	10	85	0	4
Swiss franc	39	13	84	0	3
Canadian dollar	27	16	80	0	4
Australian dollar	21	9	86	1	4
ECU	16	8	92	0	0
Other	139	10	88	1	1
Deutsche Mark against total other currencies other than US dollar	39	30	48	1	21
of which against:					
Japanese yen	7	41	31	1	27
Pound sterling	5	27	44	0	29
French franc	7	23	48	1	28
Swiss franc	3	36	40	0	24
ECU	1	40	54	6	0
Other	16	28	58	1	13
Other currency pairs	19	43	45	2	8
Total turnover	688	14	79	1	6

b. Interest rate contracts

Interest rate	All instruments (daily averages in billions of US dollars)	FRAs	Swaps	Options	Other
US dollar	41	43	40	16	1
Deutsche Mark	18	49	37	10	3
Japanese yen	35	27	49	23	0
Other	58	52	39	7	2
Total turnover	151	43	41	14	2

Table D-9

Reported turnover in notional amounts of OTC foreign exchange and interest rate derivative contracts net of local inter-dealer double-counting by reporting country* in April 1995

Reporting country	Total contracts (daily averages in billions of US dollars)	Foreign exchange contracts (daily averages in billions of US dollars)	Outright forwards	Foreign exchange and currency swaps	OTC options	Interest rate contracts (daily averages in billions of US dollars)	FRAs	Swaps	OTC options
United Kingdom	351	292	12	84	5	59	59	32	9
United States	164	132	21	63	16	32	33	45	21
Japan	139	112	15	80	5	26	9	48	43
Singapore ...	79	63	5	93	2	16	31	68	1
Hong Kong	60	56	5	94	1	4	45	52	3
Germany	56	45	9	84	6	11	39	48	8
France	55	36	6	85	9	19	27	67	7
Switzerland	47	44	19	77	4	2	66	20	14
Belgium	28	22	2	96	2	6	71	28	1
Australia	26	23	6	91	3	3	71	19	9
Denmark	26	23	7	91	2	3	81	9	9
Canada	23	19	14	82	4	4	67	24	9
Netherlands	20	16	17	77	5	4	55	32	9
Spain	15	11	6	93	1	3	45	8	4
Luxembourg	14	12	10	89	1	2	43	49	7
Sweden	14	12	6	91	4	2	74	22	4
Italy	12	11	22	76	2	2	58	30	12
Austria	7	4	7	90	3	2	90	9	1
Norway	6	4	6	94	1	1	96	2	1
Bahrain	5	1	35	54	12	4	98	2	0
Finland	5	3	8	88	4	2	91	9	1
New Zealand	4	4	10	88	2	0	53	26	22
Ireland	3	2	14	85	0	1	87	12	1
South Africa	3	3	28	66	7	0	20	15	65
Greece	1	1	39	60	1	0	23	1	77
Portugal	1	1	12	86	1	0	90	10	0
Total turnover	1,162	953	12	82	6	209	45	40	13

* Estimated coverage of the derivatives market in individual countries ranged between 77 and 100%.

exchange instruments, with 27%, followed closely by those on yen rates (23%). Yen rate contracts comprised a relatively large proportion of swaps and options compared with interest rate contracts on other currencies (Table D-8).

As noted below in Part IV, Methodology, OTC derivatives turnover data were collected on a trade location basis (as in the foreign exchange turnover part of the survey). Given the sizable overlap between these two parts of the survey it is not surprising that the geographical distribution of overall OTC derivatives trading is very similar to that for overall foreign exchange trading. Table D-9 shows that the United Kingdom was by far the most active centre in both currency and interest rate products, with respectively 31 and 28% of total turnover. There was also a high concentration of activity in the United Kingdom, the United States and Japan, in that order, which accounted together for 56% of total trading in both categories combined. However, concentration appeared somewhat more pronounced in interest rate than in foreign exchange instruments as, apart from France, Singapore and Germany, very few other countries recorded any significant activity in interest rate products.

In most reporting countries, foreign exchange swaps are by far the most widely used currency instrument. In contrast, there was no overall predominance of one type of product in the interest rate area. Indeed, there were marked variations in their relative importance across countries. For instance, the share of FRAs varied from 9% in Japan to 98% in Bahrain, that of swaps ranged from 1% in Greece to 68% in Singapore, while that of options was between zero (in Bahrain and Portugal) and 77% (in Greece).

2. Exchange-traded derivatives markets

2.1 Exchange-traded outstandings: notional amounts at end-March 1995

Data on amounts outstanding on exchange-traded derivatives markets were collected only for notional values.¹⁹ Because the data were collected from OTC firms dealing on exchanges, and not from the exchanges themselves, no information is available on ultimate counterparties, implying that no precise estimates of double-counting can be made. Assuming that all transactions were conducted with other reporting dealers, division of the data by two would provide a fairly accurate estimate of net magnitudes. Since this was not the case, the data collected are discussed in gross terms.

Total reported notional values outstanding on exchanges came to \$16.4 trillion gross at the end of March 1995, roughly one-quarter of the comparable OTC figure. There were significant differences in the relative proportion of futures and options across market risk categories. The bulk of interest rate contracts - almost four-fifths - took the form of futures rather than options, whereas options accounted for the larger share of foreign exchange and equity contracts, although they only accounted for one-third of commodity products. Activity in option markets is conditional upon the liquidity of the underlyings, which, in the case of interest rate products, generally involve futures themselves. Differences in the degree of development of risk management techniques and strategies may also explain the important variations seen across currencies in the use of options.

Interest rate contracts accounted for 96% of exchange-traded business, a much higher proportion than for OTC contracts, where foreign exchange products were considerably more prominent (Table D-10). Nonetheless, interest rate business is significantly larger in OTC markets than on organised exchanges. While this can be related to inherent differences in the way risk is traded (see footnote 14), it can also be due to a number of competitive advantages of OTC instruments. Their customised nature, combined with the development of risk reduction techniques (such as collateral arrangements) and the standardisation of market practices (such as those pertaining to documentation)

¹⁹ On exchanges, market values are generally paid down to zero on a daily basis.

- both of which are akin to features of exchange-traded derivatives markets - have greatly improved market liquidity and acted to strengthen the competitive edge already provided by the OTC market's wholesale nature.

Almost half of exchange-traded interest rate contracts were in the US dollar and over four-fifths were in the three major currencies combined. In OTC interest rate markets, the dollar was less predominant and there was a broader spectrum of currencies for which such contracts were available.

Table D-10

Reported notional amounts of exchange-traded derivative contracts outstanding¹ by underlying market risk factor at end-March 1995

Market risk factor	All instruments		Futures	Options	Memorandum item: Gross OTC contracts ²	
	In billions of US dollars	Percentage shares	Percentage shares		In billions of US dollars	Percentage shares
Foreign exchange¹	120	1	33	67	20,217	32
USD/DEM	49	41	26	74	3,341	16
USD/JPY	37	31	42	58	5,693	28
USD/currencies other than DEM and JPY	29	24	32	68	7,987	39
DEM/JPY	0	0	22	78	315	2
DEM/currencies other than USD and JPY	3	2	23	77	1,361	7
JPY/currencies other than USD and DEM	0	0	100	0	544	3
All other pairs of currencies	1	1	51	49	974	5
Interest rates	15,669	96	79	21	42,377	66
US dollar	7,702	49	75	25	13,845	33
Deutsche Mark	1,548	10	82	18	5,568	13
Japanese yen	3,748	24	92	8	9,302	22
Other interest rates	2,671	17	74	26	13,662	32
Equity and stock indices	442	3	35	65	780	1
US	131	30	34	66	155	20
Japanese	166	38	36	64	144	18
European	105	24	36	64	387	50
Other	39	9	30	70	90	12
Commodities	142	1	65	35	389	1
<i>of which:</i>						
Gold	34	24	35	65	181	47
Total	16,373	100	78	22	63,763	100

¹ The data refer to exchange-traded transactions reported by survey participants in the reporting countries, and not to the notional amounts outstanding of all contracts traded on exchanges in the reporting countries. The data are not adjusted for double-counting and are not directly comparable with outstandings reported by exchange organisations. ² Not adjusted for local and cross-border double-counting.

At \$120 billion, foreign exchange derivatives outstanding on organised exchanges amounted to less than 1% of off-exchange business. In spite of repeated attempts to introduce currency contracts, exchanges appear to have failed to compete successfully with OTC markets in this area. This may be explained by the ample availability in the long-established international interbank market of a wide range of short-term cash instruments covering a broad spread of currency exposures. Deals involving the US dollar represented 96% of exchange-traded contracts, compared with 84% of OTC contracts. Options accounted for almost two-thirds of the notional value of contracts outstanding on exchanges, compared with 17% on the OTC market (Table D-4).

Table D-11

Reported turnover in notional amounts of exchange-traded derivative contracts¹ by underlying market risk factor, reporting country and instrument type in April 1995

Market risk factor	All instruments		Futures	Options	Memorandum item: Gross OTC contracts ²	
	Daily averages in billions of US dollars	Percentage shares	Percentage shares		Daily averages in billions of US dollars	Percentage shares
Foreign exchange	15	1	83	17	1,114	81
US dollar versus all other currencies	15	98	83	17	1,032	93
of which against:						
Deutsche Mark	4	26	70	30	201	18
Yen	5	31	82	18	272	24
Other currency pairs	0	2	75	25	82	7
United Kingdom	9	56	95	5	354	32
United States	5	32	70	30	153	14
Other countries	2	12	59	41	607	54
Interest rates	1,126	99	89	11	254	19
US dollar	295	26	78	22	66	26
Deutsche Mark	119	11	90	10	29	12
Japanese yen	476	42	98	2	61	24
Other	236	21	83	17	97	38
Japan	451	40	96	4	31	12
United Kingdom	238	21	86	14	77	30
United States	191	17	80	20	38	15
France	90	8	65	35	25	10
Australia	39	3	92	8	4	2
Germany	36	3	97	3	12	5
Singapore	24	2	99	1	18	7
Hong Kong	14	1	93	7	4	0
Canada	11	1	96	4	5	2
Spain	7	1	90	10	4	2
Other reporting countries	26	2	94	6	35	14
Total	1,141	100	89	11	1,368	100

¹ The data refer to exchange-traded transactions reported by survey participants in the reporting countries, and not to the turnover in notional amounts of all contracts traded on exchanges in the reporting countries. The data are not adjusted for double-counting and are therefore not directly comparable with turnover reported by exchange organisations. ² Not adjusted for local and cross-border double-counting.

In the equity category, Japanese index contracts were predominant, followed by US and European instruments, a ranking which is somewhat different from that in the OTC markets, where European instruments were dominant (nearly 50% of total outstandings). Gold accounted for only 24% of exchange-traded commodity contracts, compared with nearly 50% for OTC commodity contracts. However, the differences in coverage in the two market categories may have caused some distortion in the comparison between instruments and market centres.

2.2. Exchange-traded turnover in terms of notional amounts in April 1995

Unlike the more comprehensive coverage for outstandings, turnover data for exchange-traded instruments were collected only for the foreign exchange and interest rate market risk categories. Total turnover in these two categories came to \$1.14 trillion per business day in April 1995, with the overwhelming volume of transactions being recorded in the interest rate category (Table D-11). While this roughly mirrored relative weights in terms of notional amounts outstanding, it stood in marked contrast to the composition of gross turnover in OTC markets, where the bulk of foreign exchange and interest rate turnover was recorded in the foreign exchange sector. In addition, turnover in exchange-traded instruments was much more concentrated in a few countries with major exchanges than turnover in OTC instruments.

In general, futures tend to be more actively traded than options (futures accounted for 89% of total turnover in April 1995). In the case of currency instruments, this stands in sharp contrast to amounts outstanding, where options tend to predominate. Also in some contrast with outstandings, exchange-traded turnover of interest rate instruments was by far the largest in the Japanese yen sector - a result which was mirrored in the fact that 40% of such turnover was reportedly in Japan and a further 46% in the United Kingdom, the United States and France. Foreign exchange turnover was, however, heavily concentrated in the United Kingdom and the United States (56 and 32% of the total respectively). In the foreign exchange sector as much as 98% of turnover involved the US dollar on one side of contracts, with the Japanese yen and the Deutsche Mark in second and third places respectively.

IV. METHODOLOGY

The information obtained in the survey was compiled by pooling data provided by the central banks or monetary authorities in 26 countries with large or medium-sized foreign exchange and derivatives markets. The data refer to turnover in the month of April 1995 and to notional amounts outstanding and gross market values of open positions of foreign exchange and derivatives transactions at end-March 1995.

In the great majority of cases the information was obtained by conducting ad hoc surveys of banks and other foreign exchange and derivatives market dealers. In a few cases the information was based on regular reports from foreign exchange and derivatives market participants, sometimes supplemented with additional survey material. Some authorities also collected supplementary information from brokers. Overall, 2,414 institutions participated in the foreign exchange part of the survey and 2,401 institutions contributed to the derivatives exercise.

1. Coverage

Data were collected on foreign exchange transactions and derivative products according to the following broad market risk categories:

- Foreign exchange transactions
- Single-currency interest rate derivatives
- Equity and stock index derivatives
- Commodity derivatives.

The category of foreign exchange transactions covered both cash (i.e. spot foreign exchange transactions) and derivative instruments. The other three categories comprised derivative instruments only. For derivatives, the following instrument breakdown was requested in each market risk category:

- Over-the-counter (OTC) forward contracts
- OTC swaps
- OTC options
- Other OTC products
- Futures
- Exchange-traded options.

To gauge the size of the foreign exchange and derivatives markets, the survey collected the following types of data:

- Turnover in nominal or notional amounts
- Outstandings in nominal or notional amounts
- Outstandings in gross market values.

The survey participants were asked to include in their reporting all arm's-length market transactions concluded by their offices. An "arm's-length" transaction was defined as one in which the dealer is indifferent as to the counterparty. In other words, in-house deals and deals with other offices of the same institution were included if the trader was equally willing to conclude the deal in question with a fully independent market participant.

2. Turnover data

Turnover data provide a measure of market activity, and can also provide a rough proxy for market liquidity. Turnover was defined as the absolute gross value of all deals concluded (not settled) during the month, and was measured in terms of the nominal value (principal) for spot, forward, swap, and futures contracts and in terms of nominal or notional amounts and premiums paid and received for option contracts. In addition to spot foreign exchange transactions, turnover data were requested for foreign exchange and interest rate derivatives only.

No distinction was made between sales and purchases (i.e. a purchase of \$5 million against sterling and a sale of \$7 million against sterling would amount to a gross turnover of \$12 million). Direct cross-currency transactions were counted as single transactions; however, cross-currency transactions passing through a vehicle currency were recorded as two separate deals against the vehicle currency. The gross amount of each transaction was recorded once, and netting arrangements and offsets were ignored.

The basis for reporting was the location of the office where any given deal was struck, even if deals entered into in different locations were booked in a central location. Thus, transactions concluded by offices located abroad were not reported by the country of location of the head office, but by that of the office abroad (insofar as the latter was a reporting institution in one of the other 25 reporting countries). For turnover of transactions with variable nominal or notional principal amounts, the basis for reporting was the nominal or notional principal amounts on the transaction date.

In all cases transactions were reported in US dollar equivalents, with non-dollar amounts to be converted into US dollars using the exchange rate prevailing on the date of the trade.

As in the previous triennial foreign exchange market surveys, turnover data were collected over a one-month period in order to reduce the likelihood that very short-term variations in activity might distort the data. The data collected for the survey reflected all transactions entered into during the calendar month of April 1995, regardless of whether delivery or settlement was made during that month.

In order to allow a comparison across countries, daily averages of turnover were computed by dividing aggregate monthly turnover for the country in question by the number of days in April on which the foreign exchange and derivatives markets in that country were open. The number of trading days ranged from seventeen (Australia, Denmark, Hong Kong, New Zealand, Norway, South Africa and Spain) to twenty (Bahrain and Japan).

In April 1995 turnover in both the foreign exchange and derivatives markets was reported to have been normal in two-thirds of the reporting countries and below normal in a third of them. Only one country (Spain) reported turnover to have been above normal in both market segments. In the six preceding months, turnover was reported to be steady in both markets in half of the countries and increasing in most of the other countries.

Turnover was reduced by the fact that Easter fell during the month of the survey. The length of the Easter holiday varied from centre to centre, and even though a given market may have been open, trading, particularly cross-border trading, is likely to have been restricted by the inability to conclude transactions with dealers in markets which were closed. No other exceptional events were reported to have disrupted trading that month. However, volatility in the major exchange rates before and during the month of April may have affected the composition of foreign exchange business recorded in the survey.

3. Nominal or notional amounts outstanding

Nominal or notional amounts outstanding provide a measure of market size, and can also provide a rough proxy of the potential transfer of price risk in derivatives markets. They are also

comparable with measures of market size in related underlying cash markets and shed useful light on the relative size and growth of cash and derivatives markets.

Nominal or notional amounts outstanding were defined as the gross nominal or notional value of all deals concluded and not yet settled at end-March 1995; the date of end-March was chosen as it would coincide for some countries with the end of an accounting period.

As in the case of the turnover data, no distinction was made between sales and purchases of derivative instruments and the resulting claims and liabilities of open contracts. In the case of foreign exchange swaps which were concluded as spot/forward transactions, only the unsettled forward part of the deal was reported. If foreign exchange swaps were executed on a forward/forward basis, amounts outstanding had to be reported separately for both legs. For other forward contracts and swaps, the transactions were always to be reported as one transaction only.

In contrast to turnover data, the basis for reporting of nominal or notional amounts outstanding was book location. In order to minimise inconsistencies between data on turnover and amounts outstanding, book reporting was requested at the lowest level of aggregation possible (local branch/subsidiary level as opposed to a worldwide consolidated book). It was therefore recommended that amounts outstanding be compiled separately for each office of a reporting institution in a given country and that the data be reported to the central bank where the relevant office of a reporting dealer was located. For transactions with variable nominal or notional principal amounts, the basis for reporting was to be the nominal or notional principal amounts at the time of reporting.

In all cases amounts outstanding were reported to the BIS in US dollar equivalents, with non-dollar amounts to be converted into US dollars using end-of-period exchange rates.

4. Gross market values

Another measure of the size of derivatives markets is provided by outstandings in terms of gross market values. In addition, gross market values supply information about the scale of gross transfer of price risks in the derivatives markets. Furthermore, gross market value at current market prices provides a measure of derivatives market size and economic significance that is readily comparable across markets and products.

Gross market values were defined as the costs that would have been incurred if the outstanding contracts had been replaced at market prices prevailing at 31st March 1995. Reporters were requested to provide both gross positive and gross negative market values in order to permit calculation of aggregate gross market values. Gross positive market values were defined as the sum of outstanding derivative contracts at replacement cost that represent claims on counterparties. Gross negative market values were defined as the sum of outstanding derivative contracts at replacement cost that represent liabilities to counterparties. Gross positive and negative market values were requested for OTC contracts only. For option-type products, market values were to be calculated using in-house pricing models.

As in the case of nominal or notional amounts outstanding, gross market values were to be reported for the unsettled leg of any given transaction and the basis for reporting was book location.

In all cases gross market values were reported to the BIS in US dollar equivalents, with non-dollar amounts to be converted into US dollars using end-of-period exchange rates.

5. Market risk categories

As described above, individual derivatives transactions were categorised into four market classes: foreign exchange, single-currency interest rate, equity and commodity. If individual derivatives transactions involved more than one market category, transactions that were simple combinations of exposures were to be reported separately in terms of their individual components. Transactions that could not be readily broken down into separable market risk components were to be reported in only one market risk category. Such products with multiple exposures were to be allocated according to the most significant underlying risk component. However, if reporting institutions were in doubt about the correct classification of multi-exposure derivatives, they were asked, for practical reasons, to allocate the deals to the four market risk categories according to the following order of precedence:

Commodities. All derivative transactions involving a commodities or commodity index exposure, whether they involved a joint exposure in commodities or any other market risk category (i.e. foreign exchange, interest rate or equity), had to be reported in the commodity category.

Equities. With the exception of contracts with a joint exposure to commodities and equities, which were to be reported as commodities, all derivatives transactions with a link to the performance of equities or equity indices were to be reported in the equity category. That is, equity deals with exposure to foreign exchange or interest rates had to be included in this category. Quanto-type instruments are an example of deals with joint equity and foreign currency exposures which were to be reported in the equity category.

Foreign exchange. This category includes all derivatives transactions (with the exception of those already reported in the commodity and equity categories) with exposure to more than one currency, be it in interest or exchange rates.

Single-currency interest rate contracts. This category includes derivatives transactions in which there is exposure to only one currency's interest rate. This category, therefore, includes all fixed and/or floating single-currency interest rate contracts including forwards, swaps and options.

6. Instrument definitions and categorisation

In each market risk category OTC derivatives were broken down by three types of "plain vanilla" instrument (forwards, swaps and options). Plain vanilla instruments were defined as instruments which are traded in generally liquid markets according to more or less standardised contracts and market conventions. If a transaction was composed of several plain vanilla components, each part was, if possible, to be reported separately.

In addition, there was a separate category for other products. This category included in principle transactions with a variable notional principal amount or contract features which act to multiply leverage. Furthermore, deals where a breakdown into individual plain vanilla components was impractical or impossible were also classified as other products.

In the foreign exchange category data on spot transactions were collected separately, while single-currency interest rate OTC options were further split into those on traded securities and other options.

Exchange-traded instruments were broken down into futures and options. Single-currency interest rate futures were further split into money market and capital market interest rate futures (i.e. futures on interest rates up to one year and futures on interest rates over one year).

Foreign exchange spot and OTC derivatives transactions were defined and categorised as follows:

Foreign exchange transactions

Spot transaction: Single outright transaction involving the exchange of two currencies at a rate agreed on the date of the contract for value or delivery (cash settlement) within two business days. The spot legs of swaps were not included among spot transactions but were treated as swap transactions even when they were for settlement within two days (i.e. including "tomorrow/next day" transactions).

OTC plain vanilla derivative instruments

Outright forward: Similar to spot deals except that they are for value, i.e. delivered for cash settlement, more than two business days after the conclusion of the transaction.

Foreign exchange swap: Transaction which involves the actual exchange of two currencies (principal amount only) on a specific date at a rate agreed at the time of the conclusion of the contract (the short leg), and a reverse exchange of the same two currencies at a date further in the future at a rate (generally different from the rate applied to the short leg) agreed at the time of the contract (the long leg). Both spot/forward and forward/forward swaps are included.

Currency swap: Contract which commits two counterparties to exchange streams of interest payments in different currencies for an agreed period of time and to exchange principal amounts in different currencies at a pre-agreed exchange rate at maturity.

Currency option: Option contract that gives the right to buy or sell a currency with another currency at a specified exchange rate during a specified period. This category also includes exotic foreign exchange options such as average rate options and barrier options. These instruments are included in the OTC options section.

Currency swaption: OTC option to enter into a currency swap contract. These products are included in the OTC options section.

Currency warrant: OTC option; long-dated (over one year) currency option. These products are included in the OTC options section.

Other foreign exchange derivative products

This category comprised in principle OTC foreign exchange derivative instruments which involve several features and where a breakdown into individual plain vanilla components is impractical or impossible, such as swaps with underlying notional principal in one currency and fixed or floating interest rate payments based on interest rates in currencies other than the notional (differential swaps or diff swaps).

Single-currency interest rate derivatives

Plain vanilla derivative instruments

<i>Forward rate agreement (FRA):</i>	Interest rate forward contract in which the rate to be paid or received on a specific obligation for a set period of time, beginning at some time in the future, is determined at contract initiation.
<i>Interest rate swap:</i>	Agreement to exchange periodic payments related to interest rates on a single currency; can be fixed for floating, or floating for floating based on different indices. This group includes those swaps whose notional principal is amortised according to a fixed schedule independent of interest rates.

The options category within plain vanilla single-currency interest rate derivatives is divided into two sections. The first section, options on traded securities, includes options on interest-bearing underlying instruments, such as options on government security futures. The second category, other options, includes interest rate options and specialised options, such as floors, collars, swaptions and warrants.

<i>Option on traded securities:</i>	OTC option on an interest-bearing underlying security.
<i>Interest rate option:</i>	OTC option, provision to pay or receive a specific interest rate on a predetermined principal for a set period of time.
<i>Interest rate cap:</i>	OTC option that pays the difference between a floating interest rate and the cap rate.
<i>Interest rate floor:</i>	OTC option that pays the difference between the floor rate and a floating interest rate.
<i>Interest rate collar:</i>	Combination of cap and floor.
<i>Interest rate swaption:</i>	OTC option to enter into an interest rate swap contract, purchasing the right to pay or receive a certain fixed rate.
<i>Interest rate warrant:</i>	OTC option; long-dated (over one year) interest rate option. These products fall into the other OTC options subsection.

Other interest rate derivative products

This category mainly comprises OTC interest rate derivative instruments with leveraged payoffs and/or those whose notional principal varies as a function of interest rates. For example, swaps based on LIBOR squared as well as index amortising rate swaps fall into this category.

Equity and stock index derivatives

<i>Equity forward:</i>	Contract to exchange an equity or equity basket at a set price at a future date.
<i>Equity swap:</i>	Contract in which one or both payments are linked to the performance of equities or an equity index (e.g. S&P 500). It involves the exchange of one equity or equity index return for another, and the exchange of an equity or equity index return for a floating or fixed interest rate.
<i>Equity option:</i>	OTC option, provision to deliver or receive a specific equity or equity basket at an agreed price at an agreed time in the future.
<i>Equity warrant:</i>	OTC option; long-dated (over one year) equity option. These products are included in the OTC options section.

The equity category does not have an "other" derivative product section; other equity derivative products are therefore reported in either the OTC options or the forwards and swaps section. The OTC option section takes precedence in the instrument classification, so that any equity derivative product with an embedded option is reported as an OTC option. All other OTC equity derivative products are reported in the forwards and swaps section.

Commodity derivatives

<i>Commodity forward:</i>	Forward contract to exchange a commodity or commodity index at a set price at a future date.
<i>Commodity swap:</i>	Contract with one or both payments linked to the performance of a commodity price or a commodity index. It involves the exchange of the return on a commodity or commodity index for another, and the exchange of a commodity or commodity index for a floating or fixed interest rate.
<i>Commodity option:</i>	OTC option, provision to deliver or receive a specific commodity or commodity index at an agreed price at a set date in the future.

The commodities category does not have an "other" derivative product section; other commodity derivative products are reported in either the OTC options or the forwards and swaps section. The OTC option section takes precedence in the instrument classification, so that any commodity derivative product with an embedded option is reported as an OTC option. All other OTC commodity derivative products are reported in the forwards and swaps section.

7. Counterparties

Following the methodology of the triennial Central Bank Survey of Foreign Exchange Market Activity, counterparty data were classified by "other dealers", "other financial institutions" and "non-financial customers" for all foreign exchange and single-currency interest rate derivatives transactions. The counterparty data were reduced to a breakdown by "other dealers" and "others" for equity and commodity derivatives.

Reporters were requested to provide separate information on local and cross-border transactions for all foreign exchange and single-currency interest rate derivatives business. However, a country breakdown of transactions with cross-border counterparties was not requested.

"Other dealers" were defined as other dealers either in the same country or in another country *participating in the survey*; they mainly include commercial and investment banks and securities houses which play a role as market-makers or intermediaries and other entities which are active dealers (e.g. subsidiaries of insurance companies). The monetary authorities conducting the surveys exchanged lists of reporting institutions and provided descriptions of the types of institution reporting data to them. However, in some cases the data on inter-dealer activity may include transactions with dealers located in non-reporting countries.

"Other financial institutions" were defined as organisations which did not participate in the survey but which provide financial services to independent companies or other economic agents. They include banks, funds and non-bank financial institutions which may be considered as financial end-users (e.g. mutual funds, UCITS, pension funds, hedge funds, currency funds, money market funds, building societies, leasing companies, insurance companies). Transactions with central banks and monetary authorities were also placed under this heading.

A "non-financial customer" was any counterparty other than those described above, in practice mainly corporate firms and governments.

Twenty-four of the 26 countries participating in the survey were in a position to provide the requested counterparty breakdown in full detail. Switzerland, attempting to ease the reporting burden, only distinguished between local and cross-border transactions of financial institutions and other counterparties, while Australia only provided a breakdown between local dealers, banks abroad and customers. Regarding transactions with customers, it is assumed by the Australian central bank that the data predominantly relate to deals struck with local customers.

There was one significant difference between the counterparty breakdowns used in the 1992 Central Bank Survey of Foreign Exchange Market Activity and the 1995 survey of both foreign exchange and derivatives markets. In 1992 only 18 countries, accounting for 74% of total turnover in traditional foreign exchange instruments (i.e. spot, outright forward and foreign exchange swap transactions), provided separate data for "other financial institutions", while in the latest survey this information was provided by 24 countries, accounting for 92% of total foreign exchange turnover.

Thus, to the extent that deals with non-reporting financial institutions were included in "other dealers" transactions in 1992, the amount of this latter type of business (redistributed in 1995 to "other financial institutions") would have been overstated in 1992, and growth rates computed between 1992 and 1995 will therefore tend to understate the expansion of inter-dealer business. Similarly, to the extent that deals now classified as being with "other financial institutions" were classified as being with "non-financial customers" in 1992, but not so in 1995, the growth of customer business will also tend to be underestimated in a comparison between the 1992 and 1995 surveys.

8. Currency and other market risk breakdowns

Because of the need to avoid excessively heavy reporting burdens and because the relative importance of trading of various currencies varies from centre to centre, countries were given some discretion in seeking this information. However, to obtain consistent data on turnover in the principal currency segments of the foreign exchange market, respondents in all locations were asked to report turnover data on foreign exchange transactions, including all foreign exchange derivatives, with the same extended currency breakdown as in the previous April 1992 triennial Central Bank Survey of Foreign Exchange Market Activity.

As a result, data were collected separately for trading in domestic currency, US dollars and Deutsche Mark against each other and against the following individual currencies and currency groups:

- Japanese yen
- Pound sterling
- Swiss franc
- French franc
- Canadian dollar
- Australian dollar
- ECU
- Other EMS currencies
- Other.

Other EMS currencies were defined to comprise the Belgian franc, Danish krone, Dutch guilder, Italian lira, Greek drachma, Irish pound, Luxembourg franc, Spanish peseta, Portuguese escudo and, in addition to the previous April 1992 survey, the currencies of the new EU member states, i.e. the Austrian schilling, Finnish markka and Swedish krona.

For other currencies the country of issue provided information on turnover in each case, but other countries tended to include these transactions in the residual categories. However, without information on the amount of transactions in a particular currency carried out by reporting dealers outside the respective country of issue, it is not possible to determine the global amount of business for that currency.

As in the 1992 survey, complete information was collected for trading involving the US dollar, Deutsche Mark and pound sterling. In contrast to 1992, comprehensive data were also obtained on deals involving the Japanese yen and the Swiss franc. Compared with the 1992 survey, much more complete information was collected for trading in all other currencies. In fact, only one country did not provide data on deals involving the Canadian dollar and the Australian dollar, and three countries did not supply data on transactions involving the ECU and other EMS currencies. With regard to the French franc, reporting improved from 18 countries collecting this information in 1992 to 24 countries in 1995. Care therefore needs to be taken in making comparisons across currencies whose coverage has changed over time or is still not complete.

For notional amounts outstanding in foreign exchange derivatives, data were reported with a more limited breakdown involving the three main currencies (US dollar, Deutsche Mark and Japanese yen) as follows:

- US dollar/Deutsche Mark
- US dollar/Japanese yen
- US dollar/currencies other than the Deutsche Mark and Japanese yen
- Deutsche Mark/Japanese yen
- Deutsche Mark/currencies other than the US dollar and Japanese yen
- Japanese yen/currencies other than the US dollar and Deutsche Mark
- Other currency pairs.

For turnover, notional amounts outstanding and gross market values of single-currency interest rate derivatives, the following disaggregation was adopted:

- US dollar
- Deutsche Mark
- Japanese yen
- Other.

Notional amounts outstanding of equity and stock index derivatives were categorised according to whether they related to US, Japanese, European (excluding emerging markets in eastern Europe) or other equity and stock indices. For commodity derivatives, only notional amounts

outstanding and gross market values of contracts involving gold had to be reported separately as an "of which" item.

9. Maturities

For notional amounts outstanding of all OTC derivatives a breakdown was requested by remaining maturity. The maturity bands are as follows:

- up to one year
- over one year and up to five years
- over five years.

In addition, turnover data on outright forwards and foreign exchange swaps was to be reported according to the maturity bands used in the previous triennial Central Bank Survey of Foreign Exchange Market Activity as follows:

- up to seven days
- over seven days and up to one year
- over one year.

In the case of transactions where the first leg had not come due, the remaining maturity had to be determined by the difference between the near and far-end dates of the transaction and not by the date of conclusion of the deal.

10. Elimination of double-counting

Double-counting arises because transactions between two reporting entities are recorded by each of them, i.e. twice. In order to derive measures of overall market size, it is therefore necessary to make, on a country-by-country level, adjustments for local inter-dealer double-counting and, in the globally aggregated data, for cross-border double-counting as well. To adjust the data for double-counting, reporters were asked to distinguish transactions contracted with other reporters (dealers) both in their own country and abroad. Adjusted figures were calculated for foreign exchange spot transactions and all three types of OTC derivatives data, i.e. turnover, nominal or notional amounts outstanding and gross market values. No adjustment was possible for data on exchange-traded business, for which no information was available on counterparties.

Two different methods of adjustment were applied for spot transactions and OTC derivatives turnover and notional amounts outstanding on the one hand, and gross market values on the other.

In the case of *turnover and notional amounts outstanding*, in a first step, reported data on local deals with other reporters were divided by two and this figure was subtracted from total reported gross data to arrive at so-called "net-gross" figures, i.e. business net of local inter-dealer double-counting. In a second step, reported data on cross-border deals with other reporters were also divided by two and this figure was subtracted from total reported "net-gross" data to obtain so-called "net-net" figures, i.e. business net of local and cross-border inter-dealer double-counting.

This quite simple procedure was possible because in the 1995 survey almost complete information was provided on local and cross-border business with other reporting dealers. In fact, only two countries (Australia and Switzerland), accounting for just 8% of total gross foreign exchange turnover, did not supply this information in full. However, given the broad coverage of the survey, it could reasonably be assumed that all deals with financial institutions reported by these two countries represented business with other reporting dealers and no attempt was made to estimate turnover and notional amounts outstanding with non-reporting banks which were not separately identified.

In contrast, in the 1989 and 1992 foreign exchange surveys, much less was known about the proportion of cross-border business with other dealers. As a consequence, in the 1992 survey it was assumed that only 90% of total cross-border business with other reporting dealers or, if not identified separately, with banks was with other reporting dealers abroad. In other words, of every \$10 of actual, underlying transactions, \$9 was assumed to have been reported twice, and \$1 was assumed to have been reported only once. That is, for every \$10 of actual transactions \$19 would have been reported. Accordingly, reported cross-border interbank business in 1992 was multiplied by a factor of 9/19 (0.474) in order to obtain an estimate of cross-border double-counting. For the 1989 survey, this factor was estimated at 7.5/17.5 (0.429), reflecting the assumption that of every \$10 of actual transactions, \$7.5 was presumed to have been reported twice, and \$2.5 was presumed to have been reported only once.

In the 1995 survey, the adjustments for double-counting on *gross market values* were performed as follows: in a first step, to obtain data on a "net-gross" basis, i.e. net of local inter-dealer double-counting, gross positive and negative market values of contracts held by reporting institutions were added to each other and from the resulting aggregate the gross negative market value of their local contracts with other reporting dealers was subtracted. In a second step, the gross negative market value of their cross-border contracts with other reporting dealers was subtracted from the "net-gross" data, to arrive at "net-net" figures, i.e. gross market values net of local and cross-border double-counting.

11. Gaps in reporting

Gaps in reporting stem from two sources: incomplete reporting (i.e. deals between two non-reporters) in the countries providing data, and less than full coverage of the range of countries in which the surveyed activity takes place. The second type of gap is mitigated by the existence of counterparty reports. The bulk of the cross-border inter-dealer business of dealers located in non-reporting countries is very likely to be captured in the reports of their counterparties in countries participating in the survey. The types of transaction which are not included in the reported data are local as well as cross-border transactions between dealers in non-reporting countries, and those between non-reporting dealers and any customers or other financial institutions wherever they are located.

In the April 1989, April 1992 and April 1995 surveys, an attempt was made to estimate both gaps for turnover in traditional foreign exchange instruments, i.e. spot transactions, outright forwards and foreign exchange swaps (see Table F-2). The gaps were estimated at \$53 billion in 1995, compared with \$35 billion in 1992 and \$56 billion in 1989. Of the gaps in 1995, \$22 billion was due to less than full coverage in the reporting countries themselves and \$31 billion related to the omission of deals between any two non-reporting entities in countries not participating in the survey.

In the 1995 survey, gaps from incomplete reporting in the countries providing data were also estimated for turnover, notional amounts outstanding and gross market values of all OTC derivative instruments (see Tables D-2 and D-3). For turnover and notional amounts outstanding, the basis for estimating gaps due to incomplete reporting in the countries providing the data was the information on the coverage of the survey in each participating country (see Tables F-1 and D-1): for example, if in a given country the coverage of the survey was 90% of total market activity, the gap from incomplete reporting was estimated to represent 10% of total turnover and notional amounts outstanding in that country. For gross market values, the gaps due to incomplete reporting were assumed to be proportional to those for notional amounts outstanding.

In the latest survey, an attempt was also made to estimate missing data on notional amounts outstanding and gross market values of outright forwards and foreign exchange swaps which were not collected from survey participants in the United Kingdom. This estimate was based on the ratio of 5% between the data on turnover and notional amounts outstanding of outright forwards and

foreign exchange swaps as reported by the other 25 participating countries. On that basis the missing notional amounts outstanding of outright forwards and foreign exchange swaps were estimated at \$3,982 billion on a "net-net" basis. For gross market values, the missing data were again assumed to be proportional to those on notional amounts outstanding. As a result, total estimated gaps in reporting in 1995 amounted to notional amounts outstanding of \$6,893 billion, gross market values of \$432 billion and turnover in notional amounts of \$41 billion on a "net-net" basis.

In some cases the sum of sub-items does not equal the total for the category in question. Apart from rounding this can result from incomplete classification of data, the use of residual categories and the suppression of data for reasons of confidentiality.

12. Intertemporal comparisons

An intertemporal comparison was only possible for data on foreign exchange turnover, which were also collected in the three previous triennial Central Bank Surveys of Foreign Exchange Market Activity. The relevant data on spot, outright forward and foreign exchange swaps are presented separately in Annex Tables 2-A to 2-H.

Intertemporal comparisons are complicated by changes in coverage and definition over the three-year periods separating the foreign exchange surveys of national markets.

Changes in coverage have been of two kinds. Firstly, within national markets the coverage of dealers active in national markets has changed. An increase in the number of reporting institutions does not, however, necessarily denote greater coverage. If institutions which were not active before, and were therefore not covered in earlier reports, began to deal on a substantial scale, it is legitimate to compare the total turnover of the larger number of reporting institutions with the total turnover of the smaller number reporting their transactions in the previous period. The same applies, of course, in the case of a decrease in the number of reporting institutions due to a reduction of their activity and importance in the market.

The second type of change in coverage relates to the inclusion of a larger number of countries. In 1986 only four countries provided information. In 1989 the number rose to 21, but some of them did not provide all types of information. In 1992 a total of 26 countries, including all countries with important markets, reported comprehensive data on turnover in foreign exchange transactions. In 1995, the number of countries did not increase further, but the coverage of market activity was significantly expanded to include all financial derivatives and to collect not only data on turnover, but on notional amounts outstanding and gross market values as well.

While the additional information provided by new reporting countries is valuable, not all of it relates to transactions that were not captured before. The bulk of these countries' cross-border transactions with dealers can be presumed to have been included in the reports of their counterparties in earlier years. In new reporting countries the business not captured before relates to local inter-dealer transactions and those with non-reporting financial institutions and customers.

To reflect the changes in country coverage in the two three-year periods between 1986 and 1992, intertemporal comparisons (i.e. percentage changes) in Annex Tables 2-A to 2-H relate to data from the same set of countries, i.e. countries reporting in both years in question.

A final complication involves changes in definitions. Virtually all the changes in definition reflect improvements in compilation procedures. In particular, greater effort has been made since the 1992 survey to classify counterparties accurately and, in addition, a finer counterparty breakdown has been used. As a result it is now possible to arrive at more accurate estimates of double-counting and to compile net figures on turnover for all items. However, because this was not possible in earlier years, intertemporal comparisons contain some double-counting. This procedure introduces biases to the extent that the share of inter-dealer business has changed over time.

13. Annex tables

The detailed results of the spring 1995 Central Bank Survey of Foreign Exchange and Derivatives Market Activity are presented in the following annex tables in two separate sections: the first covers foreign exchange markets, i.e. turnover in traditional foreign exchange business, such as spot, outright forward and foreign exchange swap deals, and includes an intertemporal comparison with the previous triennial Central Bank Surveys of Foreign Exchange Market Activity; and the second relates to derivatives markets, i.e. turnover, notional amounts outstanding and gross market values of foreign exchange, interest rate, equity and commodity derivatives.

Foreign exchange markets

Tables 1-A to 1-C show total *reported* foreign exchange market turnover net of both local and cross-border double-counting by market segment, counterparty and currency. No adjustments are made for gaps in reporting in these or any other Annex tables. Because of less than full coverage in national markets, the adjustment for local inter-dealer double-counting may be somewhat too large.

Because two currencies figure in every transaction, the sum of transactions in all individual currencies shown in Table 1-A equals twice the total transactions shown in the first column. Information by currency pair is shown for the US dollar in Table 1-B and for the Deutsche Mark in Table 1-C. Because the data in these latter tables relate to currency pairs, the sum of all transactions equals the total for the currency in question, not twice that total. The totals for the currencies in Tables 1-B and 1-C therefore correspond to the figures in the second and third columns of Table 1-A.

The information on currencies relates only to separately reported transactions. If transactions in a given currency were not identified separately, but placed in one of the residuals (other EMS currencies, currencies of other reporting countries or other currencies), global turnover in that currency is understated. For the major currencies the amount of underestimation from this source can be presumed to be minimal.

The data on transactions in the "currencies of other reporting countries" only relate to transactions in the country of issue of the Singapore dollar, the Hong Kong dollar, the Norwegian krone, the New Zealand dollar, the Bahrain dinar and the South African rand. Prior to the 1995 survey, they also included transactions in the currencies of the new EU member states, i.e. the Austrian schilling, the Finnish markka and the Swedish krona. Transactions in these currencies by dealers located outside the countries of issue were in the great majority of cases not reported separately and are therefore in the residual. In the few cases where transactions in these currencies outside the local market were reported separately, they were placed in the residual. The residual also contains transactions in currencies of countries outside the reporting area and all other unidentified transactions.

Tables 1-D to 1-G provide information on reported foreign exchange market turnover by country and currency net of local inter-dealer double-counting. As in Table 1-A, the sum of transactions in each individual currency in Table 1-D equals twice total transactions because two currencies figure in every deal. Because the data in Tables 1-E to 1-G relate to currency pairs, the total for all transactions sums to the total for the currency, not to twice the total.

Tables 1-H to 1-M contain information on reported foreign exchange market turnover by country, counterparty and market segment, and on the maturity breakdown of reported outright forward and foreign exchange swap transactions by country net of local double-counting.

Tables 1-N and 1-O contain information on the maturity breakdown of reported outright forward and foreign exchange swap transactions by currency net of local and cross-border double-counting.

Tables 2-A to 2-H provide an intertemporal comparison of reported foreign exchange turnover net of local double-counting by country and market segment and the shares of each country in the aggregated reported transactions. The global percentage changes have been calculated on a comparable basis, i.e. they relate to the changes in turnover of only those countries which participated in the surveys that are compared with each other.

Derivatives markets

Tables 3-A to 3-F provide information on reported notional amounts outstanding of foreign exchange derivatives by instrument and currency pair, and in addition for OTC derivatives by country, counterparty and maturity. The data on notional amounts outstanding of OTC derivatives in these and any other annex tables are generally calculated net of both local and cross-border double-counting, except for data broken down by country, which are only adjusted for local dealer double-counting. The data on all exchange-traded instruments in these and any other annex tables are presented on a gross, i.e. unadjusted basis, because no information was available on counterparties for this type of business.

Tables 4-A and 4-B contain detailed data on reported gross positive and negative market values of OTC foreign exchange derivatives by instrument, country and counterparty. The data on market values in these and any other annex tables are generally presented on a gross basis, i.e. no adjustments have been made for local and cross-border double-counting, except for the data broken down by country, which are adjusted for local dealer double-counting.

Tables 5-A to 5-H provide information on reported notional amounts outstanding of single-currency interest rate derivatives by instrument, country and interest rate, and in addition for OTC derivatives by counterparty and maturity.

Tables 6-A and 6-B contain detailed data on reported gross positive and negative market values of OTC single-currency interest rate derivatives by instrument, country, counterparty and interest rate.

Tables 7-A and 7-B provide information on reported notional amounts outstanding and gross positive and negative market values of equity and stock index derivatives by instrument and market risk factor, and in addition for OTC derivatives by counterparty and maturity.

Table 8-A contains detailed data on reported notional amounts outstanding and gross positive and negative market values of commodity derivatives by instrument, and in addition for OTC derivatives by counterparty and maturity.

Tables 9-A to 9-J provide information on reported turnover of foreign exchange derivatives by instrument and currency, and in addition for OTC derivatives by country and counterparty. The data on turnover of OTC derivatives in this and the following annex tables are generally calculated net of both local and cross-border double-counting, except for the data broken down by country, which are adjusted for local dealer double-counting. The data on turnover of exchange-traded instruments in this and the following annex tables are presented on a gross, i.e. unadjusted basis, because no information was available on counterparties for this type of business.

Tables 10-A to 10-G contain detailed data on reported turnover of single-currency interest rate derivatives by instrument, country and interest rate, and in addition for OTC derivatives by counterparty.

V. STATISTICAL ANNEX TABLES

(A) Foreign Exchange Markets

Foreign exchange turnover in April 1995

By market segment, counterparty and currency

- 1-A Specified currency against all other currencies
- 1-B US dollar against individual currencies
- 1-C Deutsche Mark against individual currencies

By country and currency

- 1-D Specified currency against all other currencies
- 1-E US dollar against individual currencies
- 1-F Deutsche Mark against individual currencies
- 1-G Local currency against individual currencies

By country and counterparty

- 1-H Total turnover
- 1-I Spot transactions
- 1-J Outright forwards
- 1-K Foreign exchange swaps

By country and maturity

- 1-L Outright forwards
- 1-M Foreign exchange swaps

By currency and maturity

- 1-N Outright forwards
- 1-O Foreign exchange swaps

Intertemporal comparison of foreign exchange turnover by country

Comparison of net turnover in 1986, 1989, 1992 and 1995

- 2-A Total turnover
- 2-B Spot transactions
- 2-C Outright forwards
- 2-D Foreign exchange swaps

Market shares by country in 1992 and 1995

- 2-E Total transactions
- 2-F Spot transactions
- 2-G Outright forwards
- 2-H Foreign exchange swaps

(B) Derivatives Markets

Notional amounts outstanding of foreign exchange derivatives

- 3-A By instrument, counterparty and currency pair
- 3-B OTC derivatives by country and currency pair

OTC derivatives by country and counterparty

- 3-C Total transactions
- 3-D Outright forwards and foreign exchange swaps
- 3-E Currency swaps
- 3-F Options

Gross market values of foreign exchange derivatives

- 4-A By instrument and counterparty
- 4-B By country and counterparty

Notional amounts outstanding of single-currency interest rate derivatives

- 5-A By instrument, counterparty and interest rate
- 5-B OTC derivatives by country and interest rate
- 5-C Exchange-traded derivatives by country and interest rate

OTC derivatives by country and counterparty

- 5-D Total transactions
- 5-E Forward rate agreements
- 5-F Swaps
- 5-G Options

OTC derivatives by maturity

- 5-H OTC derivatives by instrument, interest rate and maturity

Gross market values of single-currency interest rate derivatives

- 6-A By instrument, counterparty and interest rate
- 6-B By country and counterparty

Amounts outstanding of equity and stock index derivatives

- 7-A By instrument, counterparty and market risk factor
- 7-B OTC derivatives by instrument, market risk factor and maturity

Amounts outstanding of commodity derivatives

- 8-A By instrument and counterparty

Turnover in foreign exchange derivatives

By instrument, counterparty and currency

- 9-A Specified currency against all other currencies
- 9-B US dollar against individual currencies
- 9-C Deutsche Mark against individual currencies

OTC derivatives by country and currency

- 9-D Specified currency against all other currencies
- 9-E US dollar against individual currencies
- 9-F Deutsche Mark against individual currencies
- 9-G Local currency against individual currencies

OTC derivatives by country and counterparty

- 9-H Total turnover
- 9-I Currency swaps
- 9-J Options

Turnover in single-currency interest rate derivatives

- 10-A By instrument, counterparty and interest rate
- 10-B OTC derivatives by country and interest rate
- 10-C Exchange-traded derivatives by country and interest rate

OTC derivatives by country and counterparty

- 10-D Total turnover
- 10-E Forward rate agreements
- 10-F Swaps
- 10-G Options

Table 1-A

**Reported foreign exchange turnover net of local and cross-border inter-dealer
double-counting in April 1995, by market segment, counterparty and currency**

Total reported transactions in all currencies

(daily averages, in millions of US dollars)

Category	Total	Specified currency against all other currencies ¹				
		US dollar	Deutsche Mark	Japanese yen	Pound sterling	French franc
SPOT	494,190	351,439	268,340	109,039	46,322	40,379
- with other dealers	324,965	225,576	186,714	70,049	31,920	26,473
local	138,149	97,857	72,163	33,722	17,706	10,078
cross-border	186,816	127,720	114,551	36,327	14,214	16,395
- with other financial institutions ..	94,383	72,142	47,330	19,185	8,156	7,736
local	42,672	33,533	18,147	11,007	3,923	4,091
cross-border	51,711	38,610	29,183	8,178	4,233	3,645
- with non-financial customers ..	74,841	53,720	30,959	17,561	5,623	6,170
local	50,040	37,089	16,796	13,096	3,596	3,594
cross-border	24,801	16,631	14,164	4,465	2,027	2,576
OUTRIGHT FORWARDS	96,860	76,915	30,195	28,353	9,760	7,195
- with other dealers	33,396	26,716	11,908	8,417	3,667	2,130
local	14,753	11,559	4,812	4,088	2,167	877
cross-border	18,643	15,157	7,097	4,328	1,501	1,254
- with other financial institutions ..	27,847	22,745	7,222	8,412	3,163	2,537
local	19,345	15,800	4,126	6,913	2,489	1,894
cross-border	8,502	6,944	3,097	1,499	674	643
- with non-financial customers ..	35,617	27,455	10,952	11,396	2,883	2,527
local	25,738	19,801	6,631	9,611	2,102	1,769
cross-border	9,879	7,653	4,321	1,785	781	759
Up to 7 days	50,457	41,296	16,819	13,210	5,604	3,324
Over 7 days and up to 1 year	44,427	34,136	12,783	14,504	4,065	3,752
Over 1 year	1,936	1,468	571	638	88	116
FOREIGN EXCHANGE SWAPS	545,862	518,317	112,111	136,696	50,450	42,642
- with other dealers	370,488	357,720	74,185	90,641	33,012	28,537
local	139,755	133,828	24,536	35,525	16,482	9,168
cross-border	230,732	223,892	49,649	55,116	16,529	19,369
- with other financial institutions ..	107,623	101,799	20,776	24,380	10,344	8,813
local	50,270	46,815	9,423	15,475	4,564	3,787
cross-border	57,354	54,984	11,354	8,905	5,780	5,026
- with non-financial customers ..	67,751	58,798	14,802	20,290	5,910	5,292
local	45,167	38,959	8,699	16,293	3,911	2,666
cross-border	22,584	19,840	6,103	3,997	1,999	2,625
Up to 7 days	382,370	367,507	78,928	94,842	33,158	26,184
Over 7 days and up to 1 year	154,978	143,093	31,153	40,190	16,833	15,828
Over 1 year	7,429	6,893	1,807	1,657	455	627
TOTAL	1,136,912	946,671	410,646	274,088	106,532	90,216

For footnotes, see opposite page. For the conventions used, see the page which follows the list of contents.

Table 1-A (contd.)

**Reported foreign exchange turnover net of local and cross-border inter-dealer
double-counting in April 1995, by market segment, counterparty and currency**

Total reported transactions in all currencies

(daily averages, in millions of US dollars)

Specified currency against all other currencies ¹							Category
Swiss franc	Canadian dollar	Australian dollar	ECU	Other EMS currencies	Currencies of other reporting countries ²	Residual	
40,211	12,757	9,520	8,228	52,670	9,465	40,010	SPOT
27,002	6,371	5,449	5,518	30,728	4,928	23,952	- with other dealers
11,485	3,354	2,483	1,685	11,494	3,527	8,693	local
15,517	3,017	2,967	3,833	19,234	1,401	15,259	cross-border
6,954	3,661	1,002	1,671	10,761	956	9,212	- with other financial institutions ..
2,840	1,399	430	684	5,158	573	3,560	local
4,115	2,263	571	987	5,603	382	5,652	cross-border
5,994	2,724	3,069	1,039	11,181	3,581	6,271	- with non-financial customers ..
2,583	2,017	2,754	488	8,648	3,516	4,113	local
3,411	707	314	551	2,534	65	2,157	cross-border
7,136	4,589	2,231	1,811	14,500	1,962	9,071	OUTRIGHT FORWARDS
2,532	1,355	593	777	4,709	621	3,214	- with other dealers
1,010	998	233	381	1,893	384	1,049	local
1,522	357	360	395	2,816	237	2,165	cross-border
1,914	1,756	597	649	3,780	215	2,705	- with other financial institutions ..
1,256	1,137	331	438	2,825	147	1,333	local
657	619	265	211	954	67	1,373	cross-border
2,679	1,478	1,041	386	6,012	1,127	3,046	- with non-financial customers ..
1,512	1,147	928	229	4,540	1,089	1,866	local
1,167	331	113	157	1,472	38	1,181	cross-border
4,258	2,555	1,088	1,149	6,873	659	4,078	Up to 7 days
2,763	1,958	1,078	630	7,187	1,266	4,732	Over 7 days and up to 1 year ..
115	76	65	32	421	37	246	Over 1 year
35,547	21,834	18,410	15,439	85,782	15,746	38,752	FOREIGN EXCHANGE SWAPS
23,758	12,616	12,497	11,365	56,206	11,710	23,442	- with other dealers
7,541	4,812	5,785	4,888	19,353	8,102	8,235	local
16,217	7,804	6,712	6,477	36,852	3,608	15,208	cross-border
6,648	6,398	2,483	3,091	19,117	1,911	9,487	- with other financial institutions ..
2,615	2,600	877	1,105	8,538	1,436	3,306	local
4,033	3,798	1,606	1,986	10,580	475	6,181	cross-border
4,730	2,820	3,430	984	10,459	2,125	4,621	- with non-financial customers ..
1,965	2,083	3,153	430	6,615	1,977	2,340	local
2,765	737	277	554	3,844	148	2,281	cross-border
27,620	15,972	11,869	11,683	59,541	9,764	27,672	Up to 7 days
7,385	5,620	6,267	3,616	23,940	5,847	10,184	Over 7 days and up to 1 year ..
506	242	274	139	1,659	135	464	Over 1 year
82,894	39,180	30,161	25,478	152,952	27,173	87,833	TOTAL

Note: This table and the subsequent tables 1-B to 1-H, 1-J to 2-A, 2-C to 2-E, 2-G and 2-H include data on outright forwards and foreign exchange swaps which are also included in tables 9-A to 9-H.

¹ Because two currencies are involved in each transaction, the sum of transactions in individual currencies comes to twice the total reported turnover. ² Includes only transactions where at least one counterparty is located in the country of issue of the currency in question.

Table 1-B

**Reported foreign exchange turnover net of local and cross-border inter-dealer
double-counting in April 1995, by market segment, counterparty and currency**

US dollar against:

(daily averages, in millions of US dollars)

Category	Total	Deutsche Mark	Japanese yen	Pound sterling	French franc	Swiss franc
SPOT	351,439	142,559	87,661	25,937	8,693	22,251
- with other dealers	225,576	94,892	54,674	17,179	4,236	13,769
local	97,857	35,487	26,435	9,831	1,799	5,818
cross-border	127,720	59,405	28,239	7,348	2,437	7,951
- with other financial institutions ..	72,142	28,025	16,312	4,959	2,754	4,717
local	33,533	10,745	9,620	2,414	2,080	2,130
cross-border	38,610	17,281	6,693	2,545	673	2,587
- with non-financial customers ..	53,720	16,305	14,523	3,176	1,703	3,505
local	37,089	9,238	11,025	1,971	1,198	1,664
cross-border	16,631	7,067	3,498	1,205	505	1,841
OUTRIGHT FORWARDS	76,915	18,311	21,753	5,381	4,642	5,286
- with other dealers	26,716	7,118	6,185	2,400	1,441	1,746
local	11,559	2,745	2,658	1,186	598	670
cross-border	15,157	4,373	3,527	1,214	843	1,076
- with other financial institutions ..	22,745	4,614	6,216	1,353	1,824	1,717
local	15,800	2,689	4,961	880	1,408	1,174
cross-border	6,944	1,926	1,255	473	416	544
- with non-financial customers ..	27,455	6,467	9,264	1,581	1,376	1,811
local	19,801	3,714	7,785	1,124	876	1,010
cross-border	7,653	2,753	1,478	457	500	801
Up to 7 days	41,296	10,652	10,007	3,223	2,276	3,232
Over 7 days and up to 1 year ..	34,136	7,375	11,290	2,102	2,279	1,986
Over 1 year	1,468	280	455	56	85	68
FOREIGN EXCHANGE SWAPS	518,317	93,033	132,621	46,250	37,664	32,986
- with other dealers	357,720	64,116	89,129	31,279	26,333	22,939
local	133,828	19,964	34,840	15,608	8,132	7,146
cross-border	223,892	44,152	54,289	15,672	18,202	15,794
- with other financial institutions ..	101,799	16,822	23,266	9,544	7,720	5,997
local	46,815	7,126	14,676	4,116	3,215	2,100
cross-border	54,984	9,696	8,591	5,428	4,506	3,897
- with non-financial customers ..	58,798	9,747	18,892	4,242	3,610	3,638
local	38,959	5,262	15,120	2,580	1,575	1,258
cross-border	19,840	4,484	3,772	1,662	2,035	2,380
Up to 7 days	367,507	67,852	92,731	30,915	23,478	26,190
Over 7 days and up to 1 year ..	143,093	23,599	38,381	14,950	13,627	6,296
Over 1 year	6,893	1,397	1,506	381	558	468
TOTAL	946,671	253,903	242,035	77,568	50,998	60,524

For footnotes, see opposite page.

Table 1-B (contd.)

**Reported foreign exchange turnover net of local and cross-border inter-dealer
double-counting in April 1995, by market segment, counterparty and currency**

US dollar against:

(daily averages, in millions of US dollars)

Canadian dollar	Australian dollar	ECU	Other EMS currencies	Currencies of other reporting countries *	Residual	Category
12,353	8,876	1,948	19,174	7,404	14,583	SPOT
6,197	5,259	1,189	10,341	4,224	8,418	- with other dealers
3,286	2,428	296	3,699	3,093	3,645	local
2,911	2,831	893	6,642	1,131	4,773	cross-border
3,578	963	593	5,294	718	4,229	- with other financial institutions
1,370	406	349	2,750	442	1,227	local
2,207	557	244	2,544	275	3,003	cross-border
2,578	2,654	166	3,539	2,463	1,450	- with non-financial customers
1,889	2,362	88	2,770	2,414	812	local
689	292	78	769	48	639	cross-border
4,226	1,874	1,216	8,701	1,629	3,897	OUTRIGHT FORWARDS
1,292	547	520	3,291	579	1,446	- with other dealers
957	211	300	1,293	356	529	local
334	336	220	1,998	222	917	cross-border
1,628	539	512	2,673	196	1,471	- with other financial institutions
1,072	287	373	2,064	132	761	local
557	252	139	609	65	710	cross-border
1,306	788	183	2,736	854	915	- with non-financial customers
1,052	683	70	1,901	819	594	local
254	105	114	836	34	321	cross-border
2,408	962	815	4,907	592	2,219	Up to 7 days
1,748	851	384	3,537	1,004	1,580	Over 7 days and up to 1 year
69	60	16	249	33	97	Over 1 year
21,575	17,995	14,724	76,456	15,425	29,590	FOREIGN EXCHANGE SWAPS
12,510	12,415	10,926	52,399	11,648	18,748	- with other dealers
4,754	5,732	4,684	17,195	8,059	6,468	local
7,756	6,683	6,242	35,203	3,589	12,280	cross-border
6,355	2,417	2,961	17,387	1,830	7,500	- with other financial institutions
2,572	836	1,022	7,438	1,371	2,344	local
3,783	1,581	1,939	9,949	459	5,156	cross-border
2,710	3,164	837	6,670	1,946	2,196	- with non-financial customers
1,991	2,892	350	3,846	1,802	1,137	local
719	272	487	2,824	144	1,059	cross-border
15,831	11,658	11,277	55,191	9,678	22,705	Up to 7 days
5,503	6,064	3,312	19,206	5,617	6,537	Over 7 days and up to 1 year
241	273	133	1,459	130	347	Over 1 year
38,154	28,744	17,887	104,330	24,458	48,070	TOTAL

* Includes only transactions where at least one counterparty is located in the country of issue of the currency in question.

Table 1-C

**Reported foreign exchange turnover net of local and cross-border inter-dealer
double-counting in April 1995, by market segment, counterparty and currency**

Deutsche Mark against:

(daily averages, in millions of US dollars)

Category	Total	US dollar	Japanese yen	Pound sterling	French franc	Swiss franc
SPOT	268,340	142,559	18,876	17,916	29,670	15,873
- with other dealers	186,714	94,892	14,582	13,902	21,636	11,952
local	72,163	35,487	6,764	7,333	7,895	4,704
cross-border	114,551	59,405	7,818	6,569	13,741	7,249
- with other financial institutions ..	47,330	28,025	2,404	2,579	4,635	2,102
local	18,147	10,745	984	1,032	1,753	605
cross-border	29,183	17,281	1,421	1,547	2,882	1,497
- with non-financial customers ..	30,959	16,305	1,889	1,435	3,399	1,819
local	16,796	9,238	1,022	778	1,471	419
cross-border	14,164	7,067	867	657	1,928	1,400
OUTRIGHT FORWARDS	30,195	18,311	2,880	1,282	1,547	1,174
- with other dealers	11,908	7,118	1,386	500	557	617
local	4,812	2,745	676	266	200	225
cross-border	7,097	4,373	710	234	357	392
- with other financial institutions ..	7,222	4,614	584	305	501	157
local	4,126	2,689	362	170	288	63
cross-border	3,097	1,926	222	134	213	93
- with non-financial customers ..	10,952	6,467	910	477	488	400
local	6,631	3,714	730	314	282	181
cross-border	4,321	2,753	180	163	207	219
Up to 7 days	16,819	10,652	1,539	713	856	811
Over 7 days and up to 1 year	12,783	7,375	1,244	557	672	333
Over 1 year	571	280	97	12	16	29
FOREIGN EXCHANGE SWAPS	112,111	93,033	2,195	2,072	3,216	1,311
- with other dealers	74,185	64,116	1,225	1,126	1,749	575
local	24,536	19,964	513	494	731	247
cross-border	49,649	44,152	712	631	1,018	327
- with other financial institutions ..	20,776	16,822	520	399	789	189
local	9,423	7,126	243	240	409	85
cross-border	11,354	9,696	278	159	380	104
- with non-financial customers ..	14,802	9,747	449	548	677	547
local	8,699	5,262	293	373	422	280
cross-border	6,103	4,484	156	174	255	267
Up to 7 days	78,928	67,852	1,194	1,254	1,969	888
Over 7 days and up to 1 year	31,153	23,599	878	778	1,200	397
Over 1 year	1,807	1,397	122	39	45	25
TOTAL	410,646	253,903	23,951	21,270	34,433	18,358

For footnotes, see opposite page.

Table 1-C (contd.)

**Reported foreign exchange turnover net of local and cross-border inter-dealer
double-counting in April 1995, by market segment, counterparty and currency**

Deutsche Mark against:

(daily averages, in millions of US dollars)

Canadian dollar	Australian dollar	ECU	Other EMS currencies	Currencies of other reporting countries *	Residual	Category
178	185	5,611	28,250	662	8,559	SPOT
92	73	4,015	19,343	431	5,796	- with other dealers
26	13	1,140	7,084	195	1,524	local
66	60	2,875	12,259	236	4,272	cross-border
58	14	948	4,593	123	1,849	- with other financial institutions
8	4	256	1,789	79	893	local
50	10	691	2,804	44	956	cross-border
28	98	649	4,314	108	915	- with non-financial customers
21	88	196	2,768	108	687	local
7	11	453	1,546	-	228	cross-border
140	63	345	3,433	48	972	OUTRIGHT FORWARDS
31	16	206	1,189	9	279	- with other dealers
15	9	47	467	7	153	local
16	7	159	722	1	126	cross-border
57	13	81	686	3	222	- with other financial institutions
13	8	29	393	2	107	local
44	5	52	293	-	115	cross-border
53	34	58	1,557	37	471	- with non-financial customers
16	31	24	1,064	36	240	local
36	3	34	493	1	231	cross-border
35	18	284	1,543	7	361	Up to 7 days
104	42	55	1,804	41	555	Over 7 days and up to 1 year
1	2	6	79	1	48	Over 1 year
115	120	469	6,533	74	2,974	FOREIGN EXCHANGE SWAPS
79	37	340	3,204	15	1,720	- with other dealers
38	12	136	1,771	7	621	local
41	25	204	1,432	8	1,098	cross-border
19	12	70	1,384	4	567	- with other financial institutions
12	7	30	884	3	383	local
7	5	39	501	1	184	cross-border
17	71	59	1,945	55	687	- with non-financial customers
12	69	23	1,414	55	495	local
6	2	36	531	-	192	cross-border
77	87	304	3,285	14	2,004	Up to 7 days
38	33	160	3,082	59	929	Over 7 days and up to 1 year
-	-	4	134	1	39	Over 1 year
434	368	6,424	38,216	784	12,505	TOTAL

* Includes only transactions where at least one counterparty is located in the country of issue of the currency in question.

Table 1-D

**Reported foreign exchange turnover net of local inter-dealer
double-counting in April 1995, by country and currency ¹**

(daily averages, in millions of US dollars)

Country	Total	Specified currency against all other currencies ²				
		US dollar	Deutsche Mark	Japanese yen	Pound sterling	French franc
United Kingdom	463,769	387,914	164,677	92,180	74,167	39,992
United States	244,371	211,072	103,755	54,767	23,298	20,556
Japan	161,316	151,150	25,684	130,810	3,587	2,061
Singapore	105,421	95,818	33,597	29,460	8,015	4,316
Hong Kong	90,198	84,155	25,746	28,050	7,144	..
Switzerland	86,462	62,676	40,981	8,034	3,807	7,096
Germany	76,236	55,477	58,106	5,942	3,600	9,568
France	58,047	38,215	27,087	4,854	1,810	32,320
Australia	39,534	36,896	10,800	6,162	3,119	..
Denmark	30,543	21,673	11,248	749	571	1,333
Canada	29,814	28,793	4,754	1,762	1,259	410
Belgium	28,107	23,179	8,682	1,876	1,647	2,533
Netherlands	25,509	17,754	11,006	1,287	2,998	2,585
Italy	23,248	17,708	5,692	485	242	608
Sweden	19,947	13,141	9,881	665	342	731
Luxembourg	19,060	14,872	11,029	694	484	1,699
Spain	18,261	13,897	7,252	393	585	441
Austria	13,340	10,254	9,565	214	115	164
Norway	7,577	5,499	3,045	139	170	124
New Zealand	7,115	6,755	1,039	916	282	36
Finland	5,302	2,986	2,930	47	109	220
South Africa	4,979	4,737	815	210	176	54
Ireland	4,875	2,518	2,879	171	1,841	213
Greece	3,291	2,059	1,554	786	54	45
Bahrain	3,080	2,844	938	523	231	61
Portugal	2,382	1,397	1,074	199	37	67
Total	1,571,785	1,313,440	583,816	371,375	139,689	127,234

For footnotes, see opposite page.

Table 1-D (contd.)

**Reported foreign exchange turnover net of local inter-dealer
double-counting in April 1995, by country and currency ¹**

(daily averages, in millions of US dollars)

Specified currency against all other currencies ²							Country
Swiss franc	Canadian dollar	Australian dollar	ECU	Other EMS currencies	Currencies of other reporting countries ³	Residual	
31,997	11,279	7,666	18,118	65,694	..	33,855	United Kingdom
21,000	9,374	5,678	2,430	20,315	..	16,496	United States
2,071	1,224	2,377	357	718	..	2,593	Japan
6,881	2,767	3,126	518	1,692	5,881	18,771	Singapore
3,619	1,477	2,747	..	..	15,305	12,154	Hong Kong
35,135	1,306	347	1,944	8,095	..	3,502	Switzerland
4,283	694	362	1,456	6,589	..	6,395	Germany
1,347	367	122	4,183	3,881	..	1,907	France
1,357	345	16,327	..	..	..	4,061	Australia
1,053	53	25	379	15,989	..	8,013	Denmark
1,284	20,778	124	..	..	..	464	Canada
544	..	..	2,458	13,423	..	1,872	Belgium
1,464	164	75	685	12,019	..	982	Netherlands
454	31	31	1,290	19,587	..	369	Italy
909	67	31	111	12,191	..	1,826	Sweden
1,298	279	66	1,042	3,862	..	2,796	Luxembourg
283	7	8	216	13,303	..	137	Spain
540	42	15	61	3,816	..	1,896	Austria
48	7	2	73	2,263	3,480	303	Norway
51	35	1,013	1	85	3,959	57	New Zealand
70	4	5	217	3,357	..	660	Finland
53	6	10	20	64	3,731	80	South Africa
129	13	8	424	1,333	..	220	Ireland
69	4	3	126	1,669	..	211	Greece
350	29	6	2	42	63	1,071	Bahrain
35	5	-	74	1,867	..	10	Portugal
116,326	50,357	40,174	36,184	211,854	32,419	120,701	Total

¹ Spot, outright forward and foreign exchange swap transactions. ² Because two currencies are involved in each transaction, the sum of transactions in individual currencies comes to twice total reported turnover. ³ Includes only transactions where at least one counterparty is located in the country of issue of the currency in question.

Table 1-E

**Reported foreign exchange turnover net of local inter-dealer
double-counting in April 1995, by country and currency ¹**

US dollar against:

(daily averages, in millions of US dollars)

Country	Total	Deutsche Mark	Japanese yen	Pound sterling	French franc	Swiss franc
United Kingdom	387,914	99,878	78,871	53,147	25,304	25,290
United States	211,072	72,755	49,316	19,238	12,064	16,224
Japan	151,150	18,866	121,929	2,979	1,149	1,200
Singapore	95,818	25,852	26,820	7,040	2,548	5,947
Hong Kong	84,155	22,554	25,868	6,135	..	3,619
Switzerland	62,676	20,231	6,326	2,009	3,108	22,876
Germany	55,477	38,372	3,036	1,188	4,853	2,466
France	38,215	9,843	4,169	1,166	17,246	734
Australia	36,896	8,840	5,429	2,898	..	1,064
Denmark	21,673	3,903	499	374	662	742
Canada	28,793	3,875	1,677	1,031	237	958
Belgium	23,179	4,343	1,759	1,418	1,888	461
Netherlands	17,754	4,504	869	1,983	1,128	938
Italy	17,708	1,523	246	70	146	189
Sweden	13,141	3,875	340	123	263	729
Luxembourg	14,872	7,944	427	352	1,297	1,163
Spain	13,897	3,319	226	447	214	151
Austria	10,254	7,431	114	17	33	327
Norway	5,499	1,239	104	85	23	23
New Zealand	6,755	933	851	226	25	45
Finland	2,986	869	19	27	155	41
South Africa	4,737	700	182	137	38	39
Ireland	2,518	947	86	555	34	110
Greece	2,059	1,055	256	12	8	50
Bahrain	2,844	814	495	183	51	331
Portugal	1,397	411	31	4	5	9
Total	1,313,440	364,876	329,944	102,846	72,480	85,725

For footnotes, see opposite page.

Table 1-E (contd.)

**Reported foreign exchange turnover net of local inter-dealer
double-counting in April 1995, by country and currency ¹**

US dollar against:

(daily averages, in millions of US dollars)

Canadian dollar	Australian dollar	ECU	Other EMS currencies	Currencies of other reporting countries ²	Residual	Country
11,121	7,555	14,849	52,561	..	19,339	United Kingdom
9,259	5,617	1,376	15,501	..	9,722	United States
1,115	2,126	240	432	..	1,115	Japan
2,748	3,076	416	996	5,545	14,830	Singapore
1,477	2,747	..	..	14,286	7,470	Hong Kong
1,172	322	543	4,689	..	1,399	Switzerland
412	218	685	2,764	..	1,484	Germany
337	92	2,309	1,852	..	468	France
336	15,667	..	..	..	2,661	Australia
45	20	247	11,594	..	3,587	Denmark
20,562	116	..	..	..	338	Canada
..	..	2,072	10,048	..	1,189	Belgium
141	56	415	7,406	..	313	Netherlands
15	8	945	14,516	..	50	Italy
52	22	36	6,854	..	847	Sweden
244	48	633	2,152	..	612	Luxembourg
5	3	112	9,389	..	30	Spain
31	2	37	2,064	..	198	Austria
5	1	33	1,471	2,310	205	Norway
29	875	1	53	3,675	43	New Zealand
2	1	164	1,527	..	181	Finland
5	6	16	45	3,535	34	South Africa
9	8	38	695	..	35	Ireland
2	1	25	645	..	4	Greece
28	6	2	38	49	847	Bahrain
3	-	48	883	..	3	Portugal
49,155	38,594	25,243	148,174	29,400	67,003	Total

¹ Spot, outright forward and foreign exchange swap transactions. ² Includes only transactions where at least one counterparty is located in the country of issue of the currency in question.

Table 1-F

**Reported foreign exchange turnover net of local inter-dealer
double-counting in April 1995, by country and currency ¹**

Deutsche Mark against:

(daily averages, in millions of US dollars)

Country	Total	US dollar	Japanese yen	Pound sterling	French franc	Swiss franc
United Kingdom	164,677	99,878	10,069	14,844	14,061	6,302
United States	103,755	72,755	5,450	4,060	8,492	4,776
Japan	25,684	18,866	6,020	284	262	189
Singapore	33,597	25,852	2,576	960	1,763	931
Hong Kong	25,746	22,554	2,182	1,010	..	..
Switzerland	40,981	20,231	1,127	1,541	3,536	9,830
Germany	58,106	38,372	2,906	2,412	4,716	1,817
France	27,087	9,843	397	288	12,719	303
Australia	10,800	8,840	529	169	..	270
Denmark	11,248	3,903	199	135	574	279
Canada	4,754	3,875	59	193	162	302
Belgium	8,682	4,343	92	177	494	59
Netherlands	11,006	4,504	246	780	1,242	434
Italy	5,692	1,523	57	61	172	72
Sweden	9,881	3,875	266	107	381	114
Luxembourg	11,029	7,944	259	124	377	130
Spain	7,252	3,319	116	92	157	71
Austria	9,565	7,431	77	77	107	150
Norway	3,045	1,239	15	45	65	22
New Zealand	1,039	933	25	34	4	-
Finland	2,930	869	17	64	48	18
South Africa	815	700	5	2	1	6
Ireland	2,879	947	75	1,029	165	11
Greece	1,554	1,055	32	28	15	7
Bahrain	938	814	26	47	9	17
Portugal	1,074	411	12	13	30	11
Total	583,816	364,876	32,832	28,573	49,549	26,121

For footnotes, see opposite page.

Table 1-F (contd.)

**Reported foreign exchange turnover net of local inter-dealer
double-counting in April 1995, by country and currency ¹**

Deutsche Mark against:

(daily averages, in millions of US dollars)

Canadian dollar	Australian dollar	ECU	Other EMS currencies	Currencies of other reporting countries ²	Residual	Country
..	..	3,160	12,210	..	4,151	United Kingdom
116	61	1,054	4,814	..	2,178	United States
1	-	-	60	..	2	Japan
17	10	101	691	27	668	Singapore
..	..	..	..	..	..	Hong Kong
..	..	1,055	2,929	..	732	Switzerland
282	144	771	3,826	..	2,861	Germany
4	1	1,664	1,064	..	804	France
..	167	..	..	..	827	Australia
6	4	129	3,280	..	2,740	Denmark
74	1	..	..	..	87	Canada
..	..	344	2,773	..	401	Belgium
9	4	208	3,232	..	348	Netherlands
5	5	125	3,619	..	54	Italy
2	1	60	4,327	..	749	Sweden
32	16	389	1,589	..	169	Luxembourg
1	5	58	3,418	..	16	Spain
6	10	16	1,302	..	388	Austria
1	1	28	679	900	50	Norway
-	2	-	7	32	2	New Zealand
-	1	42	1,624	..	248	Finland
-	-	-	11	69	20	South Africa
-	-	384	261	..	8	Ireland
1	1	63	326	..	28	Greece
1	-	-	4	-	20	Bahrain
-	-	12	583	..	2	Portugal
557	434	9,663	52,630	1,029	17,550	Total

¹ Spot, outright forward and foreign exchange swap transactions. ² Includes only transactions where at least one counterparty is located in the country of issue of the currency in question.

Table 1-G

**Reported foreign exchange turnover net of local inter-dealer
double-counting in April 1995, by country and currency ***

Local currency against:

(daily averages, in millions of US dollars)

Country	Total	US dollar	Deutsche Mark	Japanese yen	Pound sterling	French franc
United Kingdom	74,167	53,147	14,844	3,240	n.a.	627
United States	211,072	n.a.	72,755	49,316	19,238	12,064
Japan	130,810	121,929	6,020	n.a.	324	649
Singapore	5,881	5,545	27	65	15	5
Hong Kong	15,305	14,286	..	..	..	..
Switzerland	35,135	22,876	9,830	581	258	453
Germany	58,106	38,372	n.a.	2,906	2,412	4,716
France	32,320	17,246	12,719	289	356	n.a.
Australia	16,327	15,667	167	205	52	..
Denmark	8,980	6,191	1,818	51	62	98
Canada	20,778	20,562	74	26	35	12
Belgium	9,403	6,561	2,375	25	51	151
Netherlands	10,486	6,650	2,698	172	235	215
Italy	19,062	14,347	3,466	183	111	290
Sweden	9,939	5,615	3,578	59	112	87
Luxembourg	1,878	791	988	8	9	25
Spain	12,649	9,092	3,143	51	46	71
Austria	3,088	1,644	1,135	23	20	23
Norway	3,480	2,310	900	20	40	37
New Zealand	3,959	3,675	32	41	22	7
Finland	2,063	1,004	915	11	19	17
South Africa	3,731	3,535	69	23	37	15
Ireland	1,135	613	183	9	257	15
Greece	1,597	640	305	498	14	23
Bahrain	63	49	-	2	1	-
Portugal	1,664	873	470	156	20	32
Total	693,078	373,220	138,512	57,961	23,746	19,630

For footnotes, see opposite page.

Table 1-G (contd.)

**Reported foreign exchange turnover net of local inter-dealer
double-counting in April 1995, by country ***

Local currency against:

(daily averages, in millions of US dollars)

Swiss franc	Canadian dollar	Australian dollar	ECU	Other EMS currencies	Residual	Country
406	159	111	109	922	601	United Kingdom
16,224	9,259	5,617	1,376	15,501	9,722	United States
682	108	251	117	226	503	Japan
3	1	40	-	5	174	Singapore
..	..	..	..	..	1,019	Hong Kong
n.a.	133	25	346	477	156	Switzerland
1,817	282	144	771	3,826	2,861	Germany
309	26	28	209	966	173	France
22	9	n.a.	..	..	205	Australia
32	2	2	3	143	579	Denmark
24	n.a.	7	..	..	40	Canada
25	..	..	42	135	37	Belgium
92	14	15	62	242	92	Netherlands
193	11	17	220	203	22	Italy
66	13	8	15	264	121	Sweden
6	3	1	19	23	4	Luxembourg
61	1	-	46	80	59	Spain
63	6	3	8	139	23	Austria
3	2	-	12	113	42	Norway
6	6	136	-	25	9	New Zealand
11	1	2	11	62	10	Finland
8	1	4	4	8	26	South Africa
8	4	1	2	38	6	Ireland
12	1	1	39	46	18	Greece
3	-	-	-	-	8	Bahrain
15	1	-	13	80	3	Portugal
20,091	10,043	6,413	3,426	23,527	16,510	Total

* Spot, outright forward and foreign exchange swap transactions.

Table 1-H
**Reported foreign exchange turnover
in April 1995, by country and counterparty ¹**

Total

(daily averages, in millions of US dollars)

Country	Gross turnover		Net turnover ²			
	Total	of which With other local dealers	Total	of which With other dealers located abroad	With other financial institutions	With non- financial customers
United Kingdom	571,307	107,538	463,769	241,416	84,621	30,195
United States	294,891	50,520	244,371	87,838	64,944	41,069
Japan	196,279	34,963	161,316	83,528	13,855	28,970
Singapore	124,648	19,227	105,421	63,798	15,543	6,854
Hong Kong	103,905	13,706	90,198	64,057	4,450	7,985
Switzerland	99,046	12,584	86,462	61,010	..	12,868
Germany	86,416	10,179	76,236	54,169	6,797	5,092
France	67,173	9,127	58,047	35,959	5,401	7,560
Australia	47,570	8,036	39,534	22,527	..	8,970
Denmark	32,036	1,493	30,543	25,199	343	3,507
Canada	34,869	5,055	29,814	13,227	7,403	4,130
Belgium	31,528	3,421	28,107	17,301	6,028	1,356
Netherlands	28,206	2,697	25,509	16,752	3,561	2,499
Italy	25,758	2,509	23,248	13,866	4,724	2,150
Sweden	21,137	1,190	19,947	13,641	1,100	4,017
Luxembourg	20,566	1,505	19,060	14,435	2,095	1,025
Spain	22,011	3,749	18,261	12,891	1,011	610
Austria	13,908	567	13,340	6,789	3,266	2,718
Norway	8,423	846	7,577	3,881	1,385	1,465
New Zealand	7,957	843	7,115	5,154	285	833
Finland	5,591	289	5,302	3,848	341	824
South Africa	6,014	1,035	4,979	1,388	1,069	1,488
Ireland	5,283	408	4,875	3,701	280	486
Greece	3,818	527	3,291	1,569	465	730
Bahrain	3,331	251	3,080	1,760	673	396
Portugal	2,773	391	2,382	1,362	213	415
Total	1,864,443	292,658	1,571,785	871,065	229,853	178,209

¹ Spot, outright forward and foreign exchange swap transactions. ² Net of local inter-dealer double-counting.

Table 1-I

**Reported foreign exchange turnover net of local inter-dealer
double-counting in April 1995, by country and counterparty**

Spot

(daily averages, in millions of US dollars)

Country	Total	Other dealers		Financial institutions		Non-financial customers	
		Local	Cross-border	Local	Cross-border	Local	Cross-border
United Kingdom	186,410	47,859	97,897	15,622	14,062	5,338	5,631
United States	133,964	32,238	50,058	15,637	16,804	10,022	9,206
Japan	55,479	12,846	30,338	2,876	495	7,875	1,050
Singapore	44,262	8,920	25,655	1,693	5,184	1,361	1,447
Hong Kong	34,525	5,472	23,241	525	973	3,891	422
Switzerland	44,186	7,298	31,323	..	..	2,569	2,996
Germany	34,049	3,867	24,858	1,260	2,465	1,192	407
France	25,434	4,334	15,863	723	1,173	1,949	1,393
Australia	17,637	3,628	9,770	..	..	4,239	..
Denmark	8,873	560	6,770	38	28	1,092	387
Canada	12,027	2,126	5,414	748	1,918	1,499	323
Belgium	6,115	599	3,339	97	1,495	396	189
Netherlands	11,093	1,111	7,720	445	1,074	545	198
Italy	13,428	1,415	7,716	998	1,811	1,270	217
Sweden	8,585	850	5,690	58	456	1,295	236
Luxembourg	7,546	1,015	5,103	263	708	186	271
Spain	7,216	1,324	5,204	310	67	287	24
Austria	8,993	383	4,682	406	1,376	2,102	43
Norway	3,434	354	1,745	185	558	588	3
New Zealand	3,133	281	2,317	30	97	406	1
Finland	2,521	222	1,837	61	56	338	8
South Africa	2,337	464	610	327	229	700	7
Ireland	3,204	244	2,626	69	84	150	31
Greece	2,026	353	934	235	68	424	12
Bahrain	1,901	153	987	33	403	26	298
Portugal	1,379	232	684	33	129	298	2
Total	679,756	138,149	372,383	42,672	51,711	50,040	24,801

Table 1-J

**Reported foreign exchange turnover net of local inter-dealer
double-counting in April 1995, by country and counterparty**

Outright forwards

(daily averages, in millions of US dollars)

Country	Total	Other dealers		Financial institutions		Non-financial customers	
		Local	Cross-border	Local	Cross-border	Local	Cross-border
United Kingdom	33,809	5,836	10,521	9,725	2,844	2,382	2,501
United States	27,768	3,178	7,214	5,646	3,038	6,519	2,174
Japan	16,776	1,832	5,715	1,612	185	7,183	249
Singapore	2,972	438	1,153	68	583	417	314
Hong Kong	2,935	315	1,439	153	153	716	160
Switzerland	8,351	661	3,407	..	..	1,537	2,747
Germany	4,280	648	1,823	337	253	983	236
France	2,210	345	521	242	423	504	175
Australia	1,284	141	406	..	..	737	..
Denmark	1,533	57	267	16	16	933	244
Canada	2,520	373	407	379	440	792	129
Belgium	433	24	96	9	54	187	62
Netherlands	2,640	144	1,646	220	81	436	114
Italy	2,233	240	1,055	271	197	430	40
Sweden	683	9	37	13	1	365	258
Luxembourg	1,119	29	372	265	81	120	253
Spain	645	81	296	43	5	213	6
Austria	311	24	85	35	26	139	2
Norway	231	34	31	20	-	140	6
New Zealand	396	33	133	5	20	204	3
Finland	223	6	61	26	-	123	7
South Africa	785	180	150	96	21	338	1
Ireland	242	3	13	23	14	115	74
Greece	500	93	36	129	-	133	108
Bahrain	462	31	344	4	65	3	15
Portugal	126	2	24	9	2	88	1
Total	115,467	14,753	37,251	19,345	8,502	25,738	9,879

Table 1-K

**Reported foreign exchange turnover net of local inter-dealer
double-counting in April 1995, by country and counterparty**

Foreign exchange swaps

(daily averages, in millions of US dollars)

Country	Total	Other dealers		Financial institutions		Non-financial customers	
		Local	Cross-border	Local	Cross-border	Local	Cross-border
United Kingdom	243,551	53,843	132,997	21,995	20,372	8,117	6,226
United States	82,638	15,104	30,566	10,324	13,496	5,605	7,542
Japan	89,061	20,285	47,475	7,346	1,343	11,376	1,237
Singapore	58,187	9,869	36,990	2,498	5,517	2,130	1,184
Hong Kong	52,738	7,920	39,377	1,459	1,187	2,378	417
Switzerland	33,925	4,625	26,280	..	..	1,525	1,495
Germany	37,908	5,664	27,488	1,002	1,481	1,912	361
France	30,403	4,448	19,575	629	2,211	1,678	1,862
Australia	20,613	4,267	12,352	..	..	3,993	..
Denmark	20,136	876	18,163	116	130	335	516
Canada	15,267	2,556	7,406	1,201	2,717	1,061	326
Belgium	21,559	2,798	13,865	691	3,682	318	205
Netherlands	11,776	1,442	7,386	435	1,307	788	417
Italy	7,588	855	5,094	792	655	168	24
Sweden	10,680	331	7,914	40	532	1,636	228
Luxembourg	10,396	462	8,960	195	583	33	162
Spain	10,401	2,344	7,391	352	234	69	12
Austria	4,036	160	2,022	449	974	428	3
Norway	3,911	458	2,104	95	526	496	232
New Zealand	3,586	529	2,704	63	71	216	4
Finland	2,558	61	1,951	147	51	338	10
South Africa	1,857	392	627	331	65	441	1
Ireland	1,429	161	1,062	82	9	78	37
Greece	764	81	598	26	7	16	36
Bahrain	717	67	429	3	165	7	46
Portugal	877	158	654	..	40	26	..
Total	776,562	139,755	461,432	50,270	57,354	45,167	22,584

Table 1-L

**Maturity breakdown of reported outright forward transactions
net of local inter-dealer double-counting in April 1995, by country ***

(percentage share of country's total outright forward transactions)

Country	Up to and including 7 days	Over 7 days and up to and including one year	Over one year
United Kingdom	70	29	1
United States	57	41	2
Japan	47	50	3
Singapore	40	58	2
Hong Kong	65	34	1
Switzerland	45	54	1
Germany	17	76	7
France	16	83	1
Australia	31	67	2
Denmark	28	69	3
Canada	48	48	3
Belgium	14	85	1
Netherlands	34	63	3
Italy	40	58	2
Sweden	9	80	10
Luxembourg	45	53	2
Spain	33	63	5
Austria	6	91	2
Norway	9	87	3
New Zealand	37	62	1
Finland	10	70	20
South Africa	18	78	4
Ireland	9	88	2
Greece	16	84	0
Bahrain	36	59	5
Portugal	22	77	0
Total	53	46	2

* Since data on the maturity breakdown were only collected on a gross basis, data on a net basis have been calculated by adjusting the gross data proportionally.

Table 1-M

**Maturity breakdown of reported foreign exchange swap transactions
net of local inter-dealer double-counting in April 1995, by country ***

(percentage share of country's total foreign exchange swap transactions)

Country	Up to and including 7 days	Over 7 days and up to and including one year	Over one year
United Kingdom	73	26	1
United States	70	28	2
Japan	69	30	1
Singapore	71	29	0
Hong Kong	74	26	0
Switzerland	89	10	1
Germany	73	24	3
France	55	44	1
Australia	61	37	2
Denmark	78	20	2
Canada	65	33	2
Belgium	65	34	1
Netherlands	67	31	2
Italy	64	35	1
Sweden	70	26	4
Luxembourg	71	28	1
Spain	57	36	8
Austria	51	48	1
Norway	52	46	2
New Zealand	85	14	0
Finland	82	17	1
South Africa	27	67	6
Ireland	45	51	4
Greece	73	27	0
Bahrain	46	51	3
Portugal	86	14	1
Total	71	28	1

* Since data on the maturity breakdown were only collected on a gross basis, data on a net basis have been calculated by adjusting the gross data proportionally.

Table 1-N

Maturity breakdown of reported outright forward transactions net of local and cross-border inter-dealer double-counting in April 1995, by currency *

(percentage share of total outright forward transactions)

Currency	Up to and including 7 days	Over 7 days and up to and including one year	Over one year
Total transactions in			
US dollars	54	44	2
Deutsche Mark	56	42	2
Japanese yen	47	51	2
Pound sterling	57	42	1
French franc	46	52	2
Swiss franc	60	39	2
Canadian dollar	56	43	2
Australian dollar	49	48	3
ECU	63	35	2
Other EMS	47	50	3
Currencies of all other rep. countries	34	64	2
Other	45	52	3
US dollar against			
Deutsche Mark	58	40	2
Japanese yen	46	52	2
Pound sterling	60	39	1
French franc	49	49	2
Swiss franc	61	38	1
Canadian dollar	57	41	2
Australian dollar	51	45	3
ECU	67	32	1
Other EMS	56	41	3
Currencies of all other rep. countries	36	62	2
Other	57	41	2
Deutsche Mark against			
Japanese yen	53	43	3
Pound sterling	56	43	1
French franc	55	44	1
Swiss franc	69	28	3
Canadian dollar	25	74	1
Australian dollar	29	68	3
ECU	82	16	2
Other EMS	45	53	2
Currencies of all other rep. countries	14	85	1
Other	37	58	5
Total	53	45	2

* Since data on the maturity breakdown were only collected on a gross basis, data on a net basis have been calculated by adjusting the gross data proportionally.

Table 1-O

Maturity breakdown of reported foreign exchange swap transactions net of local and cross-border inter-dealer double-counting in April 1995, by currency *

(percentage share of total foreign exchange swap transactions)

Currency	Up to and including 7 days	Over 7 days and up to and including one year	Over one year
Total transactions in			
US dollars	71	28	1
Deutsche Mark	71	28	2
Japanese yen	69	29	1
Pound sterling	66	33	1
French franc	61	37	1
Swiss franc	78	21	1
Canadian dollar	73	26	1
Australian dollar	64	34	1
ECU	76	23	1
Other EMS	70	28	2
Currencies of all other rep. countries	62	37	1
Other	72	27	1
US dollar against			
Deutsche Mark	73	25	2
Japanese yen	70	29	1
Pound sterling	67	32	1
French franc	62	36	1
Swiss franc	79	19	1
Canadian dollar	73	26	1
Australian dollar	65	34	2
ECU	77	22	1
Other EMS	73	25	2
Currencies of all other rep. countries	63	36	1
Other	77	22	1
Deutsche Mark against			
Japanese yen	54	40	6
Pound sterling	61	38	2
French franc	61	37	1
Swiss franc	68	30	2
Canadian dollar	67	33	0
Australian dollar	73	27	0
ECU	65	34	1
Other EMS	51	47	2
Currencies of all other rep. countries	18	80	1
Other	67	31	1
Total	70	28	1

* Since data on the maturity breakdown were only collected on a gross basis, data on a net basis have been calculated by adjusting the gross data proportionally.

Table 2-A

**Reported foreign exchange turnover net of local inter-dealer double-counting
in March 1986, April 1989, April 1992 and April 1995, by country ¹**

(daily averages, in billions of US dollars and in percentages)

Country	Total						
	March 1986	April 1989	April 1992	April 1995	Percentage change 1986-1989 ²	Percentage change 1989-1992 ²	Percentage change 1992-1995
United Kingdom	90	184	290	464	108	58	60
United States	59	115	167	244	120	45	46
Japan	48	111	120	161	140	8	34
Singapore	55	74	105	..	34	43
Hong Kong	49	60	90	..	24	49
Switzerland	56	66	86	..	17	32
Germany	55	76	..	..	39
France	23	33	58	..	44	74
Australia	29	29	40	..	0	37
Denmark	13	27	31	..	108	15
Canada	10	15	22	30	58	46	36
Belgium	10	16	28	..	51	79
Netherlands	13	20	26	..	52	30
Italy	10	15	23	..	50	50
Sweden	13	21	20	..	64	-6
Luxembourg	13	19	..	..	44
Spain	4	12	18	..	180	48
Austria	4	13	..	..	..
Norway	4	5	8	..	21	46
New Zealand	4	7	..	..	70
Finland	3	7	5	..	..	..
South Africa	3	5	..	..	47
Ireland	5	6	5	..	13	-17
Greece	-	1	3	..	175	..
Bahrain	3	3	3	..	..	..
Portugal	1	1	2	..	44	80
Total	206	718	1,076	1,572	116	38	46

¹ Spot, outright forward and foreign exchange swap transactions. ² On a comparable basis.

Table 2-B

**Reported spot foreign exchange turnover net of local inter-dealer double-counting
in March 1986, April 1989, April 1992 and April 1995, by country**

(daily averages, in billions of US dollars and in percentages)

Country	Spot						
	March 1986	April 1989	April 1992	April 1995	Percentage change 1986-1989*	Percentage change 1989-1992*	Percentage change 1992-1995
United Kingdom	66	119	148	186	81	24	26
United States	34	81	95	134	134	17	41
Japan	19	46	48	55	142	4	16
Singapore	31	37	44	..	20	19
Hong Kong	30	32	35	..	6	9
Switzerland	30	37	44	..	23	20
Germany	30	34	..	..	15
France	15	18	25	..	18	44
Australia	18	13	18	..	-30	40
Denmark	6	10	9	..	61	-14
Canada	4	6	8	12	53	27	56
Belgium	5	5	6	..	2	15
Netherlands	7	9	11	..	30	19
Italy	8	11	13	..	41	25
Sweden	10	10	9	..	5	-14
Luxembourg	6	8	..	..	21
Spain	3	6	7	..	134	14
Austria	4	9	..	..	..
Norway	3	2	3	..	-38	72
New Zealand	2	3	..	..	58
Finland	2	..	3	..	..	..
South Africa	2	2	..	..	21
Ireland	4	5	3	..	11	-31
Greece	-	1	2	..	157	97
Bahrain	2	2	2	..	-19	1
Portugal	1	1	1	..	50	15
Total	123	427	541	680	104	17	26

* On a comparable basis.

Table 2-C

**Reported outright forward foreign exchange turnover net of local inter-dealer
double-counting in April 1989, April 1992 and April 1995, by country**

(daily averages, in billions of US dollars)

Country	Outright forwards		
	April 1989 *	April 1992	April 1995
United Kingdom .....	..	20	34
United States	6	14	28
Japan	7	9	17
Singapore	2	3	3
Hong Kong .....	..	2	3
Switzerland	3	6	8
Germany .....	..	3	4
France .....	..	1	2
Australia	1	1	1
Denmark	1	2	2
Canada	1	1	3
Belgium	—	1	—
Netherlands	—	2	3
Italy .....	..	1	2
Sweden .....	..	2	1
Luxembourg .....	..	1	1
Spain	—	1	1
Austria .....	..	—	—
Norway .....	..	—	—
New Zealand .....	..	—	—
Finland .....	..	..	—
South Africa .....	..	—	1
Ireland .....	..	—	—
Greece	—	—	1
Bahrain	—	..	—
Portugal .....	..	—	—
Total	22	70	115

* Since data for April 1989 were only collected on a gross basis, data on a net basis have been calculated by adjusting gross data proportionally.

Table 2-D

**Reported foreign exchange swap turnover net of local inter-dealer
double-counting in April 1989, April 1992 and April 1995, by country**

(daily averages, in billions of US dollars)

Country	Foreign exchange swaps		
	April 1989 *	April 1992	April 1995
United Kingdom .....	..	123	244
United States	29	59	83
Japan	59	63	89
Singapore	21	33	58
Hong Kong .....	..	27	53
Switzerland	22	23	34
Germany .....	..	22	38
France .....	..	14	30
Australia	10	15	21
Denmark	5	14	20
Canada	8	13	15
Belgium	5	10	22
Netherlands	5	9	12
Italy .....	..	4	8
Sweden .....	..	10	11
Luxembourg .....	..	6	10
Spain	2	5	10
Austria .....	..	1	4
Norway .....	..	3	4
New Zealand .....	..	2	4
Finland .....	..	..	3
South Africa .....	..	1	2
Ireland .....	..	1	1
Greece	-	-	1
Bahrain	-	..	1
Portugal .....	..	-	1
Total	165	457	777

* Since data for April 1989 were only collected on a gross basis, data on a net basis have been calculated by adjusting gross data proportionally.

Table 2-E
**Reported foreign exchange turnover
in April 1992 and April 1995, by country ¹**

Total

(daily averages, in millions of US dollars and in percentages)

Country	Gross turnover				
	April 1992		April 1995		Percentage change between April 1992 and April 1995
	Turnover	Share of aggregated reported transactions (%)	Turnover	Share of aggregated reported transactions (%)	
United Kingdom	357,345	28	571,307	31	60
United States	212,293	16	294,891	16	39
Japan	149,657	12	196,279	11	31
Singapore	85,112	7	124,648	7	46
Hong Kong	72,458	6	103,905	6	43
Switzerland	76,703	6	99,046	5	29
Germany	61,768	5	86,416	5	40
France	38,298	3	67,173	4	75
Australia	34,552	3	47,570	3	38
Denmark	29,743	2	32,036	2	8
Canada	25,896	2	34,869	2	35
Belgium	17,017	1	31,528	2	85
Netherlands	22,450	2	28,206	2	26
Italy	17,166	1	25,758	1	50
Sweden	23,446	2	21,137	1	-10
Luxembourg	13,861	1	20,566	1	48
Spain	14,984	1	22,011	1	47
Austria	4,899	0	13,908	1	..
Norway	6,511	1	8,423	0	29
New Zealand	4,779	0	7,957	0	67
Finland	6,760	1	5,591	0	..
South Africa	4,169	0	6,014	0	44
Ireland	6,280	0	5,283	0	-16
Greece	1,457	0	3,818	0	..
Bahrain	3,467	0	3,331	0	..
Portugal	1,525	0	2,773	0	82
Total	1,292,594	100	1,864,443	100	44

For footnotes, see opposite page.

Table 2-E (contd.)

**Reported foreign exchange turnover
in April 1992 and April 1995, by country ¹**

Total

(daily averages, in millions of US dollars and in percentages)

Country	Net turnover ²				
	April 1992		April 1995		Percentage change between April 1992 and April 1995
	Turnover	Share of aggregated reported transactions (%)	Turnover	Share of aggregated reported transactions (%)	
United Kingdom	290,492	27	463,769	30	60
United States	166,946	16	244,371	16	46
Japan	120,154	11	161,316	10	34
Singapore	73,649	7	105,421	7	43
Hong Kong	60,345	6	90,198	6	49
Switzerland	65,549	6	86,462	6	32
Germany	55,040	5	76,236	5	39
France	33,286	3	58,047	4	74
Australia	28,911	3	39,534	3	37
Denmark	26,554	2	30,543	2	15
Canada	21,950	2	29,814	2	36
Belgium	15,700	1	28,107	2	79
Netherlands	19,559	2	25,509	2	30
Italy	15,450	1	23,248	1	50
Sweden	21,251	2	19,947	1	-6
Luxembourg	13,211	1	19,060	1	44
Spain	12,336	1	18,261	1	48
Austria	4,393	0	13,340	1	..
Norway	5,190	0	7,577	0	46
New Zealand	4,185	0	7,115	0	70
Finland	6,760	1	5,302	0	..
South Africa	3,397	0	4,979	0	47
Ireland	5,875	1	4,875	0	-17
Greece	1,095	0	3,291	0	..
Bahrain	3,467	0	3,080	0	..
Portugal	1,323	0	2,382	0	80
Total	1,076,068	100	1,571,785	100	46

¹ Spot, outright forward and foreign exchange swap transactions. ² Net of local inter-dealer double-counting.

Table 2-F

**Reported foreign exchange turnover
in April 1992 and April 1995, by country**

Spot

(daily averages, in millions of US dollars and in percentages)

Country	Gross turnover				
	April 1992		April 1995		Percentage change between April 1992 and April 1995
	Turnover	Share of aggregated reported transactions (%)	Turnover	Share of aggregated reported transactions (%)	
United Kingdom	184,440	28	234,269	29	27
United States	122,213	19	166,202	20	36
Japan	60,069	9	68,325	8	14
Singapore	44,020	7	53,182	7	21
Hong Kong	38,548	6	39,997	5	4
Switzerland	44,301	7	51,484	6	16
Germany	33,344	5	37,916	5	14
France	21,066	3	29,768	4	41
Australia	15,048	2	21,265	3	41
Denmark	12,294	2	9,433	1	-23
Canada	8,841	1	14,154	2	60
Belgium	5,860	1	6,714	1	15
Netherlands	11,022	2	12,204	1	11
Italy	12,345	2	14,842	2	20
Sweden	11,062	2	9,435	1	-15
Luxembourg	6,536	1	8,561	1	31
Spain	7,616	1	8,540	1	12
Austria	4,310	1	9,377	1	..
Norway	2,384	0	3,788	0	59
New Zealand	2,199	0	3,414	0	55
Finland .....	..	..	2,744	0	..
South Africa	2,385	0	2,800	0	17
Ireland	4,935	1	3,448	0	-30
Greece	1,383	0	2,379	0	72
Bahrain	1,874	0	2,055	0	10
Portugal	1,383	0	1,611	0	16
Total	659,478	100	817,906	100	24

Table 2-F (contd.)

**Reported foreign exchange turnover
in April 1992 and April 1995, by country**

Spot

(daily averages, in millions of US dollars and in percentages)

Country	Net turnover *				
	April 1992		April 1995		Percentage change between April 1992 and April 1995
	Turnover	Share of aggregated reported transactions (%)	Turnover	Share of aggregated reported transactions (%)	
United Kingdom	147,938	27	186,410	27	26
United States	94,705	18	133,964	20	41
Japan	47,688	9	55,479	8	16
Singapore	37,275	7	44,262	7	19
Hong Kong	31,742	6	34,525	5	9
Switzerland	36,855	7	44,186	7	20
Germany	29,652	5	34,049	5	15
France	17,688	3	25,434	4	44
Australia	12,554	2	17,637	3	40
Denmark	10,285	2	8,873	1	-14
Canada	7,717	1	12,027	2	56
Belgium	5,314	1	6,115	1	15
Netherlands	9,355	2	11,093	2	19
Italy	10,743	2	13,428	2	25
Sweden	9,995	2	8,585	1	-14
Luxembourg	6,223	1	7,546	1	21
Spain	6,325	1	7,216	1	14
Austria	3,841	1	8,993	1	..
Norway	1,994	0	3,434	1	72
New Zealand	1,982	0	3,133	0	58
Finland .....	..	..	2,521	0	..
South Africa	1,928	0	2,337	0	21
Ireland	4,675	1	3,204	0	-31
Greece	1,027	0	2,026	0	97
Bahrain	1,874	0	1,901	0	1
Portugal	1,197	0	1,379	0	15
Total	540,573	100	679,756	100	26

* Net of local inter-dealer double-counting.

Table 2-G

**Reported foreign exchange turnover
in April 1992 and April 1995, by country**

Outright forwards

(daily averages, in millions of US dollars and in percentages)

Country	Gross turnover				
	April 1992		April 1995		Percentage change between April 1992 and April 1995
	Turnover	Share of aggregated reported transactions (%)	Turnover	Share of aggregated reported transactions (%)	
United Kingdom	22,827	29	39,645	30	74
United States	15,627	20	30,946	24	98
Japan	10,030	13	18,607	14	86
Singapore	3,476	4	3,410	3	-2
Hong Kong	2,152	3	3,250	2	51
Switzerland	6,632	9	9,013	7	36
Germany	3,299	4	4,928	4	49
France	1,496	2	2,555	2	71
Australia	1,304	2	1,425	1	9
Denmark	2,061	3	1,590	1	-23
Canada	840	1	2,893	2	..
Belgium	666	1	457	0	-31
Netherlands	1,796	2	2,783	2	55
Italy	692	1	2,472	2	..
Sweden	1,783	2	691	1	-61
Luxembourg	977	1	1,147	1	17
Spain	767	1	726	1	-5
Austria	52	0	335	0	..
Norway	197	0	265	0	35
New Zealand	195	0	429	0	119
Finland .....	..	..	229	0	..
South Africa	590	1	965	1	64
Ireland	93	0	244	0	163
Greece	59	0	593	0	..
Bahrain .....	..	..	492	0	..
Portugal	30	0	128	0	..
Total	77,640	100	130,220	100	68

Table 2-G (contd.)

**Reported foreign exchange turnover
in April 1992 and April 1995, by country**

Outright forwards

(daily averages, in millions of US dollars and in percentages)

Country	Net turnover *				
	April 1992		April 1995		Percentage change between April 1992 and April 1995
	Turnover	Share of aggregated reported transactions (%)	Turnover	Share of aggregated reported transactions (%)	
United Kingdom	19,884	29	33,809	29	70
United States	13,628	20	27,768	24	104
Japan	9,378	13	16,776	15	79
Singapore	3,119	4	2,972	3	-5
Hong Kong	1,845	3	2,935	3	59
Switzerland	5,999	9	8,351	7	39
Germany	3,062	4	4,280	4	40
France	1,324	2	2,210	2	67
Australia	1,202	2	1,284	1	7
Denmark	2,014	3	1,533	1	-24
Canada	840	1	2,520	2	..
Belgium	639	1	433	0	-32
Netherlands	1,646	2	2,640	2	60
Italy	692	1	2,233	2	..
Sweden	1,714	2	683	1	-60
Luxembourg	954	1	1,119	1	17
Spain	635	1	645	1	2
Austria	47	0	311	0	..
Norway	187	0	231	0	24
New Zealand	191	0	396	0	107
Finland .....	..	..	223	0	..
South Africa	472	1	785	1	66
Ireland	90	0	242	0	168
Greece	58	0	500	0	..
Bahrain .....	..	..	462	0	..
Portugal	28	0	126	0	..
Total	69,648	100	115,467	100	66

* Net of local inter-dealer double-counting.

Table 2-H

**Reported foreign exchange turnover
in April 1992 and April 1995, by country**

Foreign exchange swaps

(daily averages, in millions of US dollars and in percentages)

Country	Gross turnover				
	April 1992		April 1995		Percentage change between April 1992 and April 1995
	Turnover	Share of aggregated reported transactions (%)	Turnover	Share of aggregated reported transactions (%)	
United Kingdom	150,079	27	297,394	32	98
United States	74,453	14	97,743	11	31
Japan	79,558	15	109,346	12	37
Singapore	37,616	7	68,056	7	81
Hong Kong	31,758	6	60,657	7	91
Switzerland	25,769	5	38,550	4	50
Germany	25,125	5	43,572	5	73
France	15,735	3	34,850	4	121
Australia	18,200	3	24,880	3	37
Denmark	15,389	3	21,012	2	37
Canada	16,215	3	17,822	2	10
Belgium	10,492	2	24,357	3	132
Netherlands	9,632	2	13,219	1	37
Italy	4,129	1	8,443	1	104
Sweden	10,600	2	11,010	1	4
Luxembourg	6,348	1	10,857	1	71
Spain	6,601	1	12,745	1	93
Austria	537	0	4,196	0	..
Norway	3,930	1	4,369	0	11
New Zealand	2,385	0	4,115	0	73
Finland .....	..	..	2,619	0	..
South Africa	1,195	0	2,248	0	88
Ireland	1,252	0	1,590	0	27
Greece	15	0	846	0	..
Bahrain .....	..	..	785	0	..
Portugal	112	0	1,035	0	..
Total	547,124	100	916,317	100	67

Table 2-H (contd.)

**Reported foreign exchange turnover
in April 1992 and April 1995, by country**

Foreign exchange swaps

(daily averages, in millions of US dollars and in percentages)

Country	Net turnover *				
	April 1992		April 1995		Percentage change between April 1992 and April 1995
	Turnover	Share of aggregated reported transactions (%)	Turnover	Share of aggregated reported transactions (%)	
United Kingdom	122,671	27	243,551	31	99
United States	58,613	13	82,638	11	41
Japan	63,089	14	89,061	11	41
Singapore	33,254	7	58,187	7	75
Hong Kong	26,757	6	52,738	7	97
Switzerland	22,695	5	33,925	4	49
Germany	22,327	5	37,908	5	70
France	14,273	3	30,403	4	113
Australia	15,154	3	20,613	3	36
Denmark	14,255	3	20,136	3	41
Canada	13,393	3	15,267	2	14
Belgium	9,747	2	21,559	3	121
Netherlands	8,558	2	11,776	2	38
Italy	4,015	1	7,588	1	89
Sweden	9,542	2	10,680	1	12
Luxembourg	6,034	1	10,396	1	72
Spain	5,377	1	10,401	1	93
Austria	505	0	4,036	1	..
Norway	3,009	1	3,911	1	30
New Zealand	2,012	0	3,586	0	78
Finland .....	..	..	2,558	0	..
South Africa	997	0	1,857	0	86
Ireland	1,110	0	1,429	0	29
Greece	10	0	764	0	..
Bahrain .....	..	..	717	0	..
Portugal	98	0	877	0	..
Total	457,494	100	776,562	100	70

* Net of local inter-dealer double-counting.

Table 3-A-1

**Reported notional amounts outstanding of foreign exchange derivatives
at end-March 1995, by instrument, counterparty and currency pair ***

(in millions of US dollars)

Category	Total	US dollar / Deutsche Mark	US dollar / Japanese yen	US dollar / Other currencies
OUTRIGHT FORWARDS AND FOREIGN EXCHANGE SWAPS	8,698,630	1,456,805	2,413,703	3,852,583
- with other dealers	5,250,943	838,937	1,422,960	2,224,880
local	2,025,448	222,145	740,626	831,394
cross-border	3,225,495	616,793	682,335	1,393,486
- with other financial institutions	1,659,129	296,767	299,443	793,367
local	728,295	110,164	170,910	294,216
cross-border	930,833	186,603	128,533	499,153
- with non-financial customers	1,788,559	203,794	489,181	598,887
local	1,385,617	124,927	443,366	423,325
cross-border	402,941	78,866	45,814	175,561
Up to 1 year	7,695,598	1,283,677	2,142,793	3,466,741
Over 1 year and up to 5 years	903,759	161,402	243,291	350,883
Over 5 years	87,762	10,953	27,616	28,806
CURRENCY SWAPS	1,956,832	124,695	521,705	687,814
- with other dealers	728,868	55,873	202,173	256,739
local	223,601	11,609	55,901	81,633
cross-border	505,268	44,264	146,273	175,105
- with other financial institutions	429,828	27,881	115,952	157,709
local	109,075	4,557	29,763	39,620
cross-border	320,752	23,324	86,189	118,089
- with non-financial customers	798,137	40,518	197,402	263,906
local	360,453	6,078	89,477	103,048
cross-border	437,682	34,441	107,925	160,858
Up to 1 year	484,345	32,818	117,041	174,578
Over 1 year and up to 5 years	1,000,444	62,210	290,028	340,286
Over 5 years	463,201	28,812	114,231	169,717
OTC OPTIONS SOLD	1,229,579	268,815	320,308	268,363
- with other dealers	549,456	120,987	161,964	112,036
local	140,427	30,316	44,440	31,387
cross-border	409,029	90,672	117,525	80,649
- with other financial institutions	387,967	83,094	99,238	71,517
local	128,788	31,338	38,045	22,768
cross-border	259,179	51,755	61,193	48,750
- with non-financial customers	292,156	62,878	56,786	83,424
local	149,626	28,476	33,856	54,837
cross-border	142,530	34,402	22,930	28,588
Up to 1 year	1,134,462	250,514	302,284	241,280
Over 1 year and up to 5 years	83,414	17,541	17,487	26,003
Over 5 years	10,559	461	416	840

For footnotes, see opposite page.

Table 3-A-2

**Reported notional amounts outstanding of foreign exchange derivatives
at end-March 1995, by instrument, counterparty and currency pair ***

(in millions of US dollars)

Category	Total	US dollar / Deutsche Mark	US dollar / Japanese yen	US dollar / Other currencies
OTC OPTIONS BOUGHT	1,149,613	249,904	304,855	241,483
- with other dealers	567,294	121,900	166,138	114,197
local	143,281	28,723	47,807	30,743
cross-border	424,014	93,177	118,331	83,453
- with other financial institutions	325,413	75,367	89,858	55,305
local	101,528	24,876	37,875	12,882
cross-border	223,885	50,491	51,983	42,423
- with non-financial customers	256,907	50,381	45,983	70,504
local	153,891	22,755	33,250	45,151
cross-border	103,015	27,626	12,732	25,353
Up to 1 year	1,047,946	237,626	288,217	214,699
Over 1 year and up to 5 years	79,260	12,028	15,729	25,268
Over 5 years	21,804	188	816	1,458
TOTAL OTC OPTIONS	2,379,192	518,720	625,163	509,847
OTHER PRODUCTS	60,793	1,978	4,073	21,595
- with other dealers	24,617	1,130	1,769	5,611
local	6,278	671	1,043	3,006
cross-border	18,339	459	727	2,605
- with other financial institutions	14,702	156	1,387	6,656
local	9,407	92	49	4,449
cross-border	5,295	64	1,338	2,207
- with non-financial customers	21,474	67	506	9,328
local	17,702	64	475	8,395
cross-border	3,772	3	31	933
Up to 1 year	34,762	1,299	1,787	14,052
Over 1 year and up to 5 years	19,482	15	2,215	5,608
Over 5 years	5,917	32	70	1,935
TOTAL OTC DERIVATIVES	13,095,447	2,102,198	3,564,644	5,071,839
FUTURES	38,967	13,008	15,588	8,983
Sold	25,827	6,885	12,485	5,711
Bought	13,140	6,123	3,103	3,273
EXCHANGE-TRADED OPTIONS	80,695	36,395	21,749	19,525
Sold	43,538	18,452	13,509	10,051
Bought	37,157	17,943	8,240	9,475
TOTAL EXCHANGE-TRADED PRODUCTS	119,663	49,403	37,337	28,508

For footnotes, see opposite page.

Table 3-A-1 (contd.)

**Reported notional amounts outstanding of foreign exchange derivatives
at end-March 1995, by instrument, counterparty and currency pair ***

(in millions of US dollars)

Deutsche Mark / Japanese yen	Deutsche Mark / Other currencies	Japanese yen / Other currencies	All other currency pairs	Category
85,877	397,897	160,375	331,384	OUTRIGHT FORWARDS AND FOREIGN EXCHANGE SWAPS
25,353	149,927	31,675	90,649	- with other dealers
9,081	64,160	10,492	37,513	local
16,273	85,767	21,183	53,136	cross-border
23,409	93,235	28,238	68,308	- with other financial institutions
18,886	63,845	19,372	42,190	local
4,523	29,390	8,867	26,120	cross-border
37,115	154,736	100,461	165,061	- with non-financial customers
32,888	112,122	96,743	120,271	local
4,227	42,614	3,718	44,791	cross-border
60,163	356,374	93,898	291,952	Up to 1 year
24,230	32,507	55,539	35,908	Over 1 year and up to 5 years
1,458	5,457	10,893	2,579	Over 5 years
42,923	156,465	183,646	239,584	CURRENCY SWAPS
16,819	48,550	63,283	75,702	- with other dealers
4,026	12,481	19,385	36,315	local
12,794	36,070	43,898	39,388	cross-border
9,462	34,579	31,052	51,428	- with other financial institutions
883	7,306	7,654	19,149	local
8,579	27,273	23,398	32,279	cross-border
16,642	73,336	89,312	110,953	- with non-financial customers
10,718	45,595	58,496	43,929	local
5,924	27,739	30,816	67,023	cross-border
9,839	26,557	46,910	76,602	Up to 1 year
24,034	86,463	95,103	102,320	Over 1 year and up to 5 years
8,707	42,415	41,414	57,906	Over 5 years
46,367	206,804	40,310	78,612	OTC OPTIONS SOLD
25,174	90,852	11,051	22,937	- with other dealers
6,515	20,228	1,733	4,602	local
18,660	70,624	9,318	18,335	cross-border
14,529	65,266	23,819	29,754	- with other financial institutions
4,011	23,100	4,472	4,329	local
10,518	42,166	19,347	25,425	cross-border
6,664	50,686	5,440	24,086	- with non-financial customers
2,608	15,623	3,486	9,440	local
4,056	35,063	1,954	14,646	cross-border
43,690	195,758	36,233	64,702	Up to 1 year
2,608	7,037	2,988	9,750	Over 1 year and up to 5 years
69	3,583	1,089	4,099	Over 5 years

* OTC products adjusted for local and cross-border double-counting.

Table 3-A-2 (contd.)

**Reported notional amounts outstanding of foreign exchange derivatives
at end-March 1995, by instrument, counterparty and currency pair ***

(in millions of US dollars)

Deutsche Mark / Japanese yen	Deutsche Mark / Other currencies	Japanese yen / Other currencies	All other currency pairs	Category
47,624	203,423	35,810	66,511	OTC OPTIONS BOUGHT
24,920	98,237	13,453	24,504	- with other dealers
5,951	20,871	4,115	4,279	local
18,970	77,365	9,338	20,225	cross-border
15,714	64,420	13,252	11,157	- with other financial institutions
4,705	16,542	2,197	2,318	local
11,009	47,878	11,055	8,839	cross-border
6,990	40,766	9,105	28,768	- with non-financial customers
3,520	21,077	6,105	19,913	local
3,470	19,689	3,000	8,855	cross-border
43,706	187,154	22,120	54,424	Up to 1 year
3,166	8,825	5,885	8,358	Over 1 year and up to 5 years
752	7,093	7,805	3,691	Over 5 years
93,991	410,227	76,122	145,123	TOTAL OTC OPTIONS
88	7,694	4,276	21,091	OTHER PRODUCTS
82	1,347	307	14,370	- with other dealers
24	903	59	572	local
58	445	248	13,799	cross-border
-	2,940	1,115	2,448	- with other financial institutions
-	2,550	603	1,664	local
-	390	512	784	cross-border
6	3,407	2,854	4,273	- with non-financial customers
6	2,786	2,638	3,338	local
-	621	216	935	cross-border
35	6,273	2,315	9,001	Up to 1 year
24	738	1,750	9,133	Over 1 year and up to 5 years
30	683	210	2,957	Over 5 years
222,878	972,284	424,419	737,182	TOTAL OTC DERIVATIVES
64	674	63	587	FUTURES
24	391	32	300	Sold
40	283	31	287	Bought
230	2,225	-	571	EXCHANGE-TRADED OPTIONS
165	1,079	-	282	Sold
65	1,145	-	289	Bought
294	2,899	63	1,158	TOTAL EXCHANGE-TRADED PRODUCTS

* OTC products adjusted for local and cross-border double-counting.

Table 3-B

Reported notional amounts outstanding of OTC foreign exchange derivatives net of local inter-dealer double-counting at end-March 1995, by country and currency pair ¹

(in millions of US dollars)

Country	Total	US dollar / Deutsche Mark	US dollar / Japanese yen	US dollar / Other currencies
Australia	581,101	65,768	53,680	427,884
Austria	81,512	26,610	2,188	20,822
Bahrain	30,875	3,432	6,460	18,752
Belgium	507,004	58,337	15,025	337,641
Canada	682,230	71,884	36,960	561,415
Denmark	406,568	63,606	9,068	249,350
Finland	92,387	14,608	3,586	45,728
France	1,595,288	262,351	214,027	768,267
Germany	1,255,915	611,607	70,846	284,897
Greece	23,712	8,017	4,352	6,942
Hong Kong	966,306	198,047	346,354	402,249
Ireland	51,605	4,105	917	30,935
Italy	421,904	16,924	6,225	290,407
Japan	3,211,295	229,111	2,412,926	157,601
Luxembourg	258,517	91,728	11,581	99,822
Netherlands	346,962	66,677	15,544	164,938
New Zealand	38,046	1,354	1,678	31,474
Norway	126,996	6,818	1,384	105,852
Portugal	26,955	1,814	451	13,032
Singapore	987,544	133,779	283,699	518,309
South Africa	98,114	3,719	1,858	83,317
Spain	333,443	36,221	8,162	241,800
Sweden	420,828	48,176	13,231	295,285
Switzerland ²	1,039,893	206,627	108,512	527,695
United Kingdom	1,428,584	227,344	344,445	465,309
United States	2,664,008	565,098	789,534	811,887
Total	17,677,591	3,023,762	4,762,691	6,961,610

For footnotes, see opposite page.

Table 3-B (contd.)

Reported notional amounts outstanding of OTC foreign exchange derivatives net of local inter-dealer double-counting at end-March 1995, by country and currency pair ¹

(in millions of US dollars)

Deutsche Mark / Japanese yen	Deutsche Mark / Other currencies	Japanese yen / Other currencies	All other currency pairs	Country
..	3,261	11,434	19,073	Australia
326	9,258	620	21,684	Austria
493	405	250	1,083	Bahrain
1,398	25,227	-	69,376	Belgium
78	633	709	10,551	Canada
4,732	64,890	1,827	13,095	Denmark
588	17,766	962	9,148	Finland
21,870	167,159	53,281	108,334	France
37,691	211,545	7,005	32,325	Germany
25	635	3,127	615	Greece
-	-	-	19,657	Hong Kong
57	4,927	1,425	9,240	Ireland
252	53,303	9,984	44,809	Italy
98,245	15,461	256,196	41,755	Japan
8,349	26,668	3,412	16,957	Luxembourg
2,104	51,193	8,082	38,424	Netherlands
18	698	826	2,000	New Zealand
21	5,916	430	6,575	Norway
26	3,278	6,535	1,819	Portugal
8,349	3,820	9,371	30,217	Singapore
38	237	-	8,946	South Africa
527	35,738	1,723	9,272	Spain
343	24,319	4,633	34,842	Sweden
-	98,841	-	98,217	Switzerland ²
40,786	179,194	66,249	105,258	United Kingdom
63,317	238,183	60,325	135,667	United States
289,632	1,242,554	508,404	888,935	Total

¹ Outright forwards and foreign exchange swaps, currency swaps, OTC options and other OTC products. ² Data may differ slightly from the national survey data because of differences in the estimation of the adjustment for local inter-dealer double-counting.

Table 3-C

**Reported notional amounts outstanding of OTC foreign exchange derivatives
at end-March 1995, by country and counterparty ¹**

Total

(in millions of US dollars)

Country	Gross notional outstandings		Net notional outstandings ²			
	Total	of which	Total	of which		
		With other local dealers		With other dealers located abroad	With other financial institutions	With non-financial customers
Australia	747,009	165,909	581,101	267,724	5,998	141,470
Austria	85,128	3,616	81,512	47,777	19,169	10,949
Bahrain	34,493	3,617	30,875	16,210	9,279	1,769
Belgium	567,625	60,621	507,004	253,050	140,565	52,768
Canada	808,346	126,116	682,230	212,023	205,863	138,228
Denmark	446,445	39,878	406,568	284,607	15,468	66,615
Finland	95,584	3,197	92,387	50,653	12,770	25,767
France	1,725,844	130,557	1,595,288	870,729	313,418	280,584
Germany	1,368,103	112,188	1,255,915	773,061	233,285	137,382
Greece	25,774	2,062	23,712	11,092	2,059	8,500
Hong Kong	1,080,598	114,291	966,306	740,808	59,210	51,997
Ireland	61,167	9,561	51,605	29,273	3,962	8,808
Italy	466,164	44,260	421,904	234,749	91,684	51,211
Japan	3,966,784	755,489	3,211,295	1,459,301	212,035	784,470
Luxembourg	268,547	10,030	258,517	171,804	36,832	39,851
Netherlands	384,483	37,521	346,962	164,114	85,468	59,860
New Zealand	43,775	5,728	38,046	16,836	1,600	13,883
Norway	138,959	11,964	126,996	62,129	33,090	19,813
Portugal	28,224	1,269	26,955	11,949	3,863	9,876
Singapore	1,124,449	136,905	987,544	689,182	108,811	52,646
South Africa	122,661	24,546	98,114	7,145	35,606	30,817
Spain	411,084	77,641	333,443	212,342	24,113	19,347
Sweden	465,127	44,299	420,828	216,166	29,974	130,389
Switzerland ³	1,131,971	92,079	1,039,893	687,043	..	260,771
United Kingdom	1,565,040	136,457	1,428,584	770,795	171,337	349,995
United States	3,053,243	389,236	2,664,008	903,726	961,580	409,466
Total	20,216,627	2,539,035	17,677,591	9,164,287	2,817,038	3,157,232

¹ Outright forwards and foreign exchange swaps, currency swaps, OTC options and other OTC products. ² Net of local inter-dealer double-counting. ³ Data may differ slightly from the national survey data because of differences in the estimation of the adjustment for local inter-dealer double-counting.

Table 3-D

Reported notional amounts outstanding of OTC foreign exchange derivatives net of local inter-dealer double-counting at end-March 1995, by country and counterparty

Outright forwards and foreign exchange swaps

(in millions of US dollars)

Country	Total	Other dealers		Financial institutions		Non-financial customers	
		Local	Cross-border	Local	Cross-border	Local	Cross-border
Australia	488,122	149,807	231,848	..	..	106,467	..
Austria	60,214	3,108	36,098	4,686	7,815	8,261	245
Bahrain	23,451	3,073	10,427	344	8,377	275	955
Belgium	454,563	56,719	230,289	42,546	82,223	15,746	27,040
Canada	558,756	117,015	165,444	50,344	133,213	74,284	18,456
Denmark	322,521	34,583	243,536	3,389	1,833	24,930	14,251
Finland	70,192	2,841	38,563	8,878	1,225	17,985	699
France	923,351	96,554	570,375	46,313	72,687	68,604	68,818
Germany	876,062	95,062	555,904	44,874	82,158	77,133	20,931
Greece	23,480	2,032	10,929	1,817	226	7,737	739
Hong Kong	918,768	110,038	713,049	8,713	47,642	31,976	7,350
Ireland	47,368	9,495	27,107	2,671	747	5,925	1,422
Italy	334,252	40,548	192,993	38,002	34,086	24,151	4,472
Japan	2,474,126	688,874	1,129,654	118,927	16,483	494,402	25,786
Luxembourg	224,859	8,760	149,624	16,028	14,997	6,419	29,031
Netherlands	261,045	34,212	140,375	15,345	24,839	34,163	12,111
New Zealand	30,818	4,830	14,221	642	828	10,114	184
Norway	120,008	11,856	58,981	7,416	24,280	17,123	352
Portugal	20,009	927	9,346	305	2,707	6,458	266
Singapore	905,906	135,614	617,819	31,694	71,955	34,089	14,735
South Africa	94,751	22,777	6,537	35,172	434	28,882	949
Spain	304,646	73,082	197,493	17,773	4,272	11,070	956
Sweden	334,473	42,680	176,697	6,529	13,273	71,599	23,695
Switzerland *	788,150	77,441	540,366	..	..	74,682	95,661
United Kingdom .....	..	..	..	..	..	..	..
United States	1,264,236	203,524	383,314	225,886	284,532	133,143	33,837
Total	11,924,125	2,025,448	6,450,989	728,295	930,833	1,385,617	402,941

* Data may differ slightly from the national survey data because of differences in the estimation of the adjustment for local inter-dealer double-counting.

Table 3-E

Reported notional amounts outstanding of OTC foreign exchange derivatives net of local inter-dealer double-counting at end-March 1995, by country and counterparty

Currency swaps

(in millions of US dollars)

Country	Total	Other dealers		Financial institutions		Non-financial customers	
		Local	Cross-border	Local	Cross-border	Local	Cross-border
Australia	49,386	10,354	18,235	1,978	4,020	9,781	5,018
Austria	13,084	472	6,655	3,030	1,407	1,215	302
Bahrain	315	1	72	59	183	-	1
Belgium	32,182	3,608	14,425	591	7,714	3,947	1,897
Canada	82,073	3,237	28,306	5,080	11,799	26,624	7,027
Denmark	18,125	513	7,694	2,874	2,457	3,100	1,488
Finland	14,714	23	8,151	1,407	1,028	3,963	142
France	228,596	20,283	106,269	5,460	18,664	20,669	57,251
Germany	142,526	5,284	89,749	3,637	23,160	2,728	17,968
Greece	149	5	130	4	-	10	-
Hong Kong	25,041	2,253	14,954	144	1,621	3,113	2,956
Ireland	3,226	66	1,498	361	177	1,094	30
Italy	20,050	1,025	12,246	443	5,045	851	440
Japan	539,978	43,899	212,122	23,182	44,504	158,322	57,949
Luxembourg	21,572	470	17,366	560	2,363	11	802
Netherlands	58,733	3,072	16,815	17,475	12,692	3,179	5,501
New Zealand	3,752	670	1,691	8	113	1,194	76
Norway	3,392	39	1,875	22	26	1,265	165
Portugal	3,595	332	1,377	..	623	1,264	..
Singapore	10,518	827	6,260	179	1,379	1,197	676
South Africa	-	-	-	-	-	-	-
Spain	16,533	2,969	6,850	-	1,985	3,977	752
Sweden	62,164	651	26,348	685	4,790	17,508	12,182
Switzerland *	32,965	1,488	17,209	..	..	1,372	12,896
United Kingdom	821,788	86,346	343,722	21,883	110,769	67,360	191,708
United States	257,644	35,716	50,517	20,013	64,234	26,709	60,455
Total	2,462,100	223,601	1,010,535	109,075	320,752	360,453	437,682

* Data may differ slightly from the national survey data because of differences in the estimation of the adjustment for local inter-dealer double-counting.

Table 3-F

Reported notional amounts outstanding of OTC foreign exchange derivatives net of local inter-dealer double-counting at end-March 1995, by country and counterparty

OTC options

(in millions of US dollars)

Country	Total	Other dealers		Financial institutions		Non-financial customers	
		Local	Cross-border	Local	Cross-border	Local	Cross-border
Australia	43,593	5,748	17,640	..	..	20,205	..
Austria	8,213	36	5,024	57	2,172	849	74
Bahrain	7,109	544	5,711	40	276	1	537
Belgium	20,260	295	8,336	47	7,444	1,888	2,250
Canada	39,007	5,699	17,245	305	4,644	9,185	1,929
Denmark	65,921	4,782	33,377	3,080	1,835	9,808	13,038
Finland	7,481	333	3,938	170	62	2,240	737
France	441,385	13,338	193,485	3,027	166,837	20,483	44,215
Germany	237,027	11,842	127,119	63,356	16,089	11,295	7,327
Greece	83	25	33	12	-	13	-
Hong Kong	22,496	1,999	12,805	859	231	3,421	3,181
Ireland	1,012	-	668	6	-	338	-
Italy	38,047	664	27,087	1,482	1,392	7,199	223
Japan	191,903	22,575	115,646	6,782	1,855	43,023	2,022
Luxembourg	11,187	775	3,991	1,124	1,709	1,231	2,357
Netherlands	26,894	228	6,655	1,606	13,499	3,499	1,407
New Zealand	3,477	229	924	9	-	2,271	44
Norway	3,596	69	1,273	174	1,172	697	211
Portugal	3,351	10	1,226	..	228	1,860	28
Singapore	71,109	464	65,092	609	2,995	783	1,166
South Africa	3,363	1,769	608	-	-	803	183
Spain	12,264	1,590	7,999	83	-	2,400	192
Sweden	24,192	969	13,121	140	4,557	4,550	855
Switzerland *	218,778	13,150	129,468	..	..	35,495	40,665
United Kingdom	596,404	47,670	423,717	10,220	27,156	35,052	52,589
United States	1,114,083	148,906	443,896	137,129	228,910	84,927	70,315
Total	3,212,234	283,708	1,666,084	230,317	483,064	303,517	245,545

* Data may differ slightly from the national survey data because of differences in the estimation of the adjustment for local inter-dealer double-counting.

Table 4-A

**Reported gross market values of OTC foreign exchange derivatives
at end-March 1995, by instrument and counterparty**

(in millions of US dollars)

Category	Gross positive market values	Gross negative market values
OUTRIGHT FORWARDS AND FOREIGN EXCHANGE SWAPS	507,443	531,937
- with other dealers	370,250	417,065
local	154,780	143,510
cross-border	215,471	273,557
- with other financial institutions	45,938	44,367
local	18,466	17,114
cross-border	27,129	27,009
- with non-financial customers	91,249	70,506
local	79,442	48,324
cross-border	11,772	22,157
CURRENCY SWAPS	234,202	237,969
- with other dealers	131,024	126,558
local	39,359	36,602
cross-border	91,664	89,955
- with other financial institutions	28,700	34,845
local	7,633	8,563
cross-border	20,934	26,199
- with non-financial customers	74,478	76,581
local	31,133	20,709
cross-border	43,337	55,868
OTC OPTIONS	49,372	52,092
- with other dealers	30,182	30,683
local	7,945	8,033
cross-border	22,237	22,650
- with other financial institutions	11,317	13,308
local	4,062	5,015
cross-border	7,254	8,293
- with non-financial customers	7,873	8,102
local	4,353	4,438
cross-border	3,519	3,663
OTHER PRODUCTS	4,804	6,277
- with other dealers	1,843	1,540
local	519	500
cross-border	1,324	1,040
- with other financial institutions	1,044	603
local	574	239
cross-border	470	364
- with non-financial customers	1,917	4,134
local	971	706
cross-border	946	3,428
TOTAL OTC DERIVATIVES	795,822	828,275

Table 4-B

**Reported market values of OTC foreign exchange derivatives
at end-March 1995, by country**

(in millions of US dollars)

Country	Gross positive and negative market values ¹	Negative market value exposure to local dealers	Market values net of local double-counting ²	of which			
				Positive market value exposure to dealers	Negative market value exposure to dealers located abroad	Total market value exposure to other financial institutions ³	Total market value exposure to non-financial customers ³
Australia	35,158	6,630	28,528	12,379	5,741	1,409	8,999
Austria	3,684	121	3,563	840	735	1,664	319
Bahrain	15,819	1,291	14,528	4,576	3,168	5,703	1,081
Belgium	18,204	1,556	16,648	5,637	4,390	4,365	2,256
Canada	29,089	2,150	26,939	8,405	4,600	5,955	7,979
Denmark	23,630	2,249	21,381	9,337	6,963	3,425	1,656
Finland	2,306	34	2,272	780	914	192	386
France	98,732	5,859	92,873	29,029	22,692	14,859	26,293
Germany	116,476	9,084	107,393	42,880	32,612	17,895	14,006
Greece	915	78	837	260	198	41	338
Hong Kong	62,635	2,876	59,759	29,153	25,529	1,375	3,698
Ireland	1,827	101	1,726	695	434	182	416
Italy	29,913	3,332	26,581	9,456	7,349	5,667	4,109
Japan	561,958	94,018	467,940	178,141	137,568	24,121	128,110
Luxembourg	7,597	312	7,285	4,110	1,775	817	583
Netherlands	23,769	2,140	21,629	7,454	5,768	4,937	3,471
New Zealand	2,487	256	2,231	772	561	72	827
Norway	6,281	743	5,538	2,240	1,188	1,132	978
Portugal	5,664	125	5,539	1,366	868	327	2,977
Singapore	35,392	2,714	32,678	16,320	12,228	2,538	1,609
South Africa	1,761	189	1,572	363	132	326	751
Spain	18,189	2,574	15,615	8,019	4,576	1,226	1,794
Sweden	22,986	929	22,057	6,782	6,478	1,669	7,128
Switzerland	80,241	6,506	73,735	32,154	26,724	..	14,856
United Kingdom	236,135	17,532	218,603	73,687	50,373	21,458	73,085
United States ⁴	183,248	25,246	158,002	48,463	23,638	58,765	27,136
Total	1,624,097	188,645	1,435,451	533,298	387,202	180,121	334,839

¹ Sum of gross positive and negative market values. ² Net of local inter-dealer double-counting, i.e. gross market values minus negative market value exposure to other local dealers. ³ Total exposure equals gross positive plus gross negative market values. ⁴ Data on market values net of local double-counting may differ slightly from the national survey data because of differences in the estimation of the adjustment for local inter-dealer double-counting.

Table 5-A-1

**Reported notional amounts outstanding of single-currency interest rate derivatives
at end-March 1995, by instrument, counterparty and interest rate ***

(in millions of US dollars)

Category	Total	US dollar	Deutsche Mark	Japanese yen	Other
FORWARD RATE AGREEMENTS	4,597,453	1,301,228	742,036	501,599	2,052,590
- with other dealers	3,371,429	880,106	503,986	389,695	1,533,002
local	1,409,335	339,939	161,203	150,639	746,498
cross-border	1,962,093	540,167	342,783	239,056	786,504
- with other financial institutions	905,419	338,375	170,845	64,025	331,073
local	287,015	119,067	36,070	7,289	124,589
cross-border	618,403	219,308	134,775	56,736	206,482
- with non-financial customers	320,608	66,771	66,041	12,026	175,545
local	185,905	27,415	27,343	5,036	125,887
cross-border	134,703	39,356	38,699	6,990	49,658
Up to 1 year	3,982,455	1,190,228	605,452	402,467	1,784,308
Over 1 year and up to 5 years	540,295	94,299	132,467	63,175	250,354
Over 5 years	4,638	545	2,733	68	1,291
SWAPS	18,283,350	6,088,027	2,077,315	4,590,709	5,527,299
- with other dealers	10,803,557	2,947,155	1,364,815	3,013,303	3,327,032
local	4,697,130	1,125,761	442,809	1,314,788	1,800,687
cross-border	6,106,428	1,821,394	922,006	1,698,516	1,526,345
- with other financial institutions	4,358,662	1,961,346	496,030	711,559	1,163,031
local	1,942,877	1,089,718	144,073	117,066	588,908
cross-border	2,415,783	871,629	351,957	594,493	574,122
- with non-financial customers	3,121,130	1,104,631	207,818	783,907	1,009,346
local	1,799,417	686,517	64,949	504,384	536,530
cross-border	1,321,714	418,115	142,869	279,524	472,816
Up to 1 year	6,305,472	2,393,736	628,005	1,514,507	1,769,224
Over 1 year and up to 5 years	8,931,311	2,640,176	997,860	2,468,075	2,825,200
Over 5 years	2,840,331	976,538	441,076	526,116	896,602
OTC OPTIONS ON TRADED SECURITIES SOLD	220,499	73,748	48,261	30,967	67,523
- with other dealers	104,321	24,043	29,142	23,143	27,993
local	48,671	14,502	15,193	6,486	12,491
cross-border	55,628	9,542	13,927	16,657	15,502
- with other financial institutions	70,560	28,588	10,361	3,553	28,058
local	42,866	23,246	7,354	2,597	9,669
cross-border	27,694	5,342	3,007	956	18,389
- with non-financial customers	45,618	21,117	8,758	4,271	11,472
local	35,825	18,515	5,526	3,971	7,813
cross-border	9,793	2,602	3,232	300	3,659
Up to 1 year	143,842	32,629	29,021	27,492	54,700
Over 1 year and up to 5 years	44,097	18,093	17,540	712	7,751
Over 5 years	32,561	23,026	1,700	2,762	5,073

* OTC products adjusted for local and cross-border double-counting.

Table 5-A-2

**Reported notional amounts outstanding of single-currency interest rate derivatives
at end-March 1995, by instrument, counterparty and interest rate ***

(in millions of US dollars)

Category	Total	US dollar	Deutsche Mark	Japanese yen	Other
OTC OPTIONS ON TRADED SECURITIES BOUGHT	209,618	72,221	41,324	35,654	60,419
- with other dealers	104,930	32,169	25,593	21,941	25,228
local	48,782	19,742	11,628	6,306	11,106
cross-border	56,128	12,427	13,944	15,635	14,122
- with other financial institutions	71,892	30,345	9,120	8,004	24,423
local	43,854	22,832	5,638	7,174	8,210
cross-border	28,038	7,513	3,482	830	16,213
- with non-financial customers	32,796	9,707	6,611	5,709	10,769
local	23,467	7,504	3,987	5,552	6,424
cross-border	9,329	2,203	2,624	157	4,345
Up to 1 year	149,519	33,305	33,668	34,196	48,349
Over 1 year and up to 5 years	32,870	19,181	5,684	710	7,294
Over 5 years	27,229	19,733	1,971	748	4,777
TOTAL OTC OPTIONS ON TRADED SECURITIES	430,117	145,968	89,585	66,621	127,943
OTC OPTIONS ON OTHER SECURITIES SOLD	1,717,467	981,783	219,470	175,434	340,780
- with other dealers	629,034	288,073	122,651	73,749	139,342
local	258,401	123,782	39,562	24,763	70,253
cross-border	370,633	164,292	83,089	48,986	69,089
- with other financial institutions	628,616	456,484	50,440	25,146	96,222
local	325,358	279,771	13,700	4,679	27,044
cross-border	303,258	176,713	36,740	20,467	69,178
- with non-financial customers	459,818	233,874	46,380	72,660	104,922
local	313,422	165,387	20,989	53,734	72,514
cross-border	146,396	68,487	25,390	18,926	32,408
Up to 1 year	522,614	281,754	71,447	40,858	128,555
Over 1 year and up to 5 years	939,984	548,266	107,050	109,903	174,765
Over 5 years	247,341	148,410	40,972	20,792	37,167
OTC OPTIONS ON OTHER SECURITIES BOUGHT	1,400,197	699,903	234,132	164,350	301,811
- with other dealers	627,958	264,693	130,212	92,333	136,041
local	267,255	117,789	45,648	33,339	70,432
cross-border	360,703	146,904	84,564	58,995	65,609
- with other financial institutions	454,068	267,790	65,565	23,700	96,871
local	209,550	163,497	23,360	3,240	19,350
cross-border	244,518	104,293	42,205	20,460	77,521
- with non-financial customers	318,171	163,887	38,355	44,242	68,615
local	190,302	116,520	13,635	23,613	36,230
cross-border	127,870	47,367	24,720	20,629	32,385
Up to 1 year	449,258	209,426	77,719	40,116	121,998
Over 1 year and up to 5 years	762,298	404,721	111,090	99,285	147,203
Over 5 years	180,734	82,211	45,324	20,875	32,325
TOTAL OTHER OTC OPTIONS	3,117,664	1,681,686	453,602	339,784	642,591
TOTAL OTC OPTIONS	3,547,781	1,827,654	543,187	406,405	770,534

* OTC products adjusted for local and cross-border double-counting.

Table 5-A-3

**Reported notional amounts outstanding of single-currency interest rate derivatives
at end-March 1995, by instrument, counterparty and interest rate ***

(in millions of US dollars)

Category	Total	US dollar	Deutsche Mark	Japanese yen	Other
OTHER PRODUCTS	216,437	90,114	13,444	63,116	49,763
- with other dealers	91,175	22,741	8,143	21,687	38,601
local	26,566	7,977	578	8,748	9,263
cross-border	64,609	14,764	7,565	12,939	29,339
- with other financial institutions	76,683	47,955	4,424	19,647	4,650
local	58,157	38,822	4,085	11,372	3,877
cross-border	18,526	9,133	339	8,275	773
- with non-financial customers	48,580	19,315	867	21,782	6,020
local	35,071	12,588	89	18,235	3,563
cross-border	13,509	6,727	778	3,547	2,457
Up to 1 year	67,988	15,823	2,092	14,032	36,041
Over 1 year and up to 5 years	100,661	58,353	4,837	29,140	8,332
Over 5 years	47,186	15,834	6,509	19,945	4,899
TOTAL OTC DERIVATIVES	26,645,022	9,307,022	3,375,983	5,561,828	8,400,186
FUTURES on interest rates up to 1 year	9,990,461	4,243,589	1,031,193	2,963,220	1,575,170
Sold	4,692,154	1,833,011	507,036	1,494,851	766,961
Bought	5,298,306	2,410,577	524,157	1,468,369	808,209
FUTURES on interest rates over 1 year	2,440,983	1,384,977	224,913	439,754	385,686
Sold	1,243,329	644,188	137,610	250,337	208,665
Bought	1,197,656	740,786	87,303	189,417	177,022
TOTAL FUTURES	12,431,446	5,741,224	1,270,152	3,456,671	1,963,399
EXCHANGE-TRADED OPTIONS	3,238,002	1,961,158	278,048	291,345	707,451
Sold (notional)	1,599,192	976,583	136,049	144,050	342,511
Bought (notional)	1,638,811	984,575	141,999	147,295	364,941
TOTAL EXCHANGE-TRADED PRODUCTS	15,669,448	7,702,383	1,548,201	3,748,016	2,670,850

* OTC products adjusted for local and cross-border double-counting.

Table 5-B

Reported notional amounts outstanding of OTC interest rate derivatives net of local inter-dealer double-counting at end-March 1995, by country and interest rate ¹

(in millions of US dollars)

Country	Total	US dollar	Deutsche Mark	Japanese yen	Other
Australia	346,209	35,766	1,715	3,504	305,224
Austria	170,408	29,443	58,308	796	81,862
Bahrain	107,480	96,051	9,737	225	1,467
Belgium	472,998	61,734	50,348	11,872	349,044
Canada	755,562	396,067	12,176	7,811	339,508
Denmark	321,322	32,786	23,130	4,694	260,711
Finland	156,617	30,803	13,326	1,024	111,464
France	4,122,105	645,859	425,649	544,762	2,505,837
Germany	1,964,117	238,183	1,332,535	97,367	296,031
Greece	1,848	1,021	227	-	600
Hong Kong	476,925	168,728	16,954	218,476	72,768
Ireland	106,760	21,760	19,308	344	65,349
Italy	234,062	34,180	7,650	4,425	187,807
Japan	5,099,460	1,014,482	183,118	3,806,962	94,898
Luxembourg	257,928	53,380	101,646	5,473	97,429
Netherlands	642,762	103,985	172,759	8,653	357,366
New Zealand	20,395	1,685	-	-	18,710
Norway	161,971	7,559	2,447	72	151,893
Portugal	7,553	1,506	615	46	5,384
Singapore	680,328	286,465	28,121	334,717	31,025
South Africa	19,239	2,188	148	-	16,903
Spain	291,694	51,071	18,207	8,091	214,325
Sweden	392,402	52,474	38,317	11,093	290,516
Switzerland ²	281,920	20,021	27,936	27,851	206,113
United Kingdom	10,382,242	2,772,526	1,797,750	1,702,097	4,109,869
United States	8,146,936	5,927,658	508,863	944,988	765,428
Total	35,621,243	12,087,379	4,850,988	7,745,342	10,937,531

¹ Forward rate agreements, swaps, OTC options and other OTC products. ² Data may differ slightly from the national survey data because of differences in the estimation of the adjustment for local inter-dealer double-counting.

Table 5-C

Reported notional amounts outstanding of exchange-traded interest rate derivatives at end-March 1995, by country and interest rate *

(in millions of US dollars)

Country	Total	US dollar	Deutsche Mark	Japanese yen	Other
Australia	246,476	27,026	3,995	4,258	211,197
Austria	7,935	667	3,908	-	3,360
Bahrain	14,806	14,732	72	-	2
Belgium	60,174	19,400	8,942	1,701	30,131
Canada	357,566	266,804	205	707	89,850
Denmark	15,065	2,005	1,633	24	11,403
Finland	13,147	6,443	1,878	57	4,769
France	1,307,697	498,233	145,847	123,091	540,526
Germany	199,803	20,197	153,824	5,751	20,031
Greece	7,344	5,960	1,322	-	63
Hong Kong	189,178	117,296	14,589	54,366	2,927
Ireland	16,540	4,282	3,408	579	8,271
Italy	8,682	327	533	17	7,805
Japan	4,211,480	1,315,256	305,118	2,510,480	80,626
Luxembourg	14,050	5,056	4,855	56	4,083
Netherlands	31,380	6,451	20,230	28	4,671
New Zealand	15,213	4,855	187	196	9,975
Norway	32,921	21,237	8,713	-	2,971
Portugal	11	3	4	..	5
Singapore	542,181	285,691	12,754	214,852	28,884
South Africa	12,130	10,180	-	-	1,950
Spain	32,168	703	627	14	30,824
Sweden	142,488	5,112	2,200	23	135,153
Switzerland	60,147	19,057	9,417	19,806	11,867
United Kingdom	4,074,021	1,491,091	692,238	619,075	1,271,617
United States	4,056,845	3,554,319	151,703	192,935	157,888
Total	15,669,448	7,702,383	1,548,201	3,748,016	2,670,850

* Futures and exchange-traded options; gross of local and cross-border double-counting.

Table 5-D

**Reported notional amounts outstanding of OTC interest rate derivatives
at end-March 1995, by country and counterparty ¹**

Total

(in millions of US dollars)

Country	Gross notional outstandings		Net notional outstandings ²			
	Total	of which	Total	of which		
		With other local dealers		With other dealers located abroad	With other financial institutions	With non-financial customers
Australia	490,590	144,382	346,209	97,013	37,336	67,478
Austria	184,375	13,967	170,408	123,346	29,556	3,499
Bahrain	108,588	1,107	107,480	100,570	5,425	378
Belgium	531,363	58,365	472,998	221,915	153,419	39,299
Canada	868,318	112,756	755,562	326,028	179,982	136,796
Denmark	369,836	48,514	321,322	253,472	6,228	13,108
Finland	185,612	28,995	156,617	94,571	18,441	14,610
France	4,899,843	777,738	4,122,105	1,933,292	716,544	694,531
Germany	2,177,206	213,090	1,964,117	1,178,585	393,010	179,432
Greece	1,866	18	1,848	1,810	-	20
Hong Kong	501,154	24,230	476,925	403,125	28,269	21,301
Ireland	126,044	19,284	106,760	72,831	8,926	5,719
Italy	257,158	23,096	234,062	127,363	63,874	19,729
Japan	6,204,287	1,104,827	5,099,460	2,777,618	446,909	770,106
Luxembourg	264,694	6,766	257,928	211,774	32,430	6,958
Netherlands	677,675	34,912	642,762	287,544	286,390	33,916
New Zealand	26,774	6,379	20,395	3,717	1,400	8,899
Norway	221,115	59,144	161,971	67,415	13,331	22,081
Portugal	9,671	2,118	7,553	4,264	806	364
Singapore	704,549	24,221	680,328	644,527	8,936	2,646
South Africa	26,924	7,685	19,239	917	4,851	5,786
Spain	345,022	53,328	291,694	216,665	7,586	14,115
Sweden	415,808	23,406	392,402	247,583	79,678	41,735
Switzerland ³	316,704	34,784	281,920	212,952	..	34,184
United Kingdom	12,892,662	2,510,421	10,382,242	5,814,024	1,015,429	1,042,368
United States	9,569,543	1,422,608	8,146,936	2,529,522	3,027,142	1,167,664
Total	42,377,382	6,756,140	35,621,243	17,952,442	6,565,899	4,346,721

¹ Forward rate agreements, swaps, OTC options and other OTC products. ² Net of local inter-dealer double-counting. ³ Data may differ slightly from the national survey data because of differences in the estimation of the adjustment for local inter-dealer double-counting.

Table 5-E

**Reported notional amounts outstanding of OTC interest rate derivatives net of local
inter-dealer double-counting at end-March 1995, by country and counterparty**

Forward rate agreements

(in millions of US dollars)

Country	Total	Other dealers		Financial institutions		Non-financial customers	
		Local	Cross-border	Local	Cross-border	Local	Cross-border
Australia	88,655	55,525	12,467	6,049	1,554	12,300	759
Austria	105,218	6,259	78,717	1,114	18,824	88	215
Bahrain	84,650	366	79,196	-	5,048	41	-
Belgium	160,961	27,141	78,298	4,683	45,326	4,003	1,510
Canada	137,449	41,052	43,575	10,027	13,903	24,592	4,300
Denmark	230,522	38,965	180,403	2,041	950	4,487	3,675
Finland	106,639	19,817	61,136	8,825	6,594	9,824	443
France	406,044	28,923	293,753	10,411	30,008	20,433	22,516
Germany	358,121	36,844	227,805	21,796	16,967	24,534	30,176
Greece	651	13	638	-	-	-	-
Hong Kong	119,545	11,057	107,164	-	1,101	223	-
Ireland	64,849	9,239	51,830	325	2,966	278	211
Italy	78,709	8,336	57,299	6,968	4,726	1,090	290
Japan	173,855	39,059	117,076	-	14,099	2,646	975
Luxembourg	79,943	2,571	69,195	850	5,896	764	667
Netherlands	216,488	14,883	111,579	29,612	56,975	1,450	1,989
New Zealand	4,783	2,813	636	45	-	1,275	14
Norway	142,962	55,977	57,281	7,460	4,685	16,893	666
Portugal	2,707	823	1,272	..	509	103	..
Singapore	133,344	6,339	121,833	1,031	4,010	34	99
South Africa	4,357	2,792	465	-	-	1,051	49
Spain	138,296	26,532	110,296	97	56	1,315	-
Sweden	160,780	11,618	77,661	27,803	25,791	6,726	11,181
Switzerland *	96,626	19,813	68,494	..	..	4,811	3,507
United Kingdom	2,589,627	787,328	1,560,100	33,437	113,439	44,840	50,483
United States	873,769	155,252	356,018	114,441	244,976	2,105	977
Total	6,559,546	1,409,335	3,924,186	287,015	618,403	185,905	134,703

* Data may differ slightly from the national survey data because of differences in the estimation of the adjustment for local inter-dealer double-counting.

Table 5-F

Reported notional amounts outstanding of OTC interest rate derivatives net of local inter-dealer double-counting at end-March 1995, by country and counterparty

Swaps

(in millions of US dollars)

Country	Total	Other dealers		Financial institutions		Non-financial customers	
		Local	Cross-border	Local	Cross-border	Local	Cross-border
Australia	231,944	83,608	81,048	16,418	9,135	38,969	2,766
Austria	58,502	7,387	41,025	3,363	4,411	2,201	114
Bahrain	21,954	742	20,846	42	245	4	77
Belgium	289,903	30,561	138,899	16,254	76,600	10,360	17,229
Canada	507,165	62,950	225,233	39,364	91,808	71,351	16,459
Denmark	84,909	8,821	69,142	1,766	940	2,893	1,347
Finland	48,185	9,178	32,583	1,471	1,544	3,340	68
France	2,995,064	680,336	1,329,264	263,833	201,411	180,386	339,834
Germany	1,241,306	135,759	758,769	103,394	164,199	38,114	41,071
Greece	149	5	124	-	-	20	-
Hong Kong	331,546	13,085	276,337	3,112	23,583	7,037	8,391
Ireland	39,655	10,045	19,331	3,822	1,483	4,623	351
Italy	130,384	13,208	62,369	20,822	18,569	13,436	1,980
Japan	4,516,326	1,004,286	2,459,288	66,011	334,696	502,905	149,140
Luxembourg	165,275	4,090	133,173	1,104	22,434	1,029	3,445
Netherlands	389,193	17,780	150,219	79,553	115,158	17,118	9,366
New Zealand	9,468	3,524	2,560	934	77	2,136	237
Norway	16,601	3,076	8,853	596	417	3,107	552
Portugal	4,846	1,295	2,992	7	290	261	..
Singapore	539,796	17,761	517,870	658	1,491	971	1,045
South Africa	6,934	2,390	377	700	-	3,361	106
Spain	131,863	19,463	97,522	768	4,984	7,752	1,374
Sweden	219,176	11,678	160,090	2,084	23,034	13,184	9,106
Switzerland *	160,017	11,953	129,804	..	..	7,451	10,809
United Kingdom	6,692,056	1,534,786	3,653,052	218,118	514,725	282,113	489,262
United States	5,557,563	1,009,366	1,842,085	1,098,683	804,549	585,295	217,585
Total	24,389,778	4,697,130	12,212,856	1,942,877	2,415,783	1,799,417	1,321,714

* Data may differ slightly from the national survey data because of differences in the estimation of the adjustment for local inter-dealer double-counting.

Table 5-G

**Reported notional amounts outstanding of OTC interest rate derivatives net of local
inter-dealer double-counting at end-March 1995, by country and counterparty**

OTC options

(in millions of US dollars)

Country	Total	Other dealers		Financial institutions		Non-financial customers	
		Local	Cross-border	Local	Cross-border	Local	Cross-border
Australia	25,260	5,121	3,498	3,916	264	11,652	810
Austria	6,689	321	3,604	1,052	789	755	125
Bahrain	860	-	528	-	75	2	255
Belgium	21,099	661	4,284	935	9,310	1,554	4,355
Canada	109,015	8,728	57,132	5,074	19,402	12,510	6,169
Denmark	5,891	728	3,927	366	165	378	327
Finland	1,794	-	852	-	7	935	-
France	677,286	66,426	284,263	17,707	183,628	43,792	81,470
Germany	364,166	40,484	192,011	40,362	45,916	33,836	11,557
Greece	1,048	-	1,048	-	-	-	-
Hong Kong	25,225	89	19,617	267	198	1,101	3,954
Ireland	2,257	1	1,670	12	318	133	123
Italy	23,739	1,552	7,068	5,236	7,125	2,094	664
Japan	377,961	53,217	199,281	15,101	16,234	78,288	15,840
Luxembourg	11,205	105	8,195	25	1,827	308	745
Netherlands	36,058	2,246	24,930	1,712	3,381	2,685	1,104
New Zealand	6,145	43	521	322	22	5,237	-
Norway	2,408	91	1,281	133	40	669	194
Portugal .....	..	..	..	..	..	..	..
Singapore	7,058	117	4,764	14	1,732	212	219
South Africa	7,946	2,501	75	4,151	-	1,202	17
Spain	9,451	1,525	4,456	62	185	2,285	938
Sweden	12,446	110	9,832	26	940	1,179	359
Switzerland *	25,277	3,018	14,653	..	..	4,817	2,789
United Kingdom	1,036,033	186,127	548,136	39,562	90,662	61,624	109,922
United States	1,594,555	249,899	290,556	485,592	221,288	295,767	51,453
Total	4,390,872	623,109	1,686,182	621,628	603,508	563,016	293,388

* Data may differ slightly from the national survey data because of differences in the estimation of the adjustment for local inter-dealer double-counting.

Table 5-H

Maturity breakdown of reported notional amounts outstanding of OTC interest rate derivatives net of local and cross-border inter-dealer double-counting at end-March 1995, by instrument and interest rate

(percentage share of total amounts outstanding)

Currency	Up to 1 year	Over 1 year and up to and including 5 years	Over 5 years
FORWARD RATE AGREEMENTS	88	12	0
US dollar	93	7	0
Deutsche Mark	82	18	0
Japanese yen	86	14	0
Other interest rates	88	12	0
SWAPS	35	49	16
US dollar	40	44	16
Deutsche Mark	30	48	21
Japanese yen	34	55	12
Other interest rates	32	51	16
OTC OPTIONS	36	50	14
US dollar	31	54	15
Deutsche Mark	39	44	17
Japanese yen	36	53	11
Other interest rates	46	44	10

Table 6-A-1

**Reported gross market values of OTC interest rate derivatives
at end-March 1995, by instrument, counterparty and interest rate**

(in millions of US dollars)

Category	Gross positive market values	Gross negative market values
FORWARD RATE AGREEMENTS	16,746	13,146
- with other dealers	14,748	11,584
local	4,780	4,389
cross-border	9,917	7,142
- with other financial institutions	1,174	1,155
local	379	345
cross-border	759	774
- with non-financial customers	401	324
local	287	217
cross-border	114	107
US dollar	3,700	2,871
Deutsche Mark	2,478	1,839
Japanese yen	1,739	1,689
Other interest rates	6,347	5,559
SWAPS	437,619	420,840
- with other dealers	308,404	295,826
local	137,528	126,754
cross-border	170,876	169,072
- with other financial institutions	64,664	72,061
local	23,300	22,443
cross-border	41,364	49,617
- with non-financial customers	63,624	51,974
local	33,326	28,276
cross-border	30,298	23,697
US dollar	114,212	114,507
Deutsche Mark	35,483	36,030
Japanese yen	120,665	122,352
Other interest rates	139,760	122,730
OTC OPTIONS ON TRADED SECURITIES	6,055	5,620
- with other dealers	3,926	3,735
local	1,538	1,390
cross-border	2,388	2,344
- with other financial institutions	902	1,038
local	460	662
cross-border	442	376
- with non-financial customers	1,224	846
local	614	706
cross-border	610	140
US dollar	1,939	1,767
Deutsche Mark	945	848
Japanese yen	1,048	1,067
Other interest rates	1,618	1,381

Table 6-A-2

**Reported gross market values of OTC interest rate derivatives
at end-March 1995, by instrument, counterparty and interest rate**

(in millions of US dollars)

Category	Gross positive market values	Gross negative market values
OTHER OTC OPTIONS	37,587	36,322
- with other dealers	22,376	21,687
local	11,833	12,233
cross-border	10,542	9,455
- with other financial institutions	7,403	6,248
local	3,261	3,043
cross-border	4,142	3,206
- with non-financial customers	7,789	8,364
local	2,437	2,137
cross-border	5,353	6,229
US dollar	20,839	19,450
Deutsche Mark	2,938	2,818
Japanese yen	7,120	6,865
Other interest rates	5,085	5,233
TOTAL OTC OPTIONS	43,642	41,942
US dollar	22,778	21,210
Deutsche Mark	3,883	3,665
Japanese yen	8,168	7,932
Other interest rates	6,703	6,613
OTHER PRODUCTS	4,636	3,915
- with other dealers	1,224	1,294
local	414	480
cross-border	810	814
- with other financial institutions	641	667
local	341	397
cross-border	300	270
- with non-financial customers	2,770	1,954
local	1,083	405
cross-border	1,687	1,549
US dollar	1,138	718
Deutsche Mark	180	156
Japanese yen	1,387	2,155
Other interest rates	1,927	877
TOTAL OTC DERIVATIVES	502,643	479,843
US dollar	141,829	139,307
Deutsche Mark	42,024	41,690
Japanese yen	131,959	134,128
Other interest rates	154,737	135,779

Table 6-B

**Reported market values of OTC interest rate derivatives
at end-March 1995, by country**

(in millions of US dollars)

Country	Gross positive and negative market values ¹	Negative market value exposure to local dealers	Market values net of local double-counting ²	of which			
				Positive market value exposure to dealers	Negative market value exposure to dealers located abroad	Total market value exposure to other financial institutions ³	Total market value exposure to non-financial customers ³
Australia	11,633	2,487	9,147	4,220	1,450	1,546	1,930
Austria	2,055	88	1,966	611	425	366	53
Bahrain	3,854	174	3,680	1,948	1,215	195	323
Belgium	10,151	2,190	7,961	4,621	2,115	954	270
Canada	15,209	863	14,346	4,384	3,059	3,738	3,165
Denmark	4,448	231	4,217	2,057	1,834	147	178
Finland	1,663	357	1,306	714	346	93	155
France	109,404	12,488	96,916	36,402	23,909	14,062	22,543
Germany	40,899	4,320	36,579	19,120	11,179	3,242	3,038
Greece	4	-	3	2	1	-	-
Hong Kong	6,614	202	6,412	2,795	2,613	337	666
Ireland	3,452	190	3,263	701	210	235	126
Italy	4,933	203	4,730	1,557	1,065	1,405	703
Japan	185,059	33,811	151,248	68,974	33,789	15,096	33,389
Luxembourg	11,436	298	11,138	6,391	4,258	461	28
Netherlands	9,118	605	8,512	2,004	1,454	4,368	687
New Zealand	396	102	294	155	29	18	89
Norway	1,234	305	929	521	148	62	198
Portugal	228	-	228	4	204	20	-
Singapore	18,777	519	18,258	9,451	8,486	171	150
South Africa	173	22	151	34	1	-	119
Spain	6,312	766	5,546	2,756	2,109	255	426
Sweden	4,216	65	4,151	1,823	1,361	460	507
Switzerland	9,917	921	8,996	5,246	2,670	..	1,078
United Kingdom	342,432	59,039	283,393	125,995	59,299	52,137	45,962
United States ⁴	178,868	25,000	153,868	48,194	25,599	56,586	23,489
Total	982,485	145,247	837,238	350,677	188,828	155,954	139,270

¹ Sum of gross positive and negative market values. ² Net of local inter-dealer double-counting, i.e. gross market values minus negative market value exposure to other local dealers. ³ Total exposure equals gross positive plus gross negative market values. ⁴ Data on market values net of local double-counting may differ slightly from the national survey data because of differences in the estimation of the adjustment for local inter-dealer double-counting.

Table 7-A

**Reported amounts outstanding of equity and stock index derivatives
at end-March 1995, by instrument, counterparty and market risk factor ***

(in millions of US dollars)

Category	Nominal or notional value of contracts					Gross positive market values	Gross negative market values
	Total	US	Japanese	European	Other		
FORWARDS AND SWAPS	52,132	15,750	19,726	12,215	4,443	4,502	4,430
- with other dealers	20,422	6,204	5,114	7,730	1,374	2,370	2,028
- with others	31,264	9,546	14,207	4,484	3,028	2,114	2,389
Up to 1 year	21,393	5,625	7,095	6,942	1,732		
Over 1 year and up to 5 years ..	28,180	9,484	12,110	4,384	2,201		
Over 5 years	2,538	642	521	887	488		
OTC OPTIONS SOLD	281,994	53,443	37,910	140,869	47,297		34,810
- with other dealers	88,234	14,806	17,312	48,316	7,799		21,570
- with others	191,285	38,637	20,598	92,553	39,497		12,859
Up to 1 year	159,428	28,679	27,726	76,225	26,798		
Over 1 year and up to 5 years ..	115,818	24,402	9,955	61,678	19,783		
Over 5 years	4,141	362	98	2,964	717		
OTC OPTIONS BOUGHT	245,235	53,602	41,975	125,362	21,776	30,256	
- with other dealers	92,142	11,084	21,469	52,768	6,822	22,548	
- with others	150,571	42,518	20,506	72,594	14,954	7,362	
Up to 1 year	166,439	35,822	31,098	84,324	15,195		
Over 1 year and up to 5 years ..	74,804	17,431	10,615	40,398	6,360		
Over 5 years	1,466	350	261	640	215		
TOTAL OTC OPTIONS	527,230	107,044	79,885	266,231	69,073	30,256	34,810
TOTAL OTC DERIVATIVES	579,362	122,793	99,611	278,446	73,515	34,758	39,240
FUTURES	153,988	44,557	59,550	38,401	11,480		
Sold	84,389	25,240	31,424	22,975	4,752		
Bought	69,598	19,317	28,126	15,426	6,728		
EXCHANGE-TRADED OPTIONS	287,816	86,755	106,653	67,029	27,292		
Sold	136,296	44,752	46,974	30,538	13,993		
Bought	151,521	42,003	59,680	36,491	13,298		
TOTAL EXCHANGE-TRADED PRODUCTS	441,804	131,312	166,203	105,430	38,772		

* OTC products adjusted for local and cross-border double-counting.

Table 7-B

Maturity breakdown of reported notional amounts outstanding of OTC equity and stock index derivatives at end-March 1995, by instrument and market risk factor *

(percentage share of total amounts outstanding)

Currency	Up to 1 year	Over 1 year and up to and including 5 years	Over 5 years
FORWARDS AND SWAPS	42	53	5
US	36	60	4
Japanese	36	61	3
European	57	36	7
Other	39	50	11
OTC OPTIONS	63	36	1
US	60	39	1
Japanese	74	26	0
European	60	38	1
Other	61	38	1

* Gross of local and cross-border double-counting.

Table 8-A

**Reported amounts outstanding of commodity derivatives
at end-March 1995, by instrument and counterparty ¹**

(in millions of US dollars)

Category	Nominal or notional values	of which: gold ²	Gross positive market values	of which: gold	Gross negative market values	of which: gold
FORWARDS AND SWAPS	208,327	88,318	12,952	4,876	12,050	4,845
- with other dealers	37,450		3,653		3,512	
- with others	170,493		9,298		8,536	
Up to 1 year	149,237					
Over 1 year and up to 5 years	54,119					
Over 5 years	3,128					
OTC OPTIONS SOLD	56,050	28,327			3,310	862
- with other dealers	20,215				845	
- with others	35,806				2,464	
Up to 1 year	45,057					
Over 1 year and up to 5 years	10,289					
Over 5 years	232					
OTC OPTIONS BOUGHT	53,277	30,611	3,646	1,035		
- with other dealers	13,676		947			
- with others	38,963		2,663			
Up to 1 year	41,785					
Over 1 year and up to 5 years	11,102					
Over 5 years	313					
TOTAL OTC OPTIONS	109,325	58,938	3,646	1,035	3,310	862
TOTAL OTC DERIVATIVES	317,651	147,256	16,598	5,911	15,359	5,707
FUTURES	92,422	11,728				
Sold	49,721	6,422				
Bought	42,700	5,306				
EXCHANGE-TRADED OPTIONS	49,632	22,264				
Sold	25,817	14,015				
Bought	23,815	8,248				
TOTAL EXCHANGE-TRADED PRODUCTS	142,054	33,992				

¹ OTC products adjusted for local and cross-border double-counting. ² OTC gold trades proportionally adjusted for local and cross-border double-counting.

Table 9-A-1

**Reported foreign exchange derivatives turnover in April 1995,
by instrument, counterparty and currency ¹**

Total reported transactions in all currencies

(daily averages, in millions of US dollars)

Category	Total	Specified currency against all other currencies ²				
		US dollar	Deutsche Mark	Japanese yen	Pound sterling	French franc
OUTRIGHT FORWARDS	96,860	76,915	30,195	28,353	9,760	7,195
- with other dealers	33,396	26,716	11,908	8,417	3,667	2,130
local	14,753	11,559	4,812	4,088	2,167	877
cross-border	18,643	15,157	7,097	4,328	1,501	1,254
- with other financial institutions ..	27,847	22,745	7,222	8,412	3,163	2,537
local	19,345	15,800	4,126	6,913	2,489	1,894
cross-border	8,502	6,944	3,097	1,499	674	643
- with non-financial customers ..	35,617	27,455	10,952	11,396	2,883	2,527
local	25,738	19,801	6,631	9,611	2,102	1,769
cross-border	9,879	7,653	4,321	1,785	781	759
Up to 7 days	50,457	41,296	16,819	13,210	5,604	3,324
Over 7 days and up to 1 year	44,427	34,136	12,783	14,504	4,065	3,752
Over 1 year	1,936	1,468	571	638	88	116
FOREIGN EXCHANGE SWAPS	545,862	518,317	112,111	136,696	50,450	42,642
- with other dealers	370,488	357,720	74,185	90,641	33,012	28,537
local	139,755	133,828	24,536	35,525	16,482	9,168
cross-border	230,732	223,892	49,649	55,116	16,529	19,369
- with other financial institutions ..	107,623	101,799	20,776	24,380	10,344	8,813
local	50,270	46,815	9,423	15,475	4,564	3,787
cross-border	57,354	54,984	11,354	8,905	5,780	5,026
- with non-financial customers ..	67,751	58,798	14,802	20,290	5,910	5,292
local	45,167	38,959	8,699	16,293	3,911	2,666
cross-border	22,584	19,840	6,103	3,997	1,999	2,625
Up to 7 days	382,370	367,507	78,928	94,842	33,158	26,184
Over 7 days and up to 1 year	154,978	143,093	31,153	40,190	16,833	15,828
Over 1 year	7,429	6,893	1,807	1,657	455	627
CURRENCY SWAPS	3,772	3,126	568	1,147	165	257
- with other dealers	2,343	1,945	276	616	108	183
local	836	707	108	119	75	146
cross-border	1,507	1,238	168	497	32	37
- with other financial institutions ..	616	525	96	309	24	20
local	193	160	47	54	22	2
cross-border	423	366	49	255	3	13
- with non-financial customers ..	813	597	186	203	33	54
local	376	278	46	107	21	26
cross-border	437	319	139	96	13	29
OTC OPTIONS SOLD	19,188	14,872	8,433	7,500	1,302	1,732
- with other dealers	9,858	7,656	4,439	3,865	644	781
local	2,928	2,330	1,290	1,190	228	218
cross-border	6,929	5,326	3,149	2,675	416	563
- with other financial institutions ..	6,080	4,711	2,823	2,279	419	576
local	2,184	1,810	887	1,000	109	170
cross-border	3,896	2,901	1,936	1,279	310	404
- with non-financial customers ..	3,251	2,325	1,092	1,281	240	376
local	2,304	1,693	659	1,051	197	245
cross-border	946	632	411	229	43	131

For footnotes, see opposite page.

Table 9-A-2

**Reported foreign exchange derivatives turnover in April 1995,
by instrument, counterparty and currency ¹**

Total reported transactions in all currencies

(daily averages, in millions of US dollars)

Category	Total	Specified currency against all other currencies ²				
		US dollar	Deutsche Mark	Japanese yen	Pound sterling	French franc
OTC OPTIONS BOUGHT	21,513	16,174	9,946	8,022	1,499	2,125
- with other dealers	10,500	8,215	4,849	3,903	747	862
local	3,073	2,520	1,340	1,208	239	211
cross-border	7,428	5,694	3,509	2,695	509	647
- with other financial institutions	7,188	4,988	3,632	2,523	508	748
local	2,481	1,904	1,100	1,028	169	215
cross-border	4,707	3,085	2,470	1,495	339	444
- with non-financial customers	3,825	2,709	1,326	1,498	243	511
local	2,411	1,824	615	1,228	111	248
cross-border	1,414	886	711	270	132	262
TOTAL OTC OPTIONS	40,702	31,046	18,379	15,522	2,801	3,857
Premiums collected	666	529	222	356	24	35
Premiums paid	702	539	254	365	23	35
OTHER OTC PRODUCTS	566	355	109	42	18	67
- with other dealers	98	85	10	26	5	25
local	38	28	1	11	4	8
cross-border	60	57	9	15	1	16
- with other financial institutions	247	142	38	3	2	37
local	201	123	35	3	2	27
cross-border	46	20	3	-	-	11
- with non-financial customers	221	128	61	13	11	5
local	175	104	50	9	5	5
cross-border	46	24	11	4	6	-
TOTAL OTC DERIVATIVES	687,762	629,759	161,362	181,760	63,195	54,018
FUTURES	12,618	12,428	2,951	3,895	383	161
Sold (notional)	3,934	3,826	1,082	1,457	196	89
Bought (notional)	8,684	8,602	1,869	2,437	187	72
EXCHANGE-TRADED OPTIONS	2,661	2,597	1,260	859	178	55
Sold (notional)	1,226	1,194	580	414	67	24
Bought (notional)	1,435	1,402	680	445	110	31
Premiums collected	15	14	5	4	1	-
Premiums paid	14	13	5	4	1	-
TOTAL EXCHANGE-TRADED PRODUCTS	15,278	15,024	4,212	4,754	561	216

For footnotes, see opposite page.

Table 9-A-1 (contd.)

**Reported foreign exchange derivatives turnover in April 1995,
by instrument, counterparty and currency ¹
Total reported transactions in all currencies**

(daily averages, in millions of US dollars)

Specified currency against all other currencies ²							Category
Swiss franc	Canadian dollar	Australian dollar	ECU	Other EMS currencies	Currencies of other reporting countries ³	Residual	
7,136	4,589	2,231	1,811	14,500	1,962	9,071	OUTRIGHT FORWARDS
2,532	1,355	593	777	4,709	621	3,214	- with other dealers
1,010	998	233	381	1,893	384	1,049	local
1,522	357	360	395	2,816	237	2,165	cross-border
1,914	1,756	597	649	3,780	215	2,705	- with other financial institutions ..
1,256	1,137	331	438	2,825	147	1,333	local
657	619	265	211	954	67	1,373	cross-border
2,679	1,478	1,041	386	6,012	1,127	3,046	- with non-financial customers ..
1,512	1,147	928	229	4,540	1,089	1,866	local
1,167	331	113	157	1,472	38	1,181	cross-border
4,258	2,555	1,088	1,149	6,873	659	4,078	Up to 7 days
2,763	1,958	1,078	630	7,187	1,266	4,732	Over 7 days and up to 1 year
115	76	65	32	421	37	246	Over 1 year
35,547	21,834	18,410	15,439	85,782	15,746	38,752	FOREIGN EXCHANGE SWAPS
23,758	12,616	12,497	11,365	56,206	11,710	23,442	- with other dealers
7,541	4,812	5,785	4,888	19,353	8,102	8,235	local
16,217	7,804	6,712	6,477	36,852	3,608	15,208	cross-border
6,648	6,398	2,483	3,091	19,117	1,911	9,487	- with other financial institutions ..
2,615	2,600	877	1,105	8,538	1,436	3,306	local
4,033	3,798	1,606	1,986	10,580	475	6,181	cross-border
4,730	2,820	3,430	984	10,459	2,125	4,621	- with non-financial customers ..
1,965	2,083	3,153	430	6,615	1,977	2,340	local
2,765	737	277	554	3,844	148	2,281	cross-border
27,620	15,972	11,869	11,683	59,541	9,764	27,672	Up to 7 days
7,385	5,620	6,267	3,616	23,940	5,847	10,184	Over 7 days and up to 1 year
506	242	274	139	1,659	135	464	Over 1 year
125	64	150	142	791	35	974	CURRENCY SWAPS
83	20	126	83	453	4	711	- with other dealers
38	6	92	68	192	3	86	local
45	14	34	14	260	1	625	cross-border
4	27	9	9	97	4	93	- with other financial institutions ..
-	17	2	1	33	2	36	local
4	7	8	2	64	2	56	cross-border
37	17	14	50	241	9	134	- with non-financial customers ..
17	13	11	-	204	9	18	local
20	4	3	50	37	-	116	cross-border
962	559	420	19	1,384	163	1,027	OTC OPTIONS SOLD
462	256	238	15	629	48	451	- with other dealers
123	84	73	8	154	31	98	local
339	172	165	7	471	17	353	cross-border
217	150	82	3	471	84	321	- with other financial institutions ..
52	40	26	1	111	67	77	local
149	107	56	2	360	17	244	cross-border
283	153	101	1	284	30	222	- with non-financial customers ..
192	108	99	-	155	30	100	local
90	42	2	-	65	-	119	cross-border

Note: This table and the subsequent tables 9-B to 9-H include data on outright forwards and foreign exchange swaps which are also included in tables 1-A to 1-H, 1-J to 2-A, 2-C to 2-E, 2-G and 2-H. ¹ OTC products adjusted for local and cross-border double-counting. ² Because two currencies are involved in each transaction, the sum of transactions in individual currencies comes to twice the total reported turnover. ³ Includes only transactions where at least one counterparty is located in the country of issue of the currency in question.

Table 9-A-2 (contd.)

**Reported foreign exchange derivatives turnover in April 1995,
by instrument, counterparty and currency ¹
Total reported transactions in all currencies**

(daily averages, in millions of US dollars)

Specified currency against all other currencies ²							Category
Swiss franc	Canadian dollar	Australian dollar	ECU	Other EMS currencies	Currencies of other reporting countries ³	Residual	
1,140	582	466	25	1,646	77	1,331	OTC OPTIONS BOUGHT
448	255	281	16	735	47	478	- with other dealers
127	110	89	11	145	33	89	local
321	145	193	5	580	14	389	cross-border
362	176	104	5	602	12	602	- with other financial institutions ..
104	48	27	-	211	8	100	local
259	125	77	5	353	4	501	cross-border
329	151	81	4	309	17	204	- with non-financial customers ..
228	75	76	3	181	17	50	local
101	74	6	1	125	-	143	cross-border
2,102	1,141	887	45	3,030	240	2,360	TOTAL OTC OPTIONS
20	6	4	1	97	1	35	Premiums collected
21	5	3	1	112	1	42	Premiums paid
18	4	-	38	462	4	15	OTHER OTC PRODUCTS
5	2	-	4	33	-	2	- with other dealers
-	-	-	1	23	-	-	local
5	2	-	3	11	-	2	cross-border
10	-	-	28	223	4	6	- with other financial institutions ..
-	-	-	6	196	4	5	local
10	-	-	22	27	-	-	cross-border
2	2	-	7	206	-	7	- with non-financial customers ..
2	1	-	7	164	-	2	local
-	1	-	-	42	-	5	cross-border
44,928	27,632	21,678	17,475	104,565	17,987	51,173	TOTAL OTC DERIVATIVES
754	193	13	-	55	41	14	FUTURES
355	96	7	-	28	22	7	Sold (notional)
344	97	7	-	27	18	7	Bought (notional)
202	64	8	-	26	1	43	EXCHANGE-TRADED OPTIONS ...
86	26	1	-	15	-	27	Sold (notional)
116	38	7	-	11	-	16	Bought (notional)
2	-	-	-	-	-	1	Premiums collected
2	-	-	-	-	-	-	Premiums paid
956	257	22	-	81	41	58	TOTAL EXCHANGE-TRADED PRODUCTS

Note: This table and the subsequent tables 9-B to 9-H include data on outright forwards and foreign exchange swaps which are also included in tables 1-A to 1-H, 1-J to 2-A, 2-C to 2-E, 2-G and 2-H. ¹ OTC products adjusted for local and cross-border double-counting. ² Because two currencies are involved in each transaction, the sum of transactions in individual currencies comes to twice the total reported turnover. ³ Includes only transactions where at least one counterparty is located in the country of issue of the currency in question.

Table 9-B-1

**Reported foreign exchange derivatives turnover in April 1995,
by instrument, counterparty and currency ¹**

US dollar against:

(daily averages, in millions of US dollars)

Category	Total	Deutsche Mark	Japanese yen	Pound sterling	French franc	Swiss franc
OUTRIGHT FORWARDS	76,915	18,311	21,753	5,381	4,642	5,286
- with other dealers	26,716	7,118	6,185	2,400	1,441	1,746
local	11,559	2,745	2,658	1,186	598	670
cross-border	15,157	4,373	3,527	1,214	843	1,076
- with other financial institutions ..	22,745	4,614	6,216	1,353	1,824	1,717
local	15,800	2,689	4,961	880	1,408	1,174
cross-border	6,944	1,926	1,255	473	416	544
- with non-financial customers ..	27,455	6,467	9,264	1,581	1,376	1,811
local	19,801	3,714	7,785	1,124	876	1,010
cross-border	7,653	2,753	1,478	457	500	801
Up to 7 days	41,296	10,652	10,007	3,223	2,276	3,232
Over 7 days and up to 1 year	34,136	7,375	11,290	2,102	2,279	1,986
Over 1 year	1,468	280	455	56	85	68
FOREIGN EXCHANGE SWAPS	518,317	93,033	132,621	46,250	37,664	32,986
- with other dealers	357,720	64,116	89,129	31,279	26,333	22,939
local	133,828	19,964	34,840	15,608	8,132	7,146
cross-border	223,892	44,152	54,289	15,672	18,202	15,794
- with other financial institutions ..	101,799	16,822	23,266	9,544	7,720	5,997
local	46,815	7,126	14,676	4,116	3,215	2,100
cross-border	54,984	9,696	8,591	5,428	4,506	3,897
- with non-financial customers ..	58,798	9,747	18,892	4,242	3,610	3,638
local	38,959	5,262	15,120	2,580	1,575	1,258
cross-border	19,840	4,484	3,772	1,662	2,035	2,380
Up to 7 days	367,507	67,852	92,731	30,915	23,478	26,190
Over 7 days and up to 1 year	143,093	23,599	38,381	14,950	13,627	6,296
Over 1 year	6,893	1,397	1,506	381	558	468
CURRENCY SWAPS	3,126	274	960	135	136	102
- with other dealers	1,945	158	497	94	101	70
local	707	73	78	69	84	31
cross-border	1,238	85	418	25	17	39
- with other financial institutions ..	525	48	286	22	17	3
local	160	35	48	20	-	-
cross-border	366	13	238	2	12	3
- with non-financial customers ..	597	62	159	19	19	27
local	278	-	75	8	-	9
cross-border	319	62	84	11	19	19
OTC OPTIONS SOLD	14,872	4,790	6,423	593	792	551
- with other dealers	7,656	2,631	3,303	343	366	287
local	2,330	779	1,023	136	93	84
cross-border	5,326	1,852	2,281	208	273	203
- with other financial institutions ..	4,711	1,618	1,928	208	277	112
local	1,810	558	870	52	88	23
cross-border	2,901	1,060	1,057	156	189	73
- with non-financial customers ..	2,325	462	1,119	42	149	151
local	1,693	245	938	30	102	99
cross-border	632	218	182	13	47	52

For footnotes, see opposite page.

Table 9-B-2

**Reported foreign exchange derivatives turnover in April 1995,
by instrument, counterparty and currency ¹**

US dollar against:

(daily averages, in millions of US dollars)

Category	Total	Deutsche Mark	Japanese yen	Pound sterling	French franc	Swiss franc
OTC OPTIONS BOUGHT	16,174	5,451	6,844	695	965	557
- with other dealers	8,215	2,961	3,346	395	442	273
local	2,520	876	1,041	147	119	74
cross-border	5,694	2,085	2,306	248	323	199
- with other financial institutions ..	4,988	1,791	2,093	221	299	110
local	1,904	599	898	90	85	50
cross-border	3,085	1,192	1,195	130	147	60
- with non-financial customers ..	2,709	566	1,311	79	224	175
local	1,824	235	1,103	40	127	102
cross-border	886	331	208	39	98	72
TOTAL OTC OPTIONS	31,046	10,241	13,266	1,288	1,757	1,108
Premiums collected	529	107	323	11	25	15
Premiums paid	539	116	334	11	25	16
OTHER OTC PRODUCTS	355	22	31	7	26	12
- with other dealers	85	8	23	5	16	5
local	28	-	11	4	-	-
cross-border	57	8	13	1	16	5
- with other financial institutions ..	142	5	-	-	11	5
local	123	2	-	-	-	-
cross-border	20	3	-	-	11	5
- with non-financial customers ..	128	8	8	2	-	1
local	104	6	7	2	-	1
cross-border	24	3	1	-	-	-
TOTAL OTC DERIVATIVES	629,759	121,880	168,631	53,061	44,225	39,493
FUTURES	12,428	2,809	3,884	297	124	706
Sold (notional)	3,826	1,000	1,452	147	63	331
Bought (notional)	8,602	1,810	2,432	150	62	321
EXCHANGE-TRADED OPTIONS ...	2,597	1,223	842	166	55	199
Sold (notional)	1,194	566	408	63	24	85
Bought (notional)	1,402	657	435	103	31	113
Premiums collected	14	5	4	1	-	2
Premiums paid	13	5	4	1	-	2
TOTAL EXCHANGE-TRADED PRODUCTS	15,024	4,032	4,727	463	179	904

For footnotes, see opposite page.

Table 9-B-1 (contd.)

**Reported foreign exchange derivatives turnover in April 1995,
by instrument, counterparty and currency ¹**

US dollar against:

(daily averages, in millions of US dollars)

Canadian dollar	Australian dollar	ECU	Other EMS currencies	Currencies of other reporting countries ²	Residual	Category
4,226	1,874	1,216	8,701	1,629	3,897	OUTRIGHT FORWARDS
1,292	547	520	3,291	579	1,446	- with other dealers
957	211	300	1,293	356	529	local
334	336	220	1,998	222	917	cross-border
1,628	539	512	2,673	196	1,471	- with other financial institutions
1,072	287	373	2,064	132	761	local
557	252	139	609	65	710	cross-border
1,306	788	183	2,736	854	915	- with non-financial customers
1,052	683	70	1,901	819	594	local
254	105	114	836	34	321	cross-border
2,408	962	815	4,907	592	2,219	Up to 7 days
1,748	851	384	3,537	1,004	1,580	Over 7 days and up to 1 year
69	60	16	249	33	97	Over 1 year
21,575	17,995	14,724	76,456	15,425	29,590	FOREIGN EXCHANGE SWAPS
12,510	12,415	10,926	52,399	11,648	18,748	- with other dealers
4,754	5,732	4,684	17,195	8,059	6,468	local
7,756	6,683	6,242	35,203	3,589	12,280	cross-border
6,355	2,417	2,961	17,387	1,830	7,500	- with other financial institutions
2,572	836	1,022	7,438	1,371	2,344	local
3,783	1,581	1,939	9,949	459	5,156	cross-border
2,710	3,164	837	6,670	1,946	2,196	- with non-financial customers
1,991	2,892	350	3,846	1,802	1,137	local
719	272	487	2,824	144	1,059	cross-border
15,831	11,658	11,277	55,191	9,678	22,705	Up to 7 days
5,503	6,064	3,312	19,206	5,617	6,537	Over 7 days and up to 1 year
241	273	133	1,459	130	347	Over 1 year
59	140	63	638	29	590	CURRENCY SWAPS
16	116	48	395	4	445	- with other dealers
5	92	35	174	3	61	local
11	24	13	220	1	384	cross-border
27	9	7	75	2	24	- with other financial institutions
17	1	-	26	-	3	local
7	8	1	50	2	21	cross-border
16	14	8	168	9	95	- with non-financial customers
12	11	-	151	9	3	local
4	3	8	18	-	92	cross-border
540	343	4	514	153	166	OTC OPTIONS SOLD
246	205	2	181	45	47	- with other dealers
83	54	-	42	30	8	local
164	151	2	139	15	39	cross-border
145	77	3	211	83	48	- with other financial institutions
36	23	1	52	66	33	local
106	53	2	159	17	15	cross-border
149	62	-	122	24	43	- with non-financial customers
103	60	-	59	24	28	local
42	2	-	21	-	15	cross-border

¹ OTC products adjusted for local and cross-border double-counting. ² Includes only transactions where at least one counterparty is located in the country of issue of the currency in question.

Table 9-B-2 (contd.)

**Reported foreign exchange derivatives turnover in April 1995,
by instrument, counterparty and currency ¹**

US dollar against:

(daily averages, in millions of US dollars)

Canadian dollar	Australian dollar	ECU	Other EMS currencies	Currencies of other reporting countries ²	Residual	Category
559	395	7	439	65	196	OTC OPTIONS BOUGHT
248	238	2	198	44	68	- with other dealers
109	72	-	38	32	14	local
139	166	2	160	12	55	cross-border
167	97	4	141	6	60	- with other financial institutions
40	23	-	53	2	37	local
125	74	4	87	4	23	cross-border
144	61	1	101	15	32	- with non-financial customers
70	55	-	59	15	14	local
71	5	1	42	-	7	cross-border
1,099	739	13	953	218	364	TOTAL OTC OPTIONS
5	3	-	30	-	8	Premiums collected
5	2	-	22	1	6	Premiums paid
2	-	3	249	-	3	OTHER OTC PRODUCTS
-	-	3	22	-	2	- with other dealers
-	-	-	12	-	-	local
-	-	3	10	-	2	cross-border
-	-	-	121	-	-	- with other financial institutions
-	-	-	121	-	-	local
-	-	-	1	-	-	cross-border
2	-	-	106	-	1	- with non-financial customers
1	-	-	87	-	-	local
-	-	-	19	-	1	cross-border
26,961	20,748	16,018	86,998	17,301	34,443	TOTAL OTC DERIVATIVES
193	13	-	3	39	10	FUTURES
96	7	-	2	21	5	Sold (notional)
97	7	-	1	18	5	Bought (notional)
64	8	-	12	-	-	EXCHANGE-TRADED OPTIONS
26	1	-	6	-	-	Sold (notional)
38	7	-	6	-	-	Bought (notional)
-	-	-	-	-	-	Premiums collected
-	-	-	-	-	-	Premiums paid
257	22	-	16	40	10	TOTAL EXCHANGE-TRADED PRODUCTS

¹ OTC products adjusted for local and cross-border double-counting. ² Includes only transactions where at least one counterparty is located in the country of issue of the currency in question.

Table 9-C-1

**Reported foreign exchange derivatives turnover in April 1995,
by instrument, counterparty and currency ¹**

Deutsche Mark against:

(daily averages, in millions of US dollars)

Category	Total	US dollar	Japanese yen	Pound sterling	French franc	Swiss franc
OUTRIGHT FORWARDS	30,195	18,311	2,880	1,282	1,547	1,174
- with other dealers	11,908	7,118	1,386	500	557	617
local	4,812	2,745	676	266	200	225
cross-border	7,097	4,373	710	234	357	392
- with other financial institutions ..	7,222	4,614	584	305	501	157
local	4,126	2,689	362	170	288	63
cross-border	3,097	1,926	222	134	213	93
- with non-financial customers ..	10,952	6,467	910	477	488	400
local	6,631	3,714	730	314	282	181
cross-border	4,321	2,753	180	163	207	219
Up to 7 days	16,819	10,652	1,539	713	856	811
Over 7 days and up to 1 year	12,783	7,375	1,244	557	672	333
Over 1 year	571	280	97	12	16	29
FOREIGN EXCHANGE SWAPS	112,111	93,033	2,195	2,072	3,216	1,311
- with other dealers	74,185	64,116	1,225	1,126	1,749	575
local	24,536	19,964	513	494	731	247
cross-border	49,649	44,152	712	631	1,018	327
- with other financial institutions ..	20,776	16,822	520	399	789	189
local	9,423	7,126	243	240	409	85
cross-border	11,354	9,696	278	159	380	104
- with non-financial customers ..	14,802	9,747	449	548	677	547
local	8,699	5,262	293	373	422	280
cross-border	6,103	4,484	156	174	255	267
Up to 7 days	78,928	67,852	1,194	1,254	1,969	888
Over 7 days and up to 1 year	31,153	23,599	878	778	1,200	397
Over 1 year	1,807	1,397	122	39	45	25
CURRENCY SWAPS	568	274	66	5	43	11
- with other dealers	276	158	46	2	14	7
local	108	73	10	1	9	2
cross-border	168	85	35	1	5	5
- with other financial institutions ..	96	48	11	1	1	1
local	47	35	1	1	-	-
cross-border	49	13	10	-	1	1
- with non-financial customers ..	186	62	10	2	28	2
local	46	-	5	1	19	2
cross-border	139	62	4	1	9	1
OTC OPTIONS SOLD	8,433	4,790	923	640	840	310
- with other dealers	4,439	2,631	502	281	385	138
local	1,290	779	146	86	120	25
cross-border	3,149	1,852	356	195	264	112
- with other financial institutions ..	2,823	1,618	330	202	278	100
local	887	558	113	50	70	24
cross-border	1,936	1,060	217	152	209	76
- with non-financial customers ..	1,092	462	91	157	177	73
local	659	245	50	139	106	53
cross-border	411	218	41	18	71	20

For footnotes, see opposite page.

Table 9-C-2

**Reported foreign exchange derivatives turnover in April 1995,
by instrument, counterparty and currency ¹**

Deutsche Mark against:

(daily averages, in millions of US dollars)

Category	Total	US dollar	Japanese yen	Pound sterling	French franc	Swiss franc
OTC OPTIONS BOUGHT	9,946	5,451	1,013	726	1,038	476
- with other dealers	4,849	2,961	491	323	385	127
local	1,340	876	149	85	86	28
cross-border	3,509	2,085	342	238	299	99
- with other financial institutions ..	3,632	1,791	401	275	430	243
local	1,100	599	106	71	116	44
cross-border	2,470	1,192	295	205	292	199
- with non-financial customers ..	1,326	566	121	127	224	105
local	615	235	62	45	74	101
cross-border	711	331	59	82	150	4
TOTAL OTC OPTIONS	18,379	10,241	1,936	1,366	1,878	786
Premiums collected	222	107	27	8	9	3
Premiums paid	254	116	26	8	9	3
OTHER OTC PRODUCTS	109	22	-	1	1	-
- with other dealers	10	8	-	-	1	-
local	1	-	-	-	-	-
cross-border	9	8	-	-	1	-
- with other financial institutions ..	38	5	-	-	-	-
local	35	2	-	-	-	-
cross-border	3	3	-	-	-	-
- with non-financial customers ..	61	8	-	1	-	-
local	50	6	-	1	-	-
cross-border	11	3	-	-	-	-
TOTAL OTC DERIVATIVES	161,362	121,880	7,077	4,726	6,684	3,281
FUTURES	2,951	2,809	9	83	18	15
Sold (notional)	1,082	1,000	5	47	16	8
Bought (notional)	1,869	1,810	4	36	1	7
EXCHANGE-TRADED OPTIONS	1,260	1,223	16	9	-	3
Sold (notional)	580	566	6	2	-	1
Bought (notional)	680	657	10	7	-	3
Premiums collected	5	5	-	-	-	-
Premiums paid	5	5	-	-	-	-
TOTAL EXCHANGE-TRADED PRODUCTS	4,212	4,032	25	92	18	19

For footnotes, see opposite page.

Table 9-C-1 (contd.)

**Reported foreign exchange derivatives turnover in April 1995,
by instrument, counterparty and currency ¹**

Deutsche Mark against:

(daily averages, in millions of US dollars)

Canadian dollar	Australian dollar	ECU	Other EMS currencies	Currencies of other reporting countries ²	Residual	Category
140	63	345	3,433	48	972	OUTRIGHT FORWARDS
31	16	206	1,189	9	279	- with other dealers
15	9	47	467	7	153	local
16	7	159	722	1	126	cross-border
57	13	81	686	3	222	- with other financial institutions
13	8	29	393	2	107	local
44	5	52	293	-	115	cross-border
53	34	58	1,557	37	471	- with non-financial customers
16	31	24	1,064	36	240	local
36	3	34	493	1	231	cross-border
35	18	284	1,543	7	361	Up to 7 days
104	42	55	1,804	41	555	Over 7 days and up to 1 year
1	2	6	79	1	48	Over 1 year
115	120	469	6,533	74	2,974	FOREIGN EXCHANGE SWAPS
79	37	340	3,204	15	1,720	- with other dealers
38	12	136	1,771	7	621	local
41	25	204	1,432	8	1,098	cross-border
19	12	70	1,384	4	567	- with other financial institutions
12	7	30	884	3	383	local
7	5	39	501	1	184	cross-border
17	71	59	1,945	55	687	- with non-financial customers
12	69	23	1,414	55	495	local
6	2	36	531	-	192	cross-border
77	87	304	3,285	14	2,004	Up to 7 days
38	33	160	3,082	59	929	Over 7 days and up to 1 year
-	-	4	134	1	39	Over 1 year
1	6	48	88	-	26	CURRENCY SWAPS
1	6	4	35	-	3	- with other dealers
-	-	3	7	-	3	local
1	6	1	28	-	-	cross-border
-	-	2	17	-	14	- with other financial institutions
-	-	-	4	-	6	local
-	-	1	13	-	8	cross-border
-	-	42	35	-	4	- with non-financial customers
-	-	-	19	-	-	local
-	-	42	16	-	4	cross-border
4	14	2	792	2	117	OTC OPTIONS SOLD
2	5	2	426	1	68	- with other dealers
1	1	2	107	-	24	local
2	4	-	319	1	44	cross-border
1	5	-	254	-	35	- with other financial institutions
-	2	-	55	-	16	local
1	3	-	200	-	18	cross-border
-	5	-	111	1	15	- with non-financial customers
-	5	-	54	1	7	local
-	-	-	38	-	5	cross-border

¹ OTC products adjusted for local and cross-border double-counting. ² Includes only transactions where at least one counterparty is located in the country of issue of the currency in question.

Table 9-C-2 (contd.)

**Reported foreign exchange derivatives turnover in April 1995,
by instrument, counterparty and currency ¹**

Deutsche Mark against:

(daily averages, in millions of US dollars)

Canadian dollar	Australian dollar	ECU	Other EMS currencies	Currencies of other reporting countries ²	Residual	Category
6	16	1	1,085	6	129	OTC OPTIONS BOUGHT
2	8	-	483	1	69	- with other dealers
1	1	-	90	-	26	local
2	7	-	393	1	44	cross-border
1	3	-	451	6	31	- with other financial institutions
-	1	-	148	6	11	local
1	3	-	265	-	20	cross-border
3	4	1	152	-	24	- with non-financial customers
-	4	1	81	-	12	local
3	-	-	70	-	12	cross-border
10	29	3	1,876	8	247	TOTAL OTC OPTIONS
-	-	-	65	-	3	Premiums collected
-	-	-	89	-	2	Premiums paid
-	-	-	83	-	2	OTHER OTC PRODUCTS
-	-	-	1	-	-	- with other dealers
-	-	-	1	-	-	local
-	-	-	-	-	-	cross-border
-	-	-	32	-	-	- with other financial institutions
-	-	-	32	-	-	local
-	-	-	-	-	-	cross-border
-	-	-	50	-	2	- with non-financial customers
-	-	-	42	-	1	local
-	-	-	8	-	1	cross-border
267	218	864	12,013	131	4,222	TOTAL OTC DERIVATIVES
-	-	-	16	-	1	FUTURES
-	-	-	7	-	-	Sold (notional)
-	-	-	9	-	1	Bought (notional)
-	-	-	4	-	5	EXCHANGE-TRADED OPTIONS
-	-	-	2	-	3	Sold (notional)
-	-	-	2	-	3	Bought (notional)
-	-	-	-	-	-	Premiums collected
-	-	-	-	-	-	Premiums paid
-	-	-	20	-	6	TOTAL EXCHANGE-TRADED PRODUCTS

¹ OTC products adjusted for local and cross-border double-counting. ² Includes only transactions where at least one counterparty is located in the country of issue of the currency in question.

Table 9-D

**Reported OTC foreign exchange derivatives turnover net of local inter-dealer
double-counting in April 1995, by country and currency ¹**

(daily averages, in millions of US dollars)

Country	Total	Specified currency against all other currencies ²				
		US dollar	Deutsche Mark	Japanese yen	Pound sterling	French franc
United Kingdom	292,422	272,858	61,818	60,909	46,855	24,877
United States	131,835	122,146	40,318	32,987	11,701	11,537
Japan	112,202	107,265	13,324	93,730	2,138	1,536
Singapore	62,994	61,518	13,210	18,468	5,014	2,346
Hong Kong	56,391	55,808	10,868	19,989	4,204	..
Switzerland	44,246	39,245	12,990	4,000	1,605	3,418
Germany	45,104	35,422	30,416	3,947	2,306	6,484
France	36,070	31,613	8,105	4,739	1,323	18,815
Australia	22,902	22,349	4,225	2,678	2,029	..
Denmark	22,937	19,728	5,073	531	444	731
Canada	18,681	18,548	1,785	931	633	238
Belgium	22,407	20,562	4,137	1,714	1,454	2,099
Netherlands	15,501	13,292	3,695	728	1,760	1,353
Italy	10,755	9,180	1,604	250	92	228
Sweden	11,800	10,497	2,614	266	171	314
Luxembourg	11,700	10,495	5,361	461	338	1,337
Spain	11,214	10,336	2,118	161	46	157
Austria	4,488	3,510	1,781	59	36	57
Norway	4,193	3,705	665	89	115	48
New Zealand	4,069	3,917	279	324	125	20
Finland	2,898	2,241	705	20	43	177
South Africa	2,829	2,679	270	104	77	30
Ireland	1,726	1,276	479	49	346	64
Greece	1,272	955	300	413	7	8
Bahrain	1,337	1,283	283	320	67	28
Portugal	1,018	893	44	103	4	5
Total	952,993	881,319	226,466	247,972	82,935	75,905

For footnotes, see opposite page.

Table 9-D (contd.)

**Reported OTC foreign exchange derivatives turnover net of local inter-dealer
double-counting in April 1995, by country and currency ¹**

(daily averages, in millions of US dollars)

Specified currency against all other currencies ²							Country
Swiss franc	Canadian dollar	Australian dollar	ECU	Other EMS currencies	Currencies of other reporting countries ³	Residual	
18,564	8,896	5,742	13,521	49,926	..	20,874	United Kingdom
9,983	6,640	3,931	1,454	13,570	..	9,403	United States
1,541	541	1,884	307	527	..	1,613	Japan
4,777	1,796	2,454	402	941	3,523	11,539	Singapore
1,848	1,213	2,269	..	..	10,762	5,820	Hong Kong
17,838	1,032	208	658	5,273	..	2,224	Switzerland
2,663	498	252	866	4,523	..	2,832	Germany
948	379	84	2,503	2,800	..	831	France
702	149	11,423	..	..	..	2,248	Australia
774	43	17	253	12,339	..	5,943	Denmark
431	14,424	84	..	..	..	290	Canada
451	..	..	2,073	10,634	..	1,691	Belgium
675	120	43	436	8,377	..	523	Netherlands
172	13	15	701	8,994	..	261	Italy
771	60	19	46	7,805	..	1,038	Sweden
875	244	47	663	2,514	..	1,065	Luxembourg
128	1	-	116	9,300	..	65	Spain
185	21	5	34	2,293	..	996	Austria
19	5	-	36	985	2,490	227	Norway
18	22	646	-	52	2,701	31	New Zealand
41	3	2	168	2,047	..	351	Finland
30	5	5	12	37	2,363	46	South Africa
101	6	5	36	933	..	157	Ireland
5	2	1	38	733	..	83	Greece
87	8	3	2	29	31	534	Bahrain
10	2	-	51	923	..	-	Portugal
63,637	36,125	29,138	24,375	145,555	21,871	70,685	Total

¹ Outright forwards, foreign exchange swaps, currency swaps, OTC options and other OTC products. ² Because two currencies are involved in each transaction, the sum of transactions in individual currencies comes to twice total reported turnover. ³ Includes only transactions where at least one counterparty is located in the country of issue of the currency in question.

Table 9-E

**Reported OTC foreign exchange derivatives turnover net of local inter-dealer
double-counting in April 1995, by country and currency ¹**

US dollar against:

(daily averages, in millions of US dollars)

Country	Total	Deutsche Mark	Japanese yen	Pound sterling	French franc	Swiss franc
United Kingdom	272,858	49,712	56,181	39,444	21,959	17,799
United States	122,146	31,644	31,364	10,518	9,858	8,901
Japan	107,265	10,805	89,105	1,904	1,016	903
Singapore	61,518	12,698	18,199	4,973	2,314	4,761
Hong Kong	55,808	10,488	19,651	4,162	..	1,848
Switzerland	39,245	9,464	3,560	1,387	2,769	15,224
Germany	35,422	20,922	2,271	1,004	4,741	2,052
France	31,613	5,486	4,256	981	15,464	664
Australia	22,349	4,023	2,438	1,989	..	684
Denmark	19,728	2,565	418	358	642	677
Canada	18,548	1,735	911	605	230	419
Belgium	20,562	2,670	1,671	1,383	1,839	421
Netherlands	13,292	2,380	542	1,499	1,097	556
Italy	9,180	685	134	42	91	98
Sweden	10,497	1,870	206	98	247	707
Luxembourg	10,495	4,419	304	285	1,199	830
Spain	10,336	1,416	124	33	135	94
Austria	3,510	1,244	38	9	27	154
Norway	3,705	369	75	79	21	17
New Zealand	3,917	250	301	111	18	17
Finland	2,241	203	14	25	148	31
South Africa	2,679	197	88	55	19	22
Ireland	1,276	236	38	176	27	94
Greece	955	259	182	4	7	4
Bahrain	1,283	265	315	60	28	85
Portugal	893	23	16	1	3	8
Total	881,319	176,024	232,401	71,184	63,899	57,071

For footnotes, see opposite page.

Table 9-E (contd.)

**Reported OTC foreign exchange derivatives turnover net of local inter-dealer
double-counting in April 1995, by country and currency ¹**

US dollar against:

(daily averages, in millions of US dollars)

Canadian dollar	Australian dollar	ECU	Other EMS currencies	Currencies of other reporting countries ²	Residual	Country
8,763	5,661	13,110	46,469	..	13,762	United Kingdom
6,561	3,888	1,190	11,456	..	6,767	United States
432	1,690	218	373	..	818	Japan
1,793	2,417	396	880	3,395	9,692	Singapore
1,213	2,269	..	..	10,696	5,482	Hong Kong
968	201	465	4,241	..	968	Switzerland
317	148	581	2,247	..	1,139	Germany
366	69	2,226	1,714	..	387	France
146	10,989	..	..	..	2,079	Australia
42	14	244	11,059	..	3,710	Denmark
14,314	81	..	..	..	253	Canada
..	..	2,026	9,406	..	1,147	Belgium
105	34	391	6,445	..	243	Netherlands
9	4	588	7,499	..	31	Italy
49	13	35	6,454	..	818	Sweden
218	36	609	2,045	..	552	Luxembourg
1	-	90	8,424	..	18	Spain
20	1	32	1,861	..	124	Austria
4	-	32	684	2,227	197	Norway
21	582	-	32	2,559	26	New Zealand
2	1	164	1,480	..	174	Finland
4	3	9	21	2,247	14	South Africa
6	5	22	647	..	24	Ireland
2	1	22	470	..	3	Greece
8	3	2	28	23	466	Bahrain
2	-	48	793	..	-	Portugal
35,365	28,108	22,500	124,728	21,146	48,894	Total

¹ Outright forwards, foreign exchange swaps, currency swaps, OTC options and other OTC products. ² Includes only transactions where at least one counterparty is located in the country of issue of the currency in question.

Table 9-F

**Reported OTC foreign exchange derivatives turnover net of local inter-dealer
double-counting in April 1995, by country and currency ¹**

Deutsche Mark against:

(daily averages, in millions of US dollars)

Country	Total	US dollar	Japanese yen	Pound sterling	French franc	Swiss franc
United Kingdom	61,818	49,712	1,983	2,808	2,465	560
United States	40,318	31,644	1,624	1,183	1,679	1,082
Japan	13,324	10,805	2,409	43	46	11
Singapore	13,210	12,698	248	38	30	15
Hong Kong	10,868	10,488	338	42	..	..
Switzerland	12,990	9,464	221	131	432	1,617
Germany	30,416	20,922	1,676	1,302	1,742	612
France	8,105	5,486	232	120	1,684	114
Australia	4,225	4,023	82	11	..	1
Denmark	5,073	2,565	71	43	33	73
Canada	1,785	1,735	3	6	4	4
Belgium	4,137	2,670	22	40	168	5
Netherlands	3,695	2,380	56	72	122	49
Italy	1,604	685	6	3	11	7
Sweden	2,614	1,870	15	6	11	3
Luxembourg	5,361	4,419	152	51	131	35
Spain	2,118	1,416	1	-	-	-
Austria	1,781	1,244	16	20	25	19
Norway	665	369	-	7	-	2
New Zealand	279	250	3	2	-	-
Finland	705	203	-	6	18	-
South Africa	270	197	-	1	-	3
Ireland	479	236	6	77	26	5
Greece	300	259	11	2	-	-
Bahrain	283	265	4	7	-	-
Portugal	44	23	-	1	1	-
Total	226,466	176,024	9,180	6,020	8,628	4,216

For footnotes, see opposite page.

Table 9-F (contd.)

**Reported OTC foreign exchange derivatives turnover net of local inter-dealer
double-counting in April 1995, by country and currency ¹**

Deutsche Mark against:

(daily averages, in millions of US dollars)

Canadian dollar	Australian dollar	ECU	Other EMS currencies	Currencies of other reporting countries ²	Residual	Country
9	2	347	2,927	..	1,004	United Kingdom
79	43	264	2,114	..	606	United States
1	-	-	9	..	-	Japan
3	6	5	59	10	100	Singapore
..	..	..	..	..	..	Hong Kong
-	-	111	787	..	228	Switzerland
181	104	285	2,276	..	1,316	Germany
-	-	111	349	..	8	France
..	92	..	..	..	16	Australia
-	2	9	774	..	1,503	Denmark
27	-	..	..	..	7	Canada
..	..	21	854	..	357	Belgium
2	1	4	962	..	48	Netherlands
1	-	3	852	..	38	Italy
-	-	1	644	..	65	Sweden
25	10	48	415	..	76	Luxembourg
-	-	-	690	..	10	Spain
-	3	1	373	..	82	Austria
-	-	-	215	71	1	Norway
-	-	-	3	22	-	New Zealand
-	-	1	444	..	32	Finland
-	-	-	11	39	18	South Africa
-	-	14	112	..	4	Ireland
-	-	5	18	..	4	Greece
-	-	-	1	-	6	Bahrain
-	..	-	19	..	-	Portugal
328	264	1,228	14,908	141	5,529	Total

¹ Outright forwards, foreign exchange swaps, currency swaps, OTC options and other OTC products. ² Includes only transactions where at least one counterparty is located in the country of issue of the currency in question.

Table 9-G

**Reported OTC foreign exchange derivatives turnover net of local inter-dealer
double-counting in April 1995, by country and currency ***

Local currency against:

(daily averages, in millions of US dollars)

Country	Total	US dollar	Deutsche Mark	Japanese yen	Pound sterling	French franc
United Kingdom	46,855	39,444	2,808	2,745	n.a.	453
United States	122,146	n.a.	31,644	31,364	10,518	9,858
Japan	93,730	89,105	2,409	n.a.	191	473
Singapore	3,523	3,395	10	21	3	1
Hong Kong	10,762	10,696	..	..	..	..
Switzerland	17,838	15,224	1,617	220	88	217
Germany	30,416	20,922	n.a.	1,676	1,302	1,742
France	18,815	15,464	1,684	251	223	n.a.
Australia	11,423	10,989	92	158	29	..
Denmark	6,673	5,869	398	42	43	56
Canada	14,424	14,314	27	17	22	4
Belgium	7,067	6,048	726	21	31	91
Netherlands	7,644	5,969	868	130	189	135
Italy	8,769	7,382	824	110	47	126
Sweden	6,274	5,219	533	45	67	56
Luxembourg	915	771	99	6	3	7
Spain	8,983	8,148	675	36	13	22
Austria	1,818	1,451	319	6	7	5
Norway	2,490	2,227	71	14	30	27
New Zealand	2,701	2,559	22	20	13	1
Finland	1,442	978	378	6	12	11
South Africa	2,363	2,247	39	16	21	12
Ireland	797	565	87	5	93	11
Greece	728	468	18	219	1	1
Bahrain	31	23	-	-	-	-
Portugal	907	787	17	86	3	2
Total	429,535	270,262	45,363	37,216	12,948	13,312

For footnotes, see opposite page.

Table 9-G (contd.)

**Reported OTC foreign exchange derivatives turnover net of local inter-dealer
double-counting in April 1995, by country and currency ***

Local currency against:

(daily averages, in millions of US dollars)

Swiss franc	Canadian dollar	Australian dollar	ECU	Other EMS currencies	Residual	Country
205	125	79	63	530	397	United Kingdom
8,901	6,561	3,888	1,190	11,456	6,767	United States
628	108	193	90	145	388	Japan
1	-	31	-	2	58	Singapore
..	..	..	..	..	67	Hong Kong
n.a.	64	8	82	245	75	Switzerland
612	181	104	285	2,276	1,316	Germany
169	14	15	166	737	92	France
17	3	n.a.	..	..	135	Australia
24	1	1	1	101	137	Denmark
7	n.a.	3	..	..	30	Canada
25	..	..	27	80	19	Belgium
70	13	8	40	162	59	Netherlands
68	3	11	110	80	7	Italy
61	11	7	10	184	82	Sweden
10	1	1	6	9	1	Luxembourg
34	-	-	26	26	4	Spain
12	1	1	1	12	3	Austria
-	1	-	4	86	28	Norway
1	1	64	-	18	3	New Zealand
9	-	1	4	36	9	Finland
5	1	2	2	5	14	South Africa
2	-	-	1	29	5	Ireland
1	-	-	11	2	8	Greece
2	-	-	-	-	5	Bahrain
2	-	-	3	7	-	Portugal
10,865	7,091	4,416	2,122	16,227	9,708	Total

* Outright forwards, foreign exchange swaps, currency swaps, OTC options and other OTC products.

Table 9-H

**Reported OTC foreign exchange derivatives turnover net of local inter-dealer
double-counting in April 1995, by country and counterparty ¹**

Total

(daily averages, in millions of US dollars)

Country	Gross turnover		Net turnover ²			
	Total	of which With other local dealers	Total	of which With other dealers located abroad	With other financial institutions	With non- financial customers
United Kingdom	353,917	61,494	292,422	153,506	56,734	20,687
United States	153,028	21,193	131,835	45,890	41,395	23,357
Japan	134,938	22,736	112,202	56,591	11,205	21,671
Singapore	73,401	10,407	62,994	39,714	8,763	4,110
Hong Kong	64,665	8,274	56,391	41,221	3,022	3,874
Switzerland	49,722	5,476	44,246	30,574	..	8,197
Germany	51,662	6,557	45,104	31,064	3,778	3,705
France	41,138	5,068	36,070	21,935	4,154	4,913
Australia	27,548	4,646	22,902	13,316	8	4,932
Denmark	23,909	972	22,937	19,242	354	2,369
Canada	21,745	3,064	18,681	8,213	4,911	2,493
Belgium	25,240	2,833	22,407	14,176	4,522	876
Netherlands	17,132	1,632	15,501	9,705	2,282	1,883
Italy	11,877	1,122	10,755	6,543	2,199	892
Sweden	12,158	358	11,800	8,248	634	2,561
Luxembourg	12,213	513	11,700	9,413	1,188	585
Spain	13,702	2,488	11,214	7,767	639	319
Austria	4,672	184	4,488	2,174	1,551	578
Norway	4,686	493	4,193	2,154	661	885
New Zealand	4,640	571	4,069	2,881	164	453
Finland	2,968	70	2,898	2,089	226	513
South Africa	3,458	629	2,829	804	597	798
Ireland	1,893	166	1,726	1,078	139	343
Greece	1,451	179	1,272	637	163	294
Bahrain	1,435	98	1,337	909	257	74
Portugal	1,178	160	1,018	686	54	118
Total	1,114,376	161,383	952,993	530,531	149,601	111,478

¹ Outright forwards, foreign exchange swaps, currency swaps, OTC options and other OTC products. ² Net of local inter-dealer double-counting.

Table 9-I

**Reported OTC foreign exchange derivatives turnover net of local inter-dealer
double-counting in April 1995, by country and counterparty**

Currency swaps

(daily averages, in millions of US dollars)

Country	Total	Other dealers		Financial institutions		Non-financial customers	
		Local	Cross-border	Local	Cross-border	Local	Cross-border
United Kingdom	1,421	370	690	66	81	36	178
United States	205	29	60	8	73	14	21
Japan	570	31	284	38	139	63	15
Singapore	639	5	620	-	4	-	10
Hong Kong	89	15	49	1	4	1	19
Switzerland	23	7	11	..	..	1	4
Germany	187	2	97	34	29	3	22
France	332	164	84	-	19	20	44
Australia	255	119	115	1	7	12	-
Denmark	850	-	612	4	-	146	88
Canada	54	2	12	19	7	12	3
Belgium	45	-	4	2	7	29	3
Netherlands	164	21	90	6	7	18	22
Italy	292	3	246	6	37	-	-
Sweden	22	-	13	-	-	4	5
Luxembourg	36	10	17	2	4	1	3
Spain	61	55	-	-	-	6	-
Austria	-	-	-	-	-	-	-
Norway	6	-	-	2	-	4	-
New Zealand	9	2	1	-	2	5	-
Finland	4	-	2	-	-	2	-
South Africa	-	-	-	-	-	-	-
Ireland	11	2	2	4	3	-	-
Greece	1	-	-	-	-	-	-
Bahrain	-	-	-	-	-	-	-
Portugal	3	-	3	..	..	..	..
Total	5,280	836	3,015	193	423	376	437

Table 9-J

**Reported OTC foreign exchange derivatives turnover net of local inter-dealer
double-counting in April 1995, by country and counterparty**

OTC options

(daily averages, in millions of US dollars)

Country	Total	Other dealers		Financial institutions		Non-financial customers	
		Local	Cross-border	Local	Cross-border	Local	Cross-border
United Kingdom	13,635	1,440	9,296	332	1,318	284	964
United States	21,208	2,879	8,050	3,104	5,694	1,005	475
Japan	5,786	587	3,115	519	23	1,516	26
Singapore	1,196	95	952	-	94	12	42
Hong Kong	625	24	352	9	56	117	66
Switzerland	1,946	182	876	..	..	550	339
Germany	2,728	243	1,657	468	173	109	79
France	3,126	112	1,755	46	583	442	189
Australia	750	118	443	..	..	188	..
Denmark	418	39	201	19	53	70	36
Canada	788	129	343	6	143	145	23
Belgium	370	11	209	2	75	33	40
Netherlands	848	22	522	24	193	56	33
Italy	232	5	148	13	13	46	7
Sweden	416	18	284	1	47	37	29
Luxembourg	142	13	57	39	19	5	9
Spain	107	8	81	1	4	13	-
Austria	140	-	67	1	67	5	-
Norway	41	1	19	8	5	7	-
New Zealand	77	8	43	-	4	22	-
Finland	113	3	75	2	-	31	2
South Africa	186	58	27	67	17	18	-
Ireland	4	-	1	3	-	-	-
Greece	7	5	2	-	-	-	-
Bahrain	158	-	135	1	20	-	2
Portugal	12	..	5	..	3	3	-
Total	55,059	6,001	28,714	4,665	8,603	4,715	2,361

Table 10-A-1

**Reported single-currency interest rate derivatives turnover in April 1995,
by instrument, counterparty and interest rate ***

(daily averages, in millions of US dollars)

Category	Total	US dollar	Deutsche Mark	Japanese yen	Other
FORWARD RATE AGREEMENTS	65,516	17,613	8,627	9,500	29,776
- with other dealers	48,540	11,821	6,109	6,863	22,869
local	20,699	4,528	1,763	1,892	12,335
cross-border	27,841	7,293	4,345	4,971	10,534
- with other financial institutions	12,806	4,460	2,031	2,153	4,156
local	3,879	1,579	560	65	1,674
cross-border	8,927	2,881	1,471	2,088	2,482
- with non-financial customers	4,171	1,008	479	86	2,588
local	2,730	527	182	51	1,960
cross-border	1,441	481	297	35	628
SWAPS	62,759	16,798	6,514	17,168	22,279
- with other dealers	41,222	9,971	4,214	13,439	13,598
local	19,606	4,818	1,331	4,161	9,296
cross-border	21,616	5,153	2,884	9,277	4,303
- with other financial institutions	13,988	5,285	1,818	1,793	5,092
local	8,054	3,120	1,087	288	3,559
cross-border	5,934	2,165	732	1,505	1,533
- with non-financial customers	7,549	1,542	481	1,937	3,589
local	5,175	1,148	186	1,240	2,601
cross-border	2,374	393	295	697	989
OTC OPTIONS ON TRADED SECURITIES SOLD	4,806	758	333	2,786	929
- with other dealers	3,094	265	245	2,237	346
local	771	109	82	411	169
cross-border	2,323	156	163	1,827	177
- with other financial institutions	973	388	43	224	318
local	759	310	25	209	215
cross-border	214	78	18	14	104
- with non-financial customers	740	105	45	325	265
local	618	87	32	302	197
cross-border	122	18	13	24	67
OTC OPTIONS ON TRADED SECURITIES BOUGHT	5,389	948	344	3,249	848
- with other dealers	3,201	348	239	2,284	330
local	833	162	92	410	169
cross-border	2,368	185	148	1,874	161
- with other financial institutions	1,427	520	71	521	314
local	1,114	385	51	495	100
cross-border	313	135	8	27	48
- with non-financial customers	761	80	33	443	204
local	641	61	5	442	132
cross-border	120	19	28	1	73
TOTAL OTC OPTIONS ON TRADED SECURITIES	10,195	1,706	678	6,035	1,777
Premiums collected	82	7	6	54	15
Premiums paid	81	11	4	52	14

* OTC products adjusted for local and cross-border double-counting.

Table 10-A-2

**Reported single-currency interest rate derivatives turnover in April 1995,
by instrument, counterparty and interest rate ***

(daily averages, in millions of US dollars)

Category	Total	US dollar	Deutsche Mark	Japanese yen	Other
OTC OPTIONS ON OTHER SECURITIES SOLD	5,399	2,508	663	916	1,312
- with other dealers	2,370	797	451	473	623
local	1,272	472	175	213	412
cross-border	1,098	326	276	260	211
- with other financial institutions	1,219	823	115	127	154
local	774	599	34	13	109
cross-border	446	189	81	47	45
- with non-financial customers	1,810	887	97	291	535
local	1,477	836	47	184	411
cross-border	333	51	50	108	124
OTC OPTIONS ON OTHER SECURITIES BOUGHT	5,226	2,444	461	1,148	1,174
- with other dealers	2,625	900	363	709	627
local	1,185	468	105	208	404
cross-border	1,440	432	258	501	223
- with other financial institutions	938	614	77	52	196
local	673	498	22	10	141
cross-border	265	111	13	42	55
- with non-financial customers	1,663	930	21	362	349
local	1,255	897	8	150	200
cross-border	408	33	13	212	150
TOTAL OTHER OTC OPTIONS	10,626	4,952	1,124	2,065	2,486
Premiums collected	103	31	25	11	35
Premiums paid	98	37	24	15	22
TOTAL OTC OPTIONS	20,821	6,658	1,801	8,099	4,263
Total premiums collected	184	39	31	64	51
Total premiums paid	178	48	27	66	37
OTHER PRODUCTS	2,313	391	614	92	1,217
- with other dealers	1,165	118	99	27	921
local	696	81	22	21	573
cross-border	469	37	77	6	348
- with other financial institutions	409	155	5	3	247
local	398	146	4	3	246
cross-border	11	9	1	-	1
- with non-financial customers	738	118	508	63	49
local	271	95	100	47	29
cross-border	467	23	408	16	20
TOTAL OTC DERIVATIVES	151,408	41,460	17,555	34,860	57,536

* OTC products adjusted for local and cross-border double-counting.

Table 10-A-3

**Reported single-currency interest rate derivatives turnover in April 1995,
by instrument, counterparty and interest rate ***

(daily averages, in millions of US dollars)

Category	Total	US dollar	Deutsche Mark	Japanese yen	Other
FUTURES on interest rates up to 1 year	812,192	192,916	78,445	383,422	157,409
Sold	402,973	98,029	37,827	190,621	76,497
Bought	409,220	94,888	40,618	192,802	80,912
FUTURES on interest rates over 1 year	185,052	37,250	28,287	81,605	37,910
Sold	94,245	21,337	13,972	40,361	18,575
Bought	90,807	15,913	14,315	41,244	19,335
TOTAL FUTURES	997,245	230,166	106,732	465,028	195,319
EXCHANGE-TRADED OPTIONS	128,368	64,723	12,248	10,839	40,559
Sold (notional)	65,012	33,012	5,563	5,629	20,809
Bought (notional)	63,356	31,711	6,685	5,210	19,750
Premiums collected	504	192	152	17	142
Premiums paid	358	180	59	20	99
TOTAL EXCHANGE-TRADED PRODUCTS	1,125,613	294,889	118,980	475,867	235,878

* OTC products adjusted for local and cross-border double-counting.

Table 10-B

**Reported OTC single-currency interest rate derivatives turnover net of local inter-dealer
double-counting in April 1995, by country and interest rate ***

(daily averages, in millions of US dollars)

Country	Total	US dollar	Deutsche Mark	Japanese yen	Other
United Kingdom	58,760	14,278	10,523	6,926	27,033
United States	31,723	23,706	1,899	3,409	2,708
Japan	26,444	3,189	282	22,809	165
Singapore	16,256	1,530	42	14,600	84
Hong Kong	3,539	1,574	30	1,481	454
Switzerland	2,442	93	421	5	1,923
Germany	10,867	1,224	7,108	271	2,264
France	18,811	2,572	1,173	1,148	13,917
Australia	2,814	319	22	18	2,455
Denmark	2,681	315	188	11	2,166
Canada	4,431	1,889	212	23	2,308
Belgium	5,768	1,183	483	64	4,039
Netherlands	4,111	704	1,256	29	2,122
Italy	1,503	173	18	9	1,302
Sweden	1,863	82	81	85	1,615
Luxembourg	1,970	335	760	25	850
Spain	3,389	428	82	36	2,843
Austria	2,150	161	543	2	1,444
Norway	1,454	46	37	4	1,367
New Zealand	153	8	-	-	146
Finland	1,642	155	145	-	1,342
South Africa	178	8	-	-	170
Ireland	1,475	377	288	2	808
Greece	124	39	39	1	44
Bahrain	3,953	882	81	2,976	13
Portugal	61	22	-	2	36
Total	208,563	55,293	25,713	53,937	73,621

* Forward rate agreements, swaps, OTC options and other OTC products.

Table 10-C

**Reported exchange-traded single-currency interest rate derivatives turnover
in April 1995, by country and interest rate ***

(daily averages, in millions of US dollars)

Country	Total	US dollar	Deutsche Mark	Japanese yen	Other
United Kingdom	237,582	55,357	58,493	26,342	97,390
United States	190,511	163,888	9,034	10,284	7,305
Japan	450,693	34,483	5,350	408,797	2,062
Singapore	23,938	7,363	997	14,721	856
Hong Kong	14,339	7,301	769	5,779	490
Switzerland	4,575	877	1,407	500	1,791
Germany	36,262	2,836	28,052	867	4,506
France	90,187	12,408	9,368	7,697	60,714
Australia	38,660	1,742	237	610	36,071
Denmark	766	22	207	-	537
Canada	10,738	5,221	110	66	5,342
Belgium	4,543	320	730	52	3,441
Netherlands	3,001	835	1,771	1	395
Italy	3,296	50	178	4	3,064
Sweden	4,073	448	77	-	3,549
Luxembourg	1,047	55	515	-	478
Spain	6,504	221	337	16	5,930
Austria	402	20	205	-	178
Norway	1,357	405	683	14	255
New Zealand	785	106	-	19	660
Finland	1,269	416	191	71	592
South Africa	141	123	-	-	18
Ireland	571	100	218	15	237
Greece	58	30	25	-	2
Bahrain	312	261	25	12	14
Portugal	3	1	1	..	1
Total	1,125,613	294,889	118,980	475,867	235,878

* Futures and exchange-traded options; gross of local and cross-border double-counting.

Table 10-D

**Reported OTC single-currency interest rate derivatives turnover
in April 1995, by country and counterparty ¹**

Total

(daily averages, in millions of US dollars)

Country	Gross turnover		Net turnover ²			
	Total	of which	Total	of which		
		With other local dealers		With other dealers located abroad	With other financial institutions	With non-financial customers
United Kingdom	76,709	17,949	58,760	32,116	5,243	3,453
United States	38,143	6,420	31,723	10,211	11,247	3,845
Japan	30,835	4,390	26,444	17,186	2,054	2,814
Singapore	17,999	1,743	16,256	13,054	1,428	31
Hong Kong	3,770	231	3,539	3,185	88	34
Switzerland	2,856	414	2,442	1,643	..	385
Germany	11,824	957	10,867	6,131	2,891	887
France	25,029	6,219	18,811	6,699	2,804	3,089
Australia	4,312	1,498	2,814	605	242	469
Denmark	3,200	519	2,681	2,011	84	67
Canada	5,390	959	4,431	1,917	805	751
Belgium	6,434	666	5,768	3,082	1,769	252
Netherlands	4,279	168	4,111	2,274	1,510	159
Italy	1,736	233	1,503	942	301	26
Sweden	2,049	186	1,863	984	78	616
Luxembourg	2,022	53	1,970	1,802	92	23
Spain	4,254	865	3,389	2,167	232	126
Austria	2,556	406	2,150	1,293	447	4
Norway	1,971	517	1,454	696	88	153
New Zealand	236	83	153	10	3	58
Finland	1,982	340	1,642	995	160	148
South Africa	264	86	178	8	62	22
Ireland	1,613	137	1,475	1,263	57	18
Greece	124	-	124	123	1	-
Bahrain	3,966	13	3,953	3,865	75	-
Portugal	73	13	61	46	1	2
Total	253,625	45,062	208,563	114,309	31,760	17,431

¹ Forward rate agreements, swaps, OTC options and other OTC products. ² Net of local inter-dealer double-counting.

Table 10-E

**Reported OTC single-currency interest rate derivatives turnover net of local inter-dealer
double-counting in April 1995, by country and counterparty**

Forward rate agreements

(daily averages, in millions of US dollars)

Country	Total	Other dealers		Financial institutions		Non-financial customers	
		Local	Cross-border	Local	Cross-border	Local	Cross-border
United Kingdom	34,801	11,177	20,155	633	1,447	595	796
United States	10,487	2,121	4,200	1,451	2,631	56	28
Japan	2,292	371	1,530	-	343	45	3
Singapore	5,017	494	3,125	12	1,385	-	-
Hong Kong	1,590	180	1,395	-	6	9	-
Switzerland	1,623	321	1,193	..	..	50	58
Germany	4,270	393	3,037	287	400	132	21
France	5,033	587	3,391	164	364	300	227
Australia	1,995	1,258	337	104	19	253	25
Denmark	2,179	414	1,668	18	20	30	27
Canada	2,983	809	1,134	147	406	470	17
Belgium	4,074	504	2,276	323	802	137	31
Netherlands	2,242	108	1,092	356	570	88	28
Italy	874	87	689	32	57	9	-
Sweden	1,373	178	763	17	43	218	155
Luxembourg	855	33	767	-	37	10	8
Spain	1,515	291	1,193	1	4	21	5
Austria	1,927	356	1,164	168	239	-	1
Norway	1,400	514	662	71	9	140	3
New Zealand	81	63	3	-	-	14	1
Finland	1,488	309	882	85	70	137	6
South Africa	35	19	8	1	-	6	-
Ireland	1,280	95	1,162	8	7	8	-
Greece	28	-	28	-	-	-	-
Bahrain	3,858	6	3,785	-	68	-	-
Portugal	55	11	42	..	..	2	..
Total	93,356	20,699	55,682	3,879	8,927	2,730	1,441

Table 10-F

**Reported OTC single-currency interest rate derivatives turnover net of local inter-dealer
double-counting in April 1995, by country and counterparty**

Swaps

(daily averages, in millions of US dollars)

Country	Total	Other dealers		Financial institutions		Non-financial customers	
		Local	Cross-border	Local	Cross-border	Local	Cross-border
United Kingdom	18,537	5,632	9,098	993	1,473	457	884
United States	14,222	3,102	4,770	2,931	1,797	1,453	169
Japan	12,816	2,816	7,521	120	793	1,192	374
Singapore	11,083	1,241	9,819	1	15	2	4
Hong Kong	1,844	51	1,686	5	78	15	10
Switzerland	483	58	387	..	..	17	22
Germany	5,251	412	2,645	1,762	240	132	60
France	12,514	5,422	2,807	1,771	405	1,381	729
Australia	544	188	258	13	39	41	5
Denmark	252	62	171	3	10	1	3
Canada	1,061	95	613	66	103	139	45
Belgium	1,636	156	798	70	533	41	38
Netherlands	1,326	38	733	204	316	23	12
Italy	449	137	183	70	47	11	1
Sweden	410	5	164	-	15	223	3
Luxembourg	969	20	904	5	37	1	2
Spain	264	17	242	-	-	1	3
Austria	196	44	120	15	14	1	2
Norway	33	2	20	1	-	9	-
New Zealand	40	14	7	1	-	12	6
Finland	141	31	102	1	4	3	-
South Africa	27	13	-	-	-	14	-
Ireland	180	42	99	22	10	6	2
Greece	1	-	-	-	1	-	-
Bahrain	91	7	80	-	3	-	-
Portugal	6	1	4	..	1	-	..
Total	84,376	19,606	43,233	8,054	5,934	5,175	2,374

Table 10-G

**Reported OTC single-currency interest rate derivatives turnover net of local inter-dealer
double-counting in April 1995, by country and counterparty**

OTC options

(daily averages, in millions of US dollars)

Country	Total	Other dealers		Financial institutions		Non-financial customers	
		Local	Cross-border	Local	Cross-border	Local	Cross-border
United Kingdom	5,318	1,118	2,857	286	411	313	334
United States	6,575	1,096	1,156	1,867	418	1,909	129
Japan	11,284	1,200	8,135	750	46	1,080	74
Singapore	156	6	110	1	14	-	25
Hong Kong	105	1	104	-	-	-	1
Switzerland	336	35	64	..	..	223	14
Germany	850	150	446	109	89	29	26
France	1,258	207	502	23	74	125	328
Australia	261	42	11	59	4	138	6
Denmark	250	43	171	21	11	5	-
Canada	387	54	170	28	55	66	14
Belgium	59	6	8	17	23	3	2
Netherlands	372	16	301	29	20	1	6
Italy	177	9	68	45	51	3	1
Sweden	80	3	56	1	2	10	7
Luxembourg	134	-	120	1	11	-	2
Spain	126	9	49	-	-	54	13
Austria	27	6	9	9	1	1	-
Norway	21	-	14	-	6	1	-
New Zealand	33	6	-	2	-	25	-
Finland	13	-	10	-	-	2	-
South Africa	116	53	-	61	-	2	-
Ireland	15	1	2	10	-	-	2
Greece	95	-	95	-	-	-	-
Bahrain	2	-	-	-	2	-	-
Portugal	..	..	..	..	..	..	..
Total	28,049	4,061	14,456	3,320	1,238	3,991	983