

DERIVATIVES MARKET TRANSACTION SURVEY 2003/04

Hong Kong Exchanges and Clearing Limited, Research & Planning

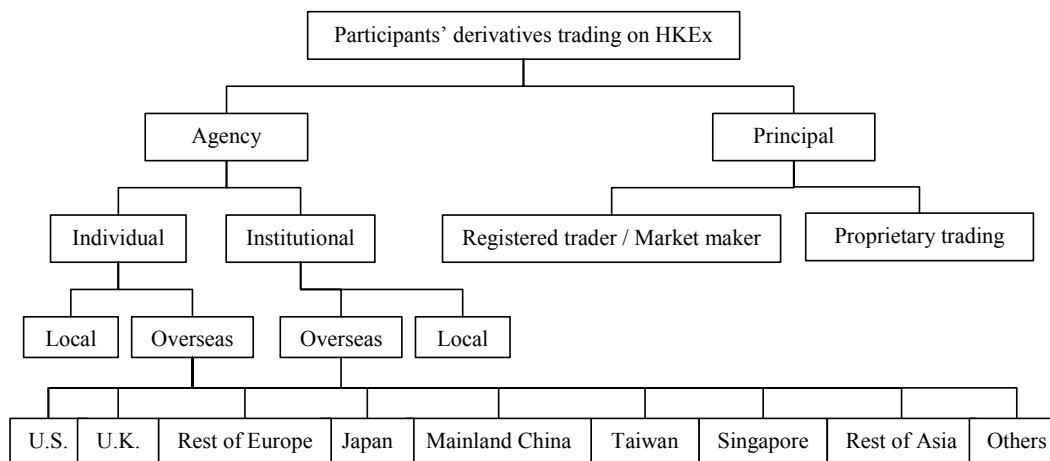


1. Introduction

Hong Kong Exchanges and Clearing Limited (HKEx) has conducted the Derivatives Market Transaction Survey (DMTS) annually since 2001 (formerly by Hong Kong Futures Exchange on its market since 1994). The main objective of the survey is to track trading composition by investor type and by trading purpose in HKEx's derivatives market.

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). 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 the HKEx



The survey questionnaires were mailed to all Futures and Stock Options EPs in the target population.¹ Out of the 152 questionnaires sent out, 143 completed questionnaires were received, representing an overall response rate of 94%. The responded sample represented 99% in total contract volume of the target population. (See Appendix 1)

The survey covers transactions during July 2003 to June 2004² in the major HKEx futures and options products, namely Hang Seng Index futures (HSI futures), Hang Seng Index options (HSI options), Mini-HSI futures, H-shares Index futures (HHI futures, launched on 8 December 2003) and stock options. They together contributed 99.3% of the total turnover volume of HKEx

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

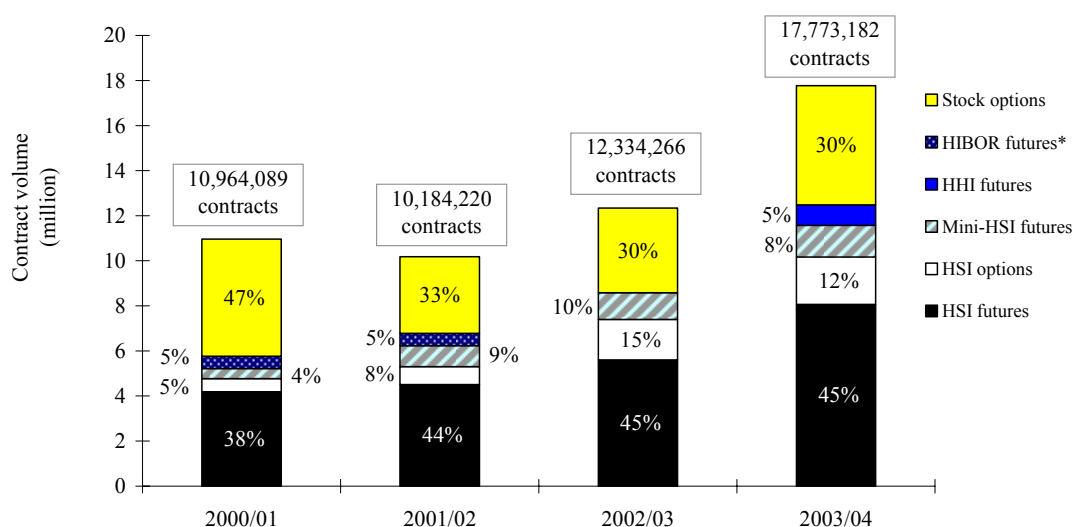
² Referred to as the year 2003/04 throughout the report; the same convention is used for the past surveys.

derivatives market during the study period. “Market turnover” in this report refers to the total turnover volume of the products under study.

Other derivative products which contributed less than 1% in aggregate of total derivatives volume of HKEx during the same period were excluded. These products were MSCI China Free Index futures, Dow Jones Industrial Average futures, HIBOR futures, Three-Year Exchange Fund Note futures, stock futures, Mini-Hang Seng Index options and H-shares Index options.

In 2003/04, market turnover (products under study only) increased 44% to 17.8 million contracts from 2002/03. The contribution to market turnover was dominated by HSI futures (45%), followed by stock options (30%). (Figure 1)

Figure 1. Contract volume and percentage of total by product (2000/01 – 2003/04)



* Product included in 2000/01 and 2001/02 surveys but excluded in subsequent surveys.

For analysis purpose, the absolute contract volume for each transaction type in the survey was estimated (referred to as the “implied contract volume”) based on the above 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.

2. Key Findings

- (1) Overall, pure trading remained the main transaction purpose of derivatives trading. It accounted for 54% of total market turnover in 2003/04, an increase from 48% in 2002/03. The proportion of turnover for hedging was 32% in 2003/04, down significantly from 42% in 2002/03. Arbitrage turnover accounted for 14% in the overall market in 2003/04, up from 10% in 2002/03.
- (2) Overall, the trading distribution by investor type in the HKEx’s derivatives market in 2003/04 was almost unchanged from 2002/03 – the three main pillars being retail investors (31% in 2003/04), institutional investors (32%) and EP principal trading (37%). The breakdown by local and overseas retail investors (29% and 2% respectively), and local and overseas institutional investors (10% and 22%

respectively) was also unchanged from 2002/03.

- (3) The trading distribution by investor type differed by product with the dominating investor type in each product remaining unchanged from 2002/03. Overseas institutional investors and local retail investors were of equal importance to HSI futures (each contributing about 37% of product turnover); both local and overseas institutional investors were major contributors to turnover in HSI options (about 24% each); local retail investors were the dominant participants in Mini-HSI futures (contributing 79% of product turnover); HHI futures had a trading composition by investor type very similar to that of HSI futures; and stock options turnover was dominated by EP principal trading (79%).
- (4) Overall, overseas investors contributed 24% of total market turnover (similar to the 25% in 2002/03); 90% of the overseas investor trading came from institutions.
- (5) In terms of absolute implied contract volume, trading from overseas investors increased by 40% from 2002/03, compared to an increase of 44% in the overall market turnover.
- (6) Investors from UK and US were two major contributors in overseas investor trading, each contributing 26% of the total overseas investor trading in 2003/04
- (7) The contribution from Asian investors was significant – 35% of overseas investor trading, as large as the contribution from all European (including UK) investors. For trading from Asian investors, the majority came from Singapore (20%), followed by Mainland China (11%).
- (8) Online trading contributed 17% of retail investor trading (or 5% of total market turnover) in 2003/04, similar to the level in 2002/03 (16% of retail investor trading and 5% of total market turnover).

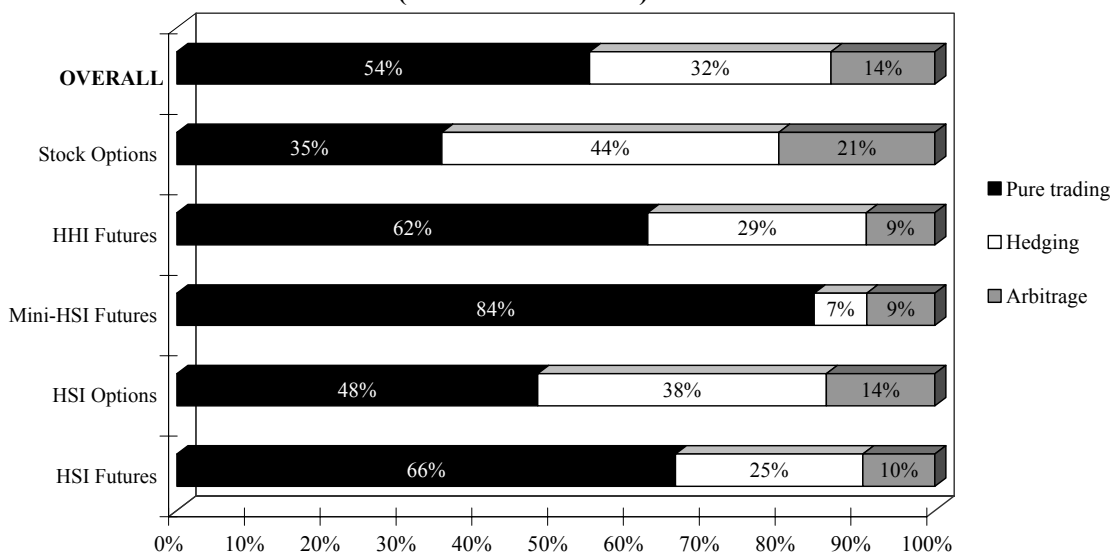
3. Transaction Purposes

EPs are not totally certain about their clients' transaction purposes and would incline to consider their client transactions as pure trading. As a result, the percentage share of pure trading as a transaction purpose may be over-estimated.

- (1) Overall, pure trading remained the main transaction purpose of derivatives trading. It accounted for 54% of total market turnover in 2003/04, an increase from 48% in 2002/03. The proportion of turnover for hedging was 32% in 2003/04, down significantly from 42% in 2002/03. Arbitrage turnover accounted for 14% in the overall market in 2003/04, up from 10% in 2002/03.
- (2) The pattern of transaction purpose in 2003/04 for **HSI futures** and **HHI futures** was very similar. For HSI futures, the proportion was 66% for pure trading, 25% for hedging and 10% for arbitrage. For HHI futures, the proportions were 62%, 29% and 9% respectively.
- (3) The main transaction purpose for **Mini-HSI futures** was pure trading, representing 84% of the product's total volume. This proportion is the highest since the product was first introduced in 2000/01. The proportion of turnover for arbitrage was halved from 18% in 2002/03 to 9% in 2003/04.

- (4) The proportion of pure trading for **HSI options** has risen in the past three years and became the main transaction purpose in 2003/04 (48% of the total product volume), followed by hedging (38%).
- (5) For **stock options**, the main transaction purpose was hedging (44%), although the proportion of turnover for hedging decreased significantly by 23 percentage points from 68% in 2002/03. It was followed by pure trading which shared 35% of the product's turnover. In particular, the proportion of turnover for arbitrage increased to 21%, three times that in 2002/03.
- (6) Compared with futures products, options products had a relatively larger proportion of turnover for arbitrage purpose – 21% for stock options and 14% for HSI options (compared with about 10% for futures products).
- (7) In absolute terms, all products had an increase in turnover volume in 2003/04 compared to 2002/03. As a result, in many cases the proportion of trading for a particular purpose that suffered a decline in 2003/04 actually increased in absolute terms (i.e. in implied contract volume). The exceptions are the proportions of hedging for options products (HSI options and stock options) and arbitrage for Mini-HSI futures. Notably, a significant increase in absolute implied contract volume in Mini-HSI futures for hedging (+128%) and that in stock options for arbitrage (+293%) was observed in 2003/04 relative to 2002/03.

**Figure 2. Transaction purposes for overall market and each product
(Jul 2003 – Jun 2004)**



Note: Numbers may not add up to 100% due to rounding.

Table 1. Transaction purposes for overall market and each product (2000/01 – 2003/04)

Product	Purpose	Percentage contribution ⁽⁴⁾				Y-o-Y change in implied contract volume ⁽³⁾ 2003/04
		2000/01	2001/02	2002/03	2003/04	
HSI Futures	Pure trading	77.9	68.0	61.5	65.8	53.8%
	Hedging	8.5	23.4	28.2	24.7	26.1%
	Arbitrage	13.5	8.7	10.3	9.5	32.8%
	Total	100.0	100.0	100.0	100.0	43.8%
HSI Options	Pure trading	66.1	40.9	43.1	47.6	29.7%
	Hedging	16.1	45.7	45.3	38.1	-1.3%
	Arbitrage	17.8	13.4	11.6	14.3	45.0%
	Total	100.0	100.0	100.0	100.0	17.4%
Mini-HSI Futures	Pure trading	72.8	74.3	78.1	84.1	27.6%
	Hedging	2.1	10.2	3.6	6.9	128.1%
	Arbitrage	25.1	15.5	18.3	9.0	-41.7%
	Total	100.0	100.0	100.0	100.0	18.5%
HHI Futures	Pure trading	-	-	-	62.1	-
	Hedging	-	-	-	28.9	-
	Arbitrage	-	-	-	9.0	-
	Total	-	-	-	100.0	-
Stock Options	Pure trading	n.a.	n.a.	24.9	35.0	98.5%
	Hedging	n.a.	n.a.	67.7	44.4	-7.2%
	Pure trading & hedging ⁽²⁾	90.4	84.6	92.6	79.4	21.2%
	Arbitrage	9.6	15.4	7.4	20.6	293.5%
	Total	100.0	100.0	100.0	100.0	41.3%
Overall ⁽¹⁾	Pure trading	n.a.	n.a.	47.9	54.4	63.8%
	Hedging	n.a.	n.a.	41.9	31.9	9.5%
	Pure trading & hedging ⁽²⁾	87.6	88.2	89.7	86.3	38.6%
	Arbitrage	12.4	11.8	10.3	13.7	91.8%
	Total	100.0	100.0	100.0	100.0	44.1%

n.a.: Not available

- : Not applicable

Notes:

(1) The overall figures for 2000/01 and 2001/02 included HIBOR futures.

(2) In 2000/01 and 2001/02 surveys, 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.

4. Distribution of Trading by Investor Type

4.1 Overall pattern of trading

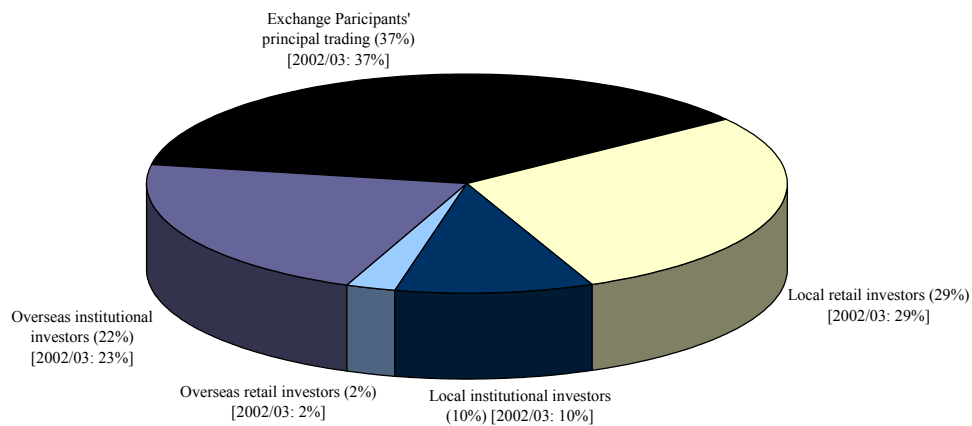
(Tables 2 & 3, Figures 3, 4 & 5)

- (1) Overall, the trading distribution by investor type in the HKEx's derivatives market in 2003/04 was almost unchanged from 2002/03 – the three main pillars being retail investors (31% in 2003/04), institutional investors (32%) and EP principal trading (37%). (Figure 3)
- (2) Local investor trading and EP principal trading had almost equal shares, contributing 39% and 37% respectively of market turnover in 2003/04. The contribution from overseas investors was 24%, compared to 25% in 2002/03. This pattern is very similar to that in 2002/03.
- (3) For the past four years, the contribution from local retail investor trading remained

unchanged, accounting for 29% of market turnover. (Figure 4 & Table 3)

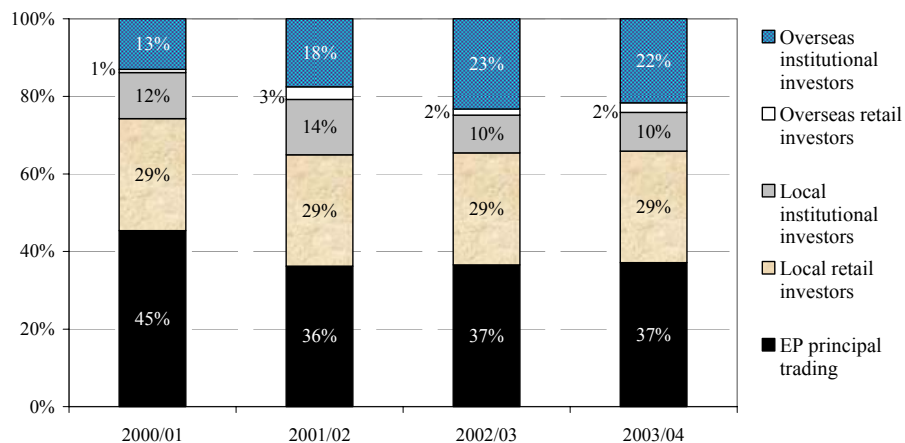
- (4) For EP principle trading, the contribution from market making (registered-trader trading for Futures EPs and market-maker trading for stock options EPs) increased from 25% in 2002/03 to 28% in 2003/04. However, this increase was exactly offset by the decrease in their proprietary trading during the same period (from 12% in 2002/03 to 9% in 2003/04). (Table 3)
- (5) In terms of absolute implied contract volume, all types of investor trading grew in number of contracts from 2002/03. In particular, overseas retail investors increased substantially by 121% for the same period (from a relatively small base). (Table 2)

Figure 3. Distribution of market trading by investor type (Jul 2003 – Jun 2004)



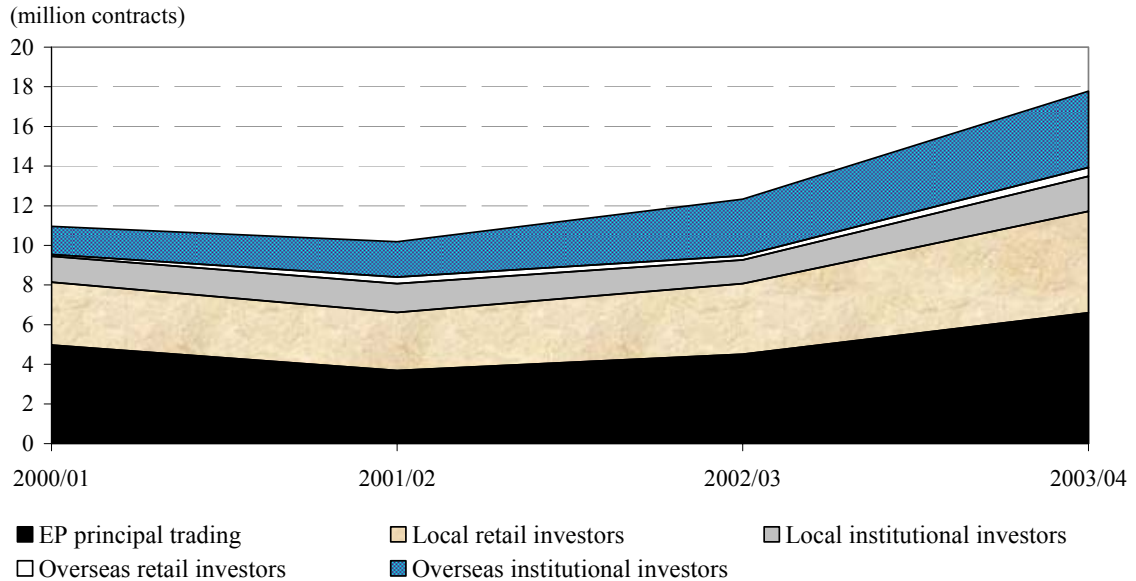
Notes: (1) Numbers may not add up to 100% due to rounding.
 (2) Exchange Participants' principal trading included trading as registered traders/market makers and proprietary trading.

Figure 4. Distribution of trading by investor type for overall market (2000/01 – 2003/04)



Note: Numbers may not add up to 100% due to rounding.

**Figure 5. Implied contract volume by investor type
(2000/01 – 2003/04)**



Note: See glossary for the definition of implied contract volume.

**Table 2. Year-on-year % change in implied contract volume
by type of trade in the overall market over the years**

Type of investor	Change in implied contract volume ⁽²⁾		
	2001/02	2002/03	2003/04
Principal trading ⁽³⁾	-25.8%	22.2%	46.4%
Registered traders/market makers	n.a.	n.a.	59.9%
Proprietary trading	n.a.	n.a.	17.0%
Local investors	-2.1%	8.7%	44.6%
Retail investors	-7.7%	21.9%	43.5%
Institutional investors	11.2%	-17.7%	48.2%
Overseas investors	39.5%	44.8%	39.8%
Retail investors	272.6%	-40.7%	120.8%
Institutional investors	24.9%	60.8%	34.2%
Total⁽¹⁾	-7.1%	21.1%	44.1%

n.a.: Not available

Notes:

(1) The overall figures for 2000/01 and 2001/02 included HIBOR futures.

(2) 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.

(3) Include trading of registered traders/market makers and proprietary trading.

4.2 Trading by product

(Table 3 & Figure 6)

- (1) **HSI futures:** In 2003/04, overseas institutional investors (38% of turnover) and local retail investors (37%) remained the two major participant types of equal importance, contributing in aggregate 75% of the product's total volume. The contribution from EP proprietary trading was 15% in 2003/04 (compared to 16% in 2002/03). Overseas retail investors' participation remained small – 3% of the product volume (vs 2% in 2002/03) – but their trading grew by 104% in terms of absolute implied contract volume.
- (2) **HSI options:** As before, the majority of HSI options turnover came from local investors: 43% – 19% from retail and 24% from institutions. However, local investors' contribution has contracted continuously and significantly over the years from 69% in 2000/01. The contribution from overseas investors (mainly institutions) was up from 11% in 2000/01 to 24% in 2002/03 and remained at 24% in 2003/04.

EP principal trading contributed about one-third of HSI options volume in 2003/04 (up from 28% in 2002/03) – 26% from their market making activities (compared to 23% in 2002/03) and 7% from their proprietary trading (compared to 5% in 2002/03). In terms of absolute implied contract volume, number of contracts from EP proprietary trading increased by 72% (compared to the 17% increase in the product's total volume).

- (3) **Mini-HSI futures:** Local retail investors continued to be the dominant participant type – their contribution increased from 74% in 2002/03 to 79% in 2003/04. The contributions from other investor types all recorded an increase – local institutional investors up from 2% to 9% and overseas investors (mainly retail) up from 5% to 8%. The contribution from EP principal trading shrank to 4% in 2003/04 from 19% in 2002/03.

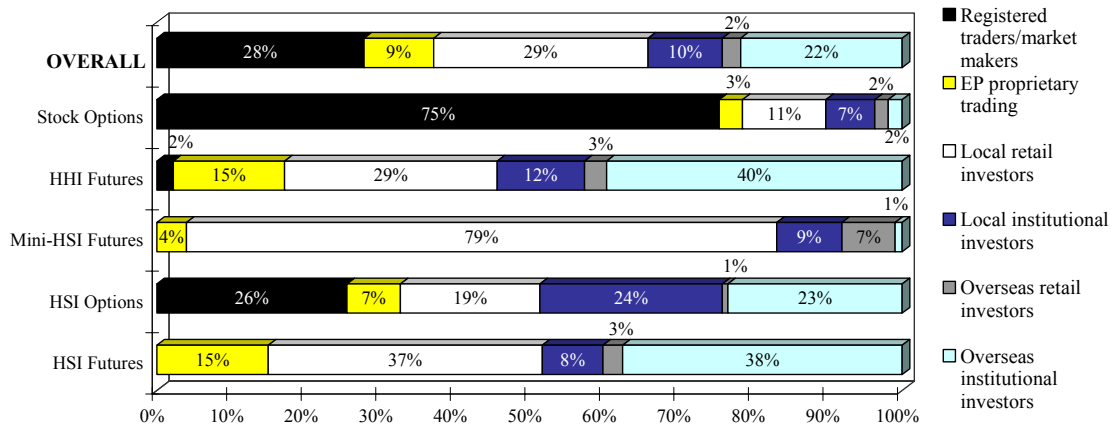
In terms of absolute implied contract volume, trading in number of contracts from local institutional investors grew 3.6 times from a relatively small base while overseas retail investors' trading increased by 90%; EP proprietary trading decreased by 75% (compared to the 19% increase in the product's total volume).

- (4) **HFI futures:** Overseas institutional investors and local retail investors were the major participants, accounting for 40% and 29% respectively of the product's total volume in 2003/04. Local institutional investors and overseas retail investors contributed 12% and 3% respectively. The proportion of EP principal trading was 17%. Such pattern of trading composition is very similar to that of the HSI futures.
- (5) **Stock options:** Unlike other derivative products for which agency trading dominated, the majority of turnover in the stock options market was EP principal trading, which accounted for 79% of the product's total volume in 2003/04, an increase from 73% in 2002/03. In particular, the contribution of EP market making increased significantly from 66% in 2002/03 to 76% in 2003/04 while EP proprietary trading decreased from 7% in 2002/03 to 3% in 2003/04.

Local investors' contribution was 18% in 2003/04 (compared to 17% in 2002/03) – 11% by local retail and 7% by local institutions. Overseas retail and institutional investors each contributed merely 2% of stock option transactions.

In terms of absolute implied contract volume, EP proprietary trading decreased by 37% from 2002/03. Overseas investor trading decreased by 49% overall but that from overseas retail investors increased by 163% from a small base.

Figure 6. Distribution of trading by investor type for each product and overall market (Jul 2003 – Jun 2004)



Notes:

- (1) Trading of registered traders/market makers and proprietary trading are included in EP principal trading.
- (2) Numbers may not add up to 100% due to rounding.

Table 3. Distribution of trading by investor type (2000/01 – 2003/04)

Type of investor	Percentage contribution ⁽³⁾				Y-o-Y % change in implied contract volume ⁽⁵⁾ 2003/04
	2000/01	2001/02	2002/03	2003/04	
HSI Futures					
Registered traders	-	-	-	-	-
Proprietary trading	6.8	12.2	15.7	15.0	36.7%
Local investors	68.8	55.1	43.7	44.9	47.9%
Retail	56.4	41.8	35.6	36.7	48.3%
Institutional	12.4	13.3	8.0	8.2	46.1%
Overseas investors	24.4	32.7	40.6	40.1	42.2%
Retail	1.3	3.8	1.9	2.6	104.2%
Institutional	23.1	28.9	38.7	37.5	39.3%
Total	100.0	100.0	100.0	100.0	43.8%
HSI Options					
Principal trading ⁽²⁾	20.6	25.6	28.2	32.7	36.1%
Registered traders ⁽⁴⁾	19.3	23.4	23.3	25.5	28.6%
Proprietary trading ⁽⁴⁾	1.3	2.2	4.9	7.2	71.7%
Local investors	68.2	59.3	48.1	43.2	5.5%
Retail	38.0	28.6	21.3	18.7	3.4%
Institutional	30.2	30.7	26.8	24.5	7.3%
Overseas investors	11.2	15.1	23.8	24.1	19.2%
Retail	0.5	2.7	0.6	0.7	54.1%
Institutional	10.8	12.4	23.2	23.4	18.4%
Total	100.0	100.0	100.0	100.0	17.4%
Mini-HSI Futures					
Registered traders	-	-	-	-	-
Proprietary trading	5.4	17.6	18.7	4.0	-74.8%
Local investors	92.2	66.0	76.1	88.0	37.0%
Retail	87.6	63.7	73.9	79.2	27.1%
Institutional	4.5	2.3	2.3	8.7	359.2%
Overseas investors	2.4	16.4	5.2	8.1	84.7%
Retail	2.2	15.7	4.5	7.1	89.7%
Institutional	0.2	0.6	0.7	0.9	53.8%
Total	100.0	100.0	100.0	100.0	18.5%
HHI Futures					
Principal trading ⁽²⁾	-	-	-	17.1	-
Registered traders	-	-	-	2.2	-
Proprietary trading	-	-	-	14.9	-
Local investors	-	-	-	40.2	-
Retail	-	-	-	28.5	-
Institutional	-	-	-	11.7	-
Overseas investors	-	-	-	42.6	-
Retail	-	-	-	3.0	-
Institutional	-	-	-	39.6	-
Total	-	-	-	100.0	-
Stock Options					
Principal trading ⁽²⁾	83.1	74.8	72.8	78.6	52.5%
Market makers	n.a.	n.a.	65.8	75.5	62.0%
Proprietary trading	n.a.	n.a.	7.0	3.1	-37.1%
Local investors	12.2	19.1	17.1	17.8	47.1%
Retail	5.3	9.4	11.0	11.2	43.7%
Institutional	6.8	9.7	6.1	6.6	53.4%
Overseas investors	4.7	6.1	10.1	3.7	-48.8%
Retail investors	0.5	0.4	1.0	1.8	162.5%
Institutional investors	4.2	5.7	9.1	1.9	-71.0%
Total	100.0	100.0	100.0	100.0	41.3%
Overall ⁽¹⁾					
Principal trading ⁽²⁾	45.4	36.2	36.6	37.1	46.4%
Registered traders/market makers ⁽⁴⁾	n.a.	n.a.	25.1	27.8	59.9%
Proprietary trading ⁽⁴⁾	n.a.	n.a.	11.5	9.3	17.0%
Local investors	40.8	43.0	38.6	38.7	44.6%
Retail investors	28.9	28.7	28.9	28.8	43.5%
Institutional investors	11.9	14.3	9.7	10.0	48.2%
Overseas investors	13.8	20.8	24.9	24.1	39.8%
Retail investors	0.8	3.3	1.6	2.5	120.8%
Institutional investors	13.0	17.5	23.3	21.7	34.2%
Total	100.0	100.0	100.0	100.0	44.1%

n.a.: Not available

- : Not applicable

Notes:

(1) The overall figures for 2000/01 and 2001/02 included HIBOR futures.

(2) Include trading of registered traders/market makers and proprietary trading.

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

(4) Figures originally presented in the 2002/03 report have been revised. In the 2002/03 survey, one EP had erroneously reported its registered-trader trading in HSI options as proprietary trading. That was corrected in this report.

(5) 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.

**Table 4. Business composition of Exchange Participants by type of trade (%)
(Breakdown by different types of trade)**

	2000/01 Overall	2001/02 Overall	2002/03 Overall	2003/04 Overall	2003/04				
					HSI Futures	HSI Options	Mini-HSI Futures	HHI Futures	Stock Options
<i>All Trading</i>									
Principal[#]	45.4	36.2	36.6	37.1	15.0	32.7	4.0	17.1	78.6
Agency	54.6	63.8	63.4	62.9	85.0	67.3	96.0	82.9	21.4
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<i>Agency Trading</i>									
Local	74.7	67.4	60.8	61.6	52.8	64.2	91.6	48.6	82.9
Overseas	25.3	32.6	39.2	38.4	47.2	35.8	8.4	51.4	17.1
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<i>Agency Trading</i>									
Retail	54.3	50.2	48.1	49.7	46.3	28.9	89.9	38.0	60.6
Institutional	45.7	49.8	51.9	50.3	53.7	71.1	10.1	62.0	39.4
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<i>Retail Investor Trading</i>									
Local	97.2	89.7	94.7	92.1	93.3	96.2	91.7	90.5	86.2
Overseas	2.8	10.3	5.3	7.9	6.7	3.8	8.3	9.5	13.8
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<i>Institutional Investor Trading</i>									
Local	47.8	44.9	29.4	31.5	17.9	51.2	90.4	22.8	77.8
Overseas	52.2	55.1	70.6	68.5	82.1	48.8	9.6	77.2	22.2
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<i>Local Investor Trading</i>									
Retail	70.8	66.8	74.9	74.2	81.8	43.3	90.1	70.9	63.0
Institutional	29.2	33.2	25.1	25.8	18.2	56.7	9.9	29.1	37.0
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<i>Overseas Investor Trading</i>									
Retail	5.9	15.8	6.5	10.2	6.6	3.1	88.5	7.0	48.9
Institutional	94.1	84.2	93.5	89.8	93.4	96.9	11.5	93.0	51.1
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

[#] Include registered traders' trading or market making and proprietary trading.

Note: Numbers may not add up to 100% due to rounding.

5. Distribution of Overseas Investor Trading by Origin

5.1 Overall pattern

In 2003/04, overseas investors' contribution was 24% of total market turnover. For overseas investor trading, 90% came from institutions.

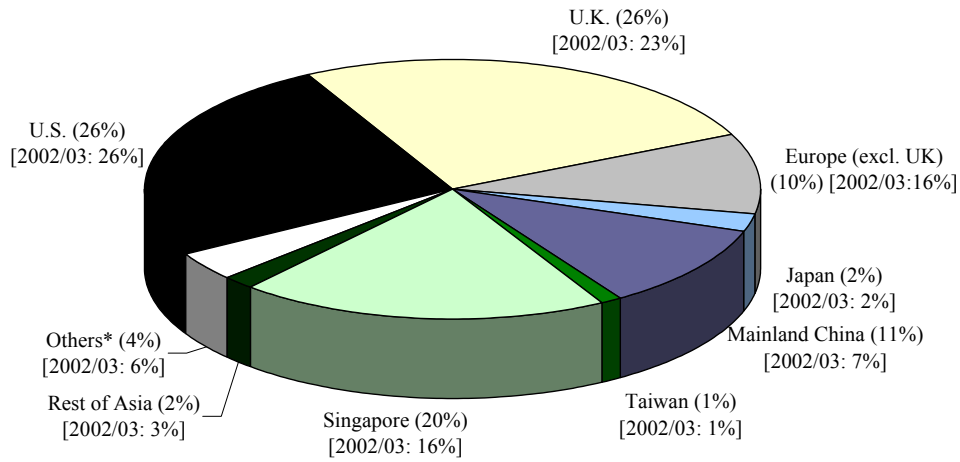
- (1) Investors from UK and US were two major contributors to overseas investor trading, each contributing 26% of total overseas investor trading in 2003/04. (*Figure 7*)
- (2) In terms of absolute implied contract volume, trading from UK and US investors increased by 60% and 40% respectively from 2002/03 (compared to the 40% increase in total overseas investor trading). (*Table 5*)
- (3) The contribution from European (excluding UK) investors³, after a substantial increase in 2002/03 (16% vs 5% in 2001/02) declined to 10% of overseas investor trading in 2003/04. (*Figure 8*)
- (4) The aggregate contribution from Asian investors (Mainland China, Singapore, Japan, Taiwan and the rest of Asia) was 35% of overseas investor trading in 2003/04, up from 30% in 2002/03. This proportion is as large as the 36% from all European (including UK) investors. (*Figure 7*)
- (5) The largest contributor group from Asia was Singaporean investors. Their contribution increased to 20% of overseas investor trading in 2003/04 from 16% in 2002/03⁴. The contribution from Mainland China investors⁵ increased to 11% from 7% in 2002/03. The contributions from Japanese and Taiwan investors remained low and stable at 2% and 1% respectively in 2003/04. (*Figure 7*)
- (6) In terms of absolute implied contract volume, trading increased in 2003/04 compared to 2002/03 for all the identified overseas origins except Europe (excluding UK)(decreased by 12%), the Rest of Asia (decreased by 37%). Among the origins, trading from Mainland China investors recorded the highest growth, of 104% in absolute terms. (*Table 5*)

³ The decline of the contribution from European (excluding UK) investors was mainly due to a significant decrease of their contribution in the stock options market.

⁴ The contribution from Singapore investors came through 21 EPs (18 FEPs and 3 SOEPs) and it was dominated by one FEP whose trading accounted for 65% of all Singaporean investor trading.

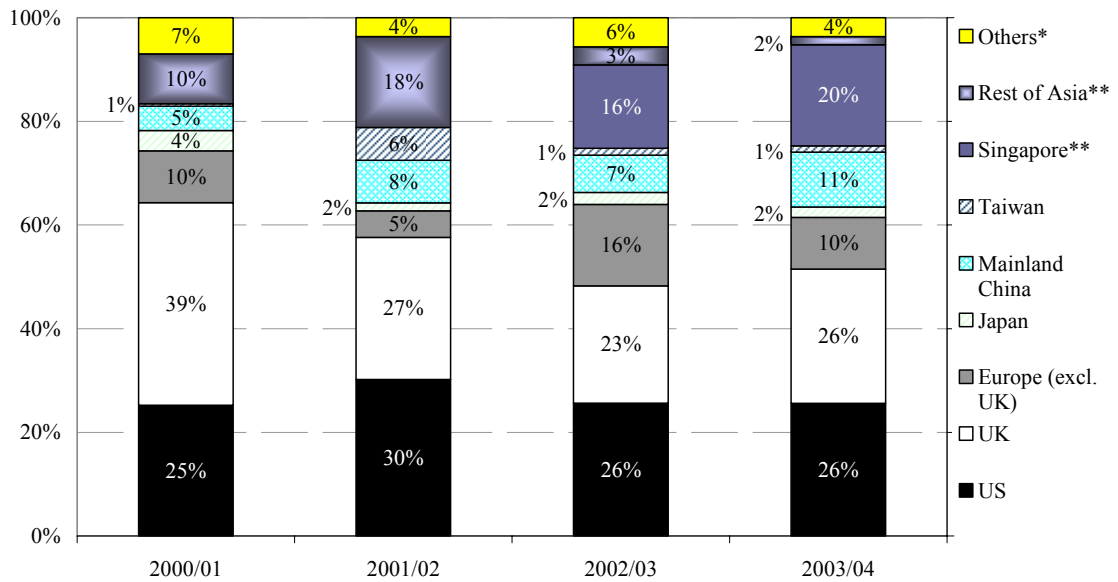
⁵ The contribution from Mainland China investors came through 35 EPs (32 FEPs and 3 SOEPs). The top three ranked EPs (all FEPs) in terms of contribution were the same as those in 2002/03. Trading volume from their Mainland China clients doubled from 2002/03.

Figure 7. Distribution of overseas investor trading by origin (Jul 2003 – Jun 2004)



* Other origins include Australia, British Virgin Islands, Canada in 2003/04.
 Note: Numbers may not add up to 100% due to rounding.

Figure 8. Distribution of overseas investor trading by origin over the years (2000/01 – 2003/04)

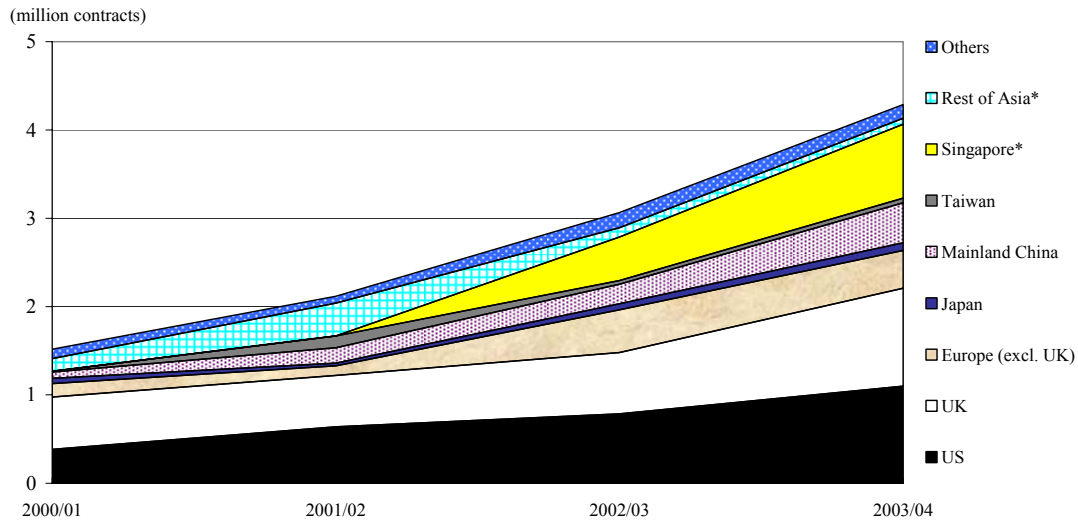


* Other origins include Australia, British Virgin Islands, Canada in 2003/04.

** For surveys before 2002/03, Singapore was included in the Rest of Asia.

Note: Numbers may not add up to 100% due to rounding.

Figure 9. Implied contract volume of overseas investor trading by origin



* For surveys before 2002/03, Singapore was included in the Rest of Asia.

Table 5. Year-on-year % change in implied contract volume over the years

Origin	Change in implied contract volume ⁽³⁾		
	2001/02	2002/03	2003/04
US	66.7%	23.1%	39.6%
UK	-2.0%	19.2%	60.2%
Europe (excl UK)	-28.4%	344.2%	-11.6%
Japan	-46.3%	118.0%	25.0%
Mainland	145.3%	27.0%	104.4%
Taiwan	1722.1%	-69.9%	30.1%
Singapore ⁽²⁾	-	-	69.8%
Rest of Asia ⁽²⁾	155.3%	-71.2%	-37.1%
Others	-27.6%	123.9%	-9.5%
Total⁽¹⁾	39.5%	44.8%	39.8%

- : Not applicable

Notes:

(1) The overall figures for 2000/01 and 2001/02 included HIBOR futures.

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

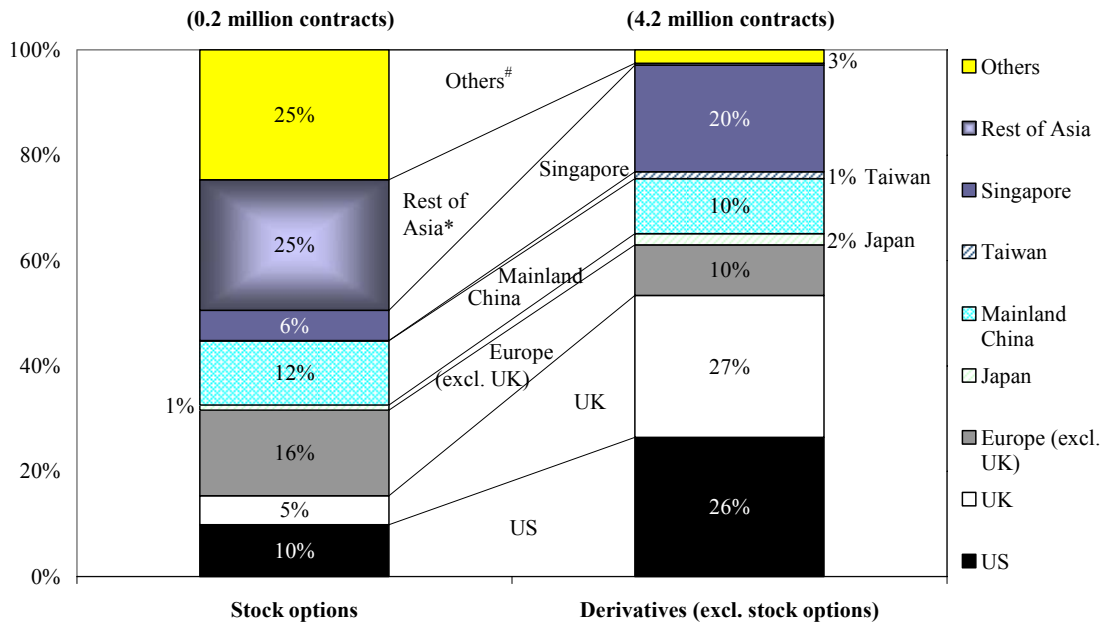
(3) See glossary for the definition of implied contract volume. The total figure is the actual total market turnover multiplied by the percentage contribution of overseas investor trading as obtained from the survey.

5.2 By market segment

FEPs service the HKEx's derivatives market for the trading of futures and options (excluding stock options) while SOEPs service the stock options market only. The distribution of overseas investor trading by origin for these two markets was very different (Figure 10). Since the actual turnover of stock options contributed only 30% of total turnover in 2003/04 in the derivatives market (Figure 1) and only 4% of stock options turnover came from overseas investors (compared to 34% for other derivatives), the pattern of total overseas trading by origin in the overall market was dominated by the pattern for derivatives excluding stock options.

- (1) For derivatives (excluding stock options), the major contributors from overseas were UK and US investors, which together contributed 53% of total overseas investor trading in 2003/04.
- (2) For stock options, the major contributors to overseas investor trading were investors from Australia (specified by SOEP respondents in the "Others" origin) and the "Rest of Asia" (excluding Japan, Mainland China, Taiwan and Singapore) (specified by SOEP respondents to be Macau, Malaysia and Indonesia) – each contributing 25% of overseas investor trading.
- (3) The contribution from Mainland China investors was comparably large in both stock options and other derivatives – about 10% of overseas investor trading.

Figure 10. Distribution of overseas investor trading by origin by market segment (2003/04)



() : Implied contract volume of overseas investor trading in the market segment.
 * "Rest of Asia" origin for stock options refers to Macau, Malaysia and Indonesia.
 # "Others" origin for stock options refers to Australia.
 Notes: 1. Figures less than 0.5% were not shown in the chart.
 2. Numbers may not add up to 100% due to rounding.

6. Online Trading

- (1) Online trading contributed 17% of retail investor trading (or 5% of total market turnover) in 2003/04, similar to the level in 2002/03 (16% of retail investor trading and 5% of total market turnover).
- (2) A larger proportion of the responding EPs had online trading business in 2003/04 than in 2002/03 – a total of 21, or 15% of number of responding EPs (compared with 8% in 2002/03), claimed that part of their retail transactions were channeled online (referred to as “online brokers”).
- (3) Online trading shared 24% of the total turnover of online brokers among the responding EPs, down from 31% in 2002/03.
- (4) All responding EPs having online trading claimed that no manual re-input was required for online orders received (compared to one responding EP in 2002/03).

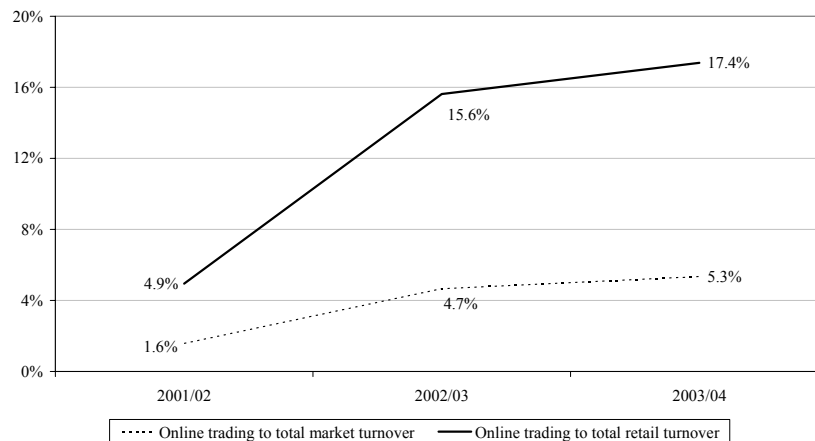
Table 6. Statistics on retail online trading (2001/02 – 2003/2004)

	2001/02	2002/03	2003/04
Number of responding EPs having online trading (online brokers)	7	11	21
Percentage of responding EPs as online brokers (%)	5%	8%	15%
Online trading to total market turnover ⁽¹⁾ (%)	1.58%	4.66%	5.35%
Online trading to total agency turnover (%)	2.48%	7.51%	8.63%
Online trading to total retail turnover (%)	4.94%	15.62%	17.38%
Online trading to total turnover of online brokers (%)	19.31%	31.04%	23.91%
Number of online brokers requiring manual order re-input for online trading	1	1	0
% of online brokers	14%	9%	0%
Percentage of online trading requiring manual order re-input ⁽²⁾	0.72%	0.29%	0%

Notes:

- (1) 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 over 99% of the total turnover of all products in the respective survey periods.
- (2) 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 EP's 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.

Figure 11. Online trading to total market and retail turnover (2001/02 – 2003/04)



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.

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 (Principal trading as market makers)

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 (Principal trading in proprietary account)

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 clients operating in Hong Kong — Hong Kong as the source of funds.

Overseas clients

Individual clients residing outside Hong Kong or institutional clients operating outside Hong Kong — overseas as the source of funds.

Online trading

Trading originating from orders entered directly by 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

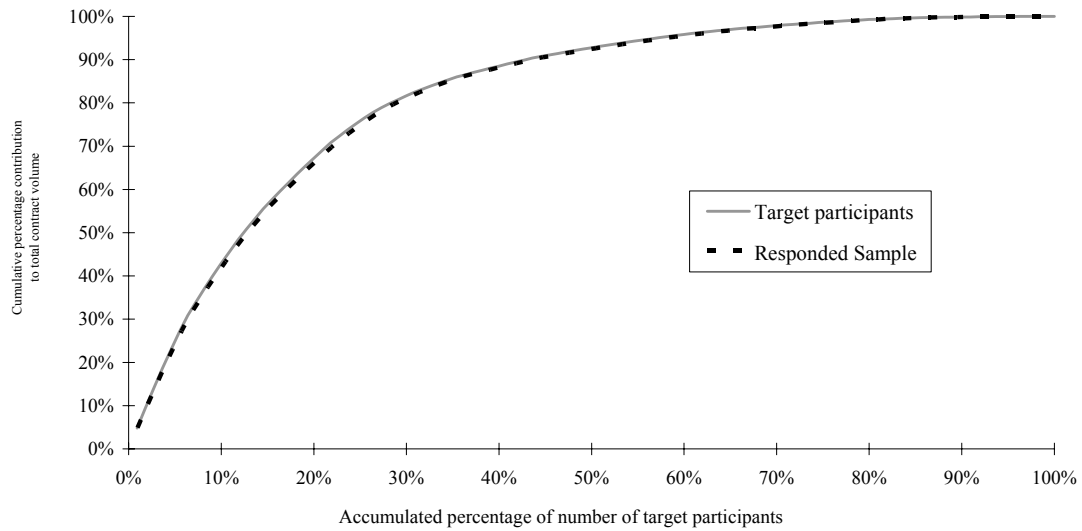
The number of contracts traded by a particular investor type in a particular product type (or the overall market) is calculated by multiplying the percentage contribution of that type of trade to the product turnover (or the market turnover) as obtained from the survey by the actual turnover (number contracts traded) of that product (or the aggregate turnover of all products under study) during the study period.

APPENDIX 1. RESPONSE RATE

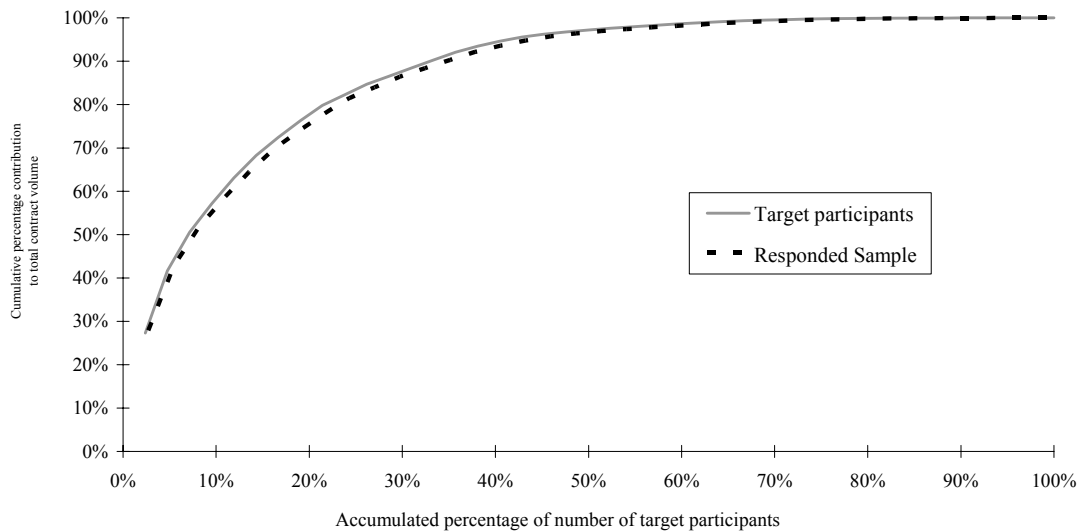
Exchange Participants	Target population	Responded participants	Response Rate	% share of turnover in target population
Futures EPs	110	105	95.5%	98.8%
Stock Options EPs	42	38	90.5%	97.9%
All Participants	152	143	94.1%	98.6%

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

(a) Futures Exchange Participants (Jul 2003 – Jun 2004)



(b) Stock Options Exchange Participants (Jul 2003 – Jun 2004)



APPENDIX 3. SURVEY METHODOLOGY

1. Target population

Exchange participation 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.

The target respondents were all corporations.

2. Methodology

- (1) 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.
- (2) The study period or survey period is from July 2003 to June 2004.
- (3) Products under study were HSI futures, HSI options, Mini-HSI futures, H-shares Index futures (HHI futures) and stock options.
- (4) The survey was by mailed questionnaires. The respective 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 of FEPs were reminded that their answers should be based on their execution turnover.
- (5) 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.
- (6) 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

- (1) 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.
- (2) For agency trading, EPs usually would not know the purpose of trading and would tend to regard such transactions as "pure trading". One EP could not provide the answer for the question on trading purposes. Such non-responses were ignored in the analysis of trading purpose.
- (3) 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.
- (4) The number of derivatives EPs was relatively small, especially for SOEPs. Their degree

of participation in the different derivative products varied a lot. The trading pattern of the different derivative products was also very different. Therefore, the influence of EPs with significant contribution to a product's trading on the survey results could be quite high. The non-response of such EPs would reduce the reliability of the survey findings. However, the impact is not expected to be serious because of the high response rate and the high representativeness of the responded sample to the target population (see Appendix 1 and 2).

- (5) 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-trades⁶. 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 questionnaire 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 were few.

⁶ *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.*