

Turnover of the foreign exchange and derivatives market in Hong Kong

by the Banking Policy Department

Hong Kong advanced one place to rank sixth in the global foreign exchange market and seventh when taking into account over-the-counter (OTC) derivatives transactions. The average daily net turnover of the foreign exchange and OTC derivatives markets amounted to US\$117.1 billion in April 2004, 64.8% higher than that recorded in the 2001 survey. Of the total, US\$102.2 billion came from foreign exchange transactions and US\$14.9 billion came from OTC derivatives transactions.

Introduction

In April this year, the Hong Kong Monetary Authority (HKMA) conducted a survey of turnover in the Hong Kong foreign exchange and over-the-counter (OTC) derivatives markets, as part of the Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity coordinated by the Bank for International Settlements. This was the sixth global survey since April 1989, the aim being to obtain comprehensive and consistent information on the sizes and structures of these markets. The latest survey was carried out by central banks and monetary authorities in 52 economies. In Hong Kong, the HKMA collected data on the operations of 58¹ institutions (54 authorized institutions and 4 major securities houses) which represent more than 90% of the turnover in the Hong Kong foreign exchange and derivatives markets.

The survey covered data on turnover in traditional foreign exchange markets (spot transactions, outright forwards and foreign exchange swaps) and OTC currency and interest rate derivatives (cross-currency swaps and options, forward rate agreements, and interest rate swaps and options). The turnover results

were based on trading volumes during April 2004. This article sets out the key findings of the Hong Kong survey and compares them with the previous survey and the global results.

Overview of the global survey results

The 2004 preliminary global survey shows that the global average daily turnover of the foreign exchange and OTC derivatives markets increased by 75%, compared with three years previously, to US\$3.1 trillion (Table 1). The increase was largely driven by the buoyant interest rate derivatives market. The survey results revealed that activities in traditional foreign exchange markets recorded a large increase as compared to 2001. Average daily net turnover of the foreign exchange market rose to US\$1.9 trillion in April 2004: an increase of 57%. This contrasted with a decline of 19% in the 2001 survey, mainly due to the decline of trading in European currencies as a result of the introduction of the euro. In the OTC derivatives market, average daily turnover increased by 112% between April 2001 and April 2004 to US\$1.2 trillion.

¹ This compared with 272 participants in the 2001 survey. The reduction in the number of participants in this survey was a result of a conscious decision by the BIS and the participating economies to reduce the reporting burden on authorized institutions and securities houses, particularly those with insignificant activity in the foreign exchange market.

The US dollar, which was used as one of the currencies in 89% of all transactions, remained the dominant currency in the global foreign exchange market. The euro was the second most traded currency (37%), followed by the Japanese yen (20%) and the British pound (17%). For currency pairs, US dollar against euro continued to be by far the most-

traded currency pair, representing 28% of global turnover, followed by US dollar against Japanese yen (17%). As in the global foreign exchange market, the US dollar was the predominant currency in the global OTC foreign exchange and interest rate derivatives markets.

TABLE 1

Global average daily turnover in foreign exchange and derivatives market activity

US\$ billion

Economy	Foreign exchange			OTC derivatives			Total		
	April 2004	April 2001	% change	April 2004	April 2001	% change	April 2004	April 2001	% change
United Kingdom	753	504	49%	643	275	134%	1,396	779	79%
United States	461	254	81%	355	135	163%	816	389	110%
Japan	199	147	35%	39	22	77%	238	169	41%
Singapore	125	101	24%	17	6	183%	142	107	33%
Germany	118	88	34%	46	97	-53%	164	185	-11%
Hong Kong	102	67	52%	15	4	259%	117	71	64%
Australia	81	52	56%	18	12	50%	99	64	55%
Switzerland	79	71	11%	18	15	20%	97	86	13%
France	64	48	33%	154	67	130%	218	115	90%
Canada	54	42	29%	17	13	31%	71	55	29%
Netherlands	49	30	63%	22	25	-12%	71	55	29%
Denmark	41	23	78%	12	6	100%	53	29	83%
Sweden	31	24	29%	8	4	100%	39	28	39%
Russia (3)	30	10	200%	-	-	n.a.	30	10	200%
Italy	20	17	18%	41	24	71%	61	41	49%
Belgium	20	10	100%	32	14	129%	52	24	117%
Korea	20	10	100%	2	0	n.a.	22	10	120%
Mexico	15	9	67%	2	0	n.a.	17	9	89%
Luxembourg	14	13	8%	7	5	40%	21	18	17%
Norway	14	13	8%	5	3	67%	19	16	19%
Others	118	86	37%	55	37	49%	173	123	41%
Total "net-gross" turnover (1)	2,408	1,619	49%	1,508	764	97%	3,916	2,383	64%
Estimated global turnover (2)	1,880	1,200	57%	1,220	575	112%	3,100	1,775	75%

Source: The Bank for International Settlements

Notes:

(1) Data are adjusted for local inter-dealer double counting ("net-gross" basis).

(2) Data are adjusted for cross-border double counting ("net-net" basis). Estimated global turnover for foreign exchange transactions also includes estimates for less than full coverage within individual reporting economies and for active non-reporting economies.

(3) Russia did not report the figures of OTC derivatives in the 2004 and 2001 surveys.

n.a. refers to not applicable.

Figures may not add up due to rounding.

Hong Kong results

Overview

The Hong Kong results were broadly in line with the global trends. Average daily net turnover of the foreign exchange and OTC derivatives markets amounted to US\$117.1 billion in April 2004, 64.8% higher than that recorded in the 2001 survey. Much of the increase was attributable to activities in the foreign exchange market.

With a global market share of 4.2%, Hong Kong's foreign exchange activities averaged US\$102.2 billion in April 2004, a 52.9% increase over April 2001. Turnover across different types of transactions rose, with forward transactions continuing to account for the majority share of the foreign exchange transactions.

Average daily net turnover in OTC derivatives also witnessed strong growth, more than trebling from US\$4.2 billion in April 2001 to US\$14.9 billion in April 2004. Growth was seen in both foreign exchange and interest rate segments of the OTC derivatives market, with the latter recording much stronger growth, probably due to growing anticipation of interest rate rises in the second half of 2004.

The survey results show that Hong Kong remains one of the most active trading centres for foreign exchange and derivatives business, as evident by its ranking of sixth in the global foreign exchange market and seventh in the global foreign exchange and OTC derivatives market.

According to market commentaries, the significant growth in the turnover results of Hong Kong is likely to be attributable to the following factors:

- Growing expectation of interest rate hike in the US in the second half of 2004.
- Increased treasury activities of banks given sluggish loan demand and plentiful liquidity within the banking system.

- Increased foreign exchange trading activities of corporate customers following the recovery of global economies from the trough in 2003.
- Increased retail investors' interest in foreign exchange market for higher return in light of the near-zero Hong Kong dollar and US dollar deposit rates. The depreciation of the US dollar provided scope and incentive for trading and optimism for valuation gains.
- Better knowledge of investors on using OTC derivatives as an investment tool to gain higher return or as a hedging tool against the downside risk of their investment.
- The continuous development and improved efficiency of fixed income market boosted the turnover of interest rate derivatives.
- Increased asset management activities.

Traditional foreign exchange transactions

Instruments

The turnover results for Hong Kong's traditional foreign exchange market were consistent with the global developments. Average daily net turnover during April 2004 amounted to US\$35.6 billion in the spot market and US\$66.5 billion in the forward market (of which 91.9% were foreign exchange swap transactions). Total foreign exchange turnover amounted to US\$102.2 billion, 52.9% higher than the US\$66.8 billion per day recorded in the previous survey in 2001. Net turnover in spot deals increased by 87.9%, reflecting the switching to non-US dollar foreign currencies for higher yield and valuation gains in view of the historically low Hong Kong dollar and US dollar deposit rates and the depreciation of the US dollar respectively (Table 2).

TABLE 2

Average daily net turnover of foreign exchange by transaction type

US\$ billion

	Turnover in Hong Kong			Global turnover		
	April 2004	April 2001	% change	April 2004	April 2001	% change
Spot	36	19	87.9%	621	387	60.5%
Forwards	67	48	39.0%	1,152	787	46.4%
Outright forwards	5	4	38.8%	208	131	58.8%
Foreign exchange swaps	61	44	39.0%	944	656	43.9%
Estimated reporting gaps	-	-	-	107	26	311.5%
Total foreign exchange transactions	102	67	52.9%	1,880	1,200	56.7%

Note:

Average daily net turnover has been adjusted for local inter-dealer double reporting.

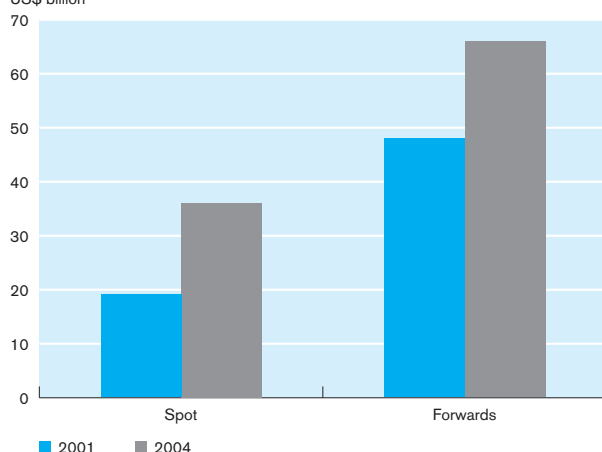
Owing primarily to the increase in foreign exchange swaps, turnover of forwards grew by 39.0% to US\$66.5 billion per day, compared with the marginal increase of 0.6% in 2001. Although forwards continued to account for the majority share of the foreign exchange transactions in Hong Kong, the share contracted to 65.1% from 71.6% in 2001. The decline in the proportion of forward business was obviously driven by the more noticeable increase in turnover of spot transactions (Chart 1).

A large proportion of forwards in Hong Kong was short-dated, with 70.1% maturing within seven days and only 2.6% maturing over one year. The maturity of foreign exchange swaps was generally shorter than that of outright forwards as the former were mostly linked to short-dated money market deals. The foreign exchange swaps were often used for hedging against currency risk and for managing liquidity (Table 3).

CHART 1

Average daily net turnover of foreign exchange by transaction type

US\$ billion



Note:

Average daily net turnover has been adjusted for local inter-dealer double reporting.

TABLE 3

Average daily net turnover of forward transactions by maturity breakdown

US\$ billion

	Average daily net turnover			% share	
	April 2004	April 2001	% change	April 2004	April 2001
Outright forwards	5.4	3.9	38.8%	100%	100%
Up to and for 7 days	2.1	1.2	73.0%	38.9%	31.2%
Over 7 days and up to and for 1 year	3.1	2.5	26.8%	58.1%	63.6%
Over 1 year	0.2	0.2	-19.9%	3.0%	5.2%
Foreign exchange swaps	61.1	44.0	39.0%	100%	100%
Up to and for 7 days	44.6	29.7	50.1%	72.9%	67.5%
Over 7 days and up to and for 1 year	15.1	13.7	10.3%	24.6%	31.0%
Over 1 year	1.5	0.6	138.2%	2.5%	1.5%
Total forward transactions	66.5	47.9	39.0%	100%	100%
Up to and for 7 days	46.7	30.9	51.0%	70.1%	64.6%
Over 7 days and up to and for 1 year	18.2	16.1	12.8%	27.3%	33.7%
Over 1 year	1.7	0.8	100.6%	2.5%	1.8%

Notes:

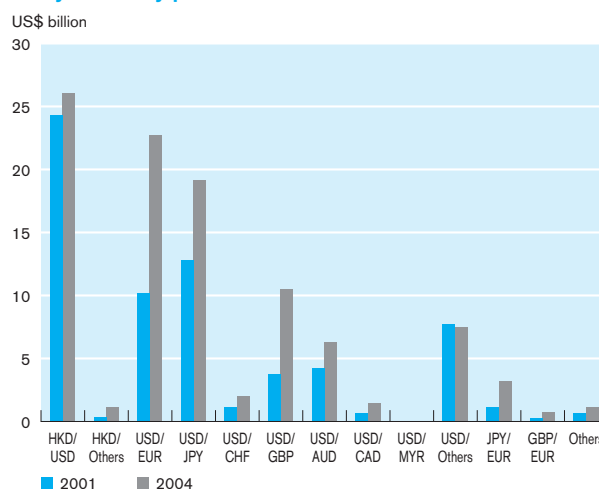
Average daily net turnover has been adjusted for local inter-dealer double reporting.
Figures may not add up to total due to rounding.

Currency composition

The US dollar remained the dominant currency in the Hong Kong foreign exchange market, being used as one of the currencies in 94.0%² of all deals transacted in April 2004. Trading in the euro was becoming more common compared with the previous survey, as it was used as one of the currencies in 26.1% of all transactions (17.2% in 2001). The share of trading in the Hong Kong dollar was 26.7%, which was by and large in exchange for the US dollar. Trading between the Hong Kong dollar and the US dollar remained stable and continued to be the most heavily-traded currency pair, despite its share declined to 25.6% of the average net daily foreign exchange turnover from 36.3% in 2001. The share of trades between the US dollar and the euro to the total turnover of foreign exchange transactions however increased noticeably from 15.3% in 2001 to 22.3% in 2004, replacing US dollar against Japanese yen as the second most commonly-traded currency pair in Hong Kong. Table 4 and Chart 2 set out a detailed analysis of turnover of foreign exchange contracts in Hong Kong by currency pairs.

CHART 2

Average daily net turnover of foreign exchange by currency pair



Note:

In USD/USD Others currency pair, "others" exclude HKD.

² Since two currencies are involved in each transaction, the sum of the percentage shares of individual currencies of both sides totals 200% instead of 100%.

TABLE 4

Average daily net turnover of foreign exchange by currency pair

US\$ billion

	Average daily net turnover				
	April 2004	% share	April 2001	% share	% change
Hong Kong dollar against:					
US dollar	26.1	25.6%	24.3	36.3%	7.7%
Others	1.1	1.1%	0.3	0.5%	247.2%
Subtotal	27.2	26.7%	24.6	36.8%	10.8%
US dollar against:					
Euro	22.8	22.3%	10.2	15.3%	123.7%
Japanese yen	19.2	18.8%	12.8	19.1%	50.3%
Swiss franc	2.0	1.9%	1.1	1.7%	80.4%
British sterling	10.5	10.3%	3.7	5.5%	183.7%
Australian dollar	6.3	6.2%	4.2	6.3%	49.7%
Canadian dollar	1.4	1.4%	0.6	0.9%	129.8%
Malaysia ringgit	0.01	0.01%	0.001	0.001%	730.4%
Others (excluding Hong Kong dollar)	7.5	7.4%	7.7	11.6%	-2.3%
Subtotal	69.8	68.4%	40.4	60.4%	73.1%
Cross currencies (excluding Hong Kong dollar and US dollar):					
Japanese yen / Euro	3.2	3.1%	1.1	1.7%	180.3%
British sterling / Euro	0.7	0.7%	0.2	0.2%	377.1%
Others	1.1	1.1%	0.6	0.9%	93.7%
Subtotal	5.1	5.0%	1.9	2.8%	169.6%
All currency pairs	102.2	100%	66.8	100%	52.9%

Notes:

Average daily net turnover has been adjusted for local inter-dealer double reporting.

Figures may not add up to total due to rounding.

Counterparties³

Due to the significant reduction in the number of reporting dealers in the 2004 global and local surveys, from 2,700 and 272 to 1,200 and 58 respectively, the share of inter-reporting dealer transactions decreased. In Hong Kong, the proportion of foreign exchange contracts transacted between reporting dealers⁴ shrank from 84.9% in 2001 to 79.9%, while that of non-reporting financial institutions expanded from 9.2% in 2001 to 13.9% (Table 5). The increasing role played by asset managers was a possible factor explaining the expansion in trades with non-reporting financial institutions by 130.3% over the three-year period. Most of the trades were cross-border in nature. Of all foreign exchange trades, 82.9% were concluded with overseas counterparties, compared with 73.5%

in 2001. A large percentage (83.4%) of the cross-border trades was transacted with overseas reporting dealers.

In line with the global trend, market concentration increased further between 2001 and 2004. The combined market share of gross foreign exchange turnover of the top ten market players rose to 74.6% from 69.5% in 2001. As in previous surveys, overseas-incorporated authorized institutions were the major players in the foreign exchange market, despite their contribution dropped from 66.1% in 2001 to 62.0% as a result of increased activities of locally-incorporated authorized institutions and securities houses. The share attributable to local authorized institutions expanded from 19.2% in 2001 to 24.4%, while securities houses made up the remaining 13.6% (14.7% in 2001).

³ Counterparties consist of reporting dealers, non-reporting financial institutions and non-financial customers.

⁴ Reporting dealers in Hong Kong are authorized institutions, which are active in the foreign exchange and derivatives markets, and major securities houses participating in the survey.

TABLE 5

Average daily net turnover of foreign exchange transactions by counterparty

US\$ billion

	Average daily net turnover			% share	
	April 2004	April 2001	% change	April 2004	April 2001
With reporting dealers	81.6	56.7	43.9%	79.9%	84.9%
Local	11.0	13.2	-16.7%	10.7%	19.7%
Cross-border	70.6	43.5	62.2%	69.1%	65.1%
With "other" financial institutions	14.2	6.2	130.3%	13.9%	9.2%
Local	2.8	1.7	62.5%	2.7%	2.6%
Cross-border	11.4	4.5	156.5%	11.2%	6.7%
With non-financial customers	6.3	3.9	61.1%	6.2%	5.9%
Local	3.7	2.9	27.6%	3.6%	4.3%
Cross-border	2.7	1.1	153.0%	2.6%	1.6%
Total foreign exchange turnover	102.2	66.8	52.9%	100%	100%

Notes:

Average daily net turnover has been adjusted for local inter-dealer double reporting.

Figures may not add up to total due to rounding.

Reporting dealers are Als and major securities houses participating in the survey.

"Other" financial institutions are financial institutions other than reporting dealers.

The share of total gross foreign exchange transactions conducted through brokers (including electronic brokers) rose slightly to 43.9% from 42.4% in 2001. Deals conducted through electronic-based systems (EBS)⁵ accounted for 52.6% of gross turnover in foreign exchange transactions and 10.8% of gross turnover in foreign exchange and interest rate derivatives⁶. In April 2004, EBS handled 49.9% of gross spot transactions and 54.0% of gross forward transactions. This reflects the importance of EBS in foreign exchange trading.

OTC derivatives

Instruments

In Hong Kong, both currency and interest rate derivatives in the OTC market registered substantial growth. The April 2004 turnover in OTC foreign exchange derivatives more than doubled the 2001 figure, at US\$3.7 billion, while turnover in OTC interest rate derivatives was 3.7 times higher, at

US\$11.2 billion. Interest rate derivatives continued to dominate the OTC derivatives market in Hong Kong with a share of 75.2% (Table 6).

Much of the increase in turnover in foreign exchange derivatives was attributable to currency options, which grew by 1.7 times over the three-year period. This may have been driven by an increase in deposit products with embedded currency options, which investors, especially retail customers, who have demanded yield enhancement in light of the historically low interest rate environment, have become more familiar with. Turnover in currency swaps also increased markedly by 81.5%.

The average daily net trading volume of interest rate derivatives increased by 3.2 times to US\$11.2 billion from US\$2.6 billion in 2001. Much of the increase was due to the growth in interest rate swaps, in particular Japanese yen-denominated swaps which rose from a small base of US\$17 million in 2001 to US\$3.4 billion on expectation of a better economic outlook for Japan. Trading of forward rate

⁵ Automated electronic order matching systems and other screen based systems.

⁶ Since the BIS has revised the reporting base of data on electronic-based system from single currency basis to currency pair basis, the 2001 figures on electronic-based systems are not comparable to the 2004 figures.

TABLE 6

Average daily net turnover of OTC derivatives by transaction type

US\$ billion

	Average daily net turnover			% share	
	April 2004	April 2001	% change	April 2004	April 2001
Foreign exchange derivatives	3.7	1.5	142.2%	24.8%	36.6%
Currency swaps	0.9	0.5	81.5%	6.1%	11.9%
OTC options	2.8	1.0	171.6%	18.7%	24.7%
Interest rate derivatives	11.2	2.6	323.3%	74.9%	63.3%
Forward rate agreements	0.3	0.5	-40.1%	2.1%	12.7%
Interest rate swaps	9.6	1.9	406.3%	64.3%	45.4%
OTC options	1.3	0.2	489.2%	8.5%	5.2%
"Other" OTC derivatives products	0.05	0.004	1,175.0%	0.3%	0.1%
Foreign exchange derivatives	0.01	0.004	123.1%	0.1%	0.1%
Interest rate derivatives	0.04	-	-	0.3%	-
Total OTC derivatives products	14.9	4.2	257.8%	100%	100%

Note:

Average net daily turnover has been adjusted for local inter-dealer double reporting except for "other" OTC derivatives products which are residual OTC derivatives not categorised in the survey and are recorded on a gross basis, i.e. not adjusted for inter-dealer double counting.

agreements, however, registered a noticeable decline of 40.1% in April 2004 to only US\$318 million per day.

Currency composition

As in the case of traditional foreign exchange business, the US dollar remained the most-traded currency for foreign exchange derivatives conducted in Hong Kong. However, the importance of the US dollar has declined, while that of the euro has increased. This development was mainly attributable to the sharp reduction in deals between the Hong Kong dollar and the US dollar (from 28.2% in April 2001 to 7.2%) and growth in deals of US dollar against euro (from 13.2% to 29.0%) (Table 7 and Chart 3).

CHART 3

Average daily net turnover of foreign exchange derivatives by currency pair

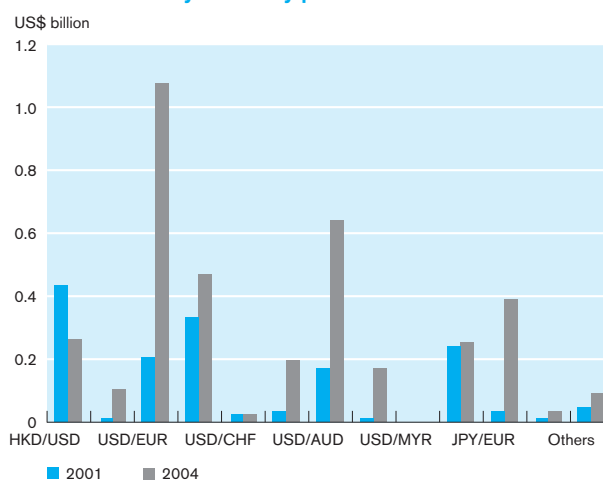


TABLE 7

Average daily net turnover of foreign exchange derivatives by currency pair

US\$ billion

	Average daily net turnover				
	April 2004	% share	April 2001	% share	% change
Hong Kong dollar against:					
US dollar	0.27	7.2%	0.43	28.2%	-38.2%
Others	0.10	2.7%	0.01	0.5%	1,104.7%
Subtotal	0.37	9.9%	0.44	28.7%	-16.9%
US dollar against:					
Euro	1.07	29.0%	0.20	13.2%	434.7%
Japanese yen	0.47	12.7%	0.33	21.5%	42.8%
Swiss franc	0.02	0.5%	0.02	1.3%	-0.6%
British sterling	0.20	5.3%	0.04	2.3%	463.1%
Australian dollar	0.64	17.2%	0.18	11.5%	262.9%
Canadian dollar	0.18	4.7%	0.01	0.5%	2,184.2%
Malaysia ringgit	0.001	0.03%	-	-	-
Others (excluding Hong Kong dollar)	0.25	6.9%	0.24	15.8%	5.2%
Subtotal	2.83	76.4%	1.01	66.1%	180.2%
Cross currencies (excluding Hong Kong dollar and US dollar):					
Japanese yen / Euro	0.39	10.4%	0.03	1.9%	1,220.1%
British sterling / Euro	0.03	0.8%	0.01	0.5%	250.6%
Others	0.09	2.5%	0.04	2.8%	118.7%
Subtotal	0.51	13.7%	0.08	5.2%	535.7%
All currency pairs	3.70	100%	1.53	100.0%	142.2%

Notes:

Average daily net turnover has been adjusted for local inter-dealer double reporting.
Figures may not add up to total due to rounding.

The US dollar became the most-traded currency in the OTC interest rate derivatives market in Hong Kong by overtaking the Hong Kong dollar, and was closely followed by the Japanese yen. The Hong Kong dollar was involved in 27.7% of total OTC interest rate derivatives turnover, down from 59.3%

in 2001. The Japanese yen contracts rose substantially to account for a 31.6% share of OTC interest rate derivative contracts in all currencies, from only a 1.7% share in 2001 (Table 8). This was driven by the significant increase in swaps.

TABLE 8

Average daily net turnover of single-currency interest rate derivatives

US\$ billion

	Average daily net turnover				
	April 2004	% share	April 2001	% share	% change
Hong Kong dollar	3.1	27.7%	1.6	59.3%	97.5%
US dollar	3.7	32.8%	0.8	32.0%	333.6%
Euro	0.5	4.4%	0.04	1.5%	1,135.1%
Japanese yen	3.5	31.6%	0.05	1.7%	7,696.3%
Others	0.4	3.4%	0.1	5.4%	168.2%
All currencies	11.2	100%	2.6	100%	323.3%

Notes:

Average daily net turnover is turnover adjusted for local inter-dealer double reporting.
Figures may not add up to total due to rounding.

Counterparties

In the OTC derivatives market, reporting dealers' transactions among each other made up a large proportion of turnover in Hong Kong (51.5%) but the proportion reduced significantly from 82.4% in 2001 (Table 9). Business with other financial institutions, on the other hand, expanded significantly from 9.3% in 2001 to 38.7%, with most of these transactions were concluded with cross-border financial institutions. These survey results were in line with the global trend and, as mentioned above, were partly due to the reduced reporting participants in the latest survey. Of all OTC derivatives turnover, 88.6% were concluded with overseas counterparties, compared with 73.8% in 2001. More than half (53.0%) of the cross-border trades were transacted with overseas reporting dealers.

The combined market share of gross OTC derivatives turnover of the top ten market players increased to 81.1% from 68.7% in 2001. Overseas-incorporated

authorized institutions remained the major players in the OTC derivatives market but their contribution dropped significantly from 70.7% in 2001 to 47.3% as a result of increased activities conducted by securities houses. The share accounted for by securities houses rose from 11.6% in 2001 to 41.4%, while that for local authorized institutions contracted from 17.7% to 11.3%.

Conclusion

The recovery of the global and domestic economies, the broad depreciation of the US dollar, low interest rate environment, as well as expectations about future interest rate movements, are the major factors contributing to the robust growth in foreign exchange and OTC derivatives turnover both locally and globally. Despite intense competition from other financial centres, the survey indicates that Hong Kong continues to maintain its position as a major centre for conducting foreign exchange and derivatives business.

TABLE 9

Average daily net turnover of OTC derivatives by counterparty

US\$ billion

	Average daily net turnover			% share	
	April 2004	April 2001	% change	April 2004	April 2001
<i>OTC derivatives</i>					
With reporting dealers	7.7	3.4	122.9%	51.3%	82.4%
Local	0.7	0.7	-1.7%	4.5%	16.5%
Cross-border	7.0	2.7	154.2%	46.8%	65.8%
With "other" financial institutions	5.8	0.4	1,394.5%	38.7%	9.3%
Local	0.7	0.1	692.4%	4.8%	2.2%
Cross-border	5.1	0.3	1,611.5%	33.9%	7.1%
With non-financial customers	1.4	0.3	317.0%	9.6%	8.3%
Local	0.4	0.2	78.2%	2.6%	5.1%
Cross-border	1.1	0.1	709.5%	7.1%	3.1%
<i>"Other" OTC derivatives products</i>	0.1	0.004	1,175.0%	0.3%	0.1%
Total OTC derivatives turnover	14.9	4.2	257.8%	100%	100%

Notes:

Average daily net turnover has been adjusted for local inter-dealer double reporting.

Figures may not add up to total due to rounding.

Reporting dealers are AIs and major securities houses participating in the survey.

"Other" financial institutions are financial institutions other than reporting dealers.

"Other" OTC derivatives products are residual OTC derivatives products not categorised in the survey and are recorded on a gross basis, i.e. not adjusted for inter-dealer double counting.