### **Communications**

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### Press release

## Turnover in foreign exchange and derivatives markets

### **Background**

In April and June 2004, the Bank for International Settlements (BIS) again coordinated a survey on foreign exchange and derivatives market activity. Central banks from over 50 countries participated in the survey. The objective was to obtain an overview of the size and structure of these markets, the role of the individual financial centres and currencies, and the types and maturities of the transactions. The last survey dates back to April 2001.

The 2004 survey was conducted in two consecutive steps:

- The first part covered the turnover of domestic bank offices in the foreign exchange and derivatives markets during the month of April. This press release specifically discusses the results for Switzerland. The figures on global turnover will be published by the BIS today as well (http://www.bis.org/publ/rpfx04.htm).
- The second part of the survey involved collecting data on the amounts outstanding on derivatives products (notional amounts and gross market values) as at 30 June 2004. Unlike the survey on turnover, this part only includes the transactions of internationally operating banking groups. A national evaluation would not make sense; the BIS will publish the global results at a later date.

The Swiss National Bank participated in the survey for the sixth time. Data was only requested from banks in Switzerland with a sizeable share in the local foreign exchange and derivatives market. This meant that 22 banks (2001: 42 banks) were required to report data. The collected data on turnover was broken down by type of transaction, counterparty, currency and contract term.

### Summary of results

In April 2004, the reporting institutions traded an average of USD 79 billion per working day in traditional foreign exchange markets and USD 18 billion in over-the-counter (OTC) derivatives markets. This is an increase of 12% and 20% respectively over the 2001 survey. Converted into Swiss francs, however, the corresponding turnovers decreased by CHF 19 billion to CHF 103 billion (-15%) and by CHF 2 billion to CHF 24 billion (-9%). In foreign exchange trading, foreign exchange swaps again gained in significance, to the detriment of spot transactions. In the single-currency interest rate segment, forward rate agreements were replaced to a considerable degree by swaps.

Banks in Switzerland settled around 50% of all OTC transactions via electronic customer platforms. In April 2001, this share was well below 30%. However, the differences between the individual institutions remained considerable.

### Turnover in traditional foreign exchange markets

The turnover in the traditional foreign exchange markets<sup>1</sup> of the 22 reporting institutions totalled USD 1,585 billion in April 2004, i.e. USD 79 billion on average per trading day. This is a 12% increase compared with 2001. Converted into Swiss francs, however, the daily turnover declined by CHF 19 billion to CHF 103 billion (-15%).

### Instruments

During the 20 trading days, an average of USD 23 billion was traded by means of spot transactions and USD 56 billion in the form of forward transactions (outright forwards and foreign exchange swaps). The trend observed in the last ten years thus continued, with spot transactions losing further ground in favour of swaps. Accounting for a share of 62%, foreign exchange swaps remained the most commonly used instrument.

### Currencies

The market participants settled transactions primarily between US dollars and euros (33% of total turnover) and between US

dollars and Swiss francs (23%). Other major currency pairs were US dollar/pound (13%), US dollar/yen (8%) and euro/Swiss franc (8%). A comparison with the turnovers recorded three years ago is difficult because of the changes in value of the currencies involved. As had been expected based on the development of the exchange rates, the share of US dollar contracts declined, while transactions in euros and pounds became relatively more significant. The share of turnover denominated in Swiss francs remained almost unchanged.

### Maturities

Foreign exchange swaps were mainly concluded with very short maturities. Transactions with maturities of seven days or less captured 64% (2001: 66%) of turnover. As usual, this year too saw hardly any transactions with maturities exceeding one year. Outright forwards also remained almost unchanged compared with the last survey; 73% (2001: 70%) of all contracts had maturities ranging from eight days to one year.

### **Turnover in OTC derivatives markets**

In OTC derivatives markets<sup>2</sup>, USD 124 billion in turnover, i.e. an average of USD 6 billion per trading day, was accounted for by OTC foreign exchange derivatives, and USD 241 billion, or USD 12 billion a day, by OTC interest rate derivatives. Compared with the last survey, the daily turnover in OTC derivatives increased by 20%. Converted into Swiss francs, however, the turnover per trading day in foreign exchange derivatives declined by over CHF 1 billion to CHF 8 billion (-15%) and that in interest rate derivatives decreased by almost CHF 1 billion to CHF 16 billion (-5%).

### Instruments

As in the previous surveys, foreign exchange derivatives were traded primarily in the form of options, with currency swaps continuing to play a minor role. Average daily turnover with single-currency interest rate contracts increased by USD 9 billion to USD 10 billion for swaps but contracted by USD 6 billion to USD 2 billion for forward rate agreements (FRAs). This is not the first time, though, that such shifts in the trade in derivatives instruments have been observed.

### Currencies

The major currencies involved in interest rate swaps were the US dollar (32%), the pound sterling (24%), the euro (23%) and the Swiss franc (17%), while most FRAs were denominated in US dollars (35%) and Swiss francs (32%). Over 90% of the corresponding turnover stemmed from transactions with foreign banks as counterparties. Foreign exchange derivatives presented a less uniform picture: turnover in foreign exchange swaps stemmed exclusively from transactions with foreign banks, while Swiss and foreign customers accounted for approximately equal shares of the turnover in foreign exchange options. Moreover, in about half of these, non-banks were the counterparty. The market participants primarily swapped US dollars and euros (31%), dollars and Swiss francs (15%), and euros and Swiss francs (14%). Additionally, swaps of US dollars against yen (11%) or pounds sterling (6%) played a significant role.

### Turnover via electronic trading platforms

The banks operating in Switzerland settled around 50% of their turnover via electronic trading platforms. Three years ago, this share had still been well below 30%. However, not all instruments show the same degree of automation in trading: while roughly 70% of all foreign exchange spot contracts and around 80% of all foreign exchange forward and swap transactions were conducted via electronic trading platforms, these systems were hardly, if at all, used for OTC derivatives transactions. Moreover, the differences between the reporting institutions were striking.

Swiss National Bank

<sup>&</sup>lt;sup>1</sup>Turnover from spot and forward transactions in foreign exchange were reported. Forward transactions are divided into outright forwards and swaps.

<sup>&</sup>lt;sup>2</sup>Turnover in OTC (over-the-counter) foreign exchange derivatives and OTC interest rate derivatives were taken into account. The relevant foreign exchange derivatives included foreign exchange swaps and foreign exchange options. Interest rate derivatives were divided into forward rate agreements, swaps and options.

Annex to the press release

## **Traditional foreign exchange markets: Overview**

	1995		1998		2001		2004	
Total turnover	'		'					
In billions of USD								
	1 556		1 634		1 346		1 585	
Turnover per trading day (	shares in total	turnove	r)					
Total turnover	86 462		81 719		70 823		79 239	
Instruments								
Spot transactions	44 186	(51%)	34 464	(42%)	23 388	(33%)	23 168	(29%
Forward transactions	42 276	(49%)	47 255	(58%)	47 435	(67%)	56 071	(71%
Outright forwards	8 351	(10%)	5 465	(7%)	6 331	(9%)	6 653	(9%
Foreign exchange swaps	33 925	(39%)	41 790	(51%)	41 104	(58%)	49 418	(62%
Counterparty								
Banks								
Local	12 584	(15%)	11 146	(14%)	9 220	(13%)	8 040	(10%
Cross-border	61 010	(71%)	57 435	(70%)	48 457	(68%)	55 801	(70%
Customers	<b>-</b>	( = 1-)		( - 1-)		( /-/		\ - 70
Local	5 630	(7%)	6 332	(8%)	7 694	(11%)	9 547	(12%
Cross-border	7 237	(8%)	6 807	(8%)	5 453	(8%)	5 851	(7%
Currency pairs								
USD/CHF	22 876	(27%)	23 811	(29%)	18 664	(26%)	17 851	(23%
USD/EUR	22 070	(27 70)		(2370)	24 595	(35%)	25 977	(33%
USD/DEM	20 231	(23%)	17 349	(21%)		(3370)	23 377	(3370
USD/JPY	6 326	(7%)	8 895	(11%)	8 458	(12%)	6 256	(8%
USD/GBP	0 320	(7 70)	3 842	(5%)	4 560	(6%)	9 937	(13%
EUR/CHF	•	•		(5/6)				
•		(110/\	5 57/	(70/)	4 446	(6%)	6 675	(8%
DEM/CHF	9 830	(11%)	5 574	(7%)	•	•	•	
Average exchange rates in Ap	pril							
USD in								
CHF	1.134		1.505		1.712		1.297	
EUR	•				1.120		0.834	
DEM	1.378		1.814					
JPY	83.61		132.03		123.73		107.58	
GBP	0.617		0.598		0.697		0.555	
Number of banks	114		63		42		22	
Number of trading days	18		20		19		20	

CHF against						USD against					Other	Total
OSD	EUR	ЭРҮ	GBP	Other	Total	EUR	ЭРҮ	GBP	Other	Total		

## Turnover per trading day

In millions of USD													
Spot transactions	3 969	3 952	234	430	247	8 832	8 190	1 656	1 811	979	12 636	1 699	23 168
Banks	2 979	2 918	167	302	134	6 4 6 9	6 177	1 297	1 472	176	9 722	1 196	17 418
Customers	991	1 034	29	128	114	2 333	2 014	359	338	203	2 914	503	5 750
Forward transactions	13 881	2 723	307	399	159	17 469	17 787	4 600	8 127	5 921	36 435	2 167	56 071
Outright forwards	1 300	1 021	86	125	29	2 611	2 652	357	334	271	3 614	428	6 653
Banks	412	261	30	45	28	773	869	177	87	130	1 263	205	2 242
Customers	888	260	89	83	39	1 838	1 783	181	247	141	2 352	223	4 412
Foreign exchange swaps	12 581	1 702	500	274	95	14 585	15 135	4 243	7 793	5 650	32 821	1 739	49 418
Banks	11 012	975	150	119	45	12 301	13 941	3 825	7 366	5 491	30 623	1 258	44 182
Customers	1 569	727	09	155	47	2 557	1 194	418	427	159	2 198	481	5 236
Total	17 851	6 675	541	829	406	26 301	25 977	6 256	9 937	006 9	49 070	3 867	79 239

Traditional foreign exchange markets: Currency breakdown

## Traditional foreign exchange markets: Further details

Shares in total turnover

	1995	1998	2001	2004
			I	
Currencies traded				
USD	72%	83%	86%	85%
EUR	-	_	45%	46%
DEM	47%	35%	_	-
CHF	41%	39%	34%	33%
<b>Other</b>	39%	43%	35%	36%
Total	200%	200%	200%	200%
Currency pairs				
USD/EUR	-	_	35%	33%
USD/DEM	23%	21%	_	_
USD/CHF	26%	29%	26%	23%
USD/GBP	2%	5%	6%	13%
USD/JPY	7%	11%	12%	8%
EUR/CHF	_	_	6%	8%
DEM/CHF	11%	7%	-	-
GBP/CHF	0.3%	0.6%	0.8%	1.0%
JPY/CHF	0.7%	0.4%	0.6%	0.7%
EUR/GBP	<b>31.</b> 70	00170		1.8%
DEM/GBP	- 2%	2%	0.9%	
•	2%	2%	-	-
EUR/JPY			2%	2%
DEM/JPY	1%	2%		-
Other Other	27%	22%	10%	10%
Total	100%	100%	100%	100%
Instruments				
Spot transactions	51%	42%	33%	29%
Outright forwards	10%	7%	9%	9%
Foreign exchange swaps	39%	51%	58%	62%
Total	100%	100%	100%	100%
Maturities of forward transactions				
up to 7 days	80%	75%	60%	58%
> 7 days to 1 year	19%	23%	39%	41%
> 1 year	1%	2%	1%	1%
Total	100%	100%	100%	100%

Number of trading days

## **OTC** derivatives markets: Overview

	1995		1998		2001		2004	
<b>Total turnover</b> In billions of USD	l				I		1	
	79		316		288		365	
Turnover per trading day (sl In millions of USD	hares in total	turnove	r)					
Total turnover	4 411		15 783		15 131		18 245	
Instruments								
Foreign exchange instruments	1 969	(45%)	9 900	(63%)	5 516	(36%)	6 196	(34%)
Currency swaps	23	(1%)	250	(2%)	62	(0%)	32	(0%)
Options Options	1 946	(44%)	9 650	(61%)	5 453	(36%)	6 164	(34%)
Interest rate instruments	2 442	(55%)	5 883	(37%)	9 615	(64%)	12 049	(66%)
FRAs	1 623	(37%)	1 922	(12%)	7 846	(52%)	1 578	(9%)
Swaps	483	(11%)	3 908	(25%)	1 729	(11%)	10 435	(57%)
Options	336	(8%)	53	(0%)	40	(0%)	36	(0%)
Average exchange rates in Apri	il							
USD in								
CHF	1.134		1.505		1.712		1.297	
EUR			•		1.120		0.834	
DEM	1.378		1.814					
JPY	83.61		132.03		123.73		107.58	
GBP	0.617		0.598		0.697		0.555	
Number of banks	114		63		42		22	

20

19

20

18

	CHF against						<u> </u>	USD against					0ther		Total
	OSD	EUR	ЭРҮ	GBP	Other	Total		EUR	ЭРҮ	GBP	Other	Total			
	_	_	_	_	_	_	_		_	_	_	_		_	
Turnover per trading day In millions of USD															
Foreign exchange instruments	921	859		102 1	129	43	2 054	1 897	693	392	681		3 663	480	6 196
Currency swaps	0	4		0	0	0	4	0	0	J	) 28		28	0	32
Options	921	855		102 1	129	43	2 049	1 897	663	392	5 653		3 635	480	6 164

OTC derivatives markets: Currency breakdown

	nsp osn	EUR	ЭРΥ	GBP	СНЕ	CAD	NOK	SEK	Other	Total
Turnover per trading day										
Interest rate insturments	3 846	2 485	154	2 540	2 423	146	109	, .		
FRAs	519	34	90	0	583	0	109	142	101	1 578
Swaps	3 327	2 448	64	2 540	1 808	146	0	0	103	
Options	0	4	0	С	32	С	C	O	С	36