

**The
Foreign Exchange
and
Interest Rate Derivatives
Markets:**

**Turnover in the United States
April 2007**

Federal Reserve Bank of New York

The Foreign Exchange and Interest Rate Derivatives Markets: Turnover in the United States

Background The Federal Reserve Bank of New York together with 53 other central banks surveyed turnover in the over-the-counter (OTC) foreign exchange and interest rate derivatives markets during the month of April 2007. This worldwide, cooperative effort is undertaken every three years and is coordinated by the Bank for International Settlements (BIS).

The "Triennial Survey" is a comprehensive source of information on the size and structure of the OTC foreign exchange and derivatives markets. These markets trade private, bilateral contracts so no turnover statistics are available as there are for the organized exchanges. (Data for exchange-traded futures and options are excluded from the survey.)

To measure the OTC markets, the dealers who make markets in foreign exchange and interest rate derivatives reported trading volumes for the month of April to the central banks in the countries where they are located. The participants reported separately the volume of trading they do with each other to permit adjustments for double reporting. The central banks then compiled national aggregates from the dealers' data and the BIS compiled global totals from the central banks' national data.¹ (See Annex I for a complete description of survey terms and methods.)

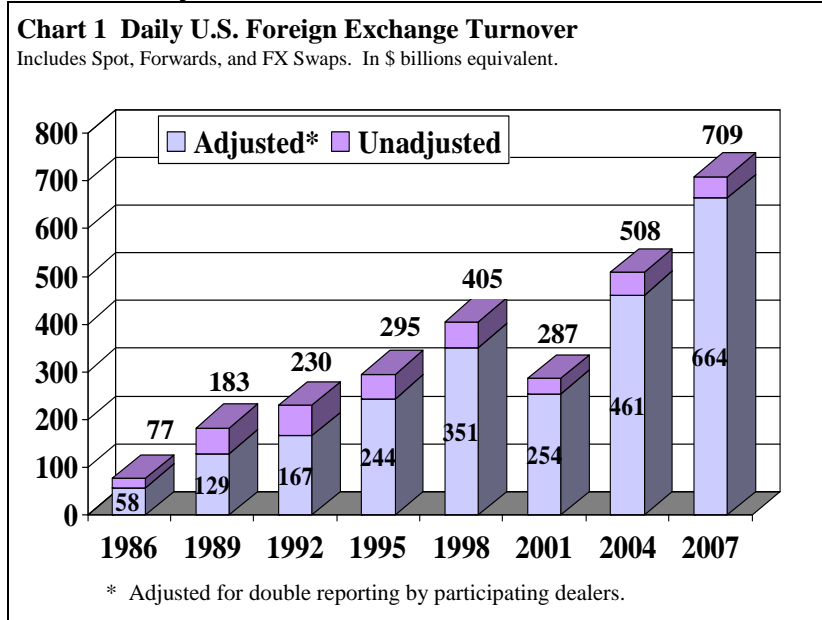
Despite continued consolidation among dealers, turnover in the U.S. foreign exchange and derivatives markets has shown considerable growth since the last survey in April 2004. In 2007, a total of 33 dealers in the United States participated in the foreign exchange part of the survey and 28 in the interest rate derivatives part, down from 43 and 40, respectively, in 2004. Participating dealers were commercial banks, brokers and investment banks. They were both U.S.-owned institutions and foreign-owned institutions with dealing operations in the United States. See Annex II for a list of participating dealers.

Continuing a practice adopted in an earlier survey, this report discusses turnover in foreign exchange (FX) spot, forwards, and swaps as the foreign exchange part of the survey. Trading in forward rate agreements (FRAs), currency and interest rate swaps, foreign exchange options and interest rate options are then treated together as the interest rate derivatives part of the survey. Aggregate data are included as Annex III.

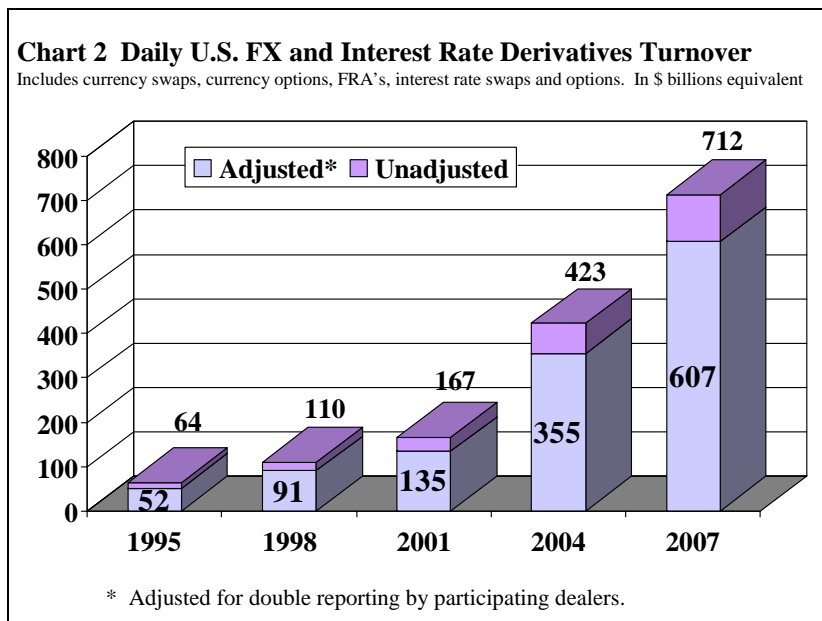
Overview After adjusting for double reporting of trades between participating dealers, daily foreign exchange turnover in the United States (spot, forwards and FX

¹ See the BIS web site (www.BIS.org) for its report on global turnover.

swaps) averaged \$664 billion in April. This was an increase of 44 percent from the 2004 survey. See Chart 1.



Daily turnover for the other derivatives markets covered by the survey (FRAs, interest rate swaps, cross currency swaps, and foreign exchange and interest rate options) averaged \$607 billion, up 70 percent. See Chart 2.



The U.S. Foreign Exchange Market

Daily foreign exchange turnover in the United States increased 44 percent from 2004 to \$664 billion², continuing the strong growth shown by the surveys of the previous two decades. At constant exchange rates, to remove the effects of exchange rate changes on reported foreign currency amounts, turnover increased 27 percent.³

Turnover in 2004

The 2004 survey took place during a period of heightened interest in foreign exchange as a separate asset class. A return to steadier trends and higher volatility led to increased volumes largely due to momentum trading by investors. In addition, a widening of interest rate differentials encouraged growth in the so-called "carry trade," where investors finance positions in high yielding currencies by borrowing in low yielding currencies. The growth in the number and variety of electronic trading alternatives available to market participants also contributed to the increase in reported turnover as they reduced trading costs and other barriers to entry while enhancing pricing transparency. This in turn led to an increase in the number of leveraged accounts, commodity trading advisors (CTAs), and currency overlay managers focusing on foreign exchange as an asset class, many of which regularly engage in high volume programmed and algorithmic trading strategies.

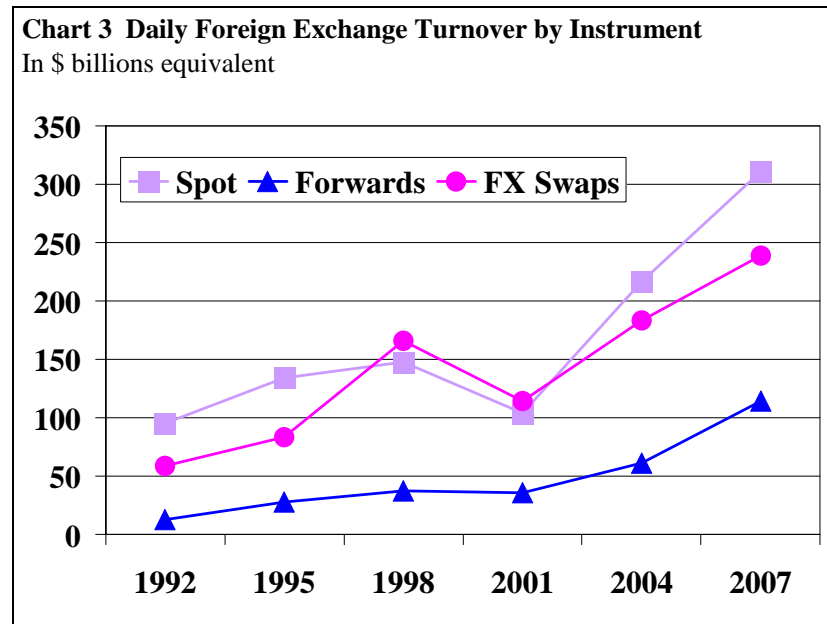
Some of the trends that supported the increase in turnover reported in 2004 have continued into 2007, with dealers attributing increased turnover to prime brokerage flows, as well as more hedging by corporations and portfolio managers taking active approaches to managing exchange rate risks. Market commentary has also focused on the emergence of retail aggregators and non-bank financial institutions and the increasing role they are playing in the marketplace. This has resulted in some traditional buy-side entities, such as hedge funds, acting more like dealers with regard to pricing and the liquidity they are willing to provide to the market.

Instruments

Among the three instruments that are considered together as foreign exchange turnover, spot trading increased the most, with trading up 43 percent. Turnover in FX swaps rose 30 percent and FX forwards 86 percent from the 2004 survey. See Chart 3.

² This total is adjusted for the double reporting of transactions between participating dealers in the United States.

³ Foreign currency amounts are reported in dollar terms. See Annex I.1 (f) for a description and explanation of the effect of exchange rate changes.

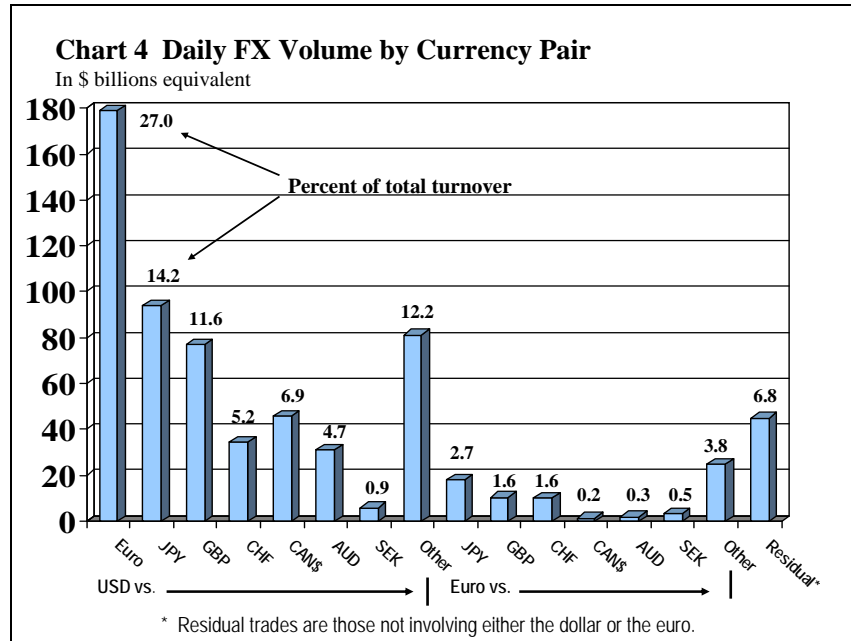


- Spot trading represented 47 percent of total foreign exchange turnover, unchanged from 2004.
- FX swaps represented 36 percent of the turnover, down from 40 percent.
 - Average FX swap maturities were somewhat shorter in the latest survey. Almost 75 percent of all swaps had maturities of seven days or less compared to 72 percent in 2004. Maturities of over seven days and up to one year accounted for 23 percent of swaps, down from 27 percent. Less than two percent of all swaps had maturities of over one year.
- Outright forward transactions rose slightly to 17 percent of total turnover, up four percentage points.
 - Maturities in the forward market have shortened over the past three years. Forward transactions with maturities of seven days or less accounted for 44 percent of the total against 38 percent in 2004. Maturities of over seven days to up to one year represented 55 percent, down from 60 percent. As in the FX swaps market, maturities over one year remain under two percent of the total.

Currencies

- The U.S. dollar was traded in almost 83 percent of all transactions, down from 92 percent in the last survey.
- The euro, the second most actively traded currency, was on one side of 38 percent of all trades in the U.S. markets, unchanged from April 2004.

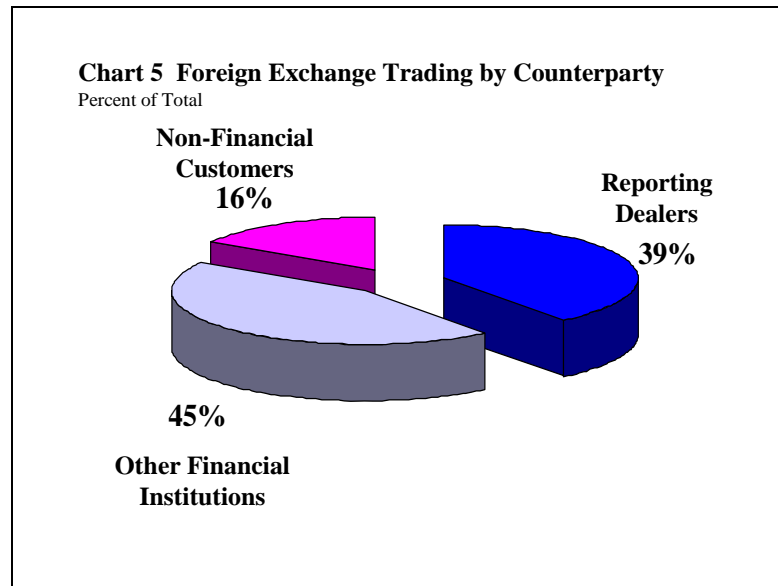
- Trading of the dollar/euro currency pair accounted for 27 percent of total turnover in the U.S. market. See Chart 4.
- Yen trading declined to 17 percent from 22 percent and remained the third most actively traded currency.



Market Structure

Participating dealers also reported their trading activity according to types and location of counterparties.

- The majority of trades were undertaken with other financial institutions (45 percent) as the counterparty, 39 percent with other reporting dealers, and 16 percent with non-financial customers. See Chart 5.



- Highlighting the international nature of foreign exchange trading, 58 percent of spot, forward and FX swap transactions were conducted with market participants outside the United States. This is down from 66 percent in 2004.
- The market shares of the biggest foreign exchange dealers continued to grow reflecting consolidation among dealers and banking institutions and the declining number of dealers participating in the survey.
 - In considering the competitive implications, it should be noted that the lists of the largest dealers vary from instrument to instrument. For example, only one institution ranked among the top five dealers on the lists of the largest spot, outright forwards, and foreign exchange swaps dealers. Lastly, in these global markets, rankings may look quite different on a worldwide basis considering the large trading operations that many global institutions maintain outside the United States.
 - In the spot market, the market share of the top 10 firms in the U.S. market increased to 79 percent from 73 percent. The five largest accounted for 56 percent of turnover, up from 47 percent.
 - In the forward market, the market shares of the top 10 and top five dealers rose respectively to 86 from 77 percent and to 59 from 53 percent, respectively.

- In the foreign exchange swaps market, the top 10 accounted for 81 percent compared to 76 percent at the previous survey. The share of the top five increased to 55 percent from 49 percent.

Differences Between the BIS Triennial and the Foreign Exchange Committee's Survey of North American Foreign Exchange Volume

Since October 2004, the Federal Reserve Bank of New York has collected and published foreign exchange turnover data on a semi-annual basis on behalf of the Foreign Exchange Committee (FXC), an industry-trade group comprised of representatives from leading foreign exchange dealers and sponsored by this Bank.

The reporting panel for the Triennial is slightly larger than the semi-annual survey, with 33 dealers in total compared to 31 for the semi-annual FXC survey. The semi-annual survey captures turnover in all of North America, including Canada and Mexico, unlike the U.S. results to the BIS survey, which is limited to U.S.-based transactions. However, the specified currency pairs collected on the FXC survey is significantly narrower than those collected on the BIS survey.

The most notable difference between the two surveys is the reporting basis, with the location of the trading desk determining reporting on the semi-annual survey, whereas on the BIS survey the location of the sales desk of any trade is the determining factor.

Data collected on the FXC survey is limited to spot, outright forwards, foreign exchange swaps and total foreign exchange options. No data is collected on currency swaps or single-currency interest rate derivatives. In addition, the FXC survey expressly excludes related-party trades, while certain related party trading is captured on the BIS survey and identified in aggregate. Other differences include:

- different maturity bucket information
- no maturity data for options on the FXC survey
- separate reporting of options bought and options sold on the BIS survey
- the absence of any local/cross border reporting on the FXC survey

Despite these differences, reported aggregates for the two surveys conducted simultaneously in April were very similar. The results of the two surveys for April 2007 are as follows:

Instrument	BIS Survey	FXC Survey	Difference
Spot	\$311	\$319	-8
Outright Forwards	\$114	\$109	5
Foreign Exchange Swaps	\$239	\$221	18
Options	\$75	\$66	9

(daily averages in billions of U.S. dollars)

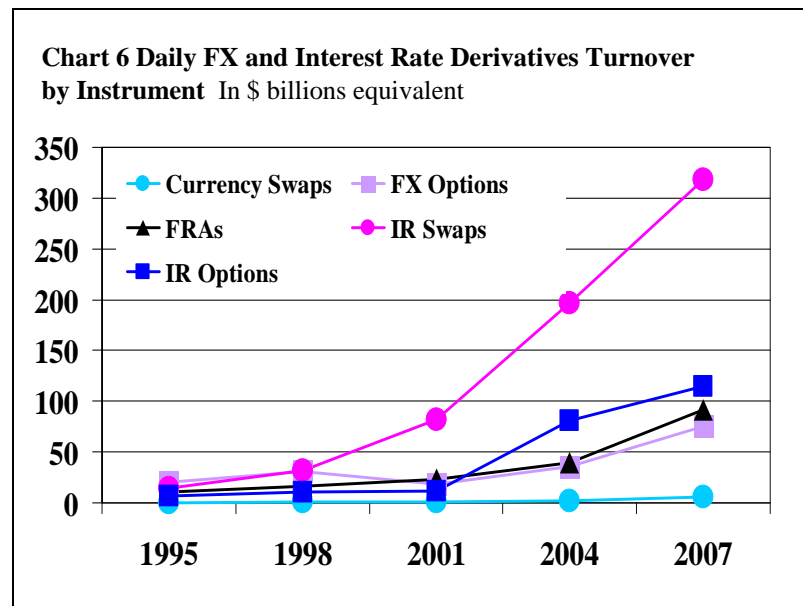
Currencies

Foreign Exchange and Interest Rate Derivatives Markets

Daily turnover for the other derivatives markets covered by the survey rose more strongly than trading in the traditional foreign exchange contracts. These other derivatives include forward rate agreements (FRAs), interest rate swaps, cross currency rate swaps, and foreign exchange and interest rate options. As a group, turnover in these instruments averaged \$607 billion per day in the United States during April, up 71 percent from the last survey. (See Chart 2.)

Instruments

- Daily turnover for interest rate swaps was \$318 billion, an increase of more than 60 percent since the last survey. See Chart 6.
- Turnover for interest rate options rose to \$115 billion per day, the second heaviest trading among these contracts, while turnover in FRAs rose 130 percent to \$92 billion per day.
- Turnover in currency swaps, while remaining a smaller market than the other instruments at less than \$6.5 billion per day, jumped over 260 percent.
- Turnover of FX options were up 110 percent over the past three years.



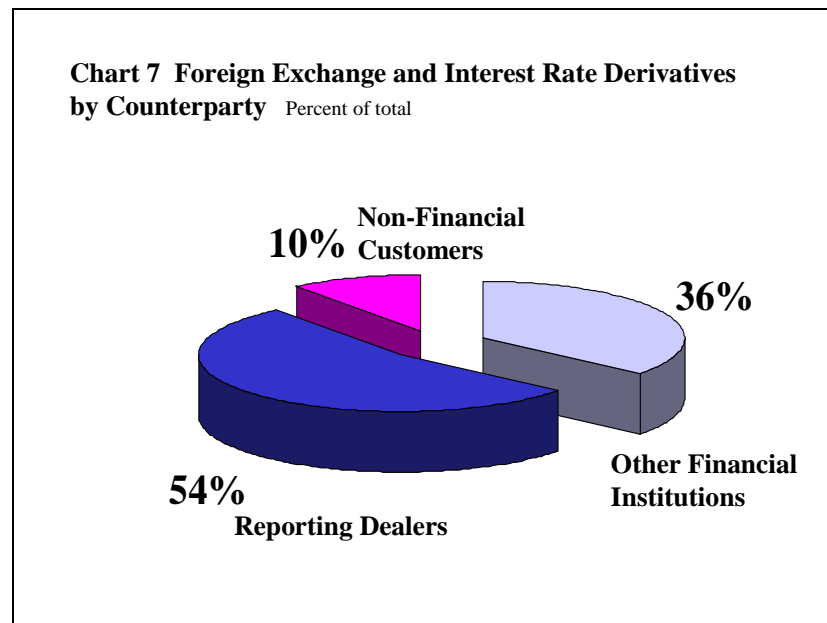
U.S. dollar-denominated contracts and contracts with the dollar on one side accounted for 77 percent of the month's turnover in these instruments compared to 83 percent three years before.

- U.S. dollar contracts represented 86 percent of the single currency interest swaps, up from 70 percent in 2004 when it fell by more than 10 percent, as turnover in many non-dollar contracts lagged the increase dollar contract trading in 2007. In particular, Euro contracts slipped from 13 percent to just 5.4% of the total. Trading in yen, sterling, and Canadian dollar each accounted for less than 2 percent of the total.
- The U.S. dollar was the currency in 89 percent of forward rate agreements and 92 percent of interest rate options. It was on one side of 80 percent of foreign exchange options and 97 percent of currency swaps.

There was considerable variability across the five instruments for location and type of counterparty.

Market Structure

- On average for all contracts, 60 percent of trading during April was conducted with a market participant outside the United States. Among the contracts, this percentage varied between 48 percent for interest rate options to 67 percent for foreign exchange options and FRAs.
- Other reporting dealers were the counterparty for 54 percent of turnover in these contracts on average, ranging from 32 percent for currency swaps to 73 percent for FRAs. See Chart 7.



- Trading in the derivatives market is more concentrated than it is in the foreign exchange market.

- For the three single currency instruments covered by this part of the survey, the top five dealers accounted for about 70 percent of reported turnover and the top ten accounted for over 90 percent. The currency swap market had relatively few reporting dealers and was even more concentrated, while the FX options market was less concentrated, with the top 5 dealers accounting for 59 percent of reported turnover.
- As in the foreign exchange side of the survey, there is movement in dealer rankings from instrument to instrument and survey to survey. A total of 12 dealers ranked in the top five in trading in at least one of the contracts. In addition, in view of the high degree of cross-border trading in all of these instruments, market share on a global basis may be a better indicator of market positions and concentration.

**Additional
information**
**Recent trend
in turnover**

Since the survey only covers one month every three years, dealers are also asked about the trading patterns and trends of their business to help assess whether the survey month's turnover should be considered normal, and whether it had been increasing or decreasing over the previous six months.

- More than 3 out of 4 dealers considered turnover during the month as normal. The views of the remaining dealers that responded indicated that activity was above normal.
- Regarding the trend in trading over the previous six months, dealers were almost evenly split in viewing their business as steady or increasing. Just five percent viewed turnover as decreasing during that period.

ANNEX I

Survey Terms
and Methods

1. Turnover

- a) *Turnover* is the volume of transactions during April 2007 in US dollar equivalents. The amount of each transaction is reported before the effects of any netting arrangements. In the case of swap transactions, only one leg is reported.
- b) The survey covered three types of counterparties:
- 1) *reporting dealers* participating in the survey,
 - 2) *other financial institutions*, and
 - 3) *non-financial customers*.

Each type of counterparty was broken down into *local* and *cross-border* resulting in a total of six categories for counterparties.

- c) *Market totals*. Transactions between two participating dealers were reported twice, once by each of them. Survey figures for market totals are therefore adjusted to avoid double counting of such trades. *Adjusted figures* are market totals after adjusting for double reporting by participating dealers. *Unadjusted figures* are gross totals without adjusting for double reporting. The data in this report are adjusted figures unless otherwise noted.
- Since transactions between *local reporting dealers* were reported twice, the total of local dealer transactions is divided by two for the *adjusted total*.
- d) *Average daily turnover* was obtained by dividing total volume by 21 trading days.
- e) Turnover for *non-U.S. dollar transactions* was reported in U.S. dollar equivalents using exchange rates at the time of the transactions.
- f) *Changes in exchange rates* affect comparisons of turnover between surveys. Turnover of non-U.S. dollar transactions are reported in U.S. dollar equivalents using exchange rates at the time of the transaction. The decline of the dollar against most foreign currencies since the last survey therefore raised the reported amounts of foreign currency turnover in dollar terms.

ANNEX I

For example, if the same amount of a particular foreign currency that had risen against the dollar was purchased and sold in 2004 and in 2007, a higher amount in dollar terms would be reported in 2007. Turnover for foreign currencies can be recalculated to help assess volume changes due to valuation changes over time by converting the reported dollar equivalents into the original foreign currencies using average April 2004 exchange rates and then converting these amounts back into dollar equivalents at April 2007 exchange rates. For the foreign exchange part of the present survey, revaluing reported 2004 turnover lowered the increase to 27 percent from 44 percent. For the 2004/2001 comparison, the adjustment also lowered turnover because of the dollar's generalized decline. By revaluing 2001 turnover in foreign currencies at 2004 dollar exchange rates, the increase in turnover was about 60 percent compared to the 82 percent decline in unadjusted dollar terms.

2. Location

Trade vs. book location. Transactions were reported on the basis of the location of the dealer agreeing to do the transaction. For example, a dealer in New York might engage in a trade that is booked at a London affiliate. In this case, the trade location is New York and the book location is London. This transaction would be included in the turnover figures in the U.S. survey. If a trader in London entered into a trade but the trader's firm booked the trade in its New York affiliate, the transaction would be included in the institution's survey report to the Bank of England.

3. Participating firms

A total of 33 dealers participated in the foreign exchange part of the survey. See Annex II. A total of 43 dealers participated in this part of the survey in 2004 and 79 in 2001. A total of 28 dealers participated in the foreign exchange and interest rate derivatives part of the survey, compared to 40 in 2004, 54 in 2001, 60 in 1998, and 51 in 1995. The dealers included both U.S. institutions as well as foreign institutions with dealing operations in the United States. Participation is voluntary. See Annex II.

Dealers were asked to participate based on several criteria including participation in the last Triennial survey or the Foreign Exchange Committee's semi-annual survey, the firm's outstanding contracts reported in bank call reports, or in the case of nonbanks, outstanding contracts reported in published financial statements. Private surveys and articles in

ANNEX I

the financial press were also used to identify foreign banks who may book contracts outside the United States and non-bank dealers who do not publicly report their contracts.

4. Instrument definitions

In each risk category, OTC derivatives were broken down into three types of plain vanilla instruments (forwards, swaps and options). Plain vanilla instruments are those traded in generally liquid markets using standardized contracts and market conventions. If a transaction was composed of several plain vanilla components, dealers were asked to report each one separately. Foreign exchange spot and OTC derivatives transactions should be defined as follows:

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 do not belong to spot transactions but are to be reported as swap transactions even when they are for settlement within two days (i.e., spot transactions should exclude "tomorrow/next day" transactions).

Outright forward

Transaction involving the exchange of two currencies at a rate agreed on the date of the contract for value or delivery (cash settlement) at some time in the future (more than two business days later). This category also includes forward foreign exchange agreement transactions (FXA), non-deliverable forwards and other forward contracts for differences.

Foreign exchange swap

Transaction involving 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 should be included. For *turnover*, only the forward leg should be reported as such. The spot leg should not be reported at all, i.e. neither as spot nor as foreign exchange swap transactions. Short-term swaps carried out as "tomorrow/next day" transactions should also be included in this category.

ANNEX ICurrency 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.

Currency swaption

OTC option to enter into a currency swap contract.

Currency warrant

OTC option; long-dated (over one year) currency option.

Forward rate agreement (FRA)

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.

Interest rate swap

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 amortized according to a fixed schedule independent of interest rates.

Interest rate option

Option contract that gives the right to pay or receive a specific interest rate on a predetermined principal for a set period of time.

Interest rate cap

OTC option that pays the difference between a floating interest rate and the cap rate.

Interest rate floor

OTC option that pays the difference between the floor rate and a floating interest rate.

ANNEX IInterest rate collar

Combination of cap and floor.

Interest rate corridor

1) A combination of two caps, one purchased by a borrower at a set strike and the other sold by the borrower at a higher strike to, in effect, offset part of the premium of the first cap. 2) A collar on a swap created with two swaptions –the structure and participation interval is determined by the strikes and types of the swaptions. 3) A digital knockout option with two barriers bracketing the current level of a long-term interest rate.

Interest rate swaption

OTC option to enter into an interest rate swap contract, purchasing the right to pay or receive a certain fixed rate.

Interest rate warrant

OTC option; long-dated (over one year) interest rate option.

Forward contracts for differences (including non-deliverable forwards).

Contracts where only the difference between the contracted forward outright rate and the prevailing spot rate is settled at maturity.

Annex II

Turnover Survey Participants Foreign Exchange Dealers

ABN AMRO North America
Bank of America
Bank of Montreal
Bank of New York
Bank of Nova Scotia
Bank of Tokyo-Mitsubishi
Barclays Capital
Bear Stearns
BNP Paribas
Calyon
Canadian Imperial Bank
Citigroup
Commerzbank
Credit Suisse Group
Deutsche Bank
Goldman Sachs
JP Morgan Chase
Lehman Brothers
Mellon Financial
Merrill Lynch
Mizhuo Corporation
Morgan Stanley
PNC Bank
Royal Bank of Scotland
Skandinaviska Enskilda Banken
Societe Generale
Standard Chartered Bank
State Street Bank & Trust Company
Sumitomo Mitsui Banking Corp
Svenska Handelsbanken
UBS
Wells Fargo
West LB

Turnover Survey Participants Derivatives Dealers

ABN AMRO North America
Bank of America
Bank of Montreal
Bank of New York
Bank of Nova Scotia
Barclays Capital
Bear Stearns
BNP Paribas
Calyon
Canadian Imperial Bank
Citigroup
Commerzbank
Credit Suisse Group
Deutsche Bank
Goldman Sachs
JP Morgan Chase
Mellon Financial
Merrill Lynch
Mizhuo Corporation
Morgan Stanley
PNC Bank
Royal Bank of Scotland
Societe Generale
State Street Bank & Trust Company
Svenska Handelsbanken
Toronto Dominion
UBS
West LB

TableA1 RSSD 999 NAME Aggregate Data	Central Bank Survey of Foreign Exchange and Derivatives Market Activity FOREIGN EXCHANGE CONTRACTS ¹ Turnover in nominal or notional principal amounts in April 2007 (in millions of USD)								
Instruments	USD against								
	EUR	JPY	GBP	CHF	CAD	AUD	SEK	OTHER ²	TOT
SPOT ³ with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	737500	319417	350311	124471	135897	109736	13989	224480	2015803
	148296	67275	46685	25538	26299	19701	3907	45538	383239
	589204	252142	303626	98933	109598	90035	10082	178942	1632564
	946409	454042	337716	184496	147088	111407	11247	329529	2521933
	573637	262431	182351	104560	82400	67002	7452	135094	1414927
	372771	191609	155365	79937	64689	44405	3795	194435	1107003
	204982	97260	84208	32830	45596	25594	7422	99818	597712
	114843	48875	38457	13817	25391	13152	4138	62804	321477
	90138	48383	45753	19013	20203	12442	3284	37014	276233
	1888891	870720	772235	341802	328581	246737	32658	653825	5135448
OUTRIGHT FORWARDS ⁴ with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	101979	59505	41265	19862	16951	24550	9633	144362	418107
	18929	8669	8011	4434	3052	4904	1980	23290	73268
	83050	50836	33254	15428	13899	19646	7653	121072	344839
	318333	182067	119003	47733	68916	69841	17078	231550	1054521
	171252	94231	67359	25605	36446	50629	11007	123315	579844
	147082	87837	51645	22128	32470	19212	6070	108237	474679
	142978	65454	49068	24842	38796	22489	8446	115734	467808
	89816	41501	25468	12320	22089	13552	5667	66505	276919
	53162	23953	23600	12522	16706	8938	2779	49229	190888
	563289	307026	209336	92437	124662	116880	35157	491650	1940434
Maturities seven days or less over seven days and up to one year over one year	282638	156660	77473	46292	41807	47144	14854	185446	852315
	295403	156445	138712	50353	83028	74310	22092	317304	1137646
	4177	2288	1165	229	2645	330	188	12191	23214
FOREIGN EXCHANGE SWAPS with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	538523	295134	246827	130943	253982	144097	32303	282270	1924076
	88231	51983	32994	12885	40338	15581	5197	53717	300925
	450292	243152	213831	118058	213644	128517	27105	228552	1623151
	595028	320360	277938	114475	213239	116589	19926	231250	1888803
	292687	167235	123365	53474	105930	60657	8844	118576	930769
	302341	153123	154572	61000	107309	55932	11083	112674	958034
	175916	179970	113737	42693	40148	24311	3175	45920	625869
	99195	144941	87318	25078	21021	17633	2055	16113	413354
	76721	35029	26419	17615	19127	6678	1120	29806	212514
	1309468	795462	638503	288110	507367	284996	55403	559439	4438749
Maturities seven days or less over seven days and up to one year over one year	1011189	650481	495785	232839	435108	233396	38531	451112	3548442
	375719	186949	174200	65014	109770	66599	22015	140666	1140932
	10794	10014	1509	3140	2827	579	53	21382	50297

1. All transactions involving exposure to more than one currency, whether in interest rates or exchange rates.
2. See also table A3 for a more detailed breakdown of total turnover in "other" currencies.
3. Excluding "tomorrow/next day" transactions. 4. Including non-deliverable forwards and other contracts-for-differences.
5. A swap is considered to be a single transaction in that the two legs are not counted separately. Including "tomorrow/next day" transactions.

TableA2 RSSD 999 NAME Aggregate Data	Central Bank Survey of Foreign Exchange and Derivatives Market Activity FOREIGN EXCHANGE CONTRACTS ¹ Turnover in nominal or notional principal amounts in April 2007 (in millions of USD)									
	EUR against								RESI-	GRAND
	JPY	GBP	CHF	CAD	AUD	SEK	OTHER ²	TOT	DUAL ³	TOTAL ⁴
SPOT⁵										
with reporting dealers	151139	72399	83306	3656	6388	24292	108888	450067	169946	2635815
- local	17732	10508	13875	656	846	4226	22430	70271	41574	495084
- cross-border	133407	61891	69433	3001	5542	20067	86458	379798	128370	2140732
with other financial institutions	127422	57366	73438	3024	5101	12208	58952	337513	131015	2990464
- local	61529	33931	43678	2000	2458	6026	38126	187750	82537	1685214
- cross-border	65892	23435	29761	1024	2644	6183	20826	149763	48478	1305244
with non-financial customers	36296	26130	23943	6402	9040	9578	57011	168400	145640	911752
- local	15128	17493	10538	5347	8295	7734	47717	112253	120447	554177
- cross-border	21167	8637	13404	1055	745	1845	9294	56148	25194	357575
TOTAL	314857	155894	180688	13083	20530	46077	224850	955982	446600	6538030
OUTRIGHT FORWARDS⁶										
with reporting dealers	11632	5617	7193	728	1948	5296	13404	45820	43631	507559
- local	2229	700	938	80	101	934	2849	7830	19505	100603
- cross-border	9402	4916	6256	649	1847	4363	10556	37989	24124	406952
with other financial institutions	21554	12557	10694	3772	3455	6889	19999	78920	74450	1207894
- local	11608	5958	5014	2179	1909	3228	11268	41164	44987	665995
- cross-border	9946	6599	5680	1593	1546	3661	8732	37759	29464	541902
with non-financial customers	14385	14788	8868	5033	6205	9352	45401	104032	98768	670608
- local	9792	13066	6377	4309	5234	7629	37722	84129	82251	443299
- cross-border	4593	1722	2491	723	971	1723	7678	19901	16517	227306
TOTAL	47570	32962	26755	9533	11609	21538	78805	228774	216848	2386056
Maturities										
seven days or less	29544	19716	17561	5960	6428	12241	40345	131796	118862	1102973
over seven days and up to one year	19790	13785	9437	3651	5273	10162	41001	103096	116463	1357205
over one year	470	162	696	3	8	71	312	1720	1026	25960
FOREIGN EXCHANGE SWAPS										
with reporting dealers	3909	1971	1836	318	275	2076	127249	137635	169302	2231014
- local	598	292	290	52	2	40	29615	30889	30290	362103
- cross-border	3310	1680	1546	267	273	2035	97634	106744	139013	1868908
with other financial institutions	9365	11165	2392	1520	5454	1465	70840	102200	58097	2049100
- local	6350	4981	630	658	5304	520	33956	52400	41727	1024896
- cross-border	3015	6184	1761	862	150	944	36884	49800	16370	1024204
with non-financial customers	2304	15689	3815	4354	3006	1118	21014	51299	54460	731628
- local	760	9495	1561	3891	2838	735	18760	38040	48049	499443
- cross-border	1544	6194	2254	463	168	383	2254	13261	6412	232187
TOTAL	15578	28825	8042	6192	8735	4659	219102	291133	281860	5011743
Maturities										
seven days or less	8974	16171	4566	4267	3154	1337	215421	253888	248339	4050669
over seven days and up to one year	7017	12933	3138	1884	5584	3322	33203	67084	58156	1266172
over one year	184	12	630	94	0	43	92	1055	5653	57005
	1. All transactions involving exposure to more than one currency, whether in interest rates or exchange rates. 2. See also table A3 for a more detailed breakdown of total turnover in "other" currencies. 3. "Residual" covers all currency pairs except those involving the USD and the euro. 4. Covers the sum of the totals in tables A1 and A2 and the column "Residual". 5. Excluding "tomorrow/next day" transactions. 6. Including non-deliverable forwards and other contracts-for-differences. 7. A swap is considered to be a single transaction in that the two legs are not counted separately. Including "tomorrow/next day" transactions.									

TableA3 RSSD 999 NAME Aggregate Data	Central Bank Survey of Foreign Exchange and Derivatives Market Activity																			
	FOREIGN EXCHANGE CONTRACTS' Turnover in nominal or notional principal amounts in April 2007 (in millions of USD)																			
	Total turnover in listed currencies against all other currencies ²																			
Instruments	BRL	CNY	CZK	DKK	HKD	HUF	IDR	INR	KRW	MXN	NOK	NZD	PHP	PLN	RUB	SGD	THB	TRL	TWD	ZAR
SPOT ³																				
with reporting dealers	11607	1186	1772	18758	14896	8267	1384	2104	2806	92965	38420	28887	621	5893	350	11208	287	1429	1240	8863
- local	2176	284	272	2024	2882	767	639	573	461	23925	5914	4979	181	488	203	1949	77	356	313	1333
- cross-border	9431	902	1500	16734	12014	7500	745	1531	2345	69040	32506	23908	440	5405	147	9259	210	1073	927	7530
with other financial institutions	16276	1631	1511	6031	45982	20450	1975	2247	3036	115489	20302	31870	914	3963	602	10546	272	34824	1893	9624
- local	9671	793	436	2504	9266	16972	1532	1324	2198	52175	11996	15422	625	1079	329	6055	185	1656	1293	4924
- cross-border	6605	839	1074	3527	36716	3478	443	923	838	63314	8306	16448	288	2884	273	4491	88	33168	599	4700
with non-financial customers	3373	1107	5637	2862	7099	11296	194	1413	2523	18093	23765	23594	279	9374	71	4645	1355	213	790	3197
- local	1924	1013	5201	1697	5046	4115	106	1372	1234	13774	19222	20340	249	6734	47	3070	1225	122	672	1865
- cross-border	1449	94	436	1166	2053	7180	88	41	1289	4319	4543	3254	30	2640	24	1575	130	91	118	1332
TOTAL	31256	3925	8920	27652	67978	40013	3553	5763	8364	226550	82484	84350	1814	19231	1023	26398	1915	36466	3923	21684
OUTRIGHT FORWARDS ⁴																				
with reporting dealers	34633	4938	1371	1461	2356	5768	1579	4913	8456	16029	10695	9725	1434	4630	1284	3736	75	208	4331	4382
- local	6157	473	224	133	1035	304	139	1143	1003	2770	993	1295	240	525	292	571	13	115	588	861
- cross-border	28476	4465	1147	1328	1321	5464	1440	3770	7453	13259	9702	8430	1194	4105	992	3165	62	93	3743	3521
with other financial institutions	56583	7426	2007	2341	11697	3529	1421	6778	8701	31104	17183	19223	1907	4244	2364	12836	357	1555	4797	9178
- local	27021	4016	1091	1456	2564	2504	642	3586	4291	18653	10308	10587	1150	2643	1310	6018	138	1064	2814	5915
- cross-border	29562	3410	916	885	9133	1025	778	3192	4410	12451	6875	8636	757	1601	1054	6818	219	491	1984	3262
with non-financial customers	13831	1832	8266	2111	4731	8976	296	1546	1799	23882	23066	20422	243	9321	332	6392	1387	187	1056	4775
- local	6700	1363	7253	1840	4085	4542	133	945	1028	12920	19920	18070	151	538	179	4781	1131	134	867	3025
- cross-border	7131	469	1013	271	646	4434	163	601	771	10962	3147	2352	92	8784	153	1612	256	53	189	1750
TOTAL	105046	14197	11644	5912	18783	18272	3295	13236	18957	71014	50944	49370	3584	18196	3980	22965	1818	1950	10184	18335
Maturities																				
seven days or less	36987	1021	8781	3218	12123	13288	404	2461	1836	33793	25382	28246	1013	11532	291	9271	1096	633	1564	9243
over seven days and up to one year	72599	11863	3080	2739	7038	5286	3029	10651	17922	38793	26490	21692	2762	7185	3810	14026	730	1000	8911	9917
over one year	1621	1783	7	90	655	0	2	1267	201	1200	72	723	51	7	173	239	6	431	295	34
FOREIGN EXCHANGE SWAPS ⁵																				
with reporting dealers	1829	259	2568	13340	30218	6112	15	186	212	102265	32480	43171	212	4931	206	25539	1005	753	23	8493
- local	367	0	151	671	2684	812	3	47	0	31092	2205	6919	91	529	0	4666	48	511	23	874
- cross-border	1462	259	2417	12669	27534	5300	12	139	212	71173	30275	36252	121	4402	206	20873	957	242	0	7619
with other financial institutions	3673	893	2248	7230	15557	3735	93	404	437	105508	20999	31029	559	5898	359	13600	385	1681	98	10926
- local	2303	827	1029	2758	5134	2161	78	274	297	55465	9394	21282	511	3233	297	6586	267	708	70	5877
- cross-border	1370	66	1219	4472	10423	1574	15	130	141	50044	11605	9746	48	2665	62	7014	118	973	28	5050
with non-financial customers	299	11	646	515	672	428	7	13	60	14809	2653	10910	0	1277	6	2746	199	89	45	1411
- local	76	11	401	222	465	353	2	2	11	5344	1910	9613	0	737	6	1294	49	3	22	1147
- cross-border	223	0	245	293	207	75	5	11	49	9465	743	1297	0	541	0	1452	150	86	23	264
TOTAL	5800	1163	5462	21083	46448	10275	115	603	709	22581	56132	85110	771	12107	571	41885	1588	2523	166	20831
Maturities																				
seven days or less	1399	54	3476	17368	35672	8784	11	29	140	193826	38665	75199	7	7691	20	34886	1176	2213	43	15743
over seven days and up to one year	4717	1109	2091	4236	13168	2303	106	620	552	39926	19615	16632	838	4946	551	11520	418	820	145	5928
over one year	49	0	45	146	291	0	0	0	17	19921	57	198	15	0	0	146	41	0	0	35

1. All transactions involving exposure to more than one currency, whether in interest rates or exchange rates. 2. Only transactions which are included in the columns "other and "residual" in tables A1 and A2. Direct cross-trade between two currencies list
3. Excluding "tomorrow/next day" transactions. 4. Including non-deliverable forwards and other contracts-for-differences. 5. A swap is considered to be a single transaction in that the two legs are not counted separately. Including "tomorrow/next day."

TableA4 RSSD 999 NAME Aggregate Data	Central Bank Survey of Foreign Exchange and Derivatives Market Activity FOREIGN EXCHANGE CONTRACTS ¹ Turnover in nominal or notional principal amounts in April 2007 (in millions of USD)									
Instruments	USD against									
	EUR	JPY	GBP	CHF	CAD	AUD	SEK	OTHER ²	TOT	
CURRENCY SWAPS ³ with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL		14954	1130	3765	3296	2552	527	150	16353	42728
		308	93	638	31	455	267	150	4155	6097
		14645	1035	3128	3265	2096	260	0	12197	36628
		22400	2806	3503	1403	5039	729	299	12467	48645
		20139	1527	1492	151	852	555	299	5395	30410
		2261	1278	2010	1252	4187	174	0	7072	18234
		1822	570	10598	2781	1740	18	4338	19063	40930
		1041	186	4077	2769	717	18	4338	13885	27030
		781	384	6522	13	1023	0	0	5178	13900
		39177	4505	17866	7480	9331	1274	4785	47882	132301
OTC OPTIONS ⁴ Sold										
with reporting dealers		58617	599781	30791	6075	18790	14196	128	25106	213482
- local		10028	6967	7168	1182	3358	1610	1	3590	33904
- cross-border		48590	52814	23624	4892	15432	12585	127	21516	179578
with other financial institutions		60054	58209	39249	6129	22424	14482	504	47384	248434
- local		22909	19776	21376	2231	9676	6116	489	17684	100257
- cross-border		37145	38433	17873	3898	12749	8366	15	29700	148177
with non-financial customers		33589	19196	14809	4441	9353	6433	253	43657	131733
- local		16097	5971	6061	2266	3195	1282	6	36570	71448
- cross-border		17493	13224	8748	2175	6158	5151	247	7090	60285
TOTAL		152260	137185	84850	16644	50567	35111	885	116147	593646
Bought										
with reporting dealers		61529	62837	33693	6921	20742	12589	206	28107	226625
- local		9475	7058	5919	1140	4475	1447	94	4117	33725
- cross-border		52054	55779	27774	5781	16267	11143	112	23991	192899
with other financial institutions		74681	91755	45232	8945	21662	16596	753	47975	307595
- local		32177	30515	28576	3259	9160	9958	361	19995	134000
- cross-border		42504	61240	16656	5686	12502	6637	392	27978	173595
with non-financial customers		34648	23484	16165	5526	13784	6480	14	28872	128974
- local		15690	8014	2746	1858	3717	2405	5	21767	56201
- cross-border		18959	15470	13419	3668	10067	4075	9	7107	72772
TOTAL		170858	178076	95089	21392	56189	35665	972	104954	663194
TOTAL OTC OPTIONS		323118	315261	179939	38036	106756	70776	1857	221101	1256840
TOTAL FX CONTRACTS		4123943	2292972	1817879	767864	1076697	720663	129860	1973896	12903772

1. All transactions involving exposure to more than one currency, whether in interest rates or exchange rates.

2. See also table A6 for a more detailed breakdown of total turnover in "other" currencies.

3. A swap is considered to be a single transaction in that the two legs are not counted separately.

4. Including currency warrants and multicurrency swaptions.

TableA5 RSSD 999 NAME Aggregate Data	Central Bank Survey of Foreign Exchange and Derivatives Market Activity FOREIGN EXCHANGE CONTRACTS ¹ Turnover in nominal or notional principal amounts in April 2007 (in millions of USD)										
Instruments	EUR against								RESI-	GRAND	
	JPY	GBP	CHF	CAD	AUD	SEK	OTHER ²	TOT	DUAL ³	TOTAL ⁴	
CURRENCY SWAPS ⁵ with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL											
with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	3	7	71	0	0	0	53	134	1549	44408	
with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	0	0	0	0	0	0	0	0	689	6787	
with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	3	7	71	0	0	0	53	134	860	37622	
with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	6	110	145	132	0	31	139	563	558	49766	
with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	0	60	16	0	0	2	10	88	178	30676	
with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	6	50	129	132	0	29	129	475	380	19089	
with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	0	28	61	396	0	0	0	485	606	42021	
with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	0	28	61	0	0	0	0	89	559	27678	
with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	0	0	0	396	0	0	0	396	47	14343	
with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	9	145	277	528	0	31	192	1182	2713	136195	
OTC OPTIONS ⁶ Sold with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL											
with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	23991	6168	4094	1025	809	970	5568	42626	12144	268252	
with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	3565	765	171	77	19	48	309	4954	1760	40618	
with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	20428	5402	3923	948	791	924	5258	37675	10384	227637	
with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	23577	7782	7105	682	1094	3039	4473	47751	34294	330479	
with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	12352	2808	3728	239	169	974	1003	21272	13299	134828	
with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	11224	4974	3377	443	925	2065	3470	26478	20995	195650	
with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	11924	1003	5362	38	501	395	2219	21442	7370	160545	
with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	1417	71	1771	5	404	74	887	4629	1312	77389	
with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	10507	932	3591	33	97	321	1332	16813	6057	83155	
with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	59491	14953	16562	1745	2404	4404	12261	111820	53808	759274	
Bought with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL											
with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	17507	5261	4459	921	542	1405	4036	34130	11862	272617	
with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	4348	719	309	15	42	163	429	6025	1948	41698	
with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	13159	4541	4149	906	500	1243	3608	28106	9913	230918	
with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	19231	11413	5998	839	856	1364	4155	43856	28265	379716	
with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	9367	5552	1954	371	251	941	849	19285	6822	160107	
with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	9865	5861	4044	468	605	423	3306	24571	21443	219609	
with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	15285	1944	7967	444	610	301	2006	28557	8070	165601	
with reporting dealers - local - cross-border with other financial institutions - local - cross-border with non-financial customers - local - cross-border TOTAL	1627	308									

TableA6 RSSD 999 NAME Aggregate Data	Central Bank Survey of Foreign Exchange and Derivatives Market Activity																			
	FOREIGN EXCHANGE CONTRACTS¹																			
	Turnover in nominal or notional principal amounts in April 2007 (In millions of USD)																			
Instruments	Total turnover in listed currencies against all other currencies²																			
	BRL	CNY	CZK	DKK	HKD	HUF	IDR	INR	KRW	MXN	NOK	NZD	PHP	PLN	RUB	SGD	THB	TRL	TWD	ZAR
CURRENCY SWAPS³																				
with reporting dealers	35	8	0	0	61	0	5	5	710	473	0	198	10	0	82	5	0	181	0	18
- local	4	3	0	0	60	0	5	5	233	30	0	198	10	0	82	5	0	155	0	18
- cross-border	31	5	0	0	1	0	0	0	477	443	0	0	0	0	0	0	0	26	0	0
with other financial institutions	37	122	0	0	0	0	10	0	295	2009	0	2	0	111	143	0	0	135	0	98
- local	0	6	0	0	0	0	10	0	50	674	0	1	0	111	143	0	0	125	0	56
- cross-border	37	116	0	0	0	0	0	0	245	1335	0	1	0	0	0	0	0	10	0	42
with non-financial customers	0	0	0	0	0	0	0	1	0	9	0	0	0	0	0	0	0	0	0	0
- local	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0
- cross-border	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	72	130	0	0	61	0	15	6	1005	2482	0	200	10	111	225	5	0	316	0	116
OTC OPTIONS⁴																				
Sold																				
with reporting dealers	6372	211	252	0	711	816	70	294	1027	4545	933	3948	0	1790	35	974	0	3381	216	1056
- local	1081	2	1	0	100	1	0	113	181	588	122	472	0	94	21	134	0	389	2	61
- cross-border	5291	209	251	0	611	815	70	181	846	3947	811	3477	0	1696	14	840	0	2992	214	995
with other financial institutions	9968	625	535	0	3655	1063	289	1655	1485	16084	3701	6976	18	606	119	1436	20	3024	15	1757
- local	4901	0	417	0	115	195	50	446	323	9472	1318	2063	6	206	4	326	0	955	9	974
- cross-border	5066	625	118	0	3540	868	239	1209	1162	6612	2383	4913	12	401	115	1110	20	2069	6	783
with non-financial customers	1603	409	301	5	608	195	13	271	25845	5176	892	767	9	255	434	341	15	1728	260	1131
- local	748	139	6	5	28	0	0	206	25583	2970	25	181	9	151	352	156	0	830	246	440
- cross-border	855	270	295	0	580	195	13	65	262	2206	867	586	0	104	82	185	15	898	14	691
TOTAL	17943	1245	1088	5	4974	2074	372	2220	28357	25805	5522	11691	27	2651	588	2751	35	8133	491	3944
Bought																				
with reporting dealers	7013	38	272	0	729	548	0	230	281	7468	1797	4042	2	395	40	773	0	2935	288	911
- local	936	2	7	0	50	28	0	88	38	808	280	489	2	91	0	79	0	433	2	113
- cross-border	6077	36	265	0	679	520	0	143	243	6660	1517	3552	0	304	40	694	0	2502	286	798
with other financial institutions	10442	281	616	0	3049	843	95	1000	1099	10433	3937	6326	16	669	0	1651	0	3269	22	1641
- local	5924	53	343	0	1095	155	60	126	106	4537	1024	2399	0	313	0	274	0	731	20	818
- cross-border	4518	228	273	0	1954	688	35	874	993	5896	2913	3927	16	356	0	1377	0	2538	2	823
with non-financial customers	749	401	566	10	624	270	35	160	12889	5399	586	562	9	162	36	229	63	1372	124	1188
- local	244	191	139	6	92	72	0	133	12806	2586	28	144	9	95	34	34	53	524	108	360
- cross-border	505	210	427	4	532	198	35	27	83	2813	558	418	0	67	0	195	10	848	16	828
TOTAL	18204	720	1454	10	4402	1661	130	1390	14269	23300	6320	10930	27	1226	76	2653	63	7576	434	3740
TOTAL OTC OPTIONS	36147	1965	2542	15	9376	3735	502	3610	42626	49105	11842	22621	54	3877	664	5404	98	15709	925	7684
TOTAL FX CONTRACT	178320	21380	28566	54661	142645	72293	7480	23218	71660	571741	201400	241652	6232	53521	6461	96655	5418	56964	15197	68650

1. All transactions involving exposure to more than one currency, whether in interest rates or exchange rates. 2. Only transactions which are included in the columns "other" and "residual" in tables A4 and A5. Direct offshore cross-trades between two currencies. 3. A swap is considered to be a single transaction in that the two legs are not counted separately. 4. Including currency warrants and multicurrency swaptions.

TableB1 RSSD 999 NAME Aggregate Data	<p style="text-align: center;">Central Bank Survey of Foreign Exchange and Derivatives Market Activity</p> <p style="text-align: center;">SINGLE-CURRENCY INTEREST RATE DERIVATIVES¹ Turnover in nominal or notional principal amounts in April 2007 (in millions of USD)</p>																	
	Instruments	USD	EUR	JPY	GBP	CHF	CAD	AUD	DKK	HKD	IDR	MXN	NOK	NZD	SEK	SGD	THB	OTH
FORWARD RATE AGREEMENTS																		
with reporting dealers	1263973	55270	0	44082	21090	2503	1172	183	0	0	0	1046	0	3982	0	0	9572	1402872
- local	323986	14522	0	5534	1405	1510	393	183	0	0	0	0	0	170	0	0	2548	350250
- cross-border	939987	40748	0	38548	19685	994	780	0	0	0	0	1046	0	3811	0	0	7024	1052623
with other financial institutions	453009	32673	1775	5344	12732	4530	6236	366	0	0	67	771	1758	1080	0	0	7164	527504
- local	262730	8453	1685	1048	1112	1298	1841	0	0	0	67	0	0	43	0	0	2095	280373
- cross-border	190279	24220	90	4296	11620	3232	4395	366	0	0	0	771	1758	1036	0	0	5069	247130
with non-financial customers	1464	1822	0	0	0	862	0	0	0	0	0	0	0	0	0	0	0	4148
- local	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
- cross-border	1464	1822	0	0	0	862	0	0	0	0	0	0	0	0	0	0	0	4148
TOTAL	1718447	89765	1775	49426	33823	7895	7409	549	0	0	67	1817	1758	5061	0	0	16736	1934524
SWAPS²																		
with reporting dealers	3018316	113230	44474	37182	33854	79293	2171	30	1372	0	24254	0	963	1016	1216	409	32253	3390034
- local	1010593	21213	7526	9108	1494	13220	244	30	177	0	8599	0	0	241	39	0	9647	1082129
- cross-border	2007724	92017	36949	28074	32360	66072	1927	0	1195	0	15656	0	963	776	1177	409	22605	2307905
with other financial institutions	2145362	186746	45734	49010	19986	43554	562	60	1861	10	36641	0	347	1383	761	223	42961	2575199
- local	1255951	41418	16596	16752	463	19192	504	60	1019	0	12480	0	340	720	129	36	12628	1378287
- cross-border	889411	145328	29137	32258	19524	24362	57	0	842	10	24160	0	7	664	632	188	30332	1196912
with non-financial customers	586230	63825	24276	12656	1384	7331	326	10	654	0	3406	1	181	19	343	420	8057	709120
- local	134695	6580	1560	487	63	3004	314	0	0	0	497	1	0	0	0	137	267	147605
- cross-border	451535	57245	22715	12169	1321	4327	12	10	654	0	2909	0	181	19	343	283	7791	561514
TOTAL	5749907	363801	114484	98848	55223	130178	3059	100	3887	10	64301	1	1491	2418	2320	1052	83271	6674353

1. All transactions where all the legs are exposed to one and only one currency's interest rate, including all fixed/floating and floating/floating single-currency interest rate contracts. 2. A swap is considered to be a single transaction in that the t

Instruments	USD	EUR	JPY	GBP	CHF	CAD	AUD	DKK	HKD	IDR	MXN	NOK	NZD	SEK	SGD	THB	OTH	TOT
	TableB2	Central Bank Survey of Foreign Exchange and Derivatives Market Activity SINGLE-CURRENCY INTEREST RATE DERIVATIVES Turnover in nominal or notional principal amounts in April 2007 (in millions of USD)																
RSSD 999																		
NAME Aggregate Data																		
OTC OPTIONS																		
Sold																		
with reporting dealers	506720	11444	19329	4730	642	6094	0	0	89	0	1120	0	0	643	0	0	555	551367
- local	150445	1639	12624	281	62	2953	0	0	0	0	133	0	0	0	0	0	87	168224
- cross-border	356275	9805	6705	4448	580	3141	0	0	89	0	988	0	0	643	0	0	468	383142
with other financial institutions	288195	7802	19350	1349	622	3247	0	0	124	0	1708	0	0	0	0	0	1439	323838
- local	176392	1849	12049	170	0	738	0	0	0	0	884	0	0	0	0	0	750	192831
- cross-border	111803	5953	7302	1178	622	2509	0	0	124	0	825	0	0	0	0	0	690	131006
with non-financial customers	102547	3119	6161	191	0	1429	0	0	356	0	0	0	0	0	0	0	282	114086
- local	60831	402	1985	32	0	1429	0	0	0	0	0	0	0	0	0	0	0	64679
- cross-border	41716	2718	4176	159	0	0	0	0	356	0	0	0	0	0	0	0	282	49407
TOTAL	897464	22365	44841	6269	1264	10770	0	0	569	0	2829	0	0	643	0	0	2276	989290
Bought																		
with reporting dealers	879231	13195	16031	2741	414	8802	0	0	618	0	1161	0	0	641	7	0	405	923967
- local	500985	1205	9962	206	0	3833	0	0	0	0	246	0	0	0	0	0	60	516497
- cross-border	378245	12711	6068	2535	414	4969	0	0	618	0	915	0	0	641	7	0	346	407470
with other financial institutions	330094	14552	15285	1464	41	1119	17	0	99	0	3327	0	0	0	0	0	1504	367500
- local	223995	6380	8623	20	0	841	0	0	0	0	2499	0	0	0	0	0	183	242540
- cross-border	106098	8172	6662	1444	41	278	17	0	99	0	828	0	0	0	0	0	1321	124959
with non-financial customers	125079	3055	5519	178	0	1446	0	0	0	0	18	0	0	0	0	0	296	135591
- local	58593	0	1637	148	0	1405	0	0	0	0	0	0	0	0	0	0	0	61783
- cross-border	66486	3055	3882	30	0	41	0	0	0	0	18	0	0	0	0	0	296	73808
TOTAL	1334403	31522	36835	4383	455	11367	17	0	717	0	4505	0	0	641	7	0	2205	1427058
TOTAL OTC OPTIONS	2231867	53887	81676	10652	1719	22137	17	0	1286	0	7334	0	0	1264	7	0	4481	2416348
Other products 2																		10756
TOTAL CONTRACTS	9700221	507453	197935	158926	90765	160210	10485	649	5173	10	71702	1818	3249	8763	2327	1052	104488	11025225
of which:																		
Related party trades 3																		3414972

1. All transactions where all the legs are exposed to one and only one currency's interest rate, including all fixed/floating and floating/floating single-currency interest rate contracts.

2. Any instrument where the transaction is highly leveraged and/or the notional amount is variable and where a decomposition into individual plain vanilla components is impractical or impossible.