

Press release

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The global OTC derivatives market continues to grow

Data released today by the BIS on positions in the global over-the-counter (OTC) derivatives market show continued market growth in the first half of 2000. The total estimated *notional amount* of outstanding OTC contracts stood at \$94 trillion at end-June 2000, a 7% increase over end-December 1999 and a 30% increase since end-June 1998, when the BIS survey was initiated.¹ At the same time, the ratio of *gross market values* to notional amounts outstanding continued their downward trend.²

The statistics released today constitute the fifth set of semiannual series under a new regular reporting framework on OTC market activity. They cover the *worldwide consolidated* OTC derivatives exposures of major banks and dealers in the G10 countries.

Growth in the first half of 2000 was led by activity in forward-type contracts, particularly interest rate swaps, outright forwards and foreign exchange swaps. In terms of broad market risk categories, interest rate, foreign exchange and commodity contracts expanded at about the same pace, while equity contracts declined.³ The overall buoyancy of activity in OTC derivatives markets contrasts with the stagnation of business conducted on derivatives exchanges (see Table 1), a trend already evident for much of the 1990s.

The new data also reveal a number of developments cutting across the different risk categories. For example, they show a continued rise in the share of euro-denominated transactions, particularly in interest rate swaps, where the euro has extended its lead as the largest currency segment. At the same time, the rate of expansion of yen-denominated contracts slowed down considerably relative to the previous review period. In addition, business with non-financial customers expanded fastest in all risk categories, although it remains much smaller than that conducted by reporting dealers and other financial sector entities (see Tables 2 and 3).

The *interest rate segment* expanded by 7%, to \$64.1 trillion. With the stock of forward rate agreements (FRAs) and options stagnating, growth was concentrated in swaps (by 9%, to \$48 trillion). Swaps have increased at a more robust pace than other interest rate instruments in recent years. This may have been related to the following factors. First, the growing variety of structures on offer has enabled the swaps market to respond in a more flexible way to the risk management requirements of

¹ The notional amount, which is generally used as a reference to calculate cash flows under individual contracts, provides a comparison of market size between related cash and derivatives markets. The numbers are adjusted for double-counting resulting from positions between reporting institutions.

² Gross market value is defined as the sum (in absolute terms) of the positive market value of all reporters' contracts and the negative market value of their contracts with non-reporters (as a proxy for the positive market value of non-reporters' positions). It measures the replacement cost of all outstanding contracts had they been settled on 30 June 2000.

³ Credit derivatives, which according to market sources have recently grown rapidly, are not identified in this survey. Data on such instruments will be collected at the time of the next triennial survey of foreign exchange and derivatives activity in June 2001.

market participants than exchange-traded markets. Secondly, the introduction of the euro has led to a rapid expansion of European capital market issuance, with some of the resulting exposure likely to have been hedged in the interest rate swaps market. Thirdly, net repayments or reduced net issuance of securities by central governments in some of the major reporting countries (with the notable exception of Japan) have affected the liquidity of government bond markets and the effectiveness of traditional hedging vehicles, such as government bond futures. This has encouraged market participants to switch to more effective hedging instruments, such as interest rate swaps. This shift seems to be confirmed by the stagnation of interest rate business on derivatives exchanges.

In the area of *currency instruments*, the value of contracts outstanding increased by 8%, to \$15.5 trillion, following a slight decline in the previous reporting period. All types of instruments shared in the expansion, with outright forward and forex swap contracts rising most rapidly (by 9%), followed by currency swaps (7%) and options (3%). Some of the increase in outright forwards and forex swaps may have been related to the upsurge of activity seen in the international interbank market since the second half of 1999.⁴ In the case of options, this was the first increase in business following four consecutive half-yearly declines. One of the most striking developments was the very sharp rise in currency contracts involving the euro (26%). The review period was marked by rising volatility of the dollar/euro currency pair, which may have fuelled related business. Contracts involving the US dollar and sterling also grew at a robust pace (by 9% and 11% respectively).

Activity in the *equity-linked sector* declined by 8%, to \$1.7 trillion. Much of the drop was accounted for by contracts on US equities held by non-financial market participants. In spite of press reports highlighting the rapid growth of retail-targeted equity index products (which often combine fixed income assets and call options), the OTC equity-linked market has not expanded much in recent periods. It remains considerably smaller than the foreign exchange or interest rate market segments, being comparable in size to the exchange-traded equity index market (\$1.5 trillion at end-June 2000).

Commodity derivatives markets expanded by 7%, to \$0.6 trillion. The rate of expansion of gold contracts, the largest single group in that market segment, slowed considerably relative to the previous review period (to 8% from 29%).

Estimated *gross market values* declined by \$232 billion, to \$2.6 trillion. The ratio of gross market values to notional amounts outstanding fell to 2.7% at end-June 2000 from 3.2% at end-December 1999, maintaining the downward trend observed since the BIS began collecting OTC market data. Lower ratios were recorded in all market risk categories, with the exception of the commodity-linked segment, which saw an increase. The most pronounced decline took place in foreign exchange instruments (to 3.7% from 4.6%). Much of the reduction was accounted for by contracts involving the yen, which is consistent with the lower volatility of the underlying market during the review period. The decline was less substantial for interest rate instruments (to 1.9% from 2.2%) but was nevertheless notable in the euro segment (to 2% from 2.4%) and the yen sector (to 1.6% from 1.9%), probably also reflecting the lower volatility of underlying markets. It should be noted that gross market values exaggerate actual credit exposure since they exclude netting and other risk reducing arrangements. Allowing for netting, the derivatives-related credit exposure of reporting institutions was considerably smaller (\$937 billion, or about 1% of notional amounts outstanding).

This press release is available on the BIS website at www.bis.org.

⁴ See the section on the international banking market in the August 2000 issue of the *BIS Quarterly Review*.

Table 1

The global over-the-counter (OTC) derivatives markets¹

Amounts outstanding in billions of US dollars

	Notional amounts				Gross market values			
	End Dec. 1998	End June 1999	End Dec. 1999	End June 2000	End Dec. 1998	End June 1999	End Dec. 1999	End June 2000
GRAND TOTAL	80,317	81,458	88,201	94,037	3,231	2,628	2,813	2,581
A. Foreign exchange contracts	18,011	14,899	14,344	15,494	786	582	662	578
Outright forwards and forex swaps	12,063	9,541	9,593	10,504	491	329	352	283
Currency swaps	2,253	2,350	2,444	2,605	200	192	250	239
Options	3,695	3,009	2,307	2,385	96	61	60	55
B. Interest rate contracts²	50,015	54,072	60,091	64,125	1,675	1,357	1,304	1,230
FRAs	5,756	7,137	6,775	6,771	15	12	12	13
Swaps	36,262	38,372	43,936	47,993	1,509	1,222	1,150	1,072
Options	7,997	8,562	9,380	9,361	152	123	141	145
C. Equity-linked contracts	1,488	1,511	1,809	1,671	236	244	359	293
Forwards and swaps	146	198	283	348	44	52	71	62
Options	1,342	1,313	1,527	1,323	192	193	288	231
D. Commodity contracts³	415	441	548	584	43	44	59	80
Gold	182	189	243	262	13	23	23	19
Other	233	252	305	323	30	22	37	61
Forwards and swaps	137	127	163	169	...	...	...	...
Options	97	125	143	154	...	...	...	...
E. Other⁴	10,388	10,536	11,408	12,163	492	400	429	400
GROSS CREDIT EXPOSURE⁵					1,329	1,119	1,023	937
<i>Memorandum item:</i>								
<i>Exchange-traded contracts⁶</i>	<i>13,920</i>	<i>15,488</i>	<i>13,497</i>	<i>13,904</i>	.	.	.	.

¹ All figures are adjusted for double-counting. Notional amounts outstanding have been adjusted by halving positions vis-à-vis other reporting dealers. Gross market values have been calculated as the sum of the total gross positive market value of contracts and the absolute value of the gross negative market value of contracts with non-reporting counterparties. ² Single-currency contracts only. ³ Adjustments for double-counting estimated. ⁴ Estimated positions of non-regular reporting institutions. ⁵ Gross market values after taking into account legally enforceable bilateral netting agreements. ⁶ Sources: FOW TRADEdata; Futures Industry Association; various futures and options exchanges.

Table 2

The global OTC foreign exchange derivatives markets^{1,2}

Amounts outstanding in billions of US dollars

	Notional amounts				Gross market values			
	End Dec. 1998	End June 1999	End Dec. 1999	End June 2000	End Dec. 1998	End June 1999	End Dec. 1999	End June 2000
Total contracts	18,011	14,899	14,344	15,494	786	582	662	578
with other reporting dealers	7,284	5,464	5,392	5,827	336	200	214	168
with other financial institutions	7,440	6,429	6,102	6,421	297	246	281	242
with non-financial customers	3,288	3,007	2,850	3,246	153	136	167	168
up to one year ³	15,791	12,444	12,140	13,178	...	...	...	...
between one and five years ³	1,624	1,772	1,539	1,623	...	...	...	...
over five years ³	592	683	666	693	...	...	...	...
US dollar	15,810	13,181	12,834	13,961	698	519	581	518
Euro ⁴	7,658	4,998	4,667	5,863	223	206	239	242
Japanese yen	5,319	4,641	4,236	4,344	370	171	262	157
Pound sterling	2,612	2,281	2,242	2,479	62	63	55	76
Swiss franc	937	823	880	906	30	33	39	34
Canadian dollar	594	636	647	605	34	27	28	22
Swedish krona	419	435	459	451	9	14	16	15
Other	2,674	2,805	2,723	2,380	146	130	104	91
<i>Memorandum item:</i>								
<i>Exchange-traded contracts⁵</i>	<i>81</i>	<i>80</i>	<i>59</i>	<i>51</i>	<i>.</i>	<i>.</i>	<i>.</i>	<i>.</i>

¹ See footnote 1 to Table 1. ² Counting both currency sides of every foreign exchange transaction means that the currency breakdown sums to 200% of the aggregate. ³ Residual maturity. ⁴ Before end-June 1999: legacy currencies of the euro. ⁵ See footnote 6 to Table 1.

Table 3

The global OTC interest rate derivatives markets¹

Amounts outstanding in billions of US dollars

	Notional amounts				Gross market values			
	End Dec. 1998	End June 1999	End Dec. 1999	End June 2000	End Dec. 1998	End June 1999	End Dec. 1999	End June 2000
Total contracts	50,015	54,072	60,091	64,125	1,675	1,357	1,304	1,230
with other reporting dealers	24,442	27,059	30,518	32,208	748	634	602	560
with other financial institutions	19,790	21,149	24,012	25,771	683	559	548	518
with non-financial customers	5,783	5,863	5,562	6,146	244	164	154	152
up to one year ²	18,185	20,287	24,874	25,809	...	...	...	...
between one and five years ²	21,405	21,985	23,179	24,406	...	...	...	...
over five years ²	10,420	11,800	12,038	13,910	...	...	...	...
US dollar	13,763	16,073	16,510	17,606	370	337	376	367
Euro ³	16,461	17,483	20,692	22,948	786	584	492	467
Japanese yen	9,763	10,207	12,391	12,763	212	192	232	207
Pound sterling	3,911	4,398	4,588	4,741	130	103	94	84
Swiss franc	1,320	1,404	1,414	1,409	31	27	19	22
Canadian dollar	747	814	825	846	18	16	15	14
Swedish krona	939	1,122	1,373	1,255	25	21	18	17
Other	3,113	2,570	2,298	2,558	102	77	58	52
<i>Memorandum item:</i>								
<i>Exchange-traded contracts³</i>	<i>12,643</i>	<i>13,807</i>	<i>11,669</i>	<i>12,313</i>	.	.	.	.

¹ See footnote 1 to Table 1. ² Residual maturity. ³ Before end-June 1999: legacy currencies of the euro. ⁴ See footnote 6 to Table 1.

Table 4

The global OTC interest rate swaps market¹

Amounts outstanding in billions of US dollars

	Notional amounts				Gross market values			
	End Dec. 1998	End June 1999	End Dec. 1999	End June 2000	End Dec. 1998	End June 1999	End Dec. 1999	End June 2000
Total contracts	36,262	38,372	43,936	47,993	1,509	1,222	1,150	1,072
with other reporting dealers	18,310	20,080	23,224	24,803	676	578	539	494
with other financial institutions	13,971	14,463	16,849	18,875	615	501	477	448
with non-financial customers	3,980	3,828	3,863	4,315	218	143	134	130
US dollar	8,612	10,201	10,712	11,804	294	272	296	299
Euro ²	12,576	12,990	15,358	17,475	728	543	443	407
Japanese yen	8,237	8,257	10,460	10,800	196	183	222	192
Pound sterling	2,968	3,214	3,538	3,773	122	94	84	76
Swiss franc	1,006	1,044	1,071	1,097	30	26	18	21
Canadian dollar	590	632	663	679	17	14	14	13
Swedish krona	416	496	545	559	24	20	16	16
Other	1,857	1,538	1,588	1,805	62	71	56	48

¹ See footnote 1 to Table 1 ² Before end-June 1999: legacy currencies of the euro.