Research & Planning

Derivatives Market Transaction Survey 2005/06

December 2006



Hong Kong Exchanges and Clearing Limited 香港交易及結算所有限公司

CONTENTS

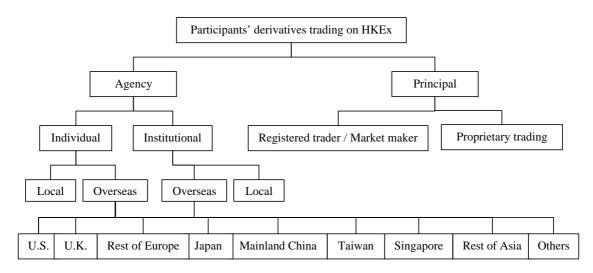
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1. INTRODUCTION

The Derivatives Market Transaction Survey (DMTS) has been conducted annually since 1994 (by Hong Kong Futures Exchange on its market prior to 2001). The main objective of the survey is to track trading composition by investor type and by trading purpose in HKEx's derivatives market, which comprises futures and options contracts.

The survey provides key information on the relative contribution to the overall market turnover and to each major product by the main investor types — local and overseas, retail and institutional, Exchange Participants' (EPs') own trading (see classification chart below). Retail online trading statistics in the overall derivatives market have been obtained since the 2001/02 survey. Comparison of the findings with those of the past surveys is performed to reveal any changes in trading pattern.



Classification of Exchange Participants' derivatives trading on HKEx

The survey questionnaires were mailed to all Futures and Stock Options EPs in the target population¹. Out of the 164 questionnaires sent out, 139 completed questionnaires were received, representing an overall response rate of 85%. The responded sample represented 96% in total contract volume of the target population. (*See Appendix 1*)

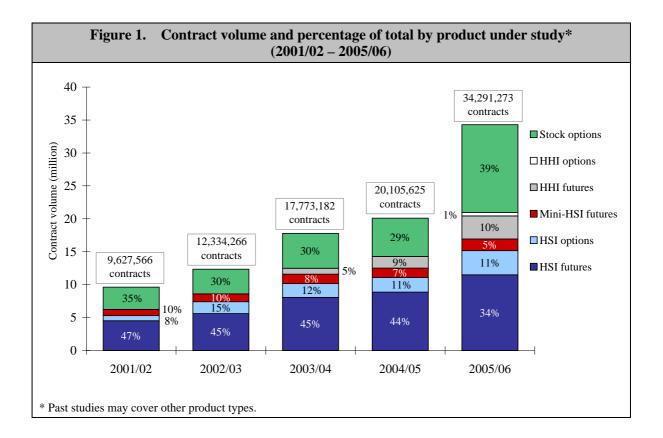
The survey covers transactions during July 2005 to June 2006² in the major HKEx futures and options products, namely Hang Seng Index (HSI) futures, HSI options, Mini-HSI futures, H-shares Index (HHI) futures, HHI options (launched on 14 June 2004 and covered in the survey for the first time) and stock options. They together contributed 99.7% of the total turnover volume of HKEx derivatives market during the study period. "Market turnover" in this report refers to the total turnover volume of the products under study.

¹ The target population consists of all the EPs with trading during the study period excluding those that ceased their operations during the study period. (See Appendix 3 for survey methodology.)

 $^{^{2}}$ Referred to as the year 2005/06 throughout the report; the same convention is used for the past surveys.

Other derivative products which in aggregate contributed less than 1% of HKEx's total derivatives turnover during the same period were excluded. These products were FTSE/Xinhua China 25 Index futures and options, HIBOR futures, Three-year Exchange Fund Note futures, stock futures and Mini-HSI options.

In 2005/06, market turnover (products under study only) increased 71% to 34.3 million contracts from 2004/05. The increase in market turnover was mainly due to a significant volume growth (130%) in stock options — from 5.8 million contracts in 2004/05 to 13.4 million contracts in 2005/06. Except for the newly launched HHI options, other products under study also increased in turnover in 2005/06 compared to 2004/05, particularly HHI futures (an increase of 95%). In 2005/06, stock options overtook HSI futures to be the most significant contributor to derivatives market turnover (39% for stock options vs 34% for HSI futures). (*Figure 1*)



For analysis purpose, the contract volume for each transaction type in the survey was estimated (referred to as the "implied contract volume³") based on the actual contract volume for each product and computed from the percentage share of the contract volume for that transaction type as obtained from the survey.

³ See glossary for the definition of implied contract volume.

2. KEY FINDINGS

Trading by transaction purpose

- (1) Overall, pure trading remained the main transaction purpose of derivatives trading. It accounted for 49% of the total market turnover in 2005/06, compared to 50% in 2004/05. The proportion of turnover for hedging was 32%, slightly down from 36% in 2004/05. Arbitrage turnover accounted for 19% of the overall market in 2005/06, up from 14% in 2004/05.
- (2) The proportion of pure trading was the highest for Mini-HSI futures (83%) while the proportion of arbitrage was the largest for stock options (25%). Hedging was quite common among all products under study except Mini-HSI futures (ranging from 28% to 37% of the respective product's trading).

Trading by investor type

- (3) In 2005/06, EP principal trading (comprising trading by registered traders/market makers and proprietary trading) was the largest contributor to market turnover in HKEx's derivatives market, accounting for 47% of total market volume (vs 35% in 2004/05)⁴ 34% from registered traders/market makers (vs 24% in 2004/05) and 14% from proprietary trading (vs 12% in 2004/05). In fact, EP principal trading in number of contracts for every product increased more than the total volume growth of the respective product (HSI futures: 66% vs 29%; HSI options: 128% vs 65%; Mini-HSI futures: 151% vs 28%; HHI futures: 113% vs 95%; and stock options: 145% vs 130%).
- (4) The contribution from institutional investors (local and overseas) was 29% in 2005/06, down from 36% in 2004/05. Retail investors' contribution (local and overseas) also decreased to 24% in 2005/06 from 28% in 2004/05, the lowest since 2001/02.
- (5) The contribution from overseas investors was 23% (21% from institutions) in 2005/06, down from 29% in 2004/05 but the same level as in 2003/04. The contribution of local retail investor trading and local institutional investor trading was 21% and 8% respectively (vs 26% and 10% in 2004/05).
- (6) The trading distribution by investor type differed by product. For stock options, the majority of turnover was EP principal trading, which accounted for 82% (76% from market making) of the product's total volume in 2005/06. Overseas institutional investors were the major contributors to trading in HSI futures (38%) and HHI futures (41%). For Mini-HSI futures, local retail investors continued to be the dominant participant type (contributing 57% of product turnover). For HHI options, the contributions from overseas and local institutional investors (28% and 26% respectively), and EP principal trading (26%) were equally significant. The majority of turnover in HSI options was EP principal trading (41%).

⁴ The large increase in the contribution of principal trading results from a general increase in principal trading across most of the EPs in 2005/06 against 2004/05, and a particularly significant increase in respect of several major contributors to total principal trading.

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Trading by overseas investors by origin

- (7) The contribution from UK investors increased from 24% of overseas investor trading in 2004/05 to 33% in 2005/06, the UK becoming the largest contributor to overseas investor trading. It was followed by European (excluding UK) investors (19% in 2005/06 vs 28% in 2004/05) who had been the largest contributor in 2004/05⁵, and US investors (18% vs 26%). Trading in number of contracts by UK investors increased by 87% over 2004/05 while that by European (excluding UK) investors decreased by 5%.
- (8) The contribution from Singaporean investors increased from 5% in 2004/05 to 11% in 2005/06.⁶ Although the relative contribution from Mainland China investors dropped from 8% in 2004/05 to 6% in 2005/06⁷, the absolute number of contracts increased by 15%. Nevertheless, the increase was relatively small compared to the almost two-fold increase for trading from Singaporean investors. The aggregate contribution from Asian investors (Mainland China, Singapore, Japan, Taiwan and the rest of Asia) was 21% of overseas investor trading in 2005/06, up from 17% in 2004/05.
- (9) The distribution of overseas investor trading by origin for stock options was different from other derivative products. For stock options, the major contributors to overseas investor trading were European (excluding UK) investors (36% of overseas investor trading), while UK investors contributed 16% and US 4%; the contribution by investors from the rest of the world other than Asia was large (in aggregate 27%). For other derivatives, the major overseas contributors were investors from the UK (contributing 35% of overseas investor trading), followed by the US (20%) and Europe (excluding UK) (17%).

Retail online trading

- (10) Retail online trading contributed 22.2% of total retail investor trading in 2005/06, compared to 23.5% in 2004/05. Its contribution to total market turnover was 5.1%, compared to 6.5% in 2004/05.
- (11) A total of 33 or 24% of responding EPs offered online trading service to retail investors (referred to as "online brokers"). All online brokers except one FEP recorded retail online trading. Retail online trading accounted for 20% of total turnover of the online brokers, down from 27% in 2004/05.

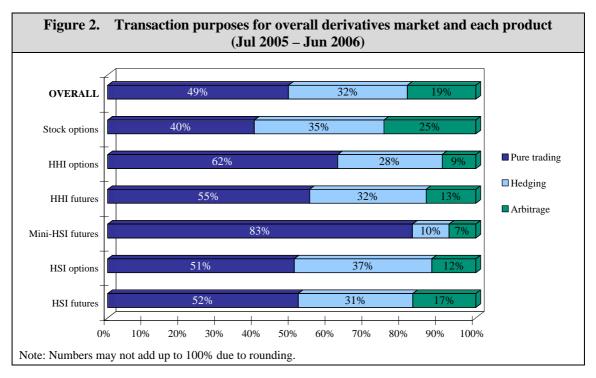
⁵ The large decrease in the contribution from European (excluding UK) investors, despite a significant increase in their contribution to stock options trading, was mainly due to the loss of European investor trading in derivatives (other than stock options) via a single EP which had the majority contribution to European investor trading in 2004/05. It was understood that the European investor client of that EP became a Futures EP itself in 2005/06.

⁶ The large increase in the contribution from Singaporean investors was mainly due to the increase in contribution to trading in derivatives (other than stock options) via a few EPs.

⁷ The decrease in contribution from Mainland China investors was more significant for stock options, mainly due to the loss of contribution from a single EP which had the majority contribution to Mainland investor trading in 2004/05.

3. FIGURES AND TABLES

3.1 Distribution of trading by transaction purpose



| | | (20 | 01/02 – 2 | | | | | (3) |
|------------------------|---------------------------------------|---------|-----------|---|---------|---------|------------------|--------------|
| Product | Purpose | | Percent | Implied contract volume ⁽³⁾ 2005/06 | | | | |
| | | 2001/02 | 2002/03 | 2003/04 | 2004/05 | 2005/06 | No. of contracts | Y-o-Y change |
| HSI futures | Pure trading | 68.0 | 61.5 | 62.8 | 53.2 | 51.8 | 5,947,704 | 26.1% |
| | Hedging | 23.4 | 28.2 | 26.6 | 34.9 | 31.1 | 3,575,121 | 15.5% |
| | Arbitrage | 8.7 | 10.3 | 10.6 | 11.9 | 17.1 | 1,966,354 | 85.4% |
| | Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 11,489,179 | 29.5% |
| HSI options | Pure trading | 40.9 | 43.1 | 47.6 | 57.3 | 50.7 | 1,860,203 | 45.6% |
| | Hedging | 45.7 | 45.3 | 38.1 | 31.8 | 37.4 | 1,371,577 | 93.3% |
| | Arbitrage | 13.4 | 11.6 | 14.3 | 10.9 | 12.0 | 439,472 | 81.1% |
| | Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 3,671,252 | 64.7% |
| Mini-HSI futures | Pure trading | 74.3 | 78.1 | 79.9 | 85.0 | 82.8 | 1,484,484 | 24.8% |
| | Hedging | 10.2 | 3.6 | 9.4 | 8.9 | 9.9 | 178,105 | 43.2% |
| | Arbitrage | 15.5 | 18.3 | 10.6 | 6.1 | 7.3 | 130,248 | 53.0% |
| | Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 1,792,837 | 28.1% |
| HHI futures | Pure trading | - | - | 62.1 | 46.2 | 54.8 | 1,916,870 | 131.1% |
| | Hedging | - | - | 28.9 | 44.9 | 31.7 | 1,106,941 | 37.5% |
| | Arbitrage | - | - | 9.0 | 8.9 | 13.5 | 471,477 | 194.1% |
| | Total | - | - | 100.0 | 100.0 | 100.0 | 3,495,287 | 94.8% |
| HHI options | Pure trading | - | - | - | n.a. | 62.4 | 302,816 | - |
| | Hedging | - | - | - | n.a. | 28.4 | 137,739 | - |
| | Arbitrage | - | - | - | n.a. | 9.2 | 44,389 | - |
| | Total | - | - | - | n.a. | 100.0 | 484,944 | - |
| Stock options | Pure trading | n.a. | 24.9 | 35.0 | 36.3 | 39.8 | 5,322,325 | 152.6% |
| _ | Hedging | n.a. | 67.7 | 44.4 | 42.7 | 35.2 | 4,707,909 | 89.9% |
| | Pure trading & hedging (2) | 84.6 | 92.6 | 79.4 | 79.0 | 75.1 | 10,030,234 | 118.7% |
| | Arbitrage | 15.4 | 7.4 | 20.6 | 21.0 | 24.9 | 3,327,540 | 172.5% |
| | Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 13,357,774 | 130.0% |
| Overall ⁽¹⁾ | Pure trading | n.a. | 47.9 | 54.0 | 50.1 | 49.1 | 16,844,668 | 67.1% |
| | Hedging | n.a. | 41.9 | 32.0 | 36.0 | 32.3 | 11,080,067 | 53.2% |
| | Pure trading & hedging ⁽²⁾ | 88.2 | 89.7 | 86.0 | 86.1 | 81.4 | 27,924,735 | 61.3% |
| | Arbitrage | 11.8 | 10.3 | 14.0 | 13.9 | 18.6 | 6,366,538 | 128.3% |
| | Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 34,291,273 | 70.6% |

Table 1. Transaction purposes for overall derivatives market and each product (2001/02 – 2005/06)

n.a.: Not available

- : Not applicable

Notes:

(1) The overall figure for 2001/02 includes HIBOR futures.

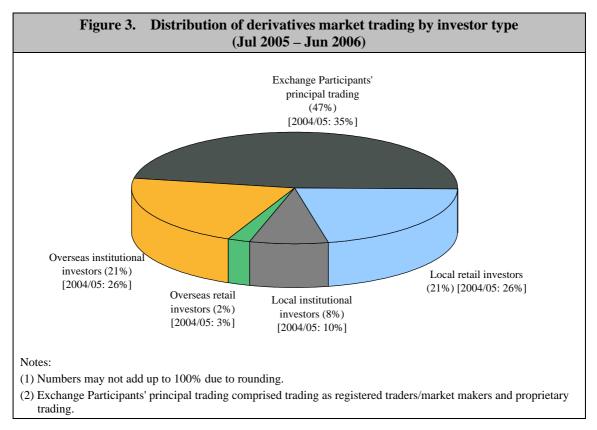
(2) In 2001/02 survey, since a major Stock Options Exchange Participant was unable to provide the breakdown between pure trading and hedging, an aggregate figure is presented.

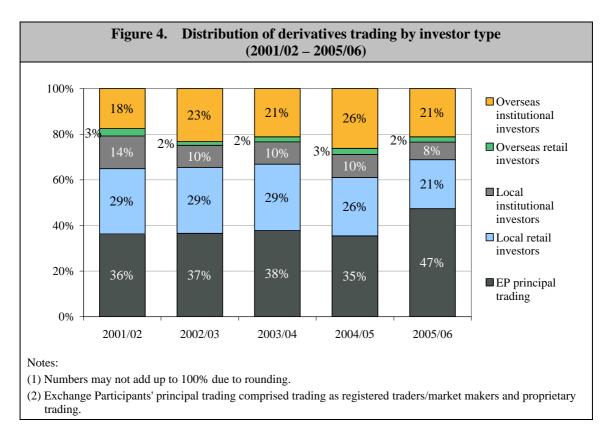
(3) See glossary for the definition of implied contract volume. The total figure of each product used is the actual contract volume for that product, based on which the implied contract volume by trading purpose is computed.

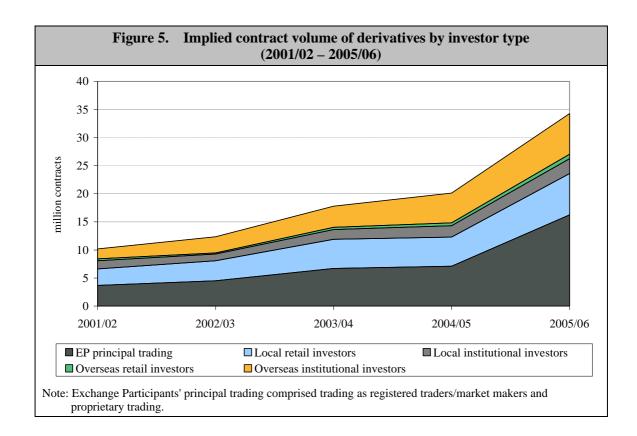
(4) Numbers may not add up to 100% due to rounding.

3.2 Distribution of trading by investor type

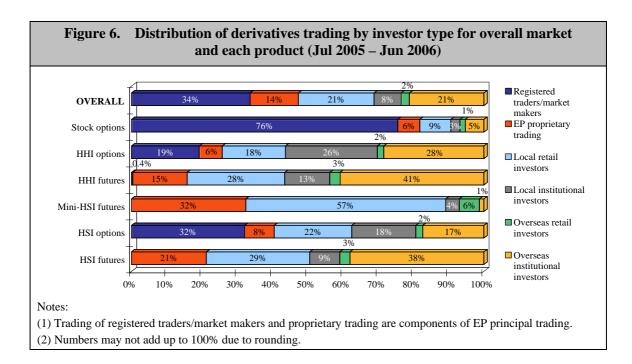
3.2.1 Overall pattern







3.2.2 By product/market segment



| Table 2. Distribution | ution of deriv | vatives t | rading b | oy invest | or type | (2001/02 - 200) | - | |
|------------------------------------|----------------|-------------|--------------|----------------------|-------------|---|----------------|--|
| Type of investor | | Percent | age contrib | ution ⁽³⁾ | | Implied contract volume ⁽⁴⁾ 2005/06 | | |
| | 2001/02 | 2002/03 | 2003/04 | 2004/05 | 2005/06 | No. of contracts | Y-o-Y chang | |
| HSI Futures | | | | | | | | |
| Registered traders | - | - | - | - | - | - | - | |
| Proprietary trading | 12.2 | 15.7 | 20.2 | 16.6 | 21.3 | 2,441,783 | 65.8% | |
| Local investors | 55.1 | 43.7 | 42.9 | 39.4 | 37.9 | 4,354,635 | 24.6% | |
| Retail | 41.8 | 35.6 | 34.7 | 29.5 | 29.3 | 3,369,830 | 28.6% | |
| Institutional | 13.3 | 8.0 | 8.2 | 9.8 | 8.6 | 984,806 | 12.8% | |
| Overseas investors | 32.7 | 40.6 | 36.9 | 44.0 | 40.8 | 4,692,760 | 20.1% | |
| Retail | 3.8 | 1.9 | 2.4 | 3.2 | 2.9 | 327,507 | 16.2% | |
| Institutional | 28.9 | 38.7 | 34.5 | 40.9 | 38.0 | 4,365,253 | 20.4% | |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 11,489,179 | 29.5% | |
| HSI Options | | | | | | | | |
| Principal trading (2) | 25.6 | 28.2 | 32.7 | 29.2 | 40.5 | 1,488,495 | 128.4% | |
| Registered traders | 23.4 | 23.3 | 25.5 | 23.2 | 32.1 | 1,179,350 | 128.0% | |
| Proprietary trading | 2.2 | 4.9 | 7.2 | 6.0 | 8.4 | 309,146 | 129.7% | |
| Local investors | 59.3 | 48.1 | 43.2 | 42.2 | 40.2 | 1,474,468 | 56.6% | |
| Retail | 28.6 | 21.3 | 18.7 | 21.1 | 22.0 | 807,278 | 71.4% | |
| Institutional | 30.7 | 26.8 | 24.5 | 21.1 | 18.2 | 667,190 | 41.8% | |
| Overseas investors | 15.1 | 23.8 | 24.1 | 28.5 | 19.3 | 708,289 | 11.3% | |
| Retail | 2.7 | 0.6 | 0.7 | 1.2 | 2.0 | 72,196 | 172.2% | |
| Institutional | 12.4 | 23.2 | 23.4 | 27.4 | 17.3 | 636,092 | 4.3% | |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 3,671,252 | 64.7% | |
| Mini-HSI Futures | | | | | | | | |
| Registered traders | - | - | - | - | - | - | - | |
| Proprietary trading | 17.6 | 18.7 | 6.1 | 16.6 | 32.5 | 582,474 | 150.8% | |
| Local investors | 66.0 | 76.1 | 87.1 | 76.2 | 60.5 | 1,085,412 | 1.8% | |
| Retail | 63.7 | 73.9 | 79.7 | 67.5 | 56.7 | 1,016,365 | 7.6% | |
| Institutional | 2.3 | 2.3 | 7.3 | 8.7 | 3.9 | 69,047 | -43.2% | |
| Overseas investors | 16.4 | 5.2 | 6.9 | 7.2 | 7.0 | 124,951 | 23.7% | |
| Retail | 15.7 | 4.5 | 6.0 | 5.9 | 5.7 | 102,243 | 22.9% | |
| Institutional | 0.6 | 0.7 | 0.9 | 1.3 | 1.3 | 22,708 | 27.4% | |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 1,792,837 | 28.1% | |
| HHI Futures | | | | | | , , | | |
| Principal trading ⁽²⁾ | | - | 17.2 | 14.4 | 15.8 | 552,624 | 113.3% | |
| Registered traders | | _ | 2.2 | 2.1 | 0.4 | 13,430 | -64.1% | |
| Proprietary trading | | - | 15.0 | 12.4 | 15.4 | 539,194 | 143.2% | |
| Local investors | | | 40.2 | 34.3 | 40.5 | 1,415,767 | 130.0% | |
| Retail | | - | 28.5 | 23.8 | 27.7 | 968,413 | 130.0 % | |
| Institutional | - | - | 28.5 11.7 | 23.8 10.5 | 12.8 | 908,413 447,354 | 120.8% | |
| Overseas investors | - | - | 42.7 | | 43.7 | · · · · · · | | |
| | - | - | | 51.3 | 45.7 | 1,526,896 | 66.0% | |
| Retail | - | - | 3.0 | 2.4 | | 100,627 | 131.0% | |
| Institutional | | - | 39.7 | 48.8 | 40.8 | 1,426,269 | 62.8% | |
| Total | - | - | 100.0 | 100.0 | 100.0 | 3,495,287 | 94.8% | |
| HHI Options (2) | | | | | | | | |
| Principal trading (2) | - | - | - | n.a. | 25.8 | 125,005 | - | |
| Registered traders | - | - | - | n.a. | 19.3 | 93,567 | - | |
| Proprietary trading | - | - | - | n.a. | 6.5 | 31,438 | - | |
| Local investors | - | - | - | n.a. | 44.0 | 213,403 | - | |
| Retail | - | - | - | n.a. | 17.9 | 86,884 | - | |
| Institutional | - | - | - | n.a. | 26.1 | 126,519 | - | |
| Overseas investors | - | - | - | n.a. | 30.2 | 146,535 | - | |
| Retail | - | - | - | n.a. | 1.8 | 8,812 | | |
| Institutional | - | - | - | n.a. | 28.4 | 137,723 | - | |
| Total | - | - | - | n.a. | 100.0 | 484,944 | - | |
| Fotal futures & options (excl. sto | ock options) | | | | | | | |
| Principal trading ⁽²⁾ | 14.9 | 18.9 | 20.5 | 18.3 | 24.8 | 5,195,704 | 98.5% | |
| Registered traders | 4.2 | 3.1 | 4.4 | 3.9 | 6.2 | 1,301,985 | 133.2% | |
| Proprietary trading | 10.7 | 15.8 | 16.1 | 14.4 | 18.6 | 3,893,719 | 89.1% | |
| Local investors | 56.2 | 49.0 | 47.8 | 42.6 | 40.8 | 8,536,288 | 40.0% | |
| Retail | 39.4 | 37.6 | 36.7 | 31.1 | 29.8 | 6,234,099 | 40.3% | |
| Institutional | 16.8 | 11.5 | 11.1 | 11.6 | 11.0 | 2,302,189 | 39.0% | |
| Overseas investors | 28.9 | 32.0 | 31.8 | 39.0 | 34.4 | 7,201,507 | 29.0% | |
| Retail | 4.8 | 32.0 1.9 | 2.5 | 39.0 3.0 | 34.4 2.9 | 7,201,507 609,789 | 29.0% 40.7% | |
| Netali | | | | | | · · · · · · | | |
| Institutional | 24.1 | 30.1 | 29.2 | 36.0 | 31.5 | 6,591,718 | 28.0% | |

(to be continued on next page)

| Table 2.D | listributi | | | s tradin 05/06) (| c | estor type | |
|----------------------------------|------------|---------|---|----------------------|----------|------------------|--------------|
| Type of investor | | Percent | Implied contract volume ⁽⁴⁾ 2005/06 | | | | |
| | 2001/02 | 2002/03 | 2003/04 | 2004/05 | 2005/06 | No. of contracts | Y-o-Y change |
| Stock Options | | | | | | | |
| Principal trading (2) | 74.8 | 72.8 | 78.6 | 76.8 | 81.8 | 10,930,515 | 145.2% |
| Market makers | n.a. | 65.8 | 75.5 | 71.9 | 75.6 | 10,098,843 | 141.7% |
| Proprietary trading | n.a. | 7.0 | 3.1 | 4.8 | 6.2 | 831,672 | 196.9% |
| Local investors | 19.1 | 17.1 | 17.8 | 19.1 | 11.4 | 1,524,039 | 37.4% |
| Retail | 9.4 | 11.0 | 11.2 | 12.6 | 8.8 | 1,172,675 | 59.9% |
| Institutional | 9.7 | 6.1 | 6.6 | 6.5 | 2.6 | 351,364 | -6.6% |
| Overseas investors | 6.1 | 10.1 | 3.7 | 4.1 | 6.8 | 903,220 | 277.0% |
| Retail | 0.4 | 1.0 | 1.8 | 1.7 | 1.5 | 199,004 | 104.3% |
| Institutional | 5.7 | 9.1 | 1.9 | 2.4 | 5.3 | 704,216 | 395.2% |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 13,357,774 | 130.0% |
| Overall ⁽¹⁾ | | | | | | | |
| Principal trading ⁽²⁾ | 36.2 | 36.6 | 37.7 | 35.4 | 47.4 | 16,247,228 | 128.1% |
| Registered traders/market makers | n.a. | 25.1 | 25.5 | 23.8 | 33.7 | 11,548,102 | 141.1% |
| Proprietary trading | n.a. | 11.5 | 12.2 | 11.6 | 13.7 | 4,699,125 | 101.5% |
| Local investors | 43.0 | 38.6 | 38.9 | 35.8 | 29.2 | 9,997,988 | 39.1% |
| Retail | 28.7 | 28.9 | 29.1 | 25.7 | 21.5 | 7,362,196 | 42.7% |
| Institutional | 14.3 | 9.7 | 9.7 | 10.1 | 7.7 | 2,635,793 | 30.0% |
| Overseas investors | 20.8 | 24.9 | 23.4 | 28.8 | 23.5 | 8,046,057 | 38.8% |
| Retail | 3.3 | 1.6 | 2.3 | 2.6 | 2.3 | 805,772 | 52.1% |
| Institutional | 17.5 | 23.3 | 21.1 | 26.2 | 21.1 | 7,240,285 | 37.5% |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 34,291,273 | 70.6% |

n.a.: Not available

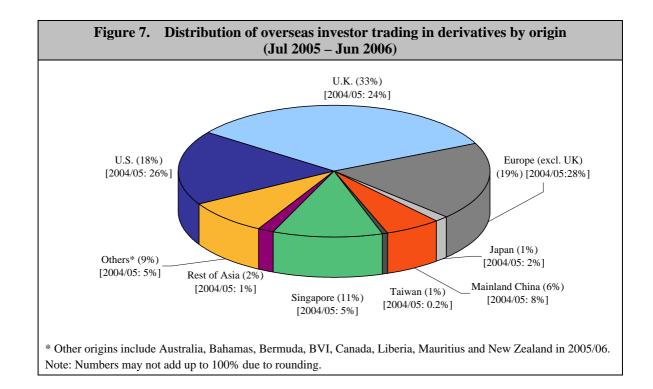
- : Not applicable

Notes:

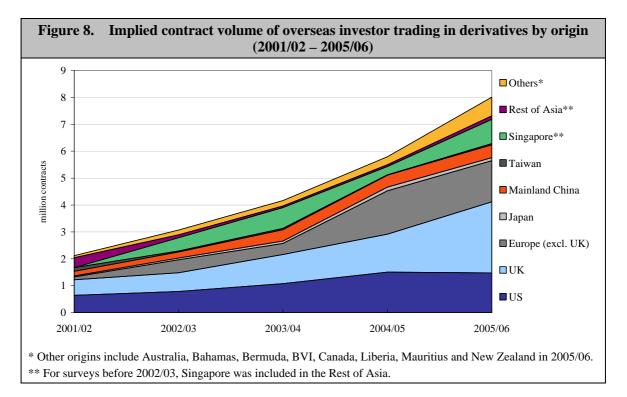
(1) The overall figure for 2001/02 includes HIBOR futures.

(1) The overlain figure for 2001/02 includes findow futures.
(2) Comprised trading of registered traders/market makers and proprietary trading.
(3) Numbers may not add up to 100% due to rounding.
(4) See glossary for the definition of implied contract volume. The total figure of each product used is the actual contract volume for that product, based on which the implied contract volume by investor type is computed.

| | | | | | | 2005/06 | | | | | |
|--------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|----------------|----------------|---------------------|----------------|----------------|-----------------|
| | 2001/02 Overall | 2002/03 Overall | 2003/04 Overall | 2004/05 Overall | 2005/06 Overall | HSI futures | HSI options | Mini-HSI futures | HHI futures | HHI options | Stock option |
| All trading | | | | | | | | | | | |
| Principal [#] | 36.2 | 36.6 | 37.7 | 35.4 | 47.4 | 21.3 | 40.5 | 32.5 | 15.8 | 25.8 | 81.8 |
| Agency | 63.8 | 63.4 | 62.3 | 64.6 | 52.6 | 78.7 | 59.5 | 67.5 | 84.2 | 74.2 | 18.2 |
| | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Agency trading | | | | | | | | | | | |
| Local | 67.4 | 60.8 | 62.4 | 55.4 | 55.4 | 48.1 | 67.6 | 89.7 | 48.1 | 59.3 | 62.8 |
| Overseas | 32.6 | 39.2 | 37.6 | 44.6 | 44.6 | 51.9 | 32.4 | 10.3 | 51.9 | 40.7 | 37.2 |
| | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Agency trading | | | | | | | | | | | |
| Retail | 50.2 | 48.1 | 50.5 | 43.8 | 45.3 | 40.9 | 40.3 | 92.4 | 36.3 | 26.6 | 56.5 |
| Institutional | 49.8 | 51.9 | 49.5 | 56.2 | 54.7 | 59.1 | 59.7 | 7.6 | 63.7 | 73.4 | 43.5 |
| | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Retail investor trading | | | | | | | | | | | |
| Local | 89.7 | 94.7 | 92.6 | 90.7 | 90.1 | 91.1 | 91.8 | 90.9 | 90.6 | 90.8 | 85.5 |
| Overseas | 10.3 | 5.3 | 7.4 | 9.3 | 9.9 | 8.9 | 8.2 | 9.1 | 9.4 | 9.2 | 14.5 |
| | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Institutional investor trading | | | | | | | | | | | |
| Local | 44.9 | 29.4 | 31.6 | 27.8 | 26.7 | 18.4 | 51.2 | 75.3 | 23.9 | 47.9 | 33.3 |
| Overseas | 55.1 | 70.6 | 68.4 | 72.2 | 73.3 | 81.6 | 48.8 | 24.7 | 76.1 | 52.1 | 66.7 |
| | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Local investor trading | | | | | | | | | | | |
| Retail | 66.8 | 74.9 | 75.0 | 71.8 | 73.6 | 77.4 | 54.8 | 93.6 | 68.4 | 40.7 | 76.9 |
| Institutional | 33.2 | 25.1 | 25.0 | 28.2 | 26.4 | 22.6 | 45.2 | 6.4 | 31.6 | 59.3 | 23.1 |
| | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Overseas investor trading | | | | | | | | | | | |
| Retail | 15.8 | 6.5 | 9.9 | 9.1 | 10.0 | 7.0 | 10.2 | 81.8 | 6.6 | 6.0 | 22.0 |
| Institutional | 84.2 | 93.5 | 90.1 | 90.9 | 90.0 | 93.0 | 89.8 | 18.2 | 93.4 | 94.0 | 78.0 |
| | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |



3.3 Distribution of overseas investor trading by origin

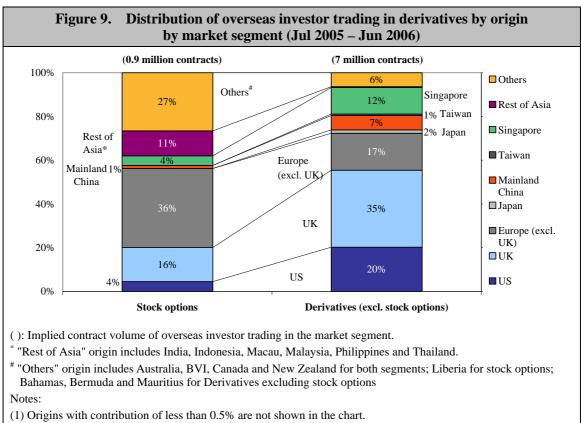


| Overall market | t | | | | | | | |
|---|--|--|--|---|---|---|---|--|
| | | Percen | tage contribu | ution ⁽⁴⁾ | | Implied contract volume ⁽³⁾ 2005/06 | | |
| Origin | 2001/02 | 2002/03 | 2003/04 | 2004/05 | 2005/06 | No. of contracts | Y-o-Y change | |
| US | 30.2 | 25.7 | 25.9 | 25.9 | 18.3 | 1,474,737 | -1.9% | |
| UK | 27.4 | 22.6 | 26.0 | 24.3 | 32.8 | 2,641,090 | 87.3% | |
| Europe (excl UK) | 5.1 | 15.8 | 10.0 | 27.9 | 19.0 | 1,531,034 | -5.1% | |
| Japan | 1.5 | 2.3 | 2.1 | 2.3 | 1.3 | 108,423 | -19.1% | |
| Mainland China | 8.2 | 7.2 | 10.2 | 7.8 | 6.4 | 518,167 | 15.3% | |
| Taiwan | 6.3 | 1.3 | 1.2 | 0.2 | 0.6 | 47,722 | 230.0% | |
| Singapore ⁽²⁾ | n.a. | 16.1 | 18.5 | 5.2 | 11.2 | 898,954 | 196.6% | |
| Rest of Asia ⁽²⁾ | 17.5 | 3.5 | 1.5 | 1.2 | 1.6 | 128,925 | 88.4% | |
| Others | 3.6 | 5.6 | 4.8 | 5.2 | 8.7 | 697,004 | 133.2% | |
| Total ⁽¹⁾ | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 8,046,057 | 38.8% | |
| Total futures a | nd options (| excl. stock | options) | | | | | |
| Origin | | Percent | Implied contract volume 2005/06 | | | | | |
| Origin | 2001/02 | 2002/03 | 2003/04 | 2004/05 | 2005/06 | No. of contracts | Y-o-Y change | |
| US | 32.6 | 28.9 | 26.7 | 27.0 | 20.1 | 1,448,286 | -4.0% | |
| UK | 25.4 | 25.1 | 27.0 | 24.9 | 35.0 | 2,523,945 | 81.5% | |
| Europe (excl UK) | 3.3 | 12.4 | 9.6 | 28.7 | 16.8 | 1,211,122 | -24.5% | |
| Japan | 1.7 | 2.6 | 2.1 | 2.4 | 1.5 | 109,534 | -18.7% | |
| Mainland China | 9.1 | 7.8 | 10.1 | 7.2 | 7.1 | 510,452 | 26.8% | |
| Taiwan | 6.8 | 1.5 | 1.2 | 0.3 | 0.7 | 48,130 | 231.0% | |
| Singapore ⁽²⁾ | n.a. | 16.2 | 19.1 | 5.1 | 12.0 | 867,735 | 206.0% | |
| Rest of Asia ⁽²⁾ | 17.4 | 3.1 | 0.4 | 0.5 | 0.3 | 24,472 | -16.5% | |
| Others | 3.7 | 2.4 | 3.8 | 3.9 | 6.4 | 457,831 | 112.2% | |
| Total ⁽¹⁾ | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 7,201,507 | 29.0% | |
| <i>a.</i> | | | | | | | | |
| Stock options | | Percent | Implied contract volume ⁽ 2005/06 | | | | | |
| - | | reiten | 0 | | | | | |
| Stock options Origin | 2001/02 | 2002/03 | 2003/04 | 2004/05 | 2005/06 | No. of | Y-0-Y | |
| Origin | 2001/02 9.1 | 2002/03 | | | | contracts | change | |
| Origin | 9.1 | 2002/03 5.6 | 2003/04 9.9 | 1.3 | 4.5 | contracts 40,493 | change 1172.2% | |
| Origin US UK | 9.1 44.8 | 2002/03 5.6 7.4 | 2003/04 9.9 5.5 | 1.3 11.0 | 4.5 15.6 | contracts 40,493 140,505 | change 1172.2% 433.8% | |
| Origin US UK Europe (excl UK) | 9.1 44.8 21.0 | 2002/03 5.6 7.4 36.4 | 2003/04 9.9 5.5 16.3 | 1.3 11.0 8.0 | 4.5 15.6 36.2 | contracts 40,493 | change | |
| Origin US UK Europe (excl UK) Japan | 9.1 44.8 21.0 0.0 | 2002/03 5.6 7.4 36.4 0.0 | 2003/04 9.9 5.5 16.3 1.0 | 1.3 11.0 8.0 0.0 | 4.5 15.6 36.2 0.0 | contracts 40,493 140,505 326,996 | change 1172.2% 433.8% 1605.5% | |
| Origin US UK Europe (excl UK) Japan Mainland China | 9.1 44.8 21.0 | 2002/03 5.6 7.4 36.4 0.0 3.7 | 2003/04 9.9 5.5 16.3 1.0 12.2 | 1.3 11.0 8.0 | 4.5 15.6 36.2 | contracts 40,493 140,505 326,996 0 | change 1172.2% 433.8% | |
| Origin US UK Europe (excl UK) Japan Mainland China Taiwan | 9.1 44.8 21.0 0.0 0.8 2.4 | 2002/03 5.6 7.4 36.4 0.0 3.7 0.0 | 2003/04 9.9 5.5 16.3 1.0 12.2 0.0 | 1.3 11.0 8.0 0.0 20.1 0.0 | 4.5 15.6 36.2 0.0 1.4 0.0 | contracts 40,493 140,505 326,996 0 12,689 79 | change 1172.2% 433.8% 1605.5% -73.7% | |
| Origin US UK Europe (excl UK) Japan Mainland China Taiwan Singapore ⁽²⁾ | 9.1 44.8 21.0 0.0 0.8 2.4 n.a. | 2002/03 5.6 7.4 36.4 0.0 3.7 0.0 15.4 | 2003/04 9.9 5.5 16.3 1.0 12.2 0.0 5.7 | 1.3 11.0 8.0 0.0 20.1 0.0 8.7 | 4.5 15.6 36.2 0.0 1.4 0.0 4.4 | contracts 40,493 140,505 326,996 0 12,689 79 39,392 | change 1172.2% 433.8% 1605.5% -73.7% 89.9% | |
| ^ | 9.1 44.8 21.0 0.0 0.8 2.4 | 2002/03 5.6 7.4 36.4 0.0 3.7 0.0 | 2003/04 9.9 5.5 16.3 1.0 12.2 0.0 | 1.3 11.0 8.0 0.0 20.1 0.0 | 4.5 15.6 36.2 0.0 1.4 0.0 | contracts 40,493 140,505 326,996 0 12,689 79 | change 1172.2% 433.8% 1605.5% | |

(1) The overall figure for 2001/02 includes HIBOR futures.

(2) Singapore was included in the rest of Asia for surveys before 2002/03.

(3) See glossary for the definition of implied contract volume. The total figure is the actual total contract volume, multiplied by the percentage contribution of overseas investor trading by origin.
(4) Numbers mean actual data to 100% due to rough diagonal data actual total contract.



(2) Numbers may not add up to 100% due to rounding.

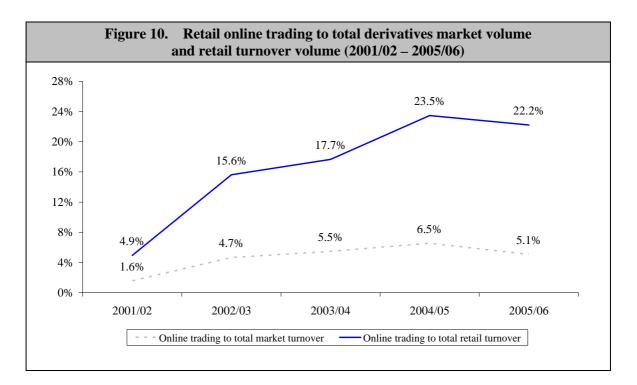
3.4 Retail online trading

| Table 5. Statistics on retail online trading in derivatives (2001/02 – 2005/06) | | | | | | | | |
|---|---------|-----------|-----------|-----------|-----------|--|--|--|
| Online brokers ⁽¹⁾ | 2001/02 | 2002/03 | 2003/04 | 2004/05 | 2005/06 | | | |
| Total number of online brokers | 7 | 11 | 21 | 31 | 33 | | | |
| - As % of all responding EPs (%) | 5% | 8% | 15% | 22% | 24% | | | |
| Number of online brokers requiring manual order re-input for online trading | 1 | 1 | 0 | 0 | 0 | | | |
| - As % of all online brokers (%) | 14% | 9% | 0% | 0% | 0% | | | |
| Online trading | 2001/02 | 2002/03 | 2003/04 | 2004/05 | 2005/06 | | | |
| Total implied contract volume | 276,786 | 1,090,283 | 1,941,128 | 2,633,008 | 3,483,994 | | | |
| - As % of total market turnover ⁽²⁾ (%) | 1.6% | 4.7% | 5.5% | 6.5% | 5.1% | | | |
| - As % of total agency turnover (%) | 2.5% | 7.5% | 8.9% | 10.3% | 10.1% | | | |
| - As % of total retail turnover (%) | 4.9% | 15.6% | 17.7% | 23.5% | 22.2% | | | |
| - As % of total turnover of online brokers (%) | 19.3% | 31.0% | 24.5% | 26.6% | 20.1% | | | |
| Percentage of online trading requiring manual order re-input ⁽³⁾ (%) | 0.7% | 0.3% | 0% | 0% | 0% | | | |

Notes:

(1) "Online brokers" refers to EPs offering online trading service to retail clients since the 2004/05 survey but refers to EPs recording retail online trading in the previous surveys.

- (2) Market turnover refers to the total turnover in number of contracts of products under study in the respective year's survey, which contributed in aggregate 99% or more of the total turnover of all products in the respective survey periods.
- (3) Calculated in terms of implied online trading volume as reported by responding EPs which indicated the need for manual re-input as a percentage of total implied online trading volume of all responding EPs. Implied online trading volume is the reported percentage of retail investor trading as online trading multiplied by the EPs' retail turnover volume. The retail turnover volume of an EP is in turn calculated by multiplying the reported percentage of total turnover as retail trading by the EP's total turnover during the study period.



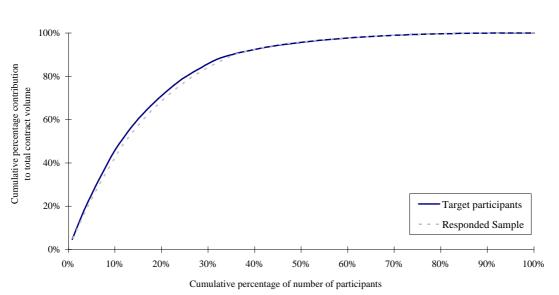
GLOSSARY

| Hedging: | Utilisation of futures/options to reduce or eliminate the market risk of a portfolio by compensating for the effect of price fluctuations of an underlying asset. |
|--|---|
| Pure trading: | Trading for potential profit in anticipation of a price movement in either the short or long term, but not for hedging or arbitrage purpose. |
| Arbitrage: | Trading to take riskless or near riskless profit from price differentials in related markets. |
| Principal trading: | Trading on the participant firm's own account, whether as a market maker or not, i.e. comprising EP registered trader/market maker trading and proprietary trading. |
| Agency trading: | Trading on behalf of the participant firm's clients, including client trading channelled from the firm's parent or sister companies. |
| EP Registered Trader/ market maker trading: | Trading on Registered Trader (RT)/market maker account as a market maker serving for that product only, including client Registered Traders but excluding the trading in that product using the EP's RT accounts for other products. |
| EP proprietary trading: | Trading on the participant firm's own account but not as a market maker. |
| Individual clients: | Clients who trade on their personal account. |
| Institutional clients: | Clients who are not individual clients. |
| Local clients: | Individual clients residing in Hong Kong or institutional clientsoperating in Hong KongHong Kong as the source of funds. |
| Online brokers: | EPs who offer online trading service to individual clients. |
| Overseas clients: | Individual clients residing outside Hong Kong or institutional clients operating outside Hong Kong overseas as the source of funds. |
| Retail online trading: | Trading originating from orders entered directly by individual clients and channelled to the brokers via electronic media (e.g. Internet). This would include client orders routed to the HKEx trading system automatically on a straight-through basis and client orders received via electronic media but having to be manually re-input into the HKEx trading system. |
| Implied contract volume: | The number of contracts traded by a particular investor type in a particular product type (or the overall market) is calculated by multiplying the percentage contribution of that type of trade to the product turnover (or the market turnover) as obtained from the survey by the actual turnover (number contracts traded) of that product (or the aggregate turnover of all products under study) during the study period. |

APPENDIX 1. RESPONSE RATE

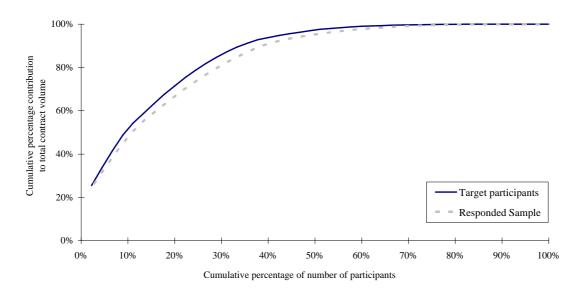
| Exchange Participants | Target population | Responded participants | Response Rate | % share of turnover in target population |
|--------------------------|----------------------|------------------------|------------------|--|
| Futures EPs | 119 | 102 | 85.7% | 95.1% |
| Stock Options EPs | 45 | 37 | 82.2% | 97.6% |
| All Participants | 164 | 139 | 84.8% | 96.1% |

APPENDIX 2. REPRESENTATIVENESS OF THE RESPONDED SAMPLE RELATIVE TO TARGET RESPONDENTS



(a) Futures Exchange Participants (Jul 2005 – Jun 2006)

(b) Stock Options Exchange Participants (Jul 2005 – Jun 2006)



APPENDIX 3. SURVEY METHODOLOGY

(1) Target population

Exchange participantship in the HKEx derivatives market consists of Futures Exchange Participants (FEPs) and Stock Options Exchange Participants (SOEPs). The target population of the survey included all FEPs and SOEPs who had trading during the study period, excluding those who had ceased to be trading participants before the start of fieldwork in July 2006.

The target respondents were all corporations.

(2) Methodology

- The survey consisted of two sub-surveys with two separate questionnaires, targeting the FEPs and the SOEPs respectively. The questionnaire addressed to SOEPs covered stock options only and that to FEPs covered major derivative products other than stock options.
- The study period or survey period is from July 2005 to June 2006.
- Products under study were Hang Seng Index (HSI) futures, HSI options, Mini-HSI futures, H-shares Index (HHI) futures, HHI options (launched on 14 June 2004 and covered in the survey for the first time) and stock options.
- The survey was done by mailed questionnaires. The target respondents were requested to provide an estimated percentage breakdown of their contract volume for each of the product under study during the study period in accordance with the prescribed classification. Respondents were reminded that their answers should be based on their execution turnover.
- Close telephone follow-up was made to ensure a high response rate, especially for the participant firms which were top-ranked in the target population by contract volume.
- Each participant firm's answers in percentage terms were weighted by its actual contract volume during the study period obtained internally to arrive at the relative contribution of each type of trading to the total volume of a particular product and of the whole market.

(3) Limitations

- In providing the breakdown of total contract volume by the type of trade, EPs might only provide their best estimates instead of hard data. Reliability of results is subject to the closeness of their estimates to the actual figures.
- For agency trading, EPs usually would not know the purpose of trading and would tend to regard such transactions as "pure trading". Four EPs in the 2005/06 survey could not provide the answer for the question on trading purposes. They were excluded in the analysis of turnover by trading purposes.
- EPs might not know the true origins of all their client orders. For instance, an EP might classify transactions for a local institution as such when in fact the orders originated from overseas and were placed through that local institution, or vice versa. As a result, the findings may deviate from the true picture.

- The number of derivatives EPs was relatively small, especially for SOEPs. Their degree of participation in the different derivative products varied greatly. The trading pattern of the different derivative products was also very different. Therefore, the non-response of particular EPs would reduce the reliability of the survey findings. However, the impact is not expected to be serious because of the high response rate by turnover volume and the high representativeness of the responded sample to the target population (see Appendix 1 and 2).
- There are two sets of statistics on FEPs' contract volume execution statistics, which record volume when the trades are executed, and registration statistics, which are adjusted for post-trades⁸. The total contract volume for a FEP and the proportion as registered trader's trading under execution statistics may differ from that under registration statistics. In this survey, execution statistics were used for analysis as in the past surveys. Even with the help of a reminder, some FEPs still answered the questions based on their registration statistics which differed from their execution statistics. For such cases, telephone follow-up was made for clarification and adjustments were made as far as possible but the figure after adjustment might still not reflect the true picture. Nevertheless, such cases are few.

* * *

⁸ Post-trades are trades being transferred from one broker account to another broker account or from registered trader's account to non-registered trader's account before clearing, no matter whether the accounts are under the same FEP firm.