



BANK FOR INTERNATIONAL SETTLEMENTS

# **Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Turnover in 2007**

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## What is the Triennial Survey?

- Conducted in April every three years
- April 2007 was the 7<sup>th</sup> survey of foreign exchange turnover and the 4<sup>th</sup> survey of derivative markets
- 54 central banks collected data from banks and dealers in their jurisdictions
- BIS co-ordinates these data and aggregates them – in particular deals with cross border netting
- Focus of this presentation is on foreign exchange turnover



## The bottom line

- Daily traditional foreign exchange turnover was \$3.2 trillion in April 2007, an unprecedented increase over three years of 69%
- A bit faster than growth in trade and international capital flows
- Around 6 ppts of this can be explained by valuation effects



## **What data are collected on foreign exchange turnover?**

- instrument
- counterparty
- currency
- location
- methods of execution



## Instrument breakdown

Global foreign exchange market turnover <sup>1</sup> Daily averages in April, in billions of US dollars						
	1992	1995	1998	2001	2004	2007
Spot transactions	394	494	568	387	631	1,005
Outright forwards	58	97	128	131	209	362
Foreign exchange swaps	324	546	734	656	954	1,714
Estimated gaps in reporting	43	53	61	26	107	128
Total	820	1,190	1,490	1,200	1,901	3,210
<i>Memo: Total in April 2007 exchange rates</i>	880	1,150	1,650	1,420	1,972	3,210

<sup>1</sup> Adjusted for local and cross-border double counting.



## **Instrument breakdown – points to note**

- Growth in FX swaps was significant at 80%
- Growth in outright forwards was 73%
- Growth in spot transactions was 59%
- Growth in currency swaps and FX options was large (108%), but from a small base



## Instrument breakdown

Global foreign exchange market turnover by location <sup>1</sup>				
Daily averages in April 2007, percent share <sup>2</sup>				
	Share of total turnover	Spot	Outright forwards	FX swaps
United Kingdom	34.5	24.7	9.1	66.2
United States	16.8	46.9	17.1	36.0
Euro area	9.7	25.8	13.3	60.9
Switzerland	6.1	44.9	7.0	48.2
Japan	6.0	42.3	10.8	46.9
Singapore	5.8	38.7	10.9	50.4
Hong Kong, SAR	4.4	21.7	8.4	69.9
Australia	4.3	26.1	8.5	65.3

<sup>1</sup> Adjusted for local double counting., "net-gross"



## Counterparty breakdown

### Foreign exchange market turnover by counterparty<sup>1</sup>

Daily averages in April, in billions of US dollars

	1998		2001		2004		2007	
	Amount	%	Amount	%	Amount	%	Amount	%
Total	1,429	100	1,174	10	1,794	100	3,083	100
With reporting dealers	908	64	689	59	956	53	1,319	43
With other financial institutions	279	20	329	28	585	33	1,235	40
With non-financial customers	242	17	156	13	252	14	527	17

<sup>1</sup> Adjusted for local and cross-border double counting, "net-net".





## Counterparty breakdown

### Global foreign exchange market turnover by location<sup>1</sup>

Daily averages in April 2007, percent

	Interbank	of which cross border	Other financial institutions	of which cross border	Non- financial customers	of which cross border
United Kingdom	45.2	33.0	42.0	26.5	12.8	9.0
United States	38.6	31.7	44.8	20.6	16.6	5.9
Euro area	64.7	47.7	23.3	13.1	12.0	2.8
Switzerland	71.3	66.6	12.7	10.5	16.0	8.0
Japan	73.5	64.1	12.6	7.0	13.9	0.7
Singapore	78.9	73.1	11.4	7.1	9.7	4.8
Hong Kong, SAR	78.5	68.4	16.5	13.2	5.0	2.5
Australia	58.7	39.0	31.3	22.8	10.0	1.9

<sup>1</sup> Adjusted for local double counting, "net-gross"



Global foreign exchange market turnover traded electronically by location<sup>1</sup>  
Daily averages in April 2007, percent share by counterparty

	Interbank			Other financial institution			Non-financial customer		
	Broking	Trading		Broking	Trading		Broking	Trading	
		Multi bank	Single bank		Multi bank	Single bank		Multi bank	Single bank
United Kingdom	20.0	5.2	2.8	12.2	8.3	11.2	17.7	5.2	11.5
United States	29.3	5.9	13.7	15.6	6.7	15.2	3.9	8.0	25.4
Switzerland	43.6	4.9	9.6	13.6	2.9	42.6	2.7	17.0	14.8
Japan	14.8	0.7	19.8	6.8	5.6	2.5	0.5	12.4	19.7
Singapore	23.2	1.9	11.8	15.4	3.5	18.1	3.5	4.8	16.9
Hong Kong, SAR	13.9	2.9	3.9	24.4	15.6	8.9	0.1	1.7	13.6
Australia	13.0	6.6	5.1	36.4	12.4	0.7	8.9	2.3	6.4
France	13.2	20.7	4.6	12.5	11.2	3.8	4.1	6.3	0.0
Germany	55.0	2.6	8.8	43.0	3.2	3.9	19.5	8.1	32.1
Average	25.1	5.7	8.9	20.0	7.7	11.9	6.8	7.3	15.6

<sup>1</sup> Not adjusted for double counting, "gross-gross"



## Currency breakdown

- Currencies pairs are generally available for:  
(USD, EUR, JPY, GBP, CHF, AUD, CAD, SEK) vs  
(USD, EUR, local currency)



### Reported foreign exchange market turnover by currency pair<sup>1</sup>

Daily averages in April, in billions of US dollars and per cent

	2001		2004		2007	
	Amount	%share	Amount	%share	Amount	%share
US dollar/euro	354	30	503	28	840	27
US dollar/yen	231	20	298	17	397	13
US dollar/sterling	125	11	248	14	361	12
US/Australian dollar	47	4	98	5	175	6
US dollar/Swiss franc	57	5	78	4	143	5
US/Canadian dollar	50	4	71	4	115	4
US dollar/other	195	17	295	16	628	21
Euro/yen	30	3	51	3	70	2
Euro/sterling	24	2	43	2	64	2
Euro/Swiss franc	12	1	26	1	54	2
Euro/other	21	2	39	2	98	4
Other currency pairs	26	2	42	2	122	4

<sup>1</sup> Adjusted for local and cross-border double counting..



Foreign exchange turnover by currency <sup>1</sup>					
Daily averages in April, percent shares					
	2001	2004	2007	Change 2004-2007 (ppts)	
				Current erate	Constant erate
US dollar	90.4	88.8	86.3	-2.4	1.1
Euro	37.7	36.9	37.0	-0.0	-3.6
Japanese yen	22.7	20.2	16.5	-3.6	-1.0
Pound sterling	13.3	16.9	15.0	-1.9	-2.9
Swiss franc	6.1	6.0	6.8	0.8	0.6
Australian dollar	4.2	5.9	6.7	0.7	0.3
Canadian dollar	4.5	4.2	4.2	0.0	-0.5
Swedish krona	2.1	2.3	2.8	0.5	0.4
Hong Kong dollar	2.2	1.9	2.8	0.9	1.0
Norwegian krone	1.1	1.4	2.2	0.7	0.6
New Zealand dollar	0.2	1.1	1.9	0.8	0.7
Danish krone	1.0	0.9	0.9	-0.0	-0.1
All currencies	200	200	200		

<sup>1</sup> The figures are adjusted for local and cross-border double counting



### Foreign exchange turnover by currency<sup>1</sup>

Daily averages in April, percent shares

	2001	2004	2007	Change 2004-2007 (ppts)	
				Current erate	Constant erate
Hong Kong dollar	2.2	1.9	2.8	0.9	1.0
Mexican peso	0.8	1.1	1.3	0.1	0.2
Singapore dollar	0.9	1.0	1.2	0.3	0.2
Korean won	0.7	1.2	1.1	-0.1	-0.3
South African rand	1.0	0.8	0.9	0.2	0.2
Russian rouble	0.4	0.7	0.8	0.0	0.1
Polish zloty	0.5	0.4	0.8	0.4	0.3
Indian rupee	0.2	0.3	0.7	0.3	0.3
Chinese renminbi	0.0	0.1	0.5	0.4	0.4
Taiwan dollar	0.3	0.4	0.4	0.0	0.0
Brazilian real	0.4	0.2	0.4	0.1	0.0
All currencies	200	200	200		
EM currencies	16.9	15.6	19.8	4.2	3.7

<sup>1</sup> The figures are adjusted for local and cross-border double counting



### Global foreign exchange market turnover by location<sup>1</sup>

Daily averages in April 2007, percent share

	USD	EUR	local	EM
United Kingdom	88.7	41.6	21.9	11.7
United States	82.6	37.6	-	26.2
Euro area	82.8	60.7	-	11.4
Switzerland	85.1	43.1	28.7	5.2
Japan	84.6	18.3	71.1	5.7
Singapore	88.3	27.2	10.5	25.9
Hong Kong, SAR	96.1	12.8	42.0	62.9
Australia	91.3	17.5	49.9	5.3

<sup>1</sup> Adjusted for local double counting., "net-gross"



## Summary

- Daily traditional foreign exchange turnover was \$3.2 trillion in April 2007, an unprecedented increase over three years of 69%
- By instrument, half of this growth is accounted for by an increase in FX swap transactions
- By counterparty, more than half of this growth is accounted for other financial institutions
- By currency, turnover is a little more diversified