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DERIVATIVES MARKET  
TRANSACTION SURVEY 2007/08

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

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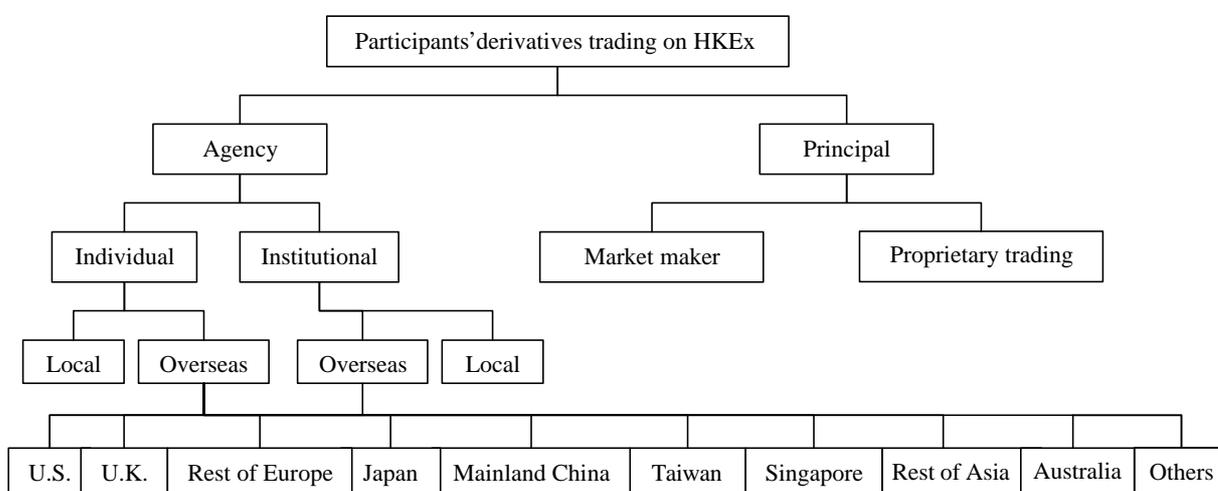
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# 1. INTRODUCTION

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, and 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 EPs (FEPs) and Stock Options EPs (SOEPs) in the target population<sup>1</sup>. Out of the 171 questionnaires sent out, 163 completed questionnaires were received, representing an overall response rate of 95%. The responded sample represented 98% in total contract volume of the target population. (See Appendix I)

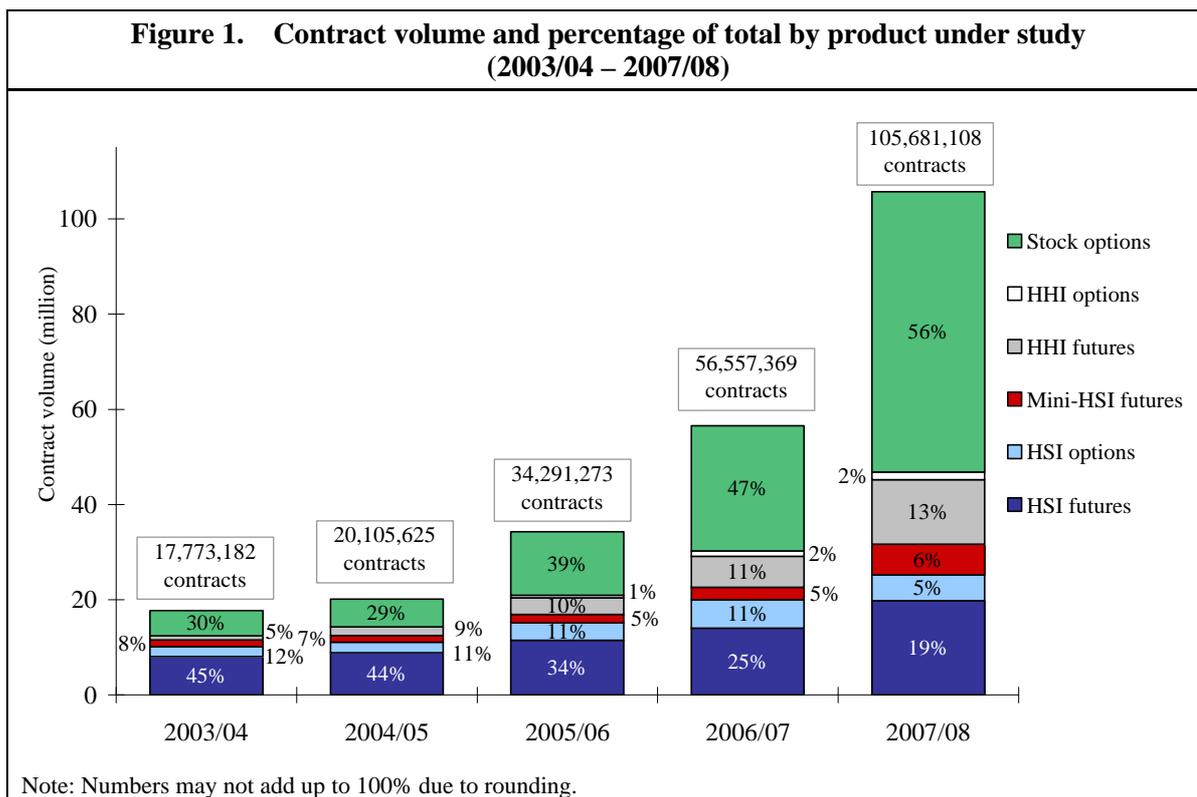
The survey covers transactions during July 2007 to June 2008<sup>2</sup> in the major HKEx futures and options products, namely Hang Seng Index (HSI) futures, HSI options, Mini-HSI futures, H-shares Index (HHI) futures, HHI options and stock options. They together contributed 99.6% of the total turnover volume of HKEx derivatives market during the study period. "Market turnover" (or "market volume") in this report refers to the total turnover volume of the products under study.

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 Mini-HHI futures (launched on 31 March 2008), Hang Seng China H-Financials Index futures, FTSE/Xinhua China 25 Index futures and options, HIBOR futures, Three-year Exchange Fund Note futures, stock futures and Mini-HSI options.

<sup>1</sup> 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 4 for survey methodology.)

<sup>2</sup> Referred to as the year 2007/08 throughout the report; the same convention is used for the past surveys.

In 2007/08, market turnover (products under study only) increased 87% to 105.7 million contracts from 2006/07. The increase in market turnover was mainly due to a significant volume growth (123%) in stock options — from 26.3 million contracts in 2006/07 to 58.8 million contracts in 2007/08. Other products under study also increased in turnover in 2007/08 compared to 2006/07, particularly Mini-HSI futures (147%) and HHI futures (111%), but not HSI options (-9%). In 2007/08, stock options remained the dominant contributor to derivatives market turnover (56%, up from 47% in 2006/07). The contribution from HHI futures has been growing since its launch in December 2003 (from 5% in 2003/04 to 13% in 2007/08). (Figure 1)



As stock options have a very different trading composition from other derivative products, the change in trading patterns of the HKEx derivatives market reflects, to a considerable extent, the increasing dominance of the stock options market segment over the past three years (see key findings in section 2).

It should be noted that the products under study differ greatly in size. Compared to index futures and options, stock options have much smaller size and notional value per contract. Although turnover of stock options by contract volume was large, stock options contracts in total had only a 4% share of notional trading value during the study period (see Appendix 3).

For analysis purpose, the contract volume for each transaction type in the survey was estimated (referred to as the “implied contract volume<sup>3</sup>”) 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.

<sup>3</sup> See glossary for the definition of implied contract volume.

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## 2. KEY FINDINGS

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### Trading by transaction purpose

- (1) Overall, pure trading and hedging were the two main transaction purposes of derivatives trading in 2007/08. The contribution of pure trading in 2007/08 was 40% of total market turnover (down from 49% in 2006/07) and that of hedging was 39% (up from 31% in 2006/07). Arbitrage turnover accounted for 21% of the overall market turnover in 2007/08, the same level as in 2006/07.
- (2) The proportion of pure trading was the highest for trading in Mini-HSI futures (78%). The proportion of arbitrage was the highest for stock options (27%, compared to 13%-18% for each of the other products). Hedging was quite common among all products under study except Mini-HSI futures (ranging from 32% to 46% for each of the other products, compared to 5% for Mini-HSI futures).
- (3) In number of contracts, a significant increase in the contract volume for hedging was observed for trading in stock options (247% increase from 2006/07)<sup>4</sup>. Given the increasing dominance of the stock options, the result was a significant year-on-year percentage increase in total trading for hedging purpose (136%, compared to 87% for overall market trading) and the significant increase in the proportion of hedging in market turnover in 2007/08.

### Trading by investor type

- (4) EP principal trading (comprising trading as market makers and EP proprietary trading) had increasing dominance in HKEx's derivatives market since 2005/06. In 2007/08, it accounted for 61% of total market volume (up from 55% in 2006/07) — 49% from market makers (up from 40% in 2006/07) and 12% from proprietary trading (compared to 15% in 2006/07). The majority of EP principal trading came from stock options (mostly as market making) — stock options contributed 56% to total market turnover but its EP principal trading contributed 81% to total EP principal trading in derivatives.
- (5) The percentage contribution from institutional investors (local and overseas) decreased for the third consecutive year to 20% in 2007/08 (from 36% in 2004/05, 29% in 2005/06 and 25% in 2006/07). Retail investors' contribution (local and overseas) was 19% in 2007/08 (compared to 20% in 2006/07), the lowest in the past eight years since HKEx undertook the survey in 2000/01.
- (6) The percentage contribution from overseas investors also decreased for the third consecutive year to 19% (mostly institutions — 17%) in 2007/08 (from 29% in 2004/05, 23% in 2005/06 and 21% in 2006/07). The contribution from local investors was 21% — 17% from retail and 4% from institutions (compared to 18% and 6% respectively in 2006/07) — a drop for the fourth consecutive year.

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<sup>4</sup> The large increase in the proportion of hedging for stock options was resulted from an increase in the number of SOEPs which reported transactions for hedging purpose and a general increase in trading for hedging purpose across most of the SOEPs in 2007/08 against 2006/07. In particular, a significant increase in trading for hedging was observed for several major contributors to stock options turnover.

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- (7) The trading distribution by investor type differed by product.
- EP principal trading dominated the turnover of both stock options and HSI options and its percentage contribution to the respective products' turnover increased over 2005/06. In 2007/08, EP principal trading accounted for 89% (83% from market making) of stock options' total volume and 56% (47% from market making) of HSI options' total volume.
  - For HSI futures, the contributions from overseas institutional and local retail investors were both significant (36% and 32% respectively). The pattern was similar in the past few years.
  - For Mini-HSI futures, local retail investors remained the dominant participant type, contributing 58% of product turnover in 2007/08.
  - For HHI futures, overseas investors contributed the majority of the product's trading (52%), mainly from overseas institutional investors (49%).
  - For HHI options, the contributions from overseas institutional investors and EP principal trading were both significant (36% and 35% respectively).
- (8) In number of contracts, EP principal trading was more than double in 2007/08 compared to 2006/07, mainly driven by an increase in market making. Retail and institutional investor trading also increased significantly in 2007/08 (by 78% and 52% respectively, the highest year-on-year increases in the past seven years for both investor types). Both overseas investor trading and local investor trading increased by more than 60% in 2007/08, also the highest year-on-year increase in the past seven years.

#### **Trading by overseas investors by origin**

- (9) Among overseas investors, UK investors remained the largest contributor to overseas investor trading in 2007/08 (32%, compared to 31% in 2006/07). They were followed by US investors (26% in both 2007/08 and 2006/07). The contributions from Australian<sup>5</sup> and European (excluding UK) investors were also significant (11% and 10% respectively in 2007/08).
- (10) The aggregate contribution to overseas investor trading from Asian investors (Mainland China, Singapore, Japan, Taiwan and the rest of Asia) was 20% in 2007/08, the same level as in 2006/07. Half of the Asian contribution came from Mainland China investors.
- (11) The distribution of overseas investor trading by origin for stock options was different from that of other derivative product types. US investors contributed less than 1% of overseas investor trading for stock options but 29% for other derivatives. European (excluding UK) investors contributed 28% for stock options but only 8% for other derivatives. Notably, the percentage contribution from UK and European investors to overseas investor trading for stock options increased significantly from 38% in aggregate in 2006/07 to 63% in 2007/08 (compared to 39% for other derivatives). Investors from Mainland China were 2% of overseas investor trading for stock options but 11% for other derivatives. However, overseas investor trading contributed only 4% to total stock options trading but 38% to other derivatives trading.

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<sup>5</sup> Australia was designated as an origin of overseas investor trading for the first time in 2007/08. It was included in "Others" in the previous surveys.

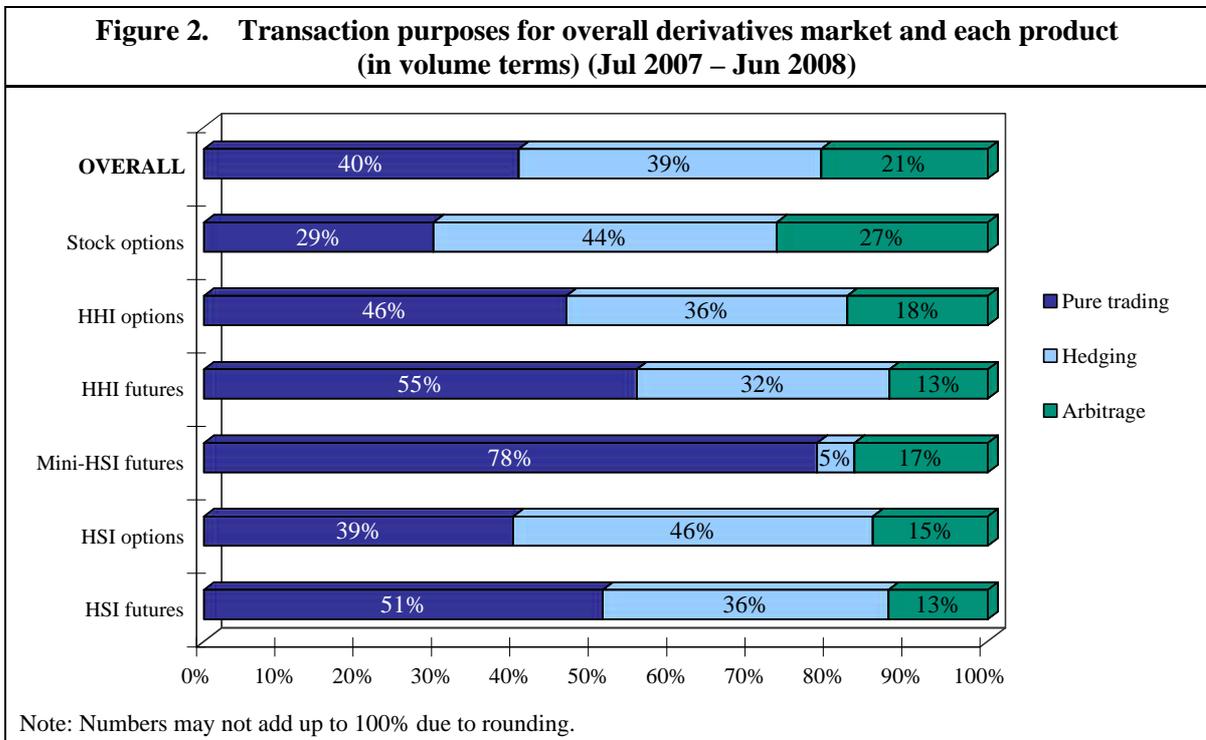
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### **Retail online trading**

- (12) Retail online trading as a proportion of total retail investor trading continued its rapid growth in 2007/08, reaching 39% in 2007/08 from 31% in 2006/07 and 22% in 2005/06. Its contribution to total market turnover was 7% in 2007/08, compared to 6% in 2006/07.
- (13) The use of online trading by retail investors was less prominent for trading in stock options than for other derivatives. For stock options, retail online trading contributed 15% of total retail investor trading and 1% of product turnover in 2007/08 (similar levels as in 2006/07). For other derivatives, retail online trading contributed 44% of total retail investor trading and 15% of total market turnover in 2007/08 (up from 34% and 10% respectively in 2006/07). However, retail investor trading contributed only 6% to total stock options trading but 35% to other derivatives trading.
- (14) A total of 48 (vs 40 in 2006/07) or 29% of responding EPs (vs 26% in 2006/07) offered online trading service to retail derivatives investors (referred to as “online brokers”). Retail online trading accounted for about 36% of total turnover of the online brokers in 2007/08, up sharply from about 26% in 2006/07.

### 3. FIGURES AND TABLES

#### 3.1 Distribution of trading by transaction purpose

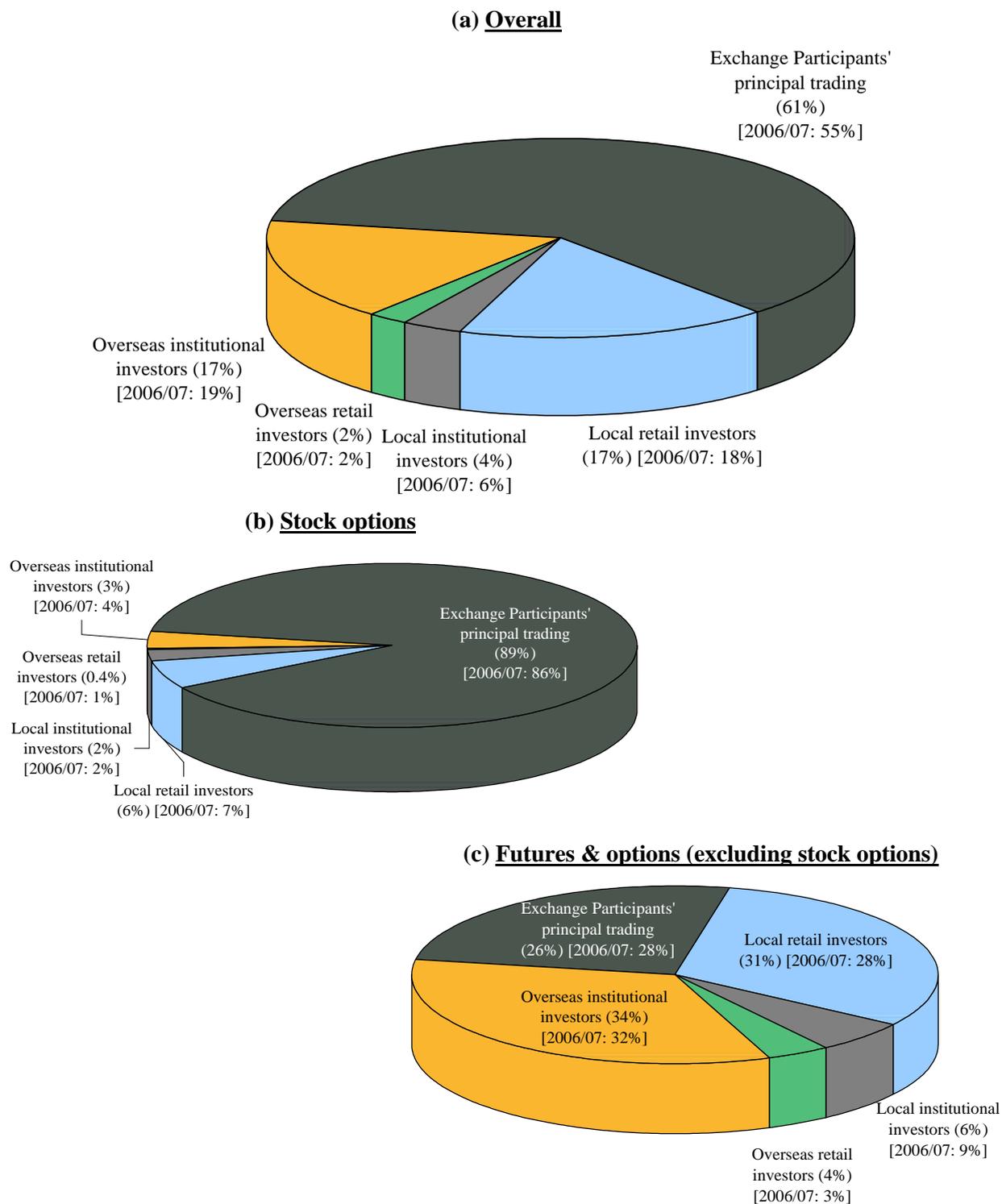


<b>Table 1. Transaction purposes for overall derivatives market and each product (2003/04 – 2007/08)</b>								
Product	Purpose	Percentage contribution <sup>(2)</sup>					Implied contract volume <sup>(1)</sup> 2007/08	
		2003/04	2004/05	2005/06	2006/07	2007/08	No. of contracts	Y-o-Y change
HSI futures	Pure trading	62.8	53.2	51.8	49.4	50.9	10,068,363	44.7%
	Hedging	26.6	34.9	31.1	33.2	36.5	7,212,682	54.3%
	Arbitrage	10.6	11.9	17.1	17.4	12.7	2,506,502	2.4%
	Total	100.0	100.0	100.0	100.0	100.0	19,787,547	40.6%
HSI options	Pure trading	47.6	57.3	50.7	39.7	39.5	2,152,246	-9.1%
	Hedging	38.1	31.8	37.4	43.2	45.9	2,501,795	-3.0%
	Arbitrage	14.3	10.9	12.0	17.1	14.6	797,951	-21.6%
	Total	100.0	100.0	100.0	100.0	100.0	5,451,993	-8.6%
Mini-HSI futures	Pure trading	79.9	85.0	82.8	60.9	78.2	5,038,026	217.3%
	Hedging	9.4	8.9	9.9	4.9	4.7	305,052	140.3%
	Arbitrage	10.6	6.1	7.3	34.3	17.0	1,095,931	22.6%
	Total	100.0	100.0	100.0	100.0	100.0	6,439,009	146.8%
HHI futures	Pure trading	62.1	46.2	54.8	53.2	55.2	7,493,814	119.0%
	Hedging	28.9	44.9	31.7	34.0	32.2	4,375,191	100.1%
	Arbitrage	9.0	8.9	13.5	12.9	12.5	1,698,730	104.8%
	Total	100.0	100.0	100.0	100.0	100.0	13,567,735	110.8%
HHI options	Pure trading	-	n.a.	62.4	55.0	46.2	754,395	18.5%
	Hedging	-	n.a.	28.4	28.5	35.9	584,831	77.2%
	Arbitrage	-	n.a.	9.2	16.5	17.9	292,095	52.7%
	Total	-	n.a.	100.0	100.0	100.0	1,631,321	40.9%
Futures & options (excl. stock options)	Pure trading	62.2	56.0	55.0	49.5	54.7	25,640,521	71.1%
	Hedging	26.7	33.2	30.5	32.5	31.6	14,827,531	50.8%
	Arbitrage	11.1	10.8	14.6	18.0	13.7	6,409,554	18.0%
	Total	100.0	100.0	100.0	100.0	100.0	46,877,605	55.0%
Stock options	Pure trading	35.0	36.3	39.8	47.6	29.3	17,229,826	37.4%
	Hedging	44.4	42.7	35.2	28.2	43.8	25,747,855	247.2%
	Arbitrage	20.6	21.0	24.9	24.2	26.9	15,825,822	148.9%
	Total	100.0	100.0	100.0	100.0	100.0	58,803,503	123.5%
Overall market	Pure trading	54.0	50.1	49.1	48.7	40.2	42,456,287	54.3%
	Hedging	32.0	36.0	32.3	30.5	38.6	40,773,577	136.4%
	Arbitrage	14.0	13.9	18.6	20.8	21.2	22,451,244	90.5%
	Total	100.0	100.0	100.0	100.0	100.0	105,681,108	86.9%
<b>Total contract volume <sup>(3)</sup></b>		17,773,182	20,105,625	34,291,273	56,557,369	105,681,108		
n.a.: Not available								
- : Not applicable								
Notes:								
(1) 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. Numbers may not add up to total due to rounding.								
(2) Numbers may not add up to 100% due to rounding.								
(3) Actual total contract volume of all products under study during the study period.								

## 3.2 Distribution of trading by investor type

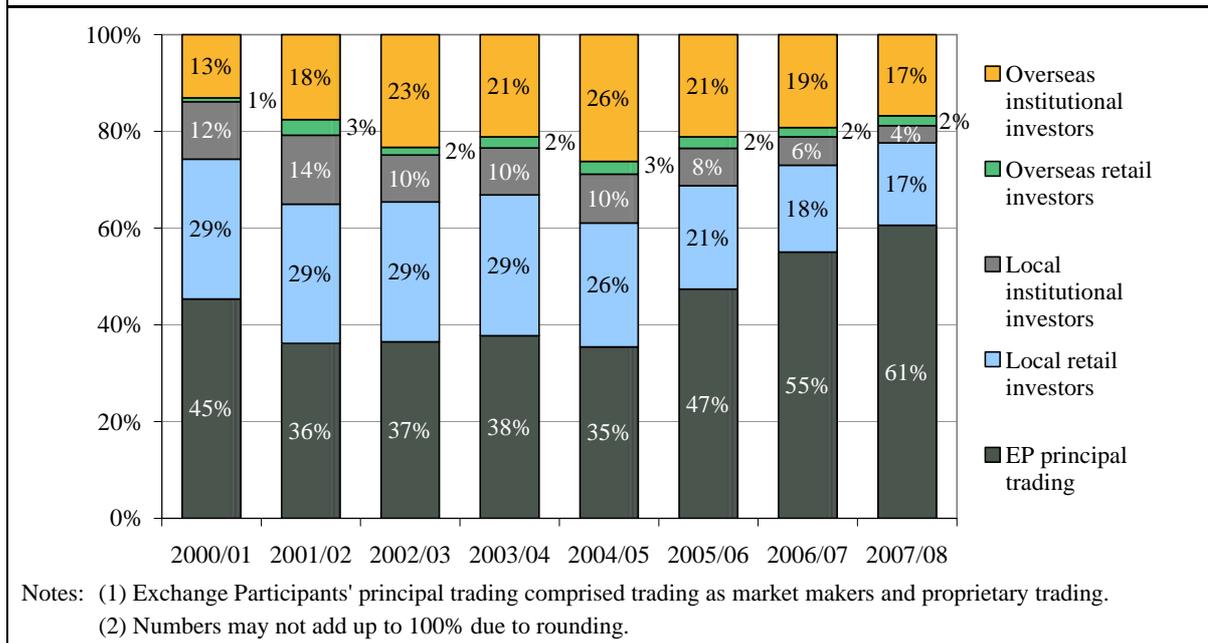
### 3.2.1 Overall pattern

**Figure 3. Distribution of derivatives market trading volume by investor type (Jul 2007 – Jun 2008)**

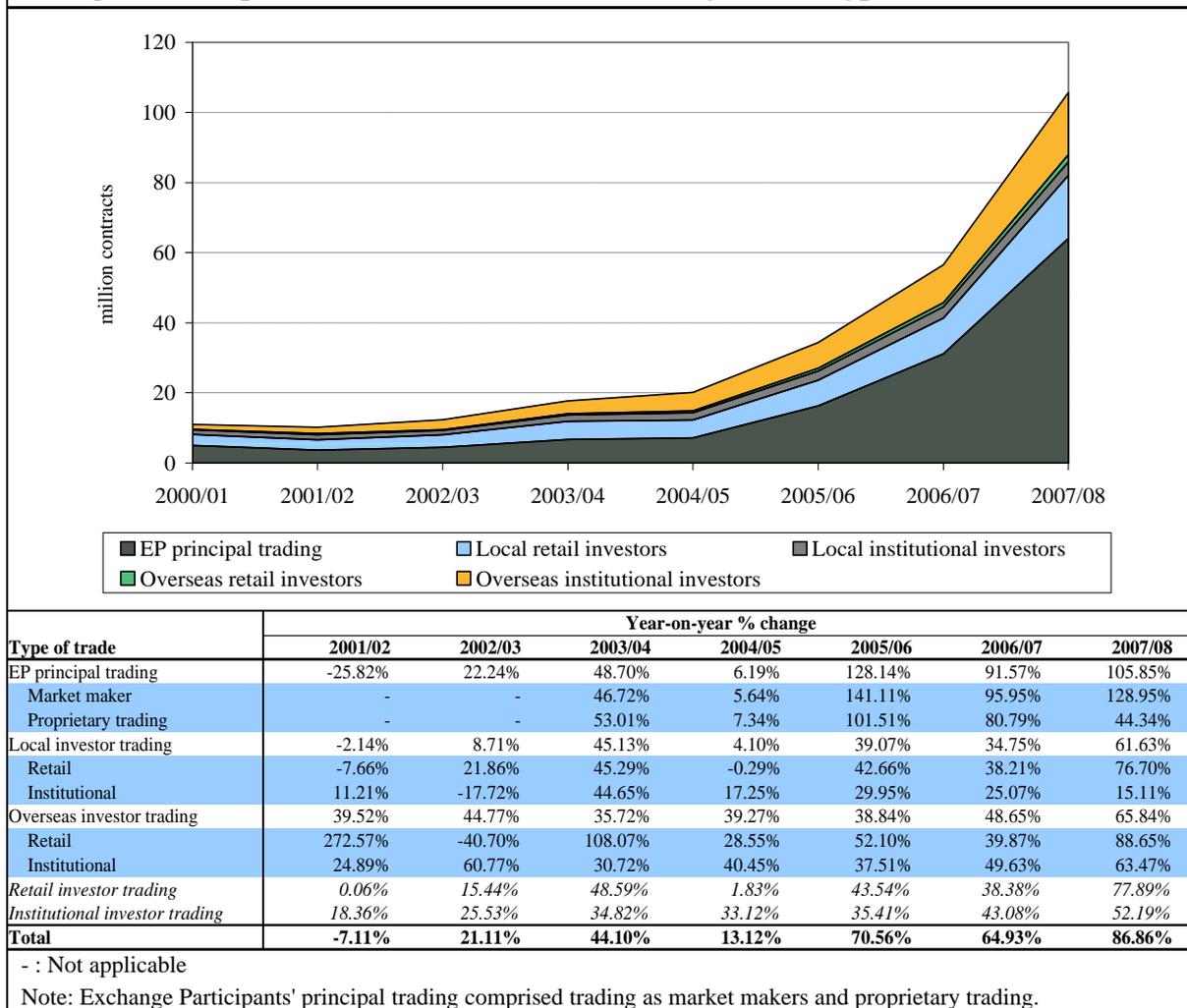


Notes: (1) Exchange Participants' principal trading comprised trading as market makers and proprietary trading.  
 (2) Numbers may not add up to 100% due to rounding.

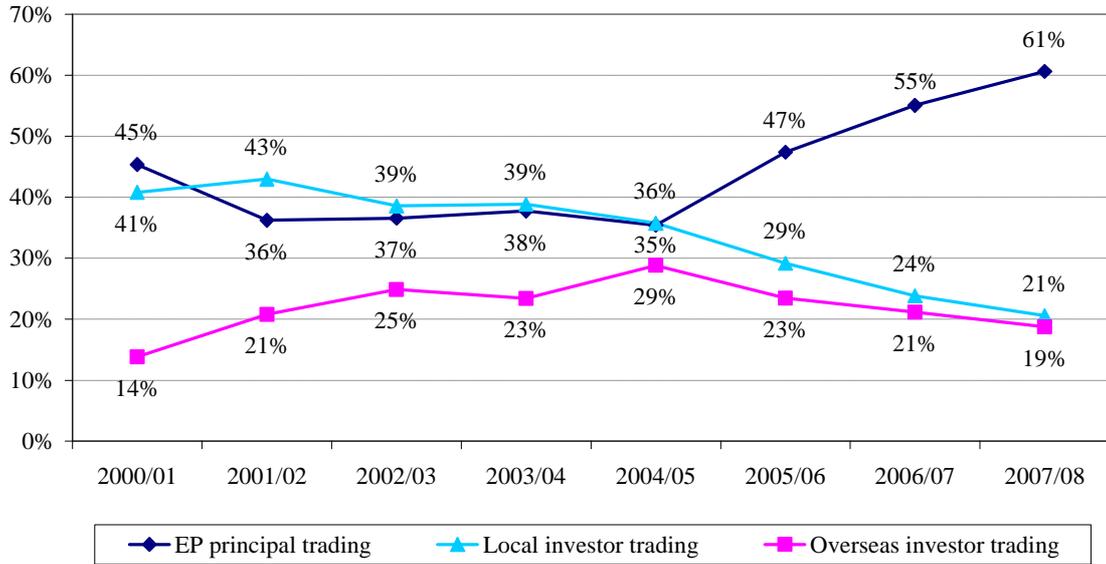
**Figure 4. Distribution of derivatives market trading volume by investor type (2000/01 – 2007/08)**



**Figure 5. Implied contract volume of derivatives by investor type (2000/01 – 2007/08)**

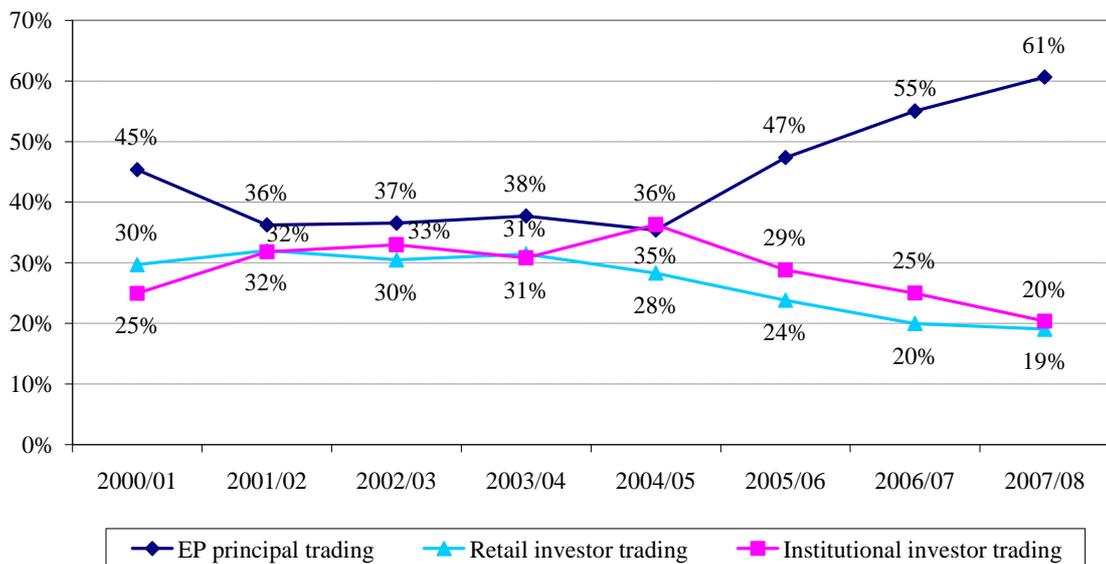


**Figure 6. Distribution of derivatives market trading volume by investor type (local vs overseas) (2000/01 – 2007/08)**



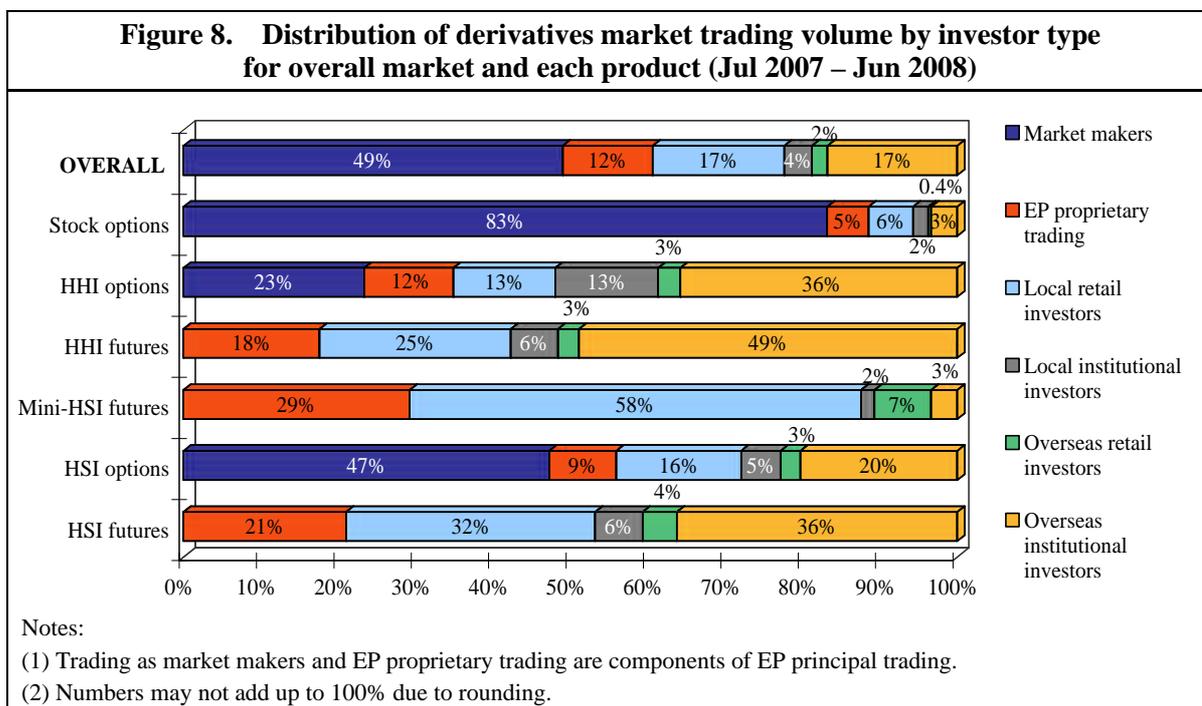
Note: Numbers may not add up to 100% due to rounding.

**Figure 7. Distribution of derivatives market trading volume by investor type (retail vs institutional) (2000/01 – 2007/08)**



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

### 3.2.2 By product/market segment



<b>Table 2. Distribution of derivatives trading by investor type (2003/04 – 2007/08)</b>							
Type of investor	Percentage contribution <sup>(3)</sup>					Implied contract volume <sup>(4)</sup> 2007/08	
	2003/04	2004/05	2005/06	2006/07	2007/08	No. of contracts	Y-o-Y change
<b>HSI Futures</b>							
Market makers	-	-	-	-	-	-	-
Proprietary trading	20.2	16.6	21.3	23.7	21.0	4,163,235	24.8%
Local investors	42.9	39.4	37.9	37.9	38.3	7,575,460	42.1%
Retail	34.7	29.5	29.3	29.7	32.2	6,366,754	52.3%
Institutional	8.2	9.8	8.6	8.2	6.1	1,208,706	4.9%
Overseas investors	36.9	44.0	40.8	38.4	40.7	8,048,852	48.7%
Retail	2.4	3.2	2.9	3.3	4.4	876,905	88.6%
Institutional	34.5	40.9	38.0	35.1	36.2	7,171,947	45.0%
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>19,787,547</b>	<b>40.6%</b>
<b>HSI Options</b>							
Principal trading <sup>(1)</sup>	32.7	29.2	40.5	46.5	56.0	3,051,036	10.0%
Market makers	25.5	23.2	32.1	39.3	47.3	2,578,938	10.1%
Proprietary trading	7.2	6.0	8.4	7.2	8.7	472,098	9.5%
Local investors	43.2	42.2	40.2	28.6	21.2	1,157,086	-32.2%
Retail	18.7	21.1	22.0	15.1	16.1	878,516	-2.2%
Institutional	24.5	21.1	18.2	13.5	5.1	278,570	-65.5%
Overseas investors	24.1	28.5	19.3	24.9	22.8	1,243,870	-16.2%
Retail	0.7	1.2	2.0	1.0	2.6	139,894	127.4%
Institutional	23.4	27.4	17.3	23.9	20.2	1,103,976	-22.5%
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>5,451,993</b>	<b>-8.6%</b>
<b>Mini-HSI Futures</b>							
Market makers	-	-	-	-	-	-	-
Proprietary trading	6.1	16.6	32.5	36.4	29.3	1,883,841	98.1%
Local investors	87.1	76.2	60.5	54.1	60.1	3,868,056	174.2%
Retail	79.7	67.5	56.7	50.0	58.3	3,753,207	187.5%
Institutional	7.3	8.7	3.9	4.0	1.8	114,848	9.2%
Overseas investors	6.9	7.2	7.0	9.5	10.7	687,113	177.7%
Retail	6.0	5.9	5.7	7.6	7.3	469,504	138.2%
Institutional	0.9	1.3	1.3	1.9	3.4	217,609	332.3%
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>6,439,009</b>	<b>146.8%</b>
<b>HHI Futures</b>							
Principal trading <sup>(1)</sup>	17.2	14.4	15.8	18.0	17.6	2,386,948	105.6%
Market makers <sup>(2)</sup>	2.2	2.1	0.4	-	-	-	-
Proprietary trading	15.0	12.4	15.4	18.0	17.6	2,386,948	105.6%
Local investors	40.2	34.3	40.5	36.7	30.8	4,177,640	77.0%
Retail	28.5	23.8	27.7	28.3	24.7	3,352,352	84.0%
Institutional	11.7	10.5	12.8	8.4	6.1	825,288	53.1%
Overseas investors	42.7	51.3	43.7	45.3	51.6	7,003,147	140.2%
Retail	3.0	2.4	2.9	2.4	2.7	370,237	140.9%
Institutional	39.7	48.8	40.8	42.9	48.9	6,632,910	140.1%
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>13,567,735</b>	<b>110.8%</b>
<b>HHI Options</b>							
Principal trading <sup>(1)</sup>	-	n.a.	25.8	28.0	34.9	569,321	75.5%
Market makers	-	n.a.	19.3	18.8	23.4	381,271	74.7%
Proprietary trading	-	n.a.	6.5	9.2	11.5	188,050	77.0%
Local investors	-	n.a.	44.0	28.4	26.5	431,672	31.4%
Retail	-	n.a.	17.9	10.1	13.1	214,303	83.8%
Institutional	-	n.a.	26.1	18.3	13.3	217,369	2.6%
Overseas investors	-	n.a.	30.2	43.6	38.6	630,328	24.8%
Retail	-	n.a.	1.8	1.1	2.9	46,615	261.8%
Institutional	-	n.a.	28.4	42.5	35.8	583,713	18.6%
<b>Total</b>	<b>-</b>	<b>n.a.</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>1,631,321</b>	<b>40.9%</b>
<b>Futures &amp; options (excl. stock options)</b>							
Principal trading <sup>(1)</sup>	20.5	18.3	24.8	28.3	25.7	12,025,320	40.5%
Market makers	4.4	3.9	6.2	8.5	6.2	2,916,430	13.6%
Proprietary trading	16.1	14.4	18.6	19.8	19.4	9,108,890	52.0%
Local investors	47.8	42.6	40.8	36.8	36.8	17,233,544	54.6%
Retail	36.7	31.1	29.8	27.5	31.1	14,591,952	75.2%
Institutional	11.1	11.6	11.0	9.3	5.6	2,641,592	-6.2%
Overseas investors	31.8	39.0	34.4	34.9	37.6	17,618,741	67.1%
Retail	2.5	3.0	2.9	3.0	4.1	1,905,655	113.4%
Institutional	29.2	36.0	31.5	31.9	33.5	15,713,086	62.9%
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>46,877,605</b>	<b>55.0%</b>

(to be continued on next page)

**Table 2. Distribution of derivatives trading by investor type  
(2003/04 – 2007/08) (cont'd)**

Type of investor	Percentage contribution <sup>(3)</sup>					Implied contract volume <sup>(4)</sup> 2007/08	
	2003/04	2004/05	2005/06	2006/07	2007/08	No. of contracts	Y-o-Y change
<b>Stock options</b>							
Principal trading <sup>(1)</sup>	78.6	76.8	81.8	86.3	<b>88.6</b>	52,073,750	129.4%
Market makers	75.5	71.9	75.6	76.9	<b>83.2</b>	48,926,668	141.9%
Proprietary trading	3.1	4.8	6.2	9.4	<b>5.4</b>	3,147,083	27.0%
Local investors	17.8	19.1	11.4	8.6	<b>7.7</b>	4,527,951	100.4%
Retail	11.2	12.6	8.8	6.8	<b>5.7</b>	3,376,361	88.0%
Institutional	6.6	6.5	2.6	1.8	<b>2.0</b>	1,151,590	148.7%
Overseas investors	3.7	4.1	6.8	5.1	<b>3.7</b>	2,201,801	63.3%
Retail investors	1.8	1.7	1.5	0.9	<b>0.4</b>	218,796	-4.5%
Institutional investors	1.9	2.4	5.3	4.3	<b>3.4</b>	1,983,005	77.2%
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>58,803,503</b>	<b>123.5%</b>
<b>Overall market</b>							
Principal trading <sup>(1)</sup>	37.7	35.4	47.4	55.0	<b>60.6</b>	64,070,977	105.9%
Market makers	25.5	23.8	33.7	40.0	<b>49.0</b>	51,808,717	128.9%
Proprietary trading	12.2	11.6	13.7	15.0	<b>11.6</b>	12,262,261	44.3%
Local investors	38.9	35.8	29.2	23.8	<b>20.6</b>	21,774,475	61.6%
Retail investors	29.1	25.7	21.5	18.0	<b>17.0</b>	17,979,650	76.7%
Institutional investors	9.7	10.1	7.7	5.8	<b>3.6</b>	3,794,825	15.1%
Overseas investors	23.4	28.8	23.5	21.1	<b>18.8</b>	19,835,656	65.8%
Retail investors	2.3	2.6	2.3	2.0	<b>2.0</b>	2,126,101	88.7%
Institutional investors	21.1	26.2	21.1	19.2	<b>16.8</b>	17,709,555	63.5%
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>105,681,108</b>	<b>86.9%</b>

n.a.: Not available - : Not applicable

Notes:

(1) Comprised trading of market makers and EP proprietary trading.

(2) Market marker system for HHI futures was lifted on 14 November 2005.

(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. Numbers may not add up to total due to rounding.

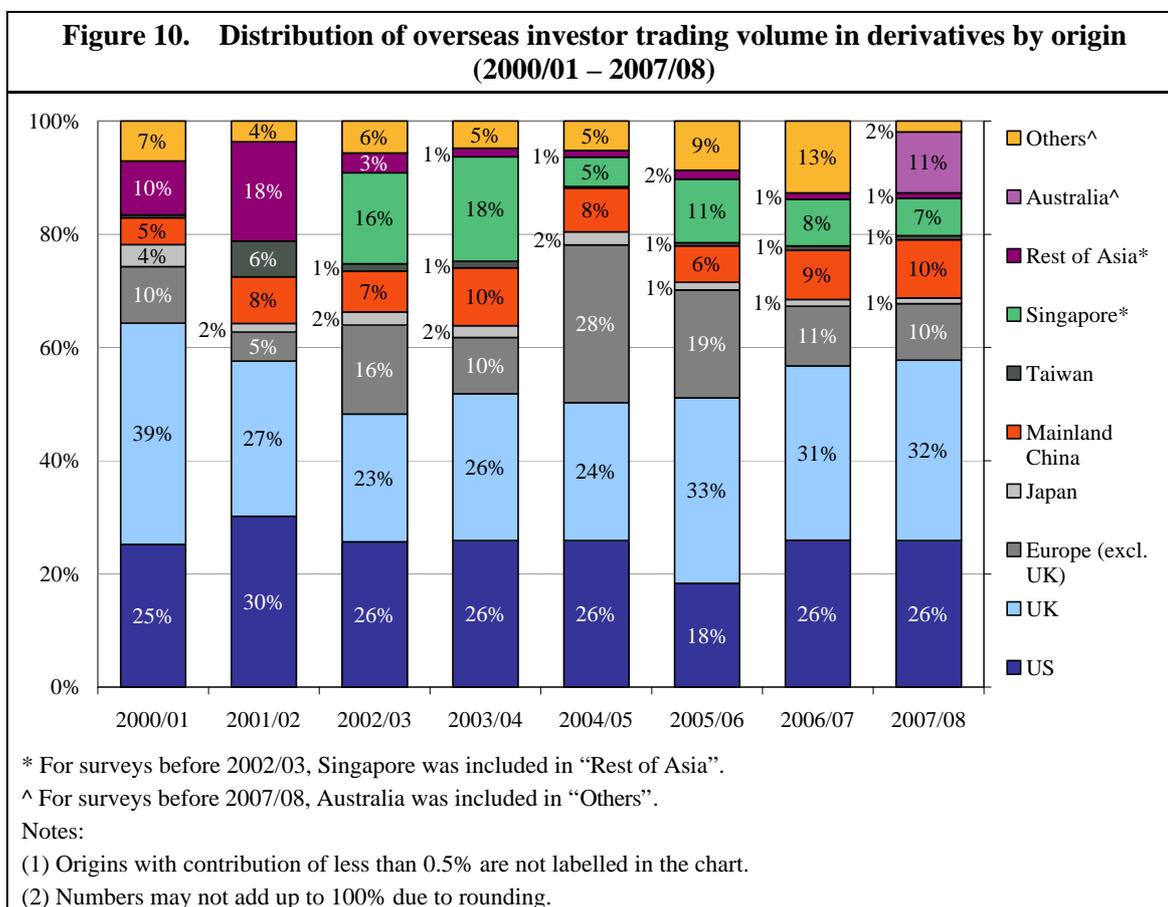
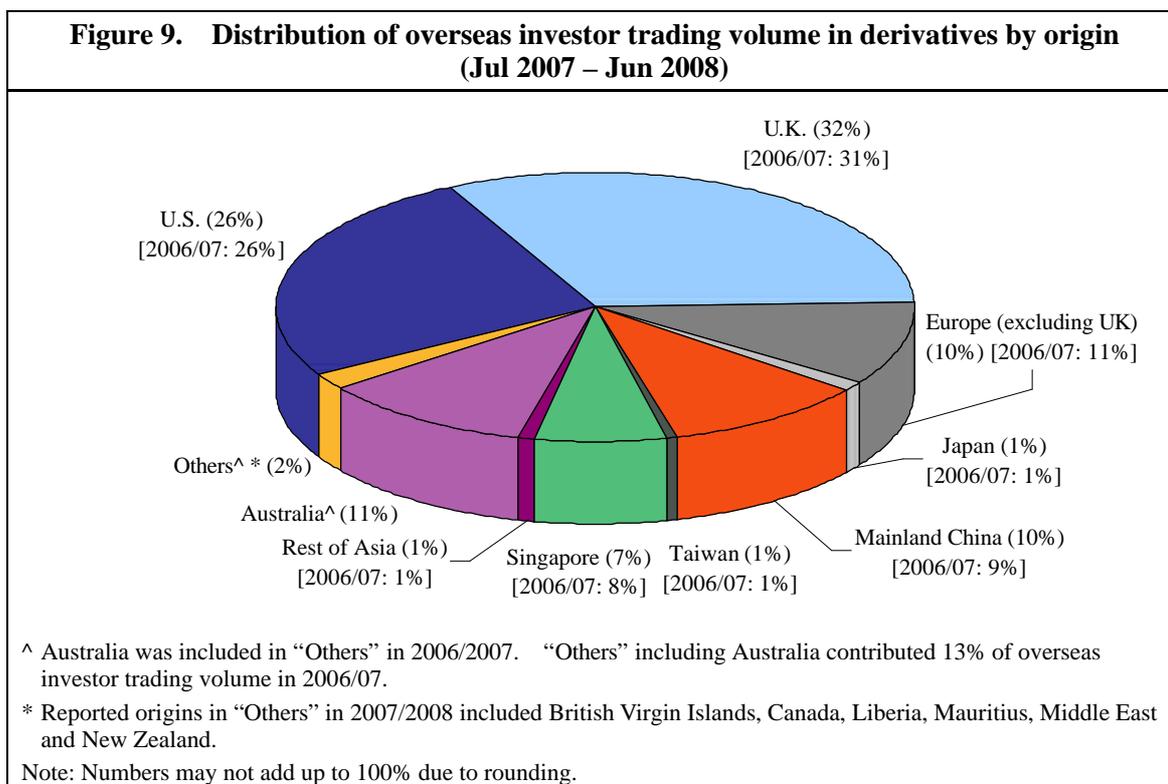
**Table 3. Business composition of Exchange Participants in derivatives  
by trade type (in volume terms) (%)**

	2003/04 Overall	2004/05 Overall	2005/06 Overall	2006/07 Overall	2007/08 Overall	2007/08					
						HSI futures	HSI options	Mini-HSI futures	HHI futures	HHI options	Stock options
<b>All trading</b>											
Principal <sup>#</sup>	37.7	35.4	47.4	55.0	<b>60.6</b>	21.0	56.0	29.3	17.6	34.9	88.6
Agency	62.3	64.6	52.6	45.0	<b>39.4</b>	79.0	44.0	70.7	82.4	65.1	11.4
	100.0	100.0	100.0	100.0	<b>100.0</b>	100.0	100.0	100.0	100.0	100.0	100.0
<b>Agency trading</b>											
Local	62.4	55.4	55.4	53.0	<b>52.3</b>	48.5	48.2	84.9	37.4	40.6	67.3
Overseas	37.6	44.6	44.6	47.0	<b>47.7</b>	51.5	51.8	15.1	62.6	59.4	32.7
	100.0	100.0	100.0	100.0	<b>100.0</b>	100.0	100.0	100.0	100.0	100.0	100.0
<b>Agency trading</b>											
Retail	50.5	43.8	45.3	44.4	<b>48.3</b>	46.4	42.4	92.7	33.3	24.6	53.4
Institutional	49.5	56.2	54.7	55.6	<b>51.7</b>	53.6	57.6	7.3	66.7	75.4	46.6
	100.0	100.0	100.0	100.0	<b>100.0</b>	100.0	100.0	100.0	100.0	100.0	100.0
<b>Retail investor trading</b>											
Local	92.6	90.7	90.1	90.0	<b>89.4</b>	87.9	86.3	88.9	90.1	82.1	93.9
Overseas	7.4	9.3	9.9	10.0	<b>10.6</b>	12.1	13.7	11.1	9.9	17.9	6.1
	100.0	100.0	100.0	100.0	<b>100.0</b>	100.0	100.0	100.0	100.0	100.0	100.0
<b>Institutional investor trading</b>											
Local	31.6	27.8	26.7	23.3	<b>17.6</b>	14.4	20.1	34.5	11.1	27.1	36.7
Overseas	68.4	72.2	73.3	76.7	<b>82.4</b>	85.6	79.9	65.5	88.9	72.9	63.3
	100.0	100.0	100.0	100.0	<b>100.0</b>	100.0	100.0	100.0	100.0	100.0	100.0
<b>Local investor trading</b>											
Retail	75.0	71.8	73.6	75.5	<b>82.6</b>	84.0	75.9	97.0	80.2	49.6	74.6
Institutional	25.0	28.2	26.4	24.5	<b>17.4</b>	16.0	24.1	3.0	19.8	50.4	25.4
	100.0	100.0	100.0	100.0	<b>100.0</b>	100.0	100.0	100.0	100.0	100.0	100.0
<b>Overseas investor trading</b>											
Retail	9.9	9.1	10.0	9.4	<b>10.7</b>	10.9	11.2	68.3	5.3	7.4	9.9
Institutional	90.1	90.9	90.0	90.6	<b>89.3</b>	89.1	88.8	31.7	94.7	92.6	90.1
	100.0	100.0	100.0	100.0	<b>100.0</b>	100.0	100.0	100.0	100.0	100.0	100.0

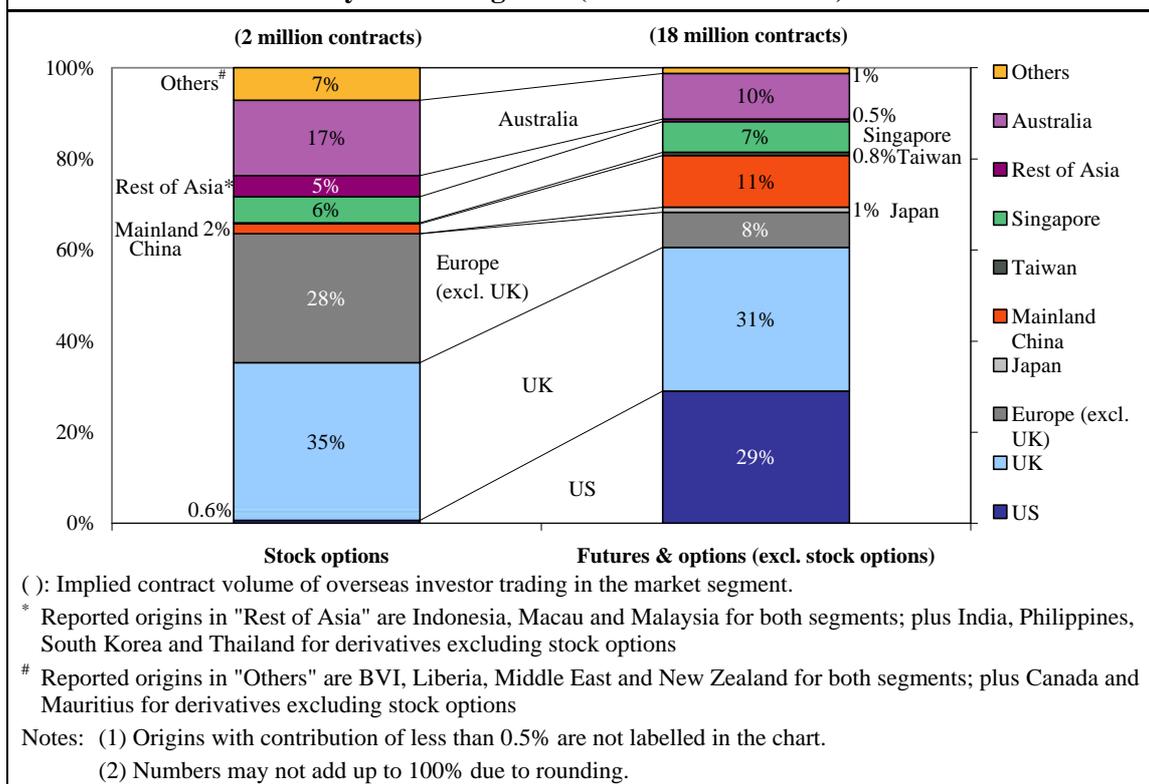
<sup>#</sup> Comprises trading of registered traders/market makers and proprietary trading.

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

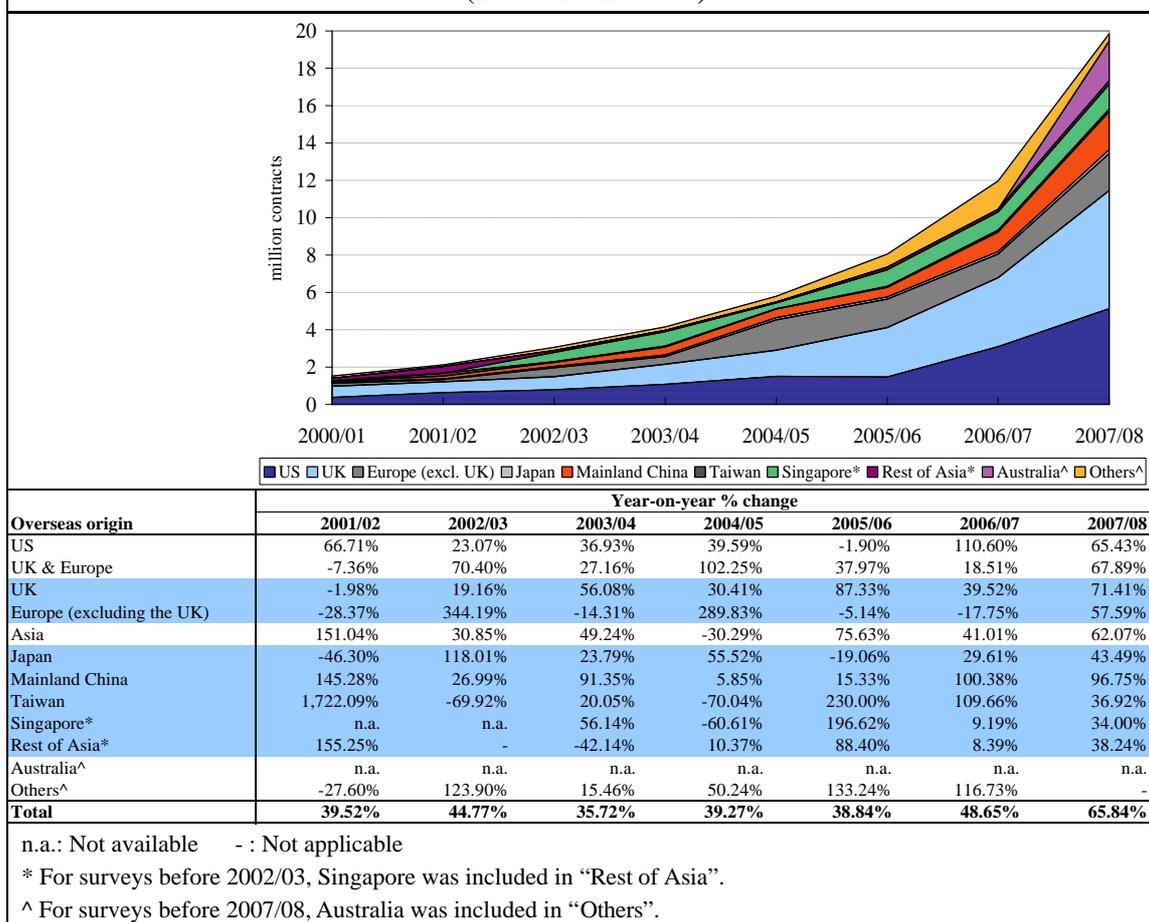
### 3.3 Distribution of overseas investor trading by origin



**Figure 11. Distribution of overseas investor trading volume in derivatives by origin by market segment (Jul 2007 – Jun 2008)**

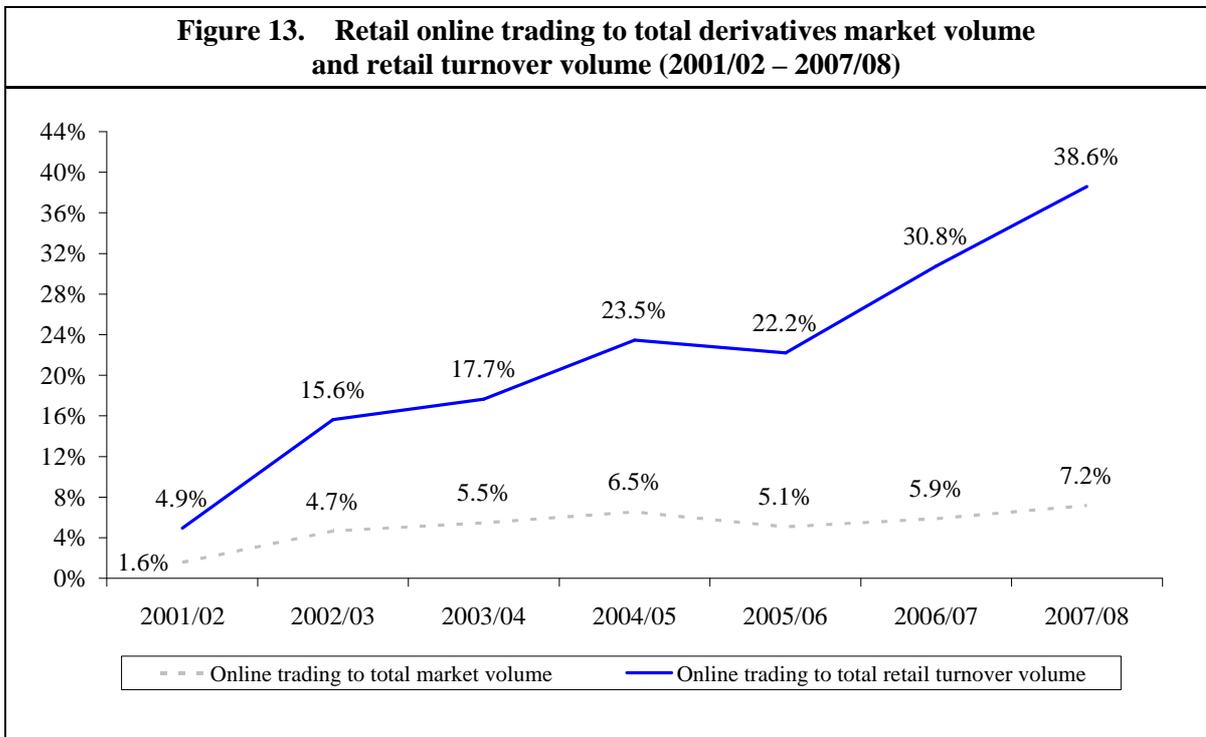


**Figure 12. Implied contract volume of overseas investor trading in derivatives by origin (2000/01 – 2007/08)**



<b>Table 4. Distribution of overseas investor trading in derivatives by origin (2003/04 – 2007/08)</b>							
<b>Overall market (All futures and options)</b>							
Origin	Percentage contribution <sup>(2)</sup>					Implied contract volume <sup>(1)</sup> 2007/08	
	2003/04	2004/05	2005/06	2006/07	2007/08	No. of contracts	Y-o-Y change
US	25.9	25.9	18.3	26.0	25.9	5,137,918	65.4%
UK	26.0	24.3	32.8	30.8	31.8	6,316,251	71.4%
Europe (excl. UK)	10.0	27.9	19.0	10.5	10.0	1,984,442	57.6%
Japan	2.1	2.3	1.3	1.2	1.0	201,640	43.5%
Mainland China	10.2	7.8	6.4	8.7	10.3	2,042,803	96.7%
Taiwan	1.2	0.2	0.6	0.8	0.7	136,997	36.9%
Singapore	18.5	5.2	11.2	8.2	6.6	1,315,335	34.0%
Rest of Asia	1.5	1.2	1.6	1.2	1.0	193,183	38.2%
Australia <sup>^</sup>	n.a.	n.a.	n.a.	n.a.	10.7	2,130,601	n.a.
Others <sup>^</sup>	4.8	5.2	8.7	12.6	1.9	376,486	-
<b>Total<sup>(1)</sup></b>	100.0	100.0	100.0	100.0	100.0	19,835,656	65.8%
<b>Futures and options (excl. stock options)</b>							
Origin	Percentage contribution <sup>(2)</sup>					Implied contract volume <sup>(1)</sup> 2007/08	
	2003/04	2004/05	2005/06	2006/07	2007/08	No. of contracts	Y-o-Y change
US	26.7	27.0	20.1	29.0	29.1	5,119,205	67.6%
UK	27.0	24.9	35.0	32.3	31.5	5,549,252	63.0%
Europe (excl. UK)	9.6	28.7	16.8	9.4	7.7	1,360,429	36.7%
Japan	2.1	2.4	1.5	1.2	1.1	201,448	58.2%
Mainland China	10.1	7.2	7.1	8.8	11.3	1,992,982	114.2%
Taiwan	1.2	0.3	0.7	0.8	0.8	132,231	51.5%
Singapore	19.1	5.1	12.0	8.7	6.7	1,187,841	29.0%
Rest of Asia	0.4	0.5	0.3	0.3	0.5	90,429	145.9%
Australia <sup>^</sup>	n.a.	n.a.	n.a.	n.a.	10.0	1,765,775	n.a.
Others <sup>^</sup>	3.8	3.9	6.4	9.3	1.2	219,150	-
<b>Total</b>	100.0	100.0	100.0	100.0	100.0	17,618,741	67.1%
<b>Stock options</b>							
Origin	Percentage contribution <sup>(2)</sup>					Implied contract volume <sup>(1)</sup> 2007/08	
	2003/04	2004/05	2005/06	2006/07	2007/08	No. of contracts	Y-o-Y change
US	9.9	1.3	4.5	2.0	0.6	13,847	-48.7%
UK	5.5	11.0	15.6	19.0	34.6	762,291	198.1%
Europe (excl. UK)	16.3	8.0	36.2	19.2	28.3	623,190	141.0%
Japan	1.0	0.0	0.0	0.9	0.0	0	-100.0%
Mainland China	12.2	20.1	1.4	7.5	2.2	47,959	-52.6%
Taiwan	0.0	0.0	0.0	0.9	0.2	4,643	-62.0%
Singapore	5.7	8.7	4.4	4.0	5.7	126,459	135.8%
Rest of Asia	24.8	16.2	11.4	7.7	4.7	102,746	-0.8%
Australia <sup>^</sup>	n.a.	n.a.	n.a.	n.a.	16.5	363,421	n.a.
Others <sup>^</sup>	24.7	34.7	26.6	38.9	7.1	157,246	-
<b>Total</b>	100.0	100.0	100.0	100.0	100.0	2,201,801	63.3%
n.a.: Not available							
- : Not applicable							
<sup>^</sup> For surveys before 2007/08, Australia was included in "Others".							
Notes:							
(1) 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. Numbers may not add up to total due to rounding.							
(2) Numbers may not add up to 100% due to rounding.							

### 3.4 Retail online trading



<b>Table 5. Statistics on retail online trading in derivatives (2003/04 – 2007/08)</b>					
<b>Overall market (All futures and options)</b>	<b>2003/04</b>	<b>2004/05</b>	<b>2005/06</b>	<b>2006/07</b>	<b>2007/08</b>
<b>Online brokers<sup>(1)</sup></b>					
Total number of online brokers	21	31	33	40	<b>48</b>
- As % of all responding EPs (%)	15%	22%	24%	26%	<b>29%</b>
<b>Online trading</b>					
Total implied contract volume	1,941,128	2,633,008	3,483,994	6,650,331	<b>15,191,118</b>
- As % of total market turnover <sup>(2)</sup> (%)	5.5%	6.5%	5.1%	5.9%	<b>7.2%</b>
- As % of total agency (investor) trading (%)	8.9%	10.3%	10.1%	13.7%	<b>18.7%</b>
- As % of total retail investor trading (%)	17.7%	23.5%	22.2%	30.8%	<b>38.6%</b>
- As % of total turnover of online brokers (%)	24.5%	26.6%	20.1%	25.8%	<b>36.1%</b>
<b>Futures and options (excl. stock options)</b>	<b>2003/04</b>	<b>2004/05</b>	<b>2005/06</b>	<b>2006/07</b>	<b>2007/08</b>
<b>Online brokers<sup>(1)</sup></b>					
Total number of online brokers	20	30	31	37	<b>45</b>
- As % of all responding EPs (%)	19%	28%	30%	33%	<b>38%</b>
<b>Online trading</b>					
Total implied contract volume	1,619,649	2,514,143	3,357,585	6,087,237	<b>14,122,769</b>
- As % of total product turnover <sup>(3)</sup> (%)	6.5%	8.8%	8.0%	10.1%	<b>15.1%</b>
- As % of total product agency (investor) trading (%)	8.3%	11.0%	11.2%	14.6%	<b>20.7%</b>
- As % of total product retail investor trading (%)	16.8%	26.3%	25.8%	34.3%	<b>43.7%</b>
- As % of total product turnover of online brokers (%)	21.5%	26.5%	20.6%	25.7%	<b>36.2%</b>
<b>Stock options</b>	<b>2003/04</b>	<b>2004/05</b>	<b>2005/06</b>	<b>2006/07</b>	<b>2007/08</b>
<b>Online brokers<sup>(1)</sup></b>					
Total number of online brokers	1	1	2	3	<b>3</b>
- As % of all responding EPs (%)	3%	3%	5%	7%	<b>7%</b>
<b>Online trading</b>					
Total implied contract volume	321,479	118,865	126,409	563,095	<b>1,068,350</b>
- As % of total product turnover <sup>(3)</sup> (%)	3.0%	1.0%	0.5%	1.1%	<b>0.9%</b>
- As % of total product agency (investor) trading (%)	14.5%	4.4%	2.7%	8.2%	<b>8.1%</b>
- As % of total product retail investor trading (%)	23.9%	7.2%	4.7%	14.7%	<b>15.2%</b>
- As % of total product turnover of online brokers (%)	85.5%	28.0%	12.2%	26.6%	<b>35.2%</b>
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) Product turnover refers to the total turnover in number of contracts of the products in the table section among the products under study.					

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# GLOSSARY

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<b>Hedging</b>	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.
<b>Pure trading</b>	Trading for potential profit in anticipation of a price movement in either the short or long term, but not for hedging or arbitrage purpose.
<b>Arbitrage</b>	Trading to take riskless or near riskless profit from price differentials in related markets.
<b>Principal trading</b>	Trading on the participant firm's own account, whether as a market maker or not, i.e. comprising EP market maker trading and proprietary trading.
<b>Agency trading</b>	Trading on behalf of the participant firm's clients, including client trading channelled from the firm's parent or sister companies.
<b>Market maker trading</b>	Trading as a market maker serving for that product only, including trading by client Registered Traders (RTs) (before 1 February 2007) or corporate entities which have market making arrangement with the EP that has been granted market maker permit in the product (on and after 1 February 2007). Trading in that product using the EP's RT accounts or market making accounts for other products is excluded.
<b>EP proprietary trading</b>	Trading on the participant firm's own account but not as a market maker.
<b>Individual/Retail investors</b>	Investors who trade on their personal account.
<b>Institutional investors</b>	Investors who are not individual/retail investors.
<b>Local investors</b>	Individual/Retail investors residing in Hong Kong or institutional investors operating in Hong Kong      Hong Kong as the source of funds.
<b>Online brokers</b>	EPs who offer online trading service to individual/retail investors.
<b>Overseas investors</b>	Individual/Retail investors residing outside Hong Kong or institutional investors operating outside Hong Kong      overseas as the source of funds.
<b>Retail online trading</b>	Trading originating from orders entered directly by individual/retail investors and channelled to the brokers via electronic media (e.g. the Internet).
<b>Implied contract volume</b>	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.
<b>Notional value</b>	The notional value of a derivatives contract is calculated by multiplying the market price of the underlying asset with the contract multiplier (i.e. the dollar amount per index point for index futures and options) or contract size (the number of underlying shares per contract for stock options). The notional value of the turnover in derivatives is the aggregated notional value of the contracts traded.

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## APPENDIX 1. RESPONSE RATE

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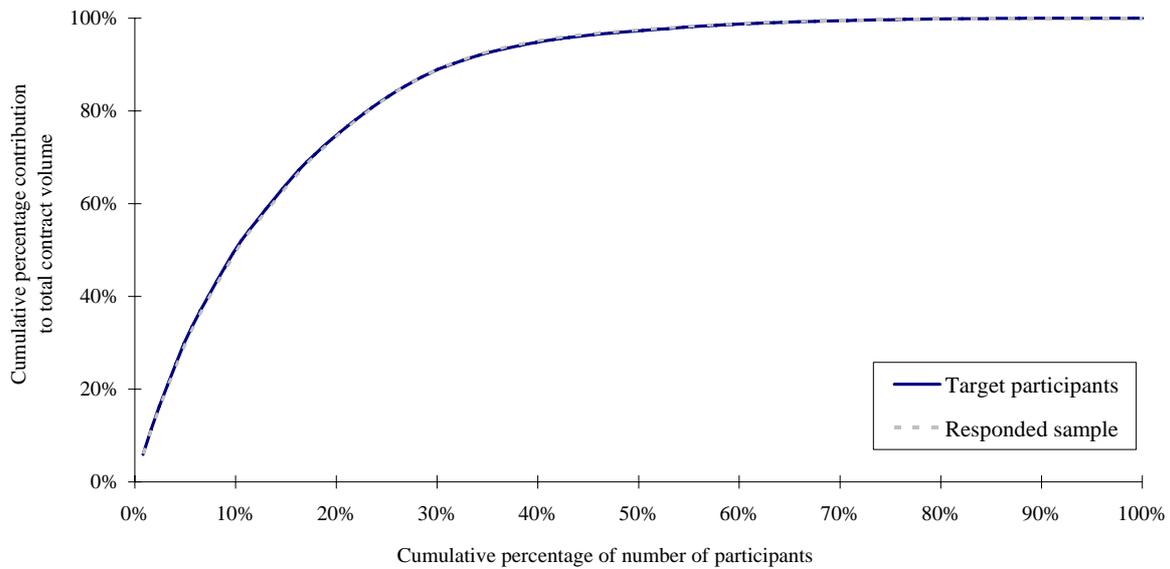
<b>Exchange Participants</b>	<b>Target population</b>	<b>Responded participants</b>	<b>Response rate</b>	<b>% share of turnover in target population</b>
<b>Futures EPs</b>	123	117	95.1%	97.9%
<b>Stock Options EPs</b>	48	46	95.8%	97.8%
<b>All Participants</b>	171	163	95.3%	97.9%

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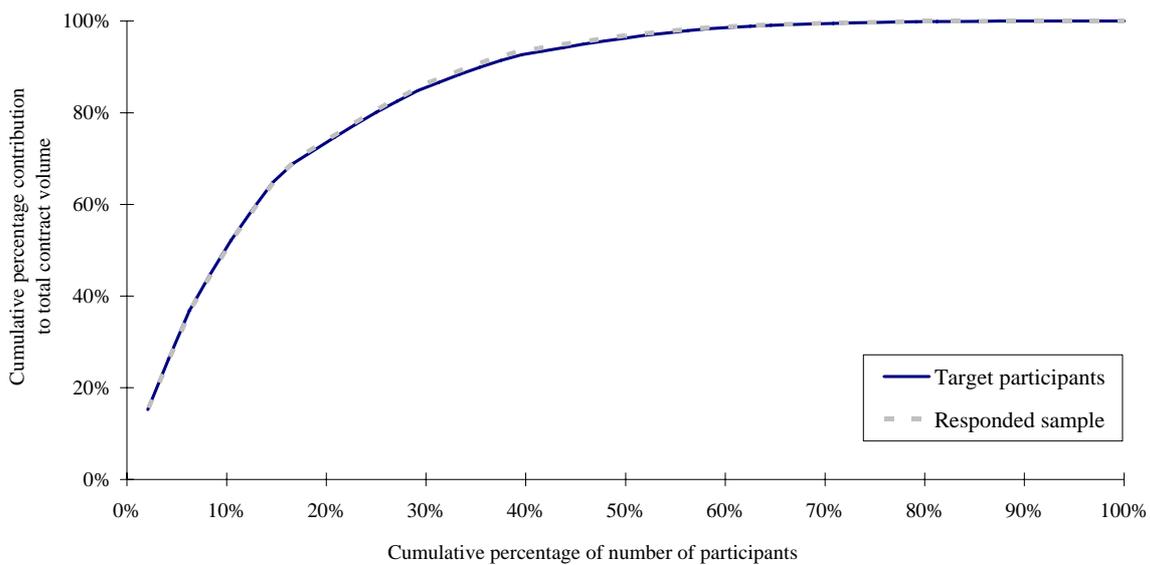
## APPENDIX 2. REPRESENTATIVENESS OF THE RESPONDED SAMPLE RELATIVE TO TARGET RESPONDENTS

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(a) Futures Exchange Participants (Jul 2007 – Jun 2008)



(b) Stock Options Exchange Participants (Jul 2007 – Jun 2008)



## APPENDIX 3. CONTRACT SIZE AND NOTIONAL VALUE OF PRODUCTS UNDER STUDY

Product	Contract multiplier (HK\$ per index point)	Notional value per contract <sup>(1)</sup> (HK\$) (as at 30 June 2008)	Turnover in notional value during the study period	
			(HK\$m)	% of total
HSI futures	50	1,105,101	21,867,228	54.6%
HSI options	50	1,105,101	6,025,000	15.0%
Mini-HSI futures	10	221,020	1,423,150	3.6%
HHI futures	50	595,488	8,079,417	20.2%
HHI options	50	595,488	971,431	2.4%
Stock options	— <sup>(2)</sup>	22,303 <sup>(3)</sup>	1,686,659	4.2%
Overall market			40,052,886	100.0%
Notes:				
(1) See glossary for the definition of notional value.				
(2) The contract size for a stock options class is one board lot of the underlying stock; different stocks may have different board lot sizes.				
(3) The figure is the simple average of the per-contract notional values of all the stock option classes traded during the study period (ranging from HK\$1,740 to HK\$105,800), based on the stock closing prices as at 30 June 2008 or, if a stock options class was delisted prior to the end of the study period, the stock closing price on the last trading day of the stock options class.				
Remark: Notional values are difficult to compile in practice as a calculation of notional values involves the market price of the underlying assets. As the market price of the underlying asset varies, a contract traded at one time may differ in notional value from the same contract traded at another time. For simplicity, the closing price of the underlying asset at a particular period end is used to calculate the notional value during the period.				

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# APPENDIX 4. SURVEY METHODOLOGY

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## (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 2008.

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 2007 to June 2008.
- Products under study were Hang Seng Index (HSI) futures, HSI options, Mini-HSI futures, H-shares Index (HHI) futures, HHI options and stock options.
- Australia was included as a designated origin for the first time in the survey. It was included in “Others” in past surveys.
- The survey was done by mailed questionnaire. 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 Participants which were top-ranked in the target population by contract volume.
- Each Participant’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”. Three EPs in the 2007/08 survey could not provide the answer for the question on trading purposes. They were excluded in the analysis of turnover by trading purpose.

- 
- 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 various derivative products varied greatly. The trading pattern of the various derivative products was also very diverse. Therefore, the non-response of particular EPs would reduce the reliability of the survey findings. However, the error due to non-response should be small 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-trades<sup>6</sup>. The total contract volume for a FEP and the proportion as market making under execution statistics may differ from that under registration statistics. In this survey, execution statistics were used for analysis as in the past surveys.

\* \* \*

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<sup>6</sup> Post-trades are trades being transferred from one broker account to another broker account or from market maker's account to non-market maker's account before clearing, no matter whether the accounts are under the same FEP firm.