Research & Corporate Development

DERIVATIVES MARKET TRANSACTION SURVEY 2011/12

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

CONTENTS

EXECUTIVE SUMMARY

The Derivatives Market Transaction Survey (DMTS) has been conducted annually since 1994 (by Hong Kong Futures Exchange on its market prior to 2001). The objectives are to track the trading composition by investor type and by trading purpose, as well as the market share of retail online trading, in HKEx's derivatives market which comprises futures and options contracts. The 2011/12 survey covers Hang Seng Index (HSI) futures, HSI options, Mini-HSI futures, H-shares Index (HHI) futures, HHI options, Mini-HHI futures and stock options. These products together accounted for 99% of the total turnover of the HKEx derivatives market during the study period of July 2011 to June 2012 (referred to as 2011/12). The overall response rate was 91% and the respondents contributed 98% of the total turnover in products under study during the study period.

The market turnover volume (which referred to the total turnover of products under study) in 2011/12 increased by 6% over the previous year. An increase in turnover volume was recorded for all products under study except stock options which recorded a decrease of 2% in volume. Nevertheless, stock options contributed 50% of the total market volume, albeit in notional value terms they had only a 3% market share.

The key findings of the trading composition of the overall market and by product segment are summarised below.

Trading by transaction purpose (See section 2)

(1) The main transaction purpose of derivatives trading in 2011/12 was ***hedging***, making up 46% of the total derivatives market turnover. The proportion of turnover for ***pure trading*** was also large (42%). ***Arbitrage*** turnover accounted for 12% of the overall market turnover in 2011/12.

(2) The proportion of hedging was generally higher in the trading of options products than of futures products. Pure trading accounted for the majority of trading in most futures products, especially the mini-contracts.

(3) Arbitrage was less common (less than 20%) for the trading in both futures and option products. However, trading volume for arbitrage increased significantly for all index futures but decreased significantly for options products in 2011/12.

Trading by investor type (See section 3)

(4) In 2011/12, the HKEx derivatives market turnover was equally shared by EP principal trading (mostly market maker trading) and agency (investor) trading, a more or less similar pattern attained since 2009/10.

(5) The contribution from ***overseas investors*** reached the highest level of 26% (22% from institutions) after 2004/05, marginally surpassing that of ***local investors*** — 24% (17% from retail) — for the first time. Overseas investor trading volume continued its year-on-year growth for the past decade — 19% in 2011/12 (with growth recorded in every product under study), compared to 6% increase in the total derivatives market turnover.

(6) ***Overseas investors (predominantly institutional)*** were significant contributors to trading in the regular index futures. ***Local retail investors*** were significant contributors to trading in mini-futures, the only product type in which their trading volume recorded year-on-year growth in 2011/12. Trading in option products was dominated by ***EP principal trading*** (mainly market making).

Trading by overseas investors by origin (See section 4)

(7) Among overseas investors, ***UK investors*** were the largest contributor group (28% of overseas investor trading and 7% of total market turnover in 2011/12). They were followed by ***Continental European investors*** (24% and 6% respectively) and ***US investors*** (16% and 4% respectively). Almost all trading from these origins came from institutional investors (over 95%).

(8) The majority of the contribution from Asian investors came from ***Mainland China*** and ***Singaporean investors*** — 12% and 11% respectively of overseas investor trading or 3% of total market volume for each in 2011/12. While trading from Singapore was predominantly institutional (at least 90%), the majority of trading from Mainland was from retail investors (at least 69%).

(9) ***For stock options***, the largest overseas contributors were UK investors (41% of the segment's overseas investor trading) while the largest overseas contributors ***for index futures and options*** were Continental European investors (29% of the segment's overseas investor trading).

(10) ***Mainland investors*** were the second largest contributor group to stock options' overseas investor trading (28%), much higher than their corresponding contribution of 8% for other derivatives. However, in number of contracts, they had equal trading volume (mainly retail trading) in the stock options segment and in other derivatives segment. In contrast, the majority of trading volume from all other origins (mainly institutional trading) was in index futures and options.

Retail online trading (See section 5)

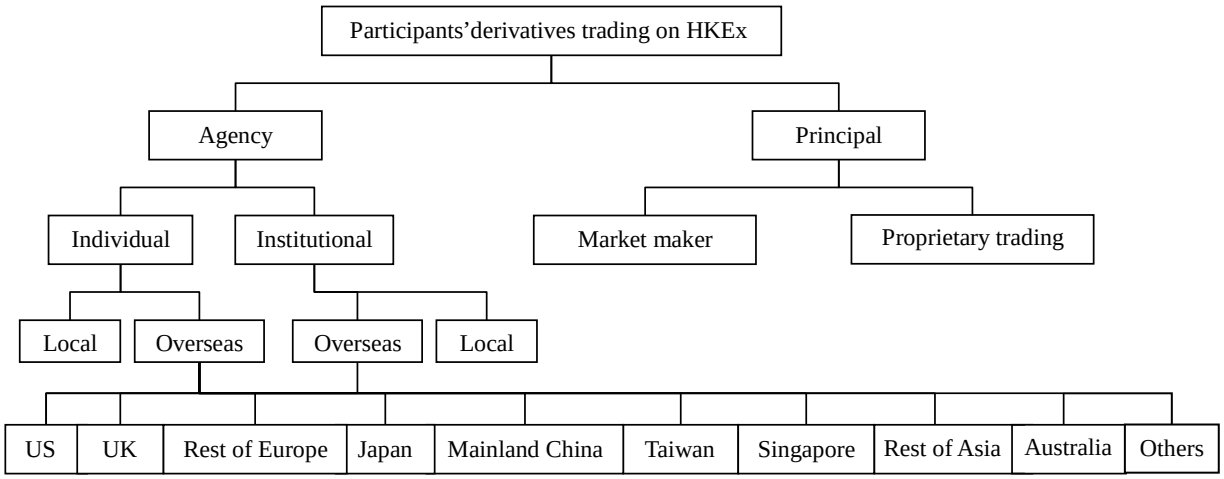
(11) Retail online trading as a proportion of total retail investor trading continued to grow, reaching 63% in 2011/12 from 54% in 2010/11. Its contribution to total market turnover was 13% in 2011/12, compared to 12% in 2010/11.

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[1]. Out of the 240 questionnaires sent out, 218 completed questionnaires were returned, representing an overall response rate of 91%. The responded sample represented 98% in total contract volume of the target population in the products under study. (*See Appendix 1.*)

The survey covers transactions during July 2011 to June 2012[2] 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, Mini-HHI futures and stock options. These together contributed 99% of the total turnover volume of the 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.

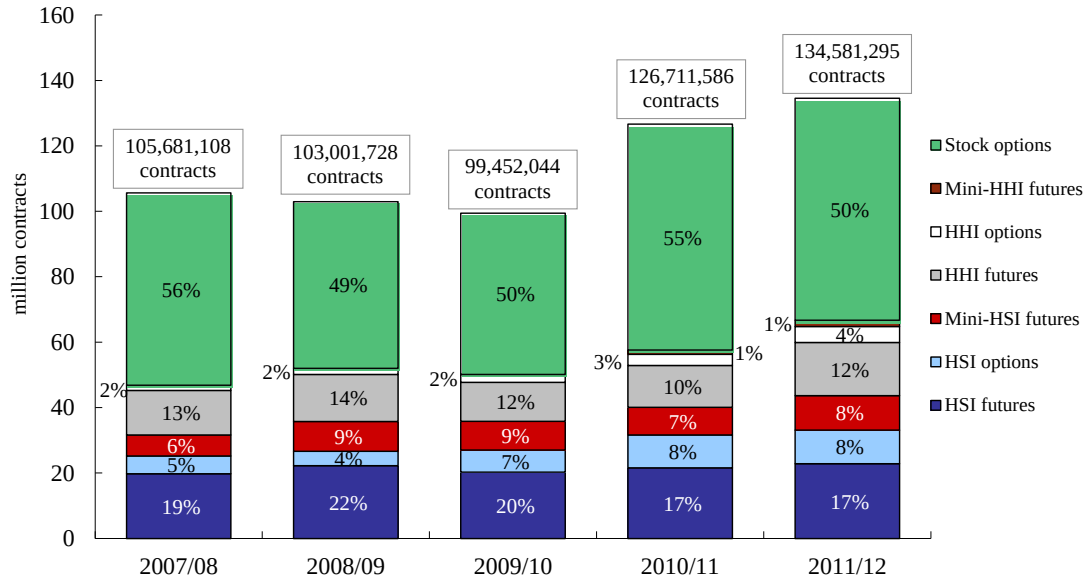
[1] The target population consists of all the EPs which had conducted trading business during the study period excluding those that ceased their operations before the start of the fieldwork. (See Appendix 4 for survey methodology.)

[2] Referred to as the year 2011/12 throughout the report; the same convention is used for the past surveys.

Other derivative products which individually contributed less than 1% of HKEx's total derivatives turnover during the same period were excluded. These products were dividend futures, HSI Volatility Index futures (launched on 20 February 2012), BRICS futures[3] (launched on 30 March 2012), HIBOR futures, Three-year Exchange Fund Note futures, stock futures, gold futures, Mini-HSI options, and flexible index (HSI and HHI) options.

In 2011/12, market turnover (products under study only) increased by 6% to 135 million contracts from 2010/11. The largest contribution to the increase came from HHI futures (+27%, from 13 million contracts in 2010/11 to 16 million contracts in 2011/12) and Mini-HSI futures (+25%, from 8 million contracts to 11 million contracts). Other products under study excluding stock options also increased in turnover in 2011/12 compared to 2010/11 (HSI futures: +6%, HSI options: +2%, HHI options: +42% from a small base, and Mini-HHI futures: +47% from a small base). Stock options, albeit with a volume decrease of 2%, remained the dominant contributor to derivatives market turnover (50%, down from 55% in 2010/11). *(See Figure 1.)*

Figure 1. Contract volume and percentage of total by product under study (2007/08 – 2011/12)



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

Product under study	Year-on-year % change (in contract volume)				
	2007/08	**2008/09**	**2009/10**	**2010/11**	**2011/12**
HSI futures	41%	12%	-9%	7%	6%
HSI options	-9%	-19%	53%	48%	2%
Mini-HSI futures	147%	41%	-3%	-4%	25%
HHI futures	111%	6%	-17%	8%	27%
HHI options	41%	15%	27%	43%	42%
Mini-HHI futures*	n.a.	n.a.	n.a.	n.a.	47%
Stock options	123%	-13%	-3%	40%	-2%
Total product under study	**87%**	**-3%**	**-3%**	**27%**	**6%**

n.a.: Not available

* Mini-HHI futures were launched on 31 March 2008 and were omitted in surveys prior to 2010/11 due to its negligible contribution to the total market contract volume.

[3] These are Brazil's IBOVESPA futures, Russia's MICEX index futures, India's SENSEX Index futures and South Africa's FTSE/JSE Top 40 futures launched under the BRICS Exchange Alliance.

Due to the dominance of the stock options market segment by contract volume, the overall trading composition of the HKEx derivatives market would be largely influenced by that of stock options, which is very different from that of other derivative products (see Section 3). 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 3% share of notional trading value during the study period (see Appendix 3).

In view of this, detailed breakdowns by stock options/other derivative products are provided to assist in more detailed interpretation.

For analysis purposes, the contract volume for each type of trade in the survey was estimated (referred to as the "implied contract volume[4]") based on the actual contract volume for each product and computed from the percentage share of the contract volume for that trade type as obtained from the survey. The relative contribution of each trade type to market volume was computed taking into account of the relative contribution by product type in the actual market turnover (see Appendix 4 for the methodology).

Sections 2 to 5 describe the findings in detail.

[4] See glossary for the definition of implied contract volume.

2. TRANSACTION PURPOSES

The main transaction purpose of derivatives trading in 2011/12 was ***hedging***, making up 46% of the total derivatives market turnover, up from 42% in 2010/11. The proportion of turnover for ***pure trading***[5] was also large (42%, compared to 44% in 2010/11). ***Arbitrage*** turnover accounted for 12% of the overall market turnover in 2011/12, compared to 14% in 2010/11.

The proportion of ***hedging*** in 2011/12 increased across all products under study except stock options for which it remained more or less the same. The proportion of hedging was generally higher in the trading of options products than futures products — the highest for HHI options (68%, up from 60% in 2010/11), 49% for stock options and 47% for HSI options. Nevertheless, hedging also accounted for a significant proportion of trading in HHI futures (49%, up from 37% in 2010/11).

Pure trading accounted for the majority of trading in most futures products, especially the mini-contracts — Mini-HSI futures (58%), Mini-HHI futures (47%) and HSI futures (44%). However, a decrease in their proportion was observed, ranging from 14%-points to 19%-points across the different types of index futures. Pure trading also contributed a considerable proportion of trading in stock options and HSI options (42% and 41% respectively) but much less in HHI options (24%).

Less than 20% of trading in each of the products under study was for ***arbitrage***. The proportion of arbitrage was the highest for trading in HHI futures (19%, up from 12% in 2010/11). Compared to 2010/11, an increase in the proportion of arbitrage was observed across all index futures while a decrease was observed across all options products.

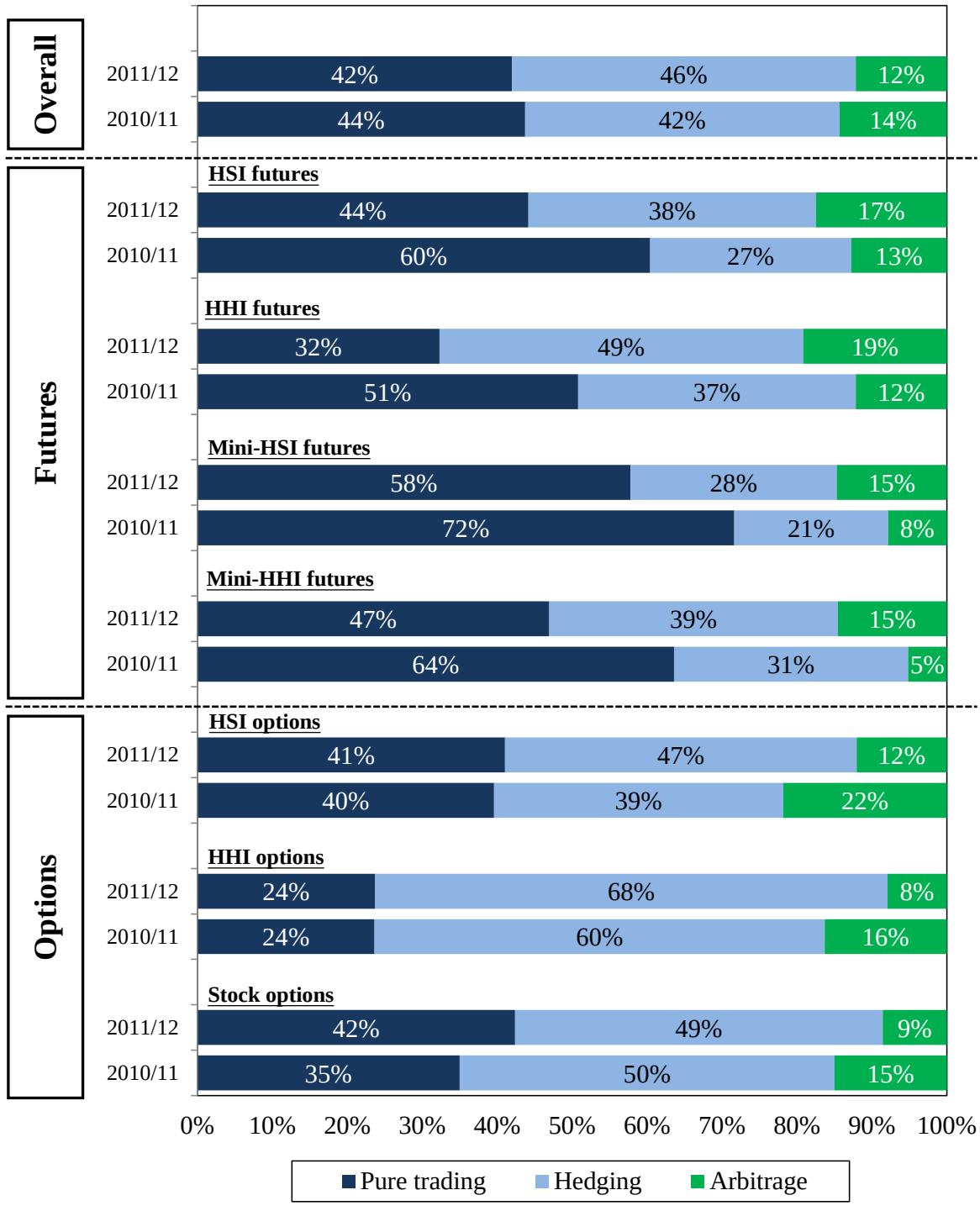
In ***number of contracts***, all products under study except stock options had a year-on-year growth in the contract volume for ***hedging***, in particular Mini-HHI futures (82%), Mini-HSI futures (68%), HHI futures and options (66% and 62% respectively) and HSI futures (51%). ***Pure trading*** grew by 2% in contract volume, driven mainly by a year-on-year growth of 19% in pure trading for stock options.

The contract volume for ***arbitrage*** significantly increased for trading in all index futures — Mini-HHI futures (+313% from a small base), Mini-HSI futures (+135%), HHI futures (+100%) and HSI futures (+45%); but significantly decreased for options products, especially stock options (-44%). Given the dominance of stock options in total market turnover, overall derivatives contract volume for arbitrage decreased year-on-year by 10%.

(See Figure 2 and Table 1.)

[5] EPs may not know 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.

Figure 2. Distribution of derivatives market trading volume by transaction purpose for overall market and each product (2011/12 vs 2010/11)



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

Table 1. Distribution of derivatives market trading volume by transaction purpose for overall market and each product (2007/08 – 2011/12)

Product	Purpose	Percentage contribution [1]					Implied contract volume[2] 2011/12	
		2007/08	2008/09	2009/10	2010/11	2011/12	No. of contracts	Y-o-Y change
HSI futures	Pure trading	50.9	54.3	55.5	60.4	**44.2**	**10,101,865**	-22.7%
	Hedging	36.5	32.0	32.6	26.8	**38.4**	**8,774,272**	51.3%
	Arbitrage	12.7	13.6	11.9	12.8	**17.5**	**3,998,833**	44.8%
	Total	100.0	100.0	100.0	100.0	**100.0**	**22,874,971**	5.8%
HHI futures	Pure trading	55.2	43.7	37.8	50.8	**32.3**	**5,250,017**	-19.4%
	Hedging	32.2	40.8	43.9	37.1	**48.5**	**7,892,089**	66.1%
	Arbitrage	12.5	15.5	18.3	12.2	**19.2**	**3,117,156**	100.0%
	Total	100.0	100.0	100.0	100.0	**100.0**	**16,259,262**	26.8%
Mini-HSI futures	Pure trading	78.2	76.9	63.9	71.6	**57.8**	**6,117,308**	1.2%
	Hedging	4.7	16.9	25.6	20.5	**27.5**	**2,913,277**	68.2%
	Arbitrage	17.0	6.2	10.4	7.8	**14.7**	**1,554,178**	135.0%
	Total	100.0	100.0	100.0	100.0	**100.0**	**10,584,762**	25.5%
Mini-HHI futures [3]	Pure trading	n.a.	n.a.	n.a.	63.6	**46.9**	**907,231**	8.5%
	Hedging	n.a.	n.a.	n.a.	31.2	**38.5**	**744,405**	81.5%
	Arbitrage	n.a.	n.a.	n.a.	5.2	**14.6**	**281,300**	312.8%
	Total	n.a.	n.a.	n.a.	100.0	**100.0**	**1,932,936**	47.1%
HSI options	Pure trading	39.5	47.9	38.1	39.6	**41.1**	**4,201,717**	5.9%
	Hedging	45.9	39.2	44.6	38.6	**46.9**	**4,801,331**	24.1%
	Arbitrage	14.6	12.9	17.3	21.8	**12.0**	**1,231,690**	-43.7%
	Total	100.0	100.0	100.0	100.0	**100.0**	**10,234,738**	2.1%
HHI options	Pure trading	46.2	58.4	30.3	23.6	**23.7**	**1,147,725**	42.3%
	Hedging	35.9	34.0	56.1	60.1	**68.4**	**3,310,331**	61.6%
	Arbitrage	17.9	7.5	13.6	16.3	**7.9**	**383,944**	-31.0%
	Total	100.0	100.0	100.0	100.0	**100.0**	**4,842,001**	41.9%
Futures & options (excl. stock	**Pure trading**	54.7	55.0	49.2	54.2	**41.6**	**27,725,864**	-11.2%
	Hedging	31.6	32.5	36.8	32.3	**42.6**	**28,435,705**	52.8%
	Arbitrage	13.7	12.6	14.0	13.5	**15.8**	**10,567,101**	35.5%
	Total	100.0	100.0	100.0	100.0	**100.0**	**66,728,670**	15.8%
Stock options	Pure trading	29.3	28.1	29.2	35.0	**42.4**	**28,750,673**	18.9%
	Hedging	43.8	50.6	53.6	50.0	**49.1**	**33,300,516**	-3.6%
	Arbitrage	26.9	21.3	17.2	15.0	**8.6**	**5,801,436**	-43.9%
	Total	100.0	100.0	100.0	100.0	**100.0**	**67,852,625**	-1.8%
Overall market	**Pure trading**	40.2	41.7	39.3	43.7	**42.0**	**56,476,537**	1.9%
	Hedging	38.6	41.5	45.1	42.0	**45.9**	**61,736,221**	16.1%
	Arbitrage	21.2	16.9	15.6	14.3	**12.2**	**16,368,537**	-9.8%
	Total	100.0	100.0	100.0	100.0	**100.0**	**134,581,295**	6.2%
Total contract volume [4]		105,681,108	103,001,728	99,452,044	126,711,586	**134,581,295**		

n.a.: Not available

Notes:

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

(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 trading purpose is computed.

(3) Mini-HHI futures were included in the survey for the first time in 2010/11. The product was launched on 31 March 2008 and was omitted in previous surveys due to its negligible contribution to the total market contract volume.

(4) Actual total contract volume of all products under study during the study period.

3. DISTRIBUTION OF TRADING BY INVESTOR TYPE

3.1 Overall pattern

(See Figures 3 – 7.)

In 2011/12, turnover in HKEx's derivatives market was equally shared by ***EP principal trading*** and ***agency (investor) trading***, a more or less similar pattern attained since 2009/10. In addition, the contribution from overseas investors marginally surpassed that of local investors for the first time (26% vs 24%).

EP principal trading accounted for 50% of total derivatives market contract volume (compared to 51% in 2010/11) — 38% from market maker trading (39% in 2010/11) and 12% from EP proprietary trading (the same as in 2010/11). Over the past decade, EP principal trading contributed 51% of the cumulative market turnover.

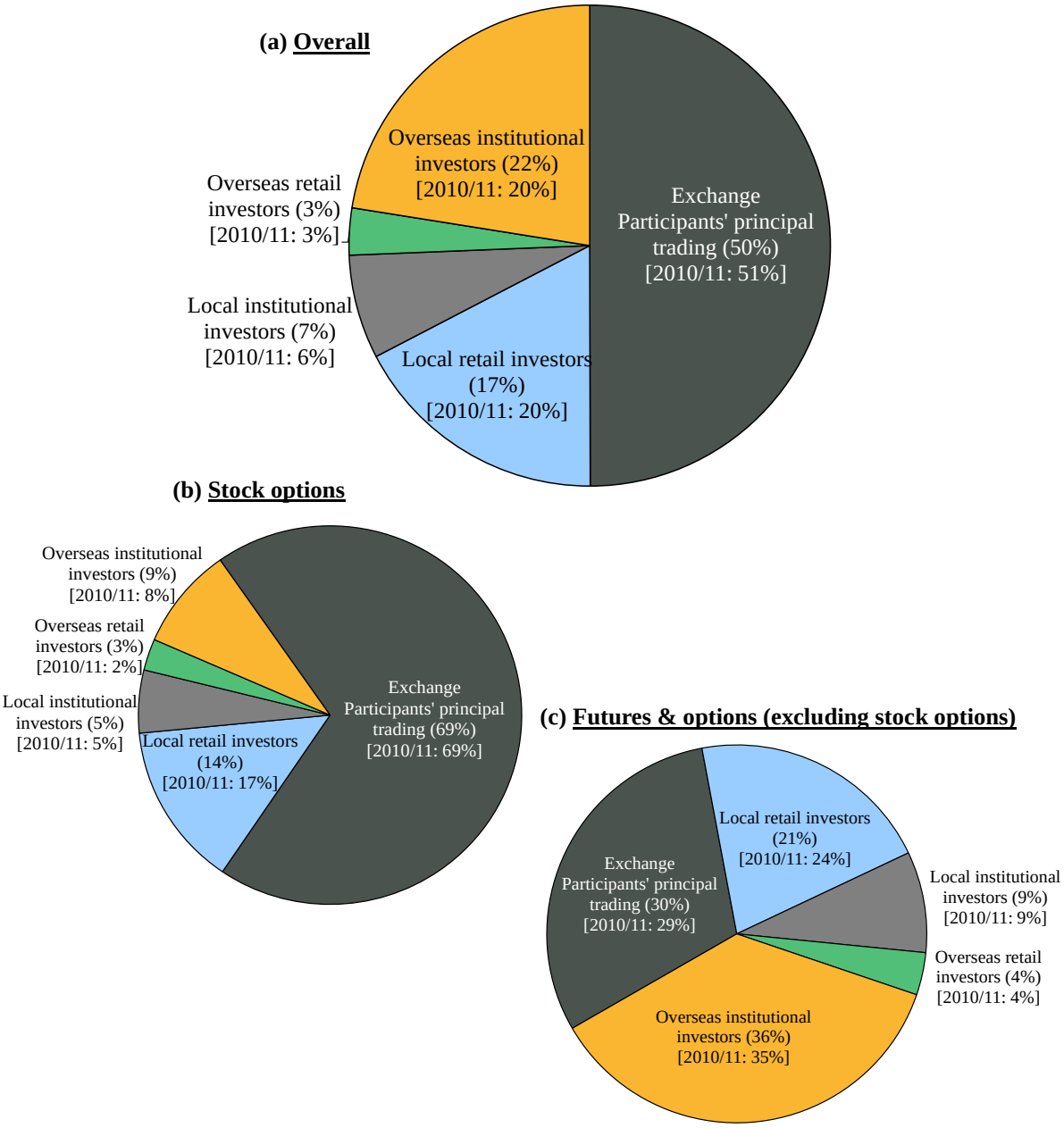
EP principal trading remained dominant in stock option trading (69%, the same as that in 2010/11) but contributed only 30% (29% in 2010/11) in other derivatives. Similar to the cases in the past few years, ***the majority of EP principal trading came from stock options*** — stock options contributed 50% of the total market turnover but its EP principal trading contributed 70% to total EP principal trading in derivatives and 88% of market making.

The contribution from ***overseas investors*** was 26% (22% from institutions) in 2011/12, the highest attained after 2004/05. Their cumulative market share in the past decade was 23% (20% from institutions). The contribution from ***local investors*** was 24% (17% from retail and 7% from institutions) in 2011/12 compared to 26% in 2010/11. Over the past decade, local investors contributed 26% of the cumulative market turnover.

The contribution from ***institutional investors*** (local and overseas) to total market turnover was 29% in 2011/12, the highest since 2005/06 when the level was similar. Their cumulative market share in the past decade was 26%. ***Retail investors***' contribution (local and overseas) was 21% in 2011/12, compared to 23% in 2010/11. Their cumulative market share in the past decade was 22%.

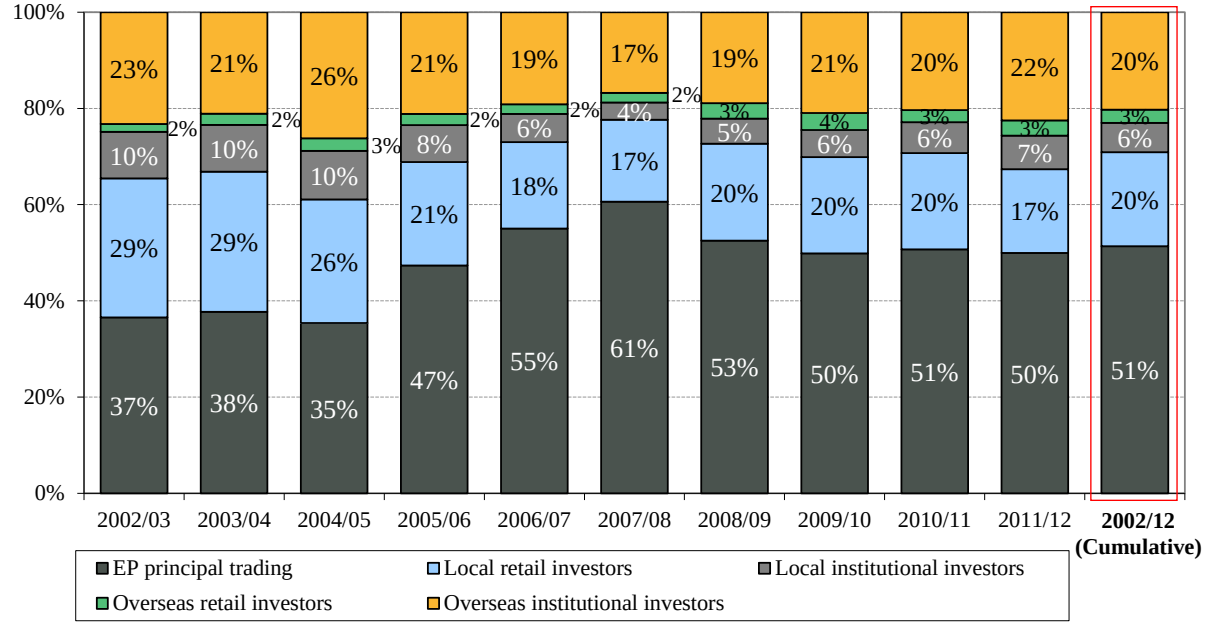
In ***number of contracts***, EP principal trading increased by 5%, compared to the 6% increase in the total derivatives market turnover. Local investor trading volume decreased by 2% from 2010/11, mainly reflecting the decrease in local retail investor trading volume (-8%) despite a 16% increase in local institutional investor trading volume. Overseas investor trading volume continued its year-on-year growth for the past decade and increased by 19% from 2010/11.

Figure 3. Distribution of derivatives market trading volume by investor type (Jul 2011 – Jun 2012)



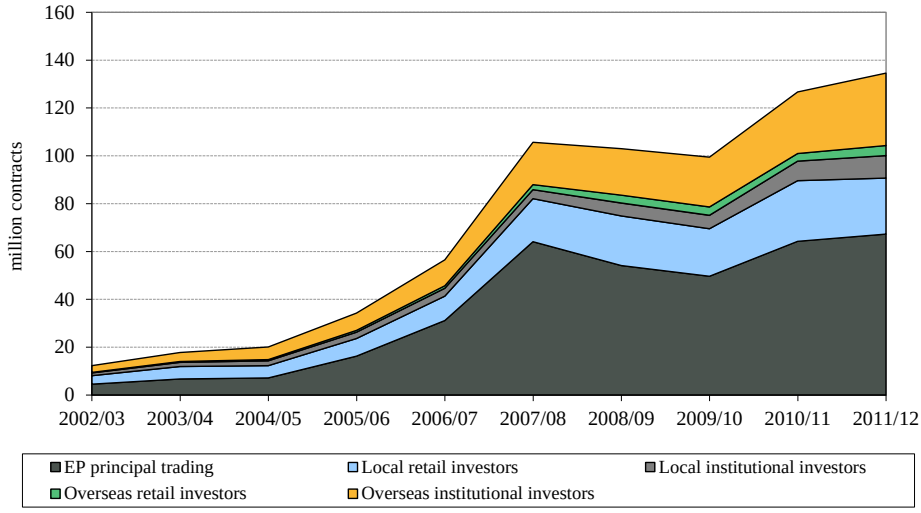
Notes: (1) Exchange Participants' principal trading comprises market maker trading and EP proprietary trading.
(2) Numbers may not add up to 100% due to rounding.

Figure 4. Distribution of derivatives market trading volume by investor type (2002/03 – 2011/12)



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

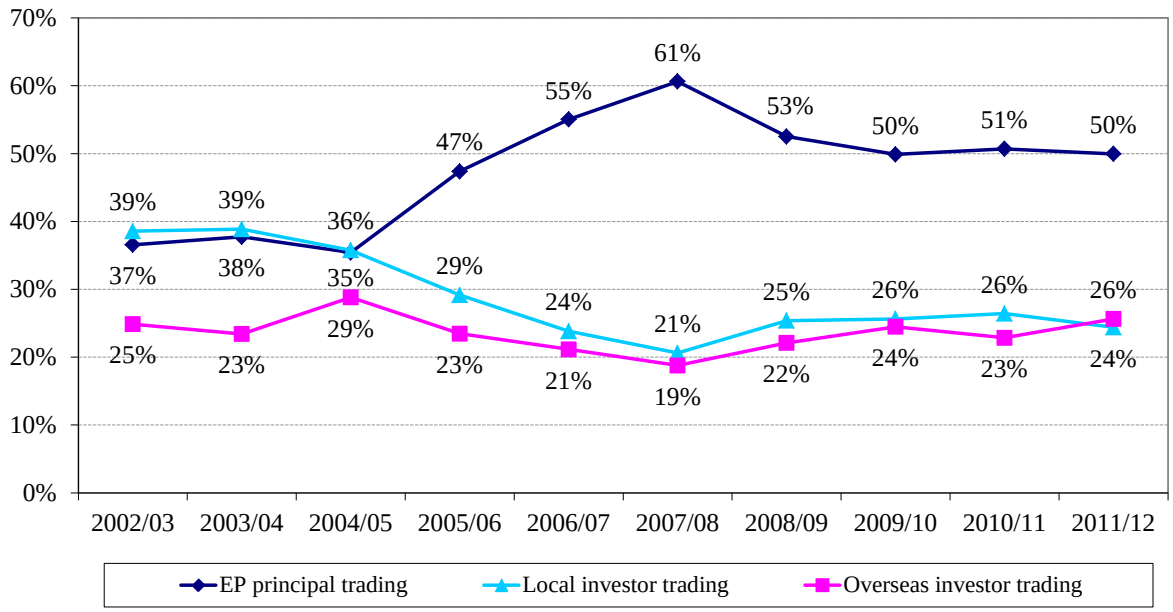
Figure 5. Implied contract volume of derivatives by investor type (2002/03 – 2011/12)



Type of trade	Year-on-year % change									
	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
EP principal trading	22.24%	48.70%	6.19%	128.14%	91.57%	105.85%	-15.57%	-8.30%	29.52%	4.66%
Market maker	n.a.	46.72%	5.64%	141.11%	95.95%	128.95%	-20.73%	-12.30%	36.80%	4.96%
Proprietary trading	n.a.	53.01%	7.34%	101.51%	80.79%	44.34%	6.24%	4.31%	10.22%	3.68%
Local investor trading	8.71%	45.13%	4.10%	39.07%	34.75%	61.63%	20.05%	-2.47%	31.36%	-1.96%
Retail	21.86%	45.29%	-0.29%	42.66%	38.21%	76.70%	15.52%	-4.12%	27.35%	-7.63%
Institutional	-17.72%	44.65%	17.25%	29.95%	25.07%	15.11%	41.53%	3.91%	45.67%	15.73%
Overseas investor trading	44.77%	35.72%	39.27%	38.84%	48.65%	65.84%	14.77%	6.96%	18.98%	19.09%
Retail	-40.70%	108.07%	28.55%	52.10%	39.87%	88.65%	56.14%	6.22%	-8.93%	32.26%
Institutional	60.77%	30.72%	40.45%	37.51%	49.63%	63.47%	9.81%	7.08%	23.70%	17.45%
Retail investor trading	*15.44%*	*48.59%*	*1.83%*	*43.54%*	*38.38%*	*77.89%*	*19.82%*	*-2.69%*	*21.89%*	*-3.14%*
Institutional investor trading	*25.53%*	*34.82%*	*33.12%*	*35.41%*	*43.08%*	*52.19%*	*15.40%*	*6.40%*	*28.35%*	*17.04%*
Total	**21.11%**	**44.10%**	**13.12%**	**70.56%**	**64.93%**	**86.86%**	**-2.54%**	**-3.45%**	**27.41%**	**6.21%**

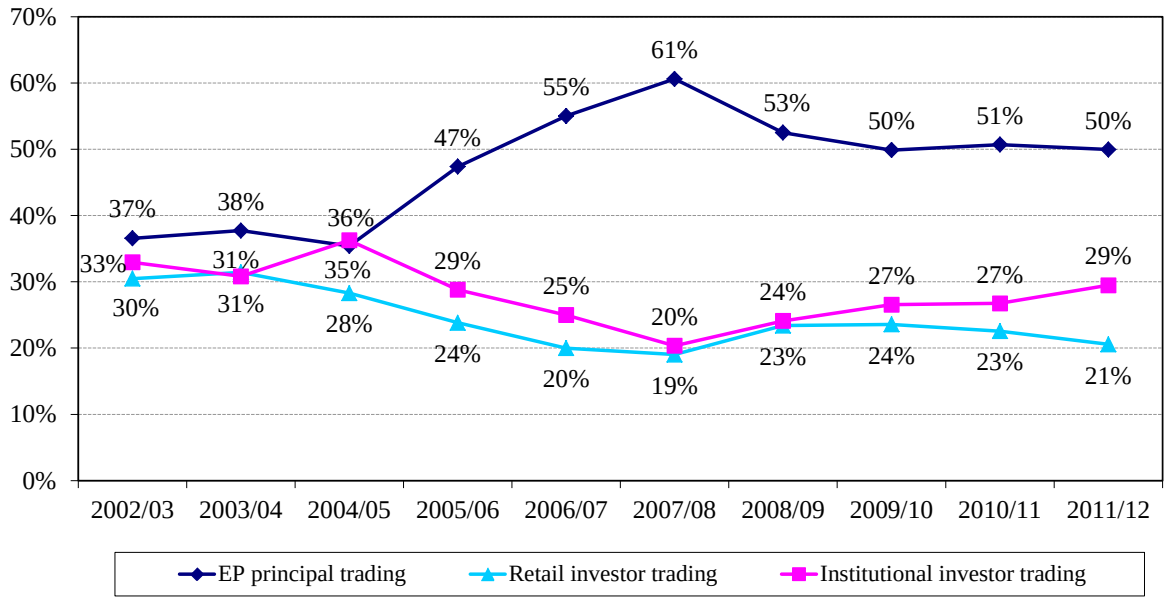
n.a.: Not available
Note: Exchange Participants' principal trading comprises market maker trading and EP proprietary trading.

Figure 6. Distribution of derivatives market trading volume by investor type (local vs overseas) (2002/03 – 2011/12)



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) (2002/03 – 2011/12)



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

3.2 Trading by product

(See Figure 8 and Tables 2 and 3.)

The trading distribution by investor type differed by product type. To summarise:

- ***Overseas investors (predominantly institutional)*** were significant contributors to trading in the regular index futures. Their trading volume recorded a year-on-year growth in every product under study.
- ***Local retail investors*** were significant contributors to trading in mini-futures. Their trading volume recorded a year-on-year growth only in mini-futures products but a decrease in all other products under study.
- ***EP principal trading (mainly market making)*** dominated the trading in option products. Its trading volume recorded a year-on-year growth in every product under study except stock options.

The pattern for specific products is described below.

For ***HSI futures***, the contribution from overseas institutional investors was the most significant and reached the highest level in record — 44%, compared to 43% in 2010/11. EP principal trading and local retail investor trading were also significant, each contributing 22% of the product's turnover. However, local retail investors' contribution continued its downtrend in the past few years while EP principal trading's were rather steady. In ***number of contracts***, local retail investor trading dropped by 8% in 2011/12 while overseas institutional investor trading and EP principal trading increased by 7% and 12% respectively, compared to 6% increase in the product's volume.

For ***HHI futures***, overseas investors remained the major participant type. In the past three years, their contribution stood at the highest level of close to 60% since launch — 58% in 2011/12, mainly from overseas institutional investors (56%). The contribution from EP principal trading was also significant (26%, up from 23% in 2010/11). Their contract volume increased by 41% year-on-year compared to 27% increase in the product's volume. This might be related to the significant increase in the proportion of the product's volume for hedging purpose (see Section 2 above). Local investors' contribution was 16% (almost equally split by retail and institutional investors) but had been down to the lowest level in record in the past three years. Their trading volume increased by 16% from 2010/11, in contrast to the 25% increase in overseas investor trading volume.

For ***Mini-HSI futures***, local retail investors remained the major participant type, contributing 47% of the product's turnover in 2011/12 (compared to 49% in 2010/11). The contribution from EP principal trading was also significant (25%, up from 22% in 2010/11), with a 44% year-on-year growth in contract volume compared to 26% growth in the product's volume. Overseas investors contributed 23% (15% from institutions), with a year-on-year growth of 14% in contract volume. Local institutional investors, though had a small contribution (6%), recorded a remarkable growth of 63% in contract volume from 2010/11.

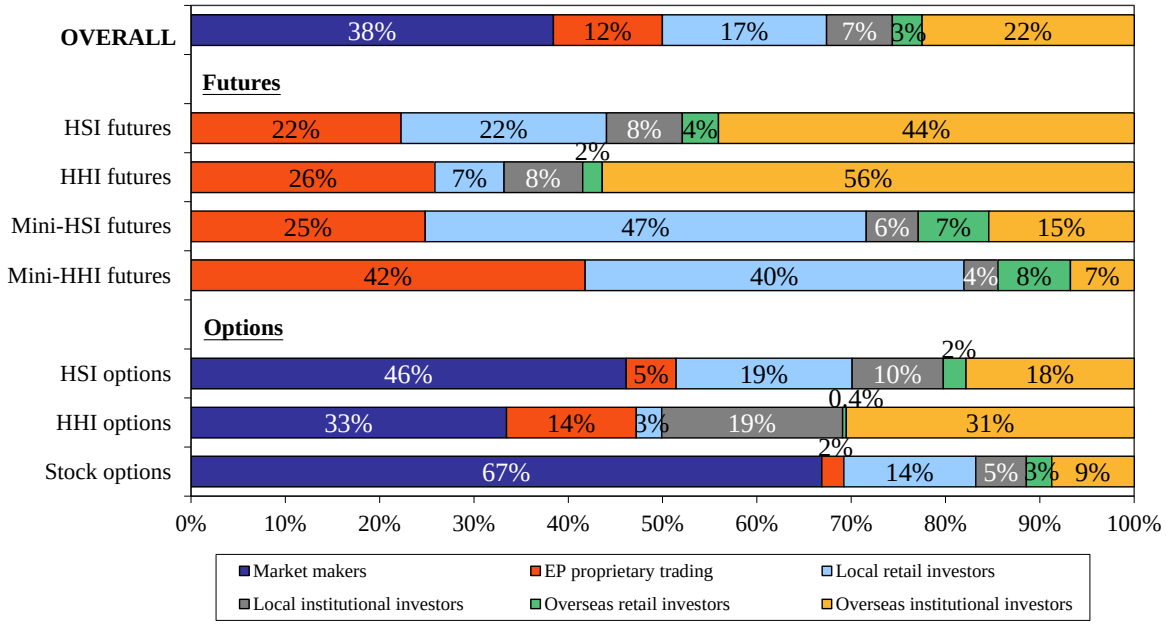
For ***Mini-HHI futures***, EP principal trading and local retail investors were the two main contributor groups. EP principal trading recorded a substantial year-on-year growth of 96% in contract volume and their contribution increased from 31% in 2010/11 to 42% in 2011/12. On the other hand, local retail investors had their contribution down from 53% in 2010/11 to 40%, with an 11% growth in contract volume compared to 47% growth in the product's volume. Overseas investors contributed about 14% of the product's turnover in 2011/12 — 8% from retail and 7% from institutions, a similar pattern as in 2010/11. They recorded a growth rate of 50% in contract volume comparable to that in the product's volume.

For ***HSI options***, EP principal trading remained the major participant type, contributing 51% of the product's turnover in 2011/12 (compared to 52% in 2010/11) — 46% from market maker trading (vs 44% in 2010/11) and 5% from proprietary trading (down from 8% in 2010/11). Local investors' contribution was 28%, down from 35% in both 2009/10 and 2010/11. Overseas investors contributed 20% of the product's turnover (up from 13% in 2010/11), mainly from institutions (18%, up from 10% in 2010/11). The marginal growth of 2% in the product's contract volume in the year was mainly supported by overseas institutional investor trading which increased by 74% in contract volume from 2010/11 while all other types of investor trading recorded a decrease in contract volume. Notably, EP proprietary trading volume recorded a significant decrease of 35%.

For ***HHI options***, EP principal trading and overseas institutional investors were the two major contributor groups, contributing respectively 47% (33% from market making) and 31% of the product's volume, up from 45% and 23% respectively in 2010/11. In number of contracts, overseas institutional investor trading and market maker trading increased by 86% and 67% respectively in 2011/12, compared to 42% increase in the product's volume. The contribution from local investors decreased from 31% in 2010/11 to 22% in 2011/12, mainly from local institutions (19%) whose trading volume increased by only 4% year-on-year.

For ***stock options***, EP principal trading continued to dominate the turnover (69%, 67% from market making) in 2011/12, the same level as in 2010/11. Local investors' contribution was 19% (compared to 21% in 2010/11) — 14% from retail and 5% from institutions. The contribution from overseas investor trading continued its uptrend in the past few years and reached the highest level of 11% in 2011/12. In ***number of contracts***, overseas investor trading volume increased by 16% from 2010/11, especially trading from overseas retail investors (+66%), compared to the decrease of 2% in the product's volume which was mainly resulted from the drop in local retail investor trading volume (-17%).

Figure 8. Distribution of derivatives market trading volume by investor type for overall market and each product (Jul 2011 – Jun 2012)



Notes:
(1) Market maker trading and EP proprietary trading are components of EP principal trading.
(2) Numbers may not add up to 100% due to rounding.

Table 2. Distribution of derivatives trading by investor type (2007/08 – 2011/12)

Type of investor	Percentage contribution [1]					Implied contract volume [2] 2011/12	
	2007/08	2008/09	2009/10	2010/11	2011/12	No. of contracts	Y-o-Y change
HSI Futures							
Market makers	-	-	-	-	-	-	-
Proprietary trading	21.0	20.0	18.9	21.0	**22.3**	**5,091,171**	**12.4%**
Local investors	38.3	40.9	36.2	32.0	**29.8**	**6,823,367**	**-1.3%**
Retail	32.2	31.8	30.3	25.0	**21.8**	**4,985,411**	**-7.8%**
Institutional	6.1	9.1	6.0	7.0	**8.0**	**1,837,956**	**22.1%**
Overseas investors	40.7	39.2	44.9	47.1	**47.9**	**10,960,433**	**7.7%**
Retail	4.4	4.7	6.1	3.7	**3.8**	**877,469**	**11.1%**
Institutional	36.2	34.5	38.8	43.4	**44.1**	**10,082,964**	**7.4%**
Total	100.0	100.0	100.0	100.0	**100.0**	**22,874,971**	**5.8%**
HHI Futures							
Principal trading [4]	17.6	22.3	26.4	23.2	**25.9**	**4,205,214**	**41.1%**
Market makers	-	-	-	-	-	-	-
Proprietary trading	17.6	22.3	26.4	23.2	**25.9**	**4,205,214**	**41.1%**
Local investors	30.8	23.9	15.7	17.2	**15.7**	**2,544,715**	**15.5%**
Retail	24.7	16.9	11.2	9.9	**7.3**	**1,188,976**	**-5.9%**
Institutional	6.1	7.0	4.5	7.3	**8.3**	**1,355,738**	**44.3%**
Overseas investors	51.6	53.8	58.0	59.6	**58.5**	**9,509,333**	**24.5%**
Retail	2.7	4.6	2.4	2.2	**2.1**	**339,155**	**21.8%**
Institutional	48.9	49.2	55.5	57.4	**56.4**	**9,170,178**	**24.6%**
Total	100.0	100.0	100.0	100.0	**100.0**	**16,259,262**	**26.8%**
Mini-HSI Futures							
Market makers	-	-	-	-	-	-	-
Proprietary trading	29.3	20.5	19.7	21.6	**24.8**	**2,627,460**	**44.2%**
Local investors	60.1	61.8	52.1	53.3	**52.3**	**5,533,454**	**23.1%**
Retail	58.3	57.6	46.5	49.0	**46.8**	**4,949,377**	**19.6%**
Institutional	1.8	4.1	5.6	4.2	**5.5**	**584,078**	**63.0%**
Overseas investors	10.7	17.7	28.1	25.1	**22.9**	**2,423,848**	**14.4%**
Retail	7.3	8.7	9.3	7.5	**7.5**	**791,288**	**24.7%**
Institutional	3.4	9.0	18.9	17.6	**15.4**	**1,632,559**	**10.0%**
Total	100.0	100.0	100.0	100.0	**100.0**	**10,584,762**	**25.5%**
Mini-HHI Futures [3]							
Market makers	-	-	-	-	-	-	-
Proprietary trading	n.a.	n.a.	n.a.	31.4	**41.8**	**807,584**	**96.0%**
Local investors	n.a.	n.a.	n.a.	54.5	**43.8**	**845,954**	**18.2%**
Retail	n.a.	n.a.	n.a.	53.1	**40.2**	**776,281**	**11.3%**
Institutional	n.a.	n.a.	n.a.	1.4	**3.6**	**69,672**	**288.2%**
Overseas investors	n.a.	n.a.	n.a.	14.2	**14.5**	**279,398**	**49.9%**
Retail	n.a.	n.a.	n.a.	8.1	**7.7**	**148,666**	**40.3%**
Institutional	n.a.	n.a.	n.a.	6.1	**6.8**	**130,733**	**62.6%**
Total	n.a.	n.a.	n.a.	100.0	**100.0**	**1,932,936**	**47.1%**
HSI Options							
Principal trading [4]	56.0	51.1	47.0	51.8	**51.4**	**5,263,682**	**1.3%**
Market makers	47.3	42.2	39.0	43.6	**46.1**	**4,722,251**	**8.2%**
Proprietary trading	8.7	8.8	8.0	8.3	**5.3**	**541,431**	**-34.7%**
Local investors	21.2	31.8	34.6	35.0	**28.3**	**2,898,420**	**-17.3%**
Retail	16.1	19.9	22.5	22.7	**18.7**	**1,909,087**	**-16.0%**
Institutional	5.1	11.9	12.1	12.3	**9.7**	**989,333**	**-19.7%**
Overseas investors	22.8	17.1	18.4	13.2	**20.3**	**2,072,636**	**56.6%**
Retail	2.6	2.6	3.0	2.7	**2.4**	**248,020**	**-9.8%**
Institutional	20.2	14.6	15.4	10.5	**17.8**	**1,824,616**	**74.0%**
Total	100.0	100.0	100.0	100.0	**100.0**	**10,234,738**	**2.1%**
HHI Options							
Principal trading [4]	34.9	33.9	37.8	44.8	**47.2**	**2,285,636**	**49.5%**
Market makers	23.4	21.6	22.8	28.5	**33.4**	**1,619,033**	**66.6%**
Proprietary trading	11.5	12.3	15.0	16.3	**13.8**	**666,603**	**19.6%**
Local investors	26.5	35.1	30.6	30.9	**21.9**	**1,059,111**	**0.5%**
Retail	13.1	14.5	10.3	4.7	**2.7**	**130,176**	**-19.1%**
Institutional	13.3	20.5	20.3	26.2	**19.2**	**928,935**	**4.0%**
Overseas investors	38.6	31.1	31.6	24.3	**30.9**	**1,497,254**	**80.7%**
Retail	2.9	3.1	2.3	1.0	**0.4**	**19,595**	**-40.0%**
Institutional	35.8	27.9	29.2	23.3	**30.5**	**1,477,659**	**85.6%**
Total	100.0	100.0	100.0	100.0	**100.0**	**4,842,001**	**41.9%**
Futures & options (excl. stock options)							
Principal trading [4]	25.7	23.8	25.5	28.6	**30.4**	**20,280,748**	**23.1%**
Market makers	6.2	4.4	6.4	9.3	**9.5**	**6,341,285**	**18.8%**
Proprietary trading	19.4	19.5	19.2	19.3	**20.9**	**13,939,463**	**25.2%**
Local investors	36.8	38.9	33.6	32.8	**29.5**	**19,705,020**	**4.3%**
Retail	31.1	30.5	26.6	24.2	**20.9**	**13,939,307**	**0.0%**
Institutional	5.6	8.3	7.1	8.6	**8.6**	**5,765,713**	**16.6%**
Overseas investors	37.6	37.3	40.8	38.7	**40.1**	**26,742,902**	**20.1%**
Retail	4.1	5.1	5.2	3.7	**3.6**	**2,424,194**	**14.6%**
Institutional	33.5	32.2	35.6	35.0	**36.4**	**24,318,708**	**20.6%**
Total	100.0	100.0	100.0	100.0	**100.0**	**66,728,670**	**15.8%**

(to be continued on next page)

Table 2. Distribution of derivatives trading by investor type (2007/08 – 2011/12) (cont'd)

Type of investor	Percentage contribution [1]					Implied contract volume [2] 2011/12	
	2007/08	2008/09	2009/10	2010/11	2011/12	No. of contracts	Y-o-Y change
Stock options							
Principal trading [4]	88.6	81.8	74.7	69.2	**69.2**	**46,962,910**	**-1.7%**
Market makers	83.2	76.1	66.6	63.6	**66.9**	**45,372,941**	**3.3%**
Proprietary trading	5.4	5.7	8.1	5.6	**2.3**	**1,589,969**	**-58.7%**
Local investors	7.7	11.6	17.5	21.1	**19.4**	**13,129,766**	**-10.1%**
Retail	5.7	9.6	13.4	16.5	**14.0**	**9,487,534**	**-16.9%**
Institutional	2.0	2.0	4.1	4.6	**5.4**	**3,642,232**	**14.4%**
Overseas investors	3.7	6.6	7.8	9.7	**11.4**	**7,759,948**	**15.9%**
Retail investors	0.4	1.3	1.9	1.6	**2.7**	**1,823,101**	**66.5%**
Institutional investors	3.4	5.3	6.0	8.1	**8.7**	**5,936,847**	**6.0%**
Total	100.0	100.0	100.0	100.0	**100.0**	**67,852,625**	**-1.8%**
Overall market							
Principal trading [4]	60.6	52.5	49.9	50.7	**50.0**	**67,243,658**	**4.7%**
Market makers	49.0	39.9	36.2	38.9	**38.4**	**51,714,226**	**5.0%**
Proprietary trading	11.6	12.6	13.7	11.8	**11.5**	**15,529,432**	**3.7%**
Local investors	20.6	25.4	25.6	26.4	**24.4**	**32,834,787**	**-2.0%**
Retail investors	17.0	20.2	20.0	20.0	**17.4**	**23,426,842**	**-7.6%**
Institutional investors	3.6	5.2	5.6	6.4	**7.0**	**9,407,945**	**15.7%**
Overseas investors	18.8	22.1	24.5	22.9	**25.6**	**34,502,851**	**19.1%**
Retail investors	2.0	3.2	3.5	2.5	**3.2**	**4,247,296**	**32.3%**
Institutional investors	16.8	18.9	20.9	20.3	**22.5**	**30,255,555**	**17.5%**
Total	100.0	100.0	100.0	100.0	**100.0**	**134,581,295**	**6.2%**

– : Not applicable; n.a.: Not available

Notes: (1) Numbers may not add up to 100% due to rounding.

(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) Mini-HHI futures were included in the survey for the first time in 2010/11. The product was launched on 31 March 2008 and was omitted in previous surveys due to its negligible contribution to the total market contract volume.

(4) Principal trading comprises market maker trading and EP proprietary trading.

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

						2011/12						
	2007/08 Overall	2008/09 Overall	2009/10 Overall	2010/11 Overall	2011/12 Overall	HSI futures	HSI options	Mini-HSI futures	HHI futures	HHI options	Mini-HHI futures	Stock options
All trading												
Principal#	60.6	52.5	49.9	50.7	**50.0**	22.3	51.4	24.8	25.9	47.2	41.8	69.2
Agency	39.4	47.5	50.1	49.3	**50.0**	77.7	48.6	75.2	74.1	52.8	58.2	30.8
	100.0	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	52.3	53.5	51.1	53.6	**48.8**	38.4	58.3	69.5	21.1	41.4	75.2	62.9
Overseas	47.7	46.5	48.9	46.4	**51.2**	61.6	41.7	30.5	78.9	58.6	24.8	37.1
	100.0	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	48.3	49.3	47.0	45.7	**41.1**	33.0	43.4	72.1	12.7	5.9	82.2	54.1
Institutional	51.7	50.7	53.0	54.3	**58.9**	67.0	56.6	27.9	87.3	94.1	17.8	45.9
	100.0	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	89.4	86.2	85.0	88.8	**84.7**	85.0	88.5	86.2	77.8	86.9	83.9	83.9
Overseas	10.6	13.8	15.0	11.2	**15.3**	15.0	11.5	13.8	22.2	13.1	16.1	16.1
	100.0	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	17.6	21.6	21.1	24.0	**23.7**	15.4	35.2	26.3	12.9	38.6	34.8	38.0
Overseas	82.4	78.4	78.9	76.0	**76.3**	84.6	64.8	73.7	87.1	61.4	65.2	62.0
	100.0	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	82.6	79.5	78.1	75.7	**71.3**	73.1	65.9	89.4	46.7	12.3	91.8	72.3
Institutional	17.4	20.5	21.9	24.3	**28.7**	26.9	34.1	10.6	53.3	87.7	8.2	27.7
	100.0	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	10.7	14.6	14.5	11.1	**12.3**	8.0	12.0	32.6	3.6	1.3	53.2	23.5
Institutional	89.3	85.4	85.5	88.9	**87.7**	92.0	88.0	67.4	96.4	98.7	46.8	76.5
	100.0	100.0	100.0	100.0	**100.0**	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Comprises market maker trading and EP proprietary trading.

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

4. DISTRIBUTION OF OVERSEAS INVESTOR TRADING BY ORIGIN

4.1 Overall pattern

Overseas investors in aggregate contributed 26% of total market turnover, and experienced a year-on-year increase of 19% in contract volume. Among them, ***UK investors*** were the largest contributor group — 28% of overseas investor trading in 2011/12 (up from 25% in 2010/11) or 7% of total market turnover (compared to 6% in 2010/11). Their contract volume increased by 34% from 2010/11. ***European (excluding UK) investors*** overtook US investors to become the second major overseas contributor group[6] — 24% of overseas investor trading in 2011/12 (up from 16% in 2010/11) or 6% of total market turnover (up from 4% in 2010/11). Their contract volume increased remarkably by 81% from 2010/11. ***US investors*** ranked third — 16% (down from 23% in 2010/11) or 4% of total market turnover (compared to 5% in 2010/11). With the contract volume of US investor trading decreased by 18% in 2011/12, it was the first time since 2004/05 that the contribution from US investors fell behind that from Continental European investors.

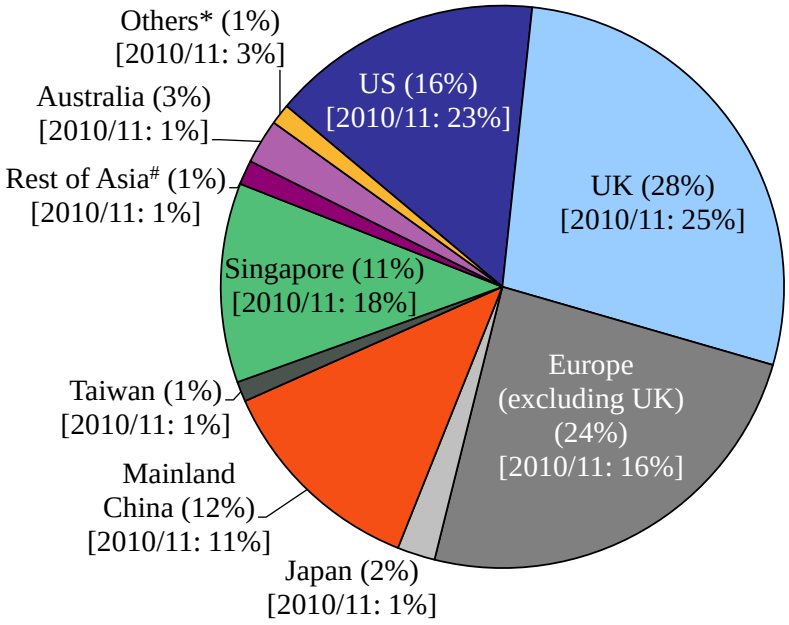
The aggregate contribution in 2011/12 from ***Asian investors*** (Mainland China, Singapore, Japan, Taiwan and the Rest of Asia) was 28% of overseas investor trading (down from 33% in 2010/11) or 7% of total market volume (the same as in 2010/11). The majority of the Asian contribution came from Mainland China and Singaporean investors — 12% and 11% respectively of overseas investor trading in 2011/12 or 3% of total market volume for each. While Mainland investor trading volume increased by 32% in 2011/12, Singaporean investor trading volume decreased by 26%[7]. Notably, trading from Mainland investors continued its year-on-year growth in volume terms in the past decade, while no other origin under study did so.

(See Figures 9 – 12.)

[6] This owed largely to the case of a single FEP with a significant turnover contribution who reported a client base change from the US to Europe (excluding UK). A general increase in trading from European (excluding UK) investors across some of the FEPs in 2011/12 against 2010/11 was also observed.

[7] This owed largely to the case of one FEP and one SOEP, both with a significant turnover contribution, who reported a client base change from Singapore to other origins.

Figure 9. Distribution of overseas investor trading volume in derivatives by origin (Jul 2011 – Jun 2012)

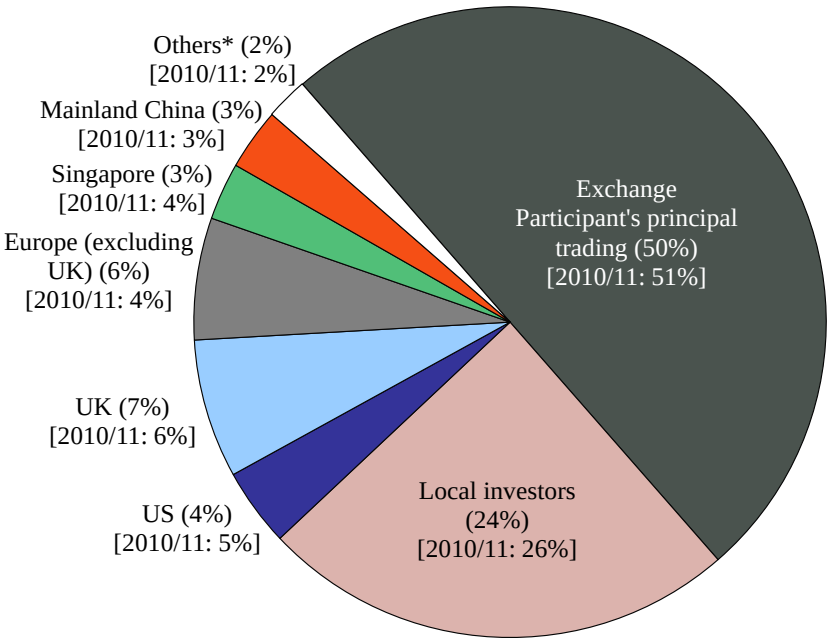


Reported origins in "Rest of Asia" in 2011/12 are India, Indonesia, Macau, Malaysia, Philippines, South Korea and Thailand.

* Reported origins in "Others" in 2011/12 are Africa, Bermuda, British Virgin Islands, Canada, Cayman Islands, Cyprus, Liberia, Mauritius, Middle East, New Zealand and Republic of Seychelles.

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

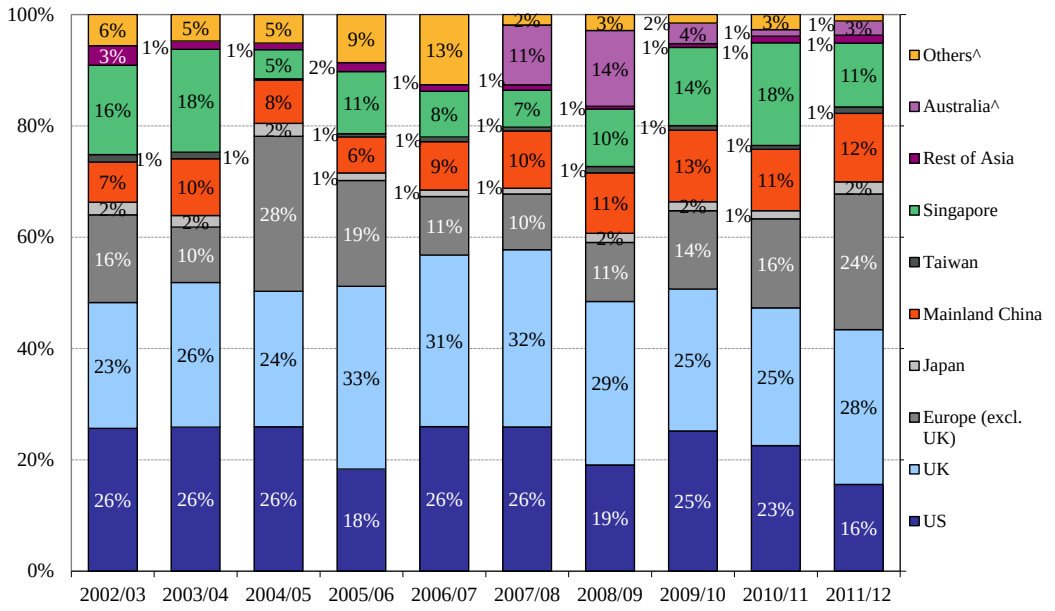
Figure 10. Distribution of derivatives market trading volume by local and overseas origins (Jul 2011 – Jun 2012)



* Others comprise investors from Australia, Japan, Taiwan, Rest of Asia and Rest of the World.

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

Figure 11. Distribution of overseas investor trading volume in derivatives by origin (2002/03 – 2011/12)



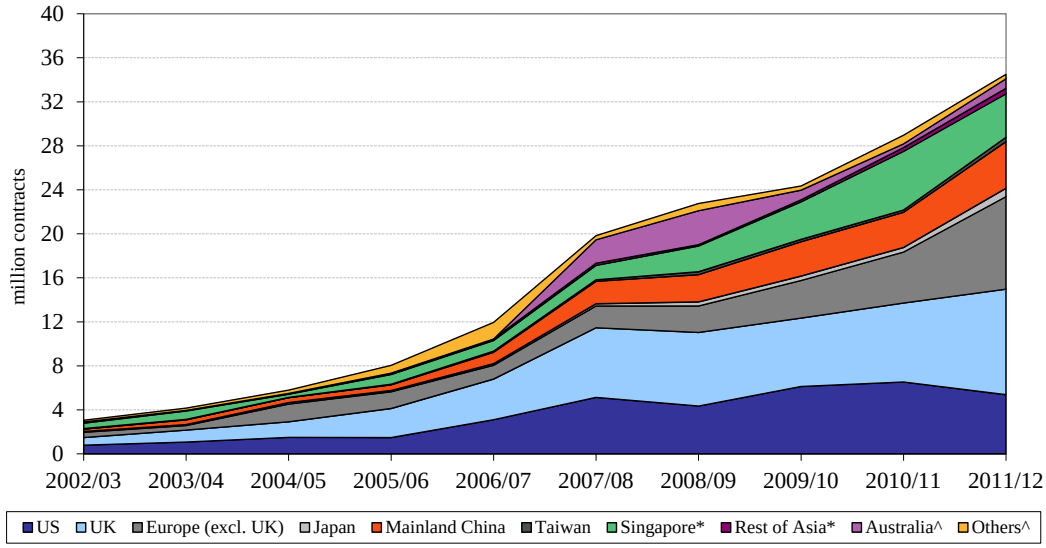
^ For surveys before 2007/08, Australia was included in "Others".

Notes:

(1) Origins with contribution of less than 0.5% are not labelled in the chart.

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

Figure 12. Implied contract volume of overseas investor trading in derivatives by origin (2002/03 – 2011/12)



Overseas origin	Year-on-year % change									
	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
US	23.07%	36.93%	39.59%	-1.90%	110.60%	65.43%	-15.50%	41.19%	6.61%	-17.74%
UK & Europe	70.40%	27.16%	102.25%	37.97%	18.51%	67.89%	9.63%	5.85%	22.53%	52.55%
UK	19.16%	56.08%	30.41%	87.33%	39.52%	71.41%	5.88%	-7.22%	15.46%	33.86%
Europe (excluding the UK)	344.19%	-14.31%	289.83%	-5.14%	-17.75%	57.59%	21.58%	42.07%	35.31%	81.42%
Asia	30.85%	49.24%	-30.29%	75.63%	41.01%	62.07%	43.19%	31.25%	29.93%	3.51%
Japan	118.01%	23.79%	55.52%	-19.06%	29.61%	43.49%	83.44%	7.39%	4.70%	80.18%
Mainland China	26.99%	91.35%	5.85%	15.33%	100.38%	96.75%	21.18%	26.16%	2.51%	32.45%
Taiwan	-69.92%	20.05%	-70.04%	230.00%	109.66%	36.92%	88.74%	-20.30%	-1.99%	97.67%
Singapore*	-	56.14%	-60.61%	196.62%	9.19%	34.00%	78.66%	45.59%	56.02%	-25.84%
Rest of Asia*	-71.17%	-42.14%	10.37%	88.40%	8.39%	38.24%	-39.84%	40.38%	109.41%	41.95%
Australia^	-	-	-	-	-	-	45.21%	-71.05%	-61.50%	155.83%
Others^	123.90%	15.46%	50.24%	133.24%	116.73%	-75.08%	75.32%	-42.30%	107.40%	-48.36%
Total	**44.77%**	**35.72%**	**39.27%**	**38.84%**	**48.65%**	**65.84%**	**14.77%**	**6.96%**	**18.98%**	**19.09%**

- : Not applicable

* For surveys before 2002/03, Singapore was included in "Rest of Asia". ^ For surveys before 2007/08, Australia was included in "Others".

Although the survey did not ask for a breakdown by retail/institutional investors for each overseas origin, a minimum proportion of retail/institutional investor trading from each origin could be deduced from EPs' responses. Almost all trading from the US and the UK came from institutional investors (at least 99%) and for Continental Europe as well (at least 96%). Investor trading from Japan, Singapore and Australia was also predominantly from institutional investors (at least 90%). In contrast, ***at least 69% of Mainland investor trading came from retail investors***. *(See Table 4.)*

Table 4. Minimum proportion of retail/institutional investor trading from each overseas origin (2011/12)

Origin	Minimum proportion of the trading coming from	
	Retail investors	**Institutional investors**
US	0.2%	98.9%
UK	0.2%	99.3%
Europe (excl. UK)	1.5%	95.8%
Japan	0.1%	93.7%
Mainland China	69.3%	23.7%
Taiwan	27.1%	46.3%
Singapore	4.3%	89.8%
Australia	7.2%	86.5%

Note: The minimum proportions were deduced figures from the responses. The difference between 100% and the summation of the two figures for an origin represents the proportion of trading from that origin which could come from either retail or institutional investors.

4.2 Trading by market segment

The stock options market segment is served by SOEPs while the market segment in other futures and options is served by FEPs. Overseas investor trading constituted only 11% of stock options trading but 40% of other derivatives trading. The distribution of overseas investor trading by origin for stock options also differed from that of other derivatives.

For ***stock options***, the major overseas contributors were investors from the ***UK*** (41% of the segment's overseas investor trading, compared to 43% in 2010/11). They were followed by investors from ***Mainland China*** whose contribution increased significantly from 2010/11 (28% vs 17%). In number of contracts, Mainland investor trading in stock options increased by 84% while UK investor trading increased by only 10% in 2010/11, compared to overall volume growth of 16% for the product.

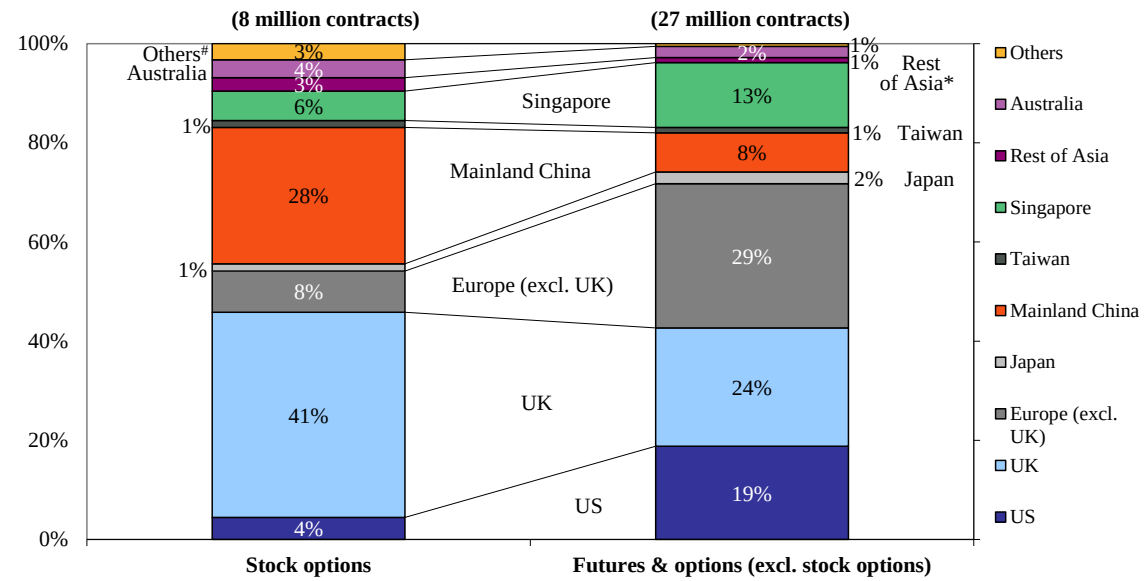
For ***other derivatives (ie index futures and options)***, the major overseas contributors were ***Continental European, the UK and the US investors*** — together contributing 72% of the segment's overseas investor trading (29%, 24% and 19% respectively). In number of contracts, investor trading from continental Europe and the UK increased by 83% and 50% respectively while that from the US decreased by 21%

US investors, although being a significant contributor group to other derivatives, had only a minor contribution (4%) to stock options. Nevertheless, in number of contracts, US investor trading volume in stock options increased by 159% in 2011/12, in contrast to a decrease of 21% in its volume in other derivatives.

Notably, ***Singaporean investor trading*** volume in both market segments decreased from 2010/11, especially in stock options (-65% in stock options and -13% in other derivatives). Investor trading from ***Australia*** and the other two Asian origins — ***Japan and Taiwan***, though with a small base, recorded substantial volume growth — +183%, +69% and +104% respectively in stock option volume and +145%, +82% and +96% respectively in volume of other derivatives.

(See Figure 13, Table 5.)

Figure 13. Distribution of overseas investor trading volume in derivatives by origin by market segment (Jul 2011 – Jun 2012)



( ): Implied contract volume of overseas investor trading in the market segment.

* Reported origins in "Rest of Asia" are Macau, Malaysia and Thailand for both segments; plus India, Philippines and South Korea for derivatives excluding stock options; plus Indonesia for stock options.

Reported origins in "Others" are Bermuda, British Virgin Islands and Cayman Islands for both segments; plus Africa, Canada, Cyprus, Mauritius, Middle East, New Zealand and Republic of Seychelles for derivatives excluding stock options; plus Liberia for stock options.

Notes Numbers may not add up to 100% due to rounding.

Table 5. Distribution of overseas investor trading in derivatives by origin (2007/08 – 2011/12)

Overall market (All futures and options)

Origin	Percentage contribution [2]					Implied contract volume[1] (2011/12)	
	2007/08	2008/09	2009/10	2010/11	2011/12	No. of contracts	Y-o-Y change
US	25.9	19.1	25.2	22.6	**15.6**	**5,376,084**	**-17.7%**
Europe	41.8	40.0	39.6	40.7	**52.2**	**18,004,126**	**52.5%**
UK	31.8	29.4	25.5	24.7	**27.8**	**9,589,682**	**33.9%**
Europe (excl. UK)	10.0	10.6	14.1	16.0	**24.4**	**8,414,445**	**81.4%**
Asia	19.6	24.5	30.0	32.8	**28.5**	**9,832,443**	**3.5%**
Japan	1.0	1.6	1.6	1.4	**2.2**	**749,332**	**80.2%**
Mainland China	10.3	10.9	12.8	11.0	**12.3**	**4,240,154**	**32.5%**
Taiwan	0.7	1.1	0.8	0.7	**1.2**	**399,239**	**97.7%**
Singapore	6.6	10.3	14.1	18.4	**11.5**	**3,958,770**	**-25.8%**
Rest of Asia	1.0	0.5	0.7	1.2	**1.4**	**484,948**	**41.9%**
Australia	10.7	13.6	3.7	1.2	**2.6**	**882,251**	**155.8%**
Others	1.9	2.9	1.6	2.7	**1.2**	**407,947**	**-48.4%**
Total[1]	100.0	100.0	100.0	100.0	**100.0**	**34,502,851**	**19.1%**

Futures and options (excl. stock options)

Origin	Percentage contribution [2]					Implied contract volume[1] (2011/12)	
	2007/08	2008/09	2009/10	2010/11	2011/12	No. of contracts	Y-o-Y change
US	29.1	21.9	29.2	28.7	**18.8**	**5,031,625**	**-21.4%**
Europe	39.2	37.3	36.1	38.2	**52.9**	**14,148,838**	**66.4%**
UK	31.5	27.7	20.4	19.1	**23.9**	**6,379,938**	**49.9%**
Europe (excl. UK)	7.7	9.7	15.8	19.1	**29.1**	**7,768,901**	**83.0%**
Asia	20.5	25.0	30.8	29.8	**25.5**	**6,807,493**	**2.5%**
Japan	1.1	1.9	1.8	1.6	**2.4**	**637,137**	**82.2%**
Mainland China	11.3	10.7	12.4	9.2	**7.9**	**2,105,825**	**3.2%**
Taiwan	0.8	1.2	0.9	0.7	**1.1**	**290,458**	**95.5%**
Singapore	6.7	11.0	15.3	18.0	**13.1**	**3,497,356**	**-12.8%**
Rest of Asia	0.5	0.3	0.3	0.4	**1.0**	**276,716**	**197.9%**
Australia	10.0	14.4	3.2	1.1	**2.2**	**600,757**	**144.8%**
Others	1.2	1.4	0.7	2.2	**0.6**	**154,190**	**-68.1%**
Total	100.0	100.0	100.0	100.0	**100.0**	**26,742,902**	**20.1%**

Stock options

Origin	Percentage contribution [2]					Implied contract volume[1] (2011/12)	
	2007/08	2008/09	2009/10	2010/11	2011/12	No. of contracts	Y-o-Y change
US	0.6	2.8	4.1	2.0	**4.4**	**344,459**	**158.6%**
Europe	62.9	55.3	57.7	49.3	**49.7**	**3,855,288**	**16.8%**
UK	34.6	39.2	52.6	43.4	**41.4**	**3,209,744**	**10.3%**
Europe (excl. UK)	28.3	16.0	5.1	5.9	**8.3**	**645,544**	**64.6%**
Asia	12.8	21.5	25.9	42.6	**39.0**	**3,024,950**	**5.9%**
Japan	0.0	0.0	0.5	1.0	**1.4**	**112,195**	**69.4%**
Mainland China	2.2	12.0	15.0	17.3	**27.5**	**2,134,329**	**84.0%**
Taiwan	0.2	0.8	0.8	0.8	**1.4**	**108,780**	**103.6%**
Singapore	5.7	6.7	7.2	19.8	**5.9**	**461,415**	**-65.2%**
Rest of Asia	4.7	2.0	2.4	3.7	**2.7**	**208,231**	**-16.3%**
Australia	16.5	8.8	6.2	1.5	**3.6**	**281,494**	**183.1%**
Others	7.1	11.6	6.0	4.6	**3.3**	**253,757**	**-17.4%**
Total	100.0	100.0	100.0	100.0	**100.0**	**7,759,948**	**15.9%**

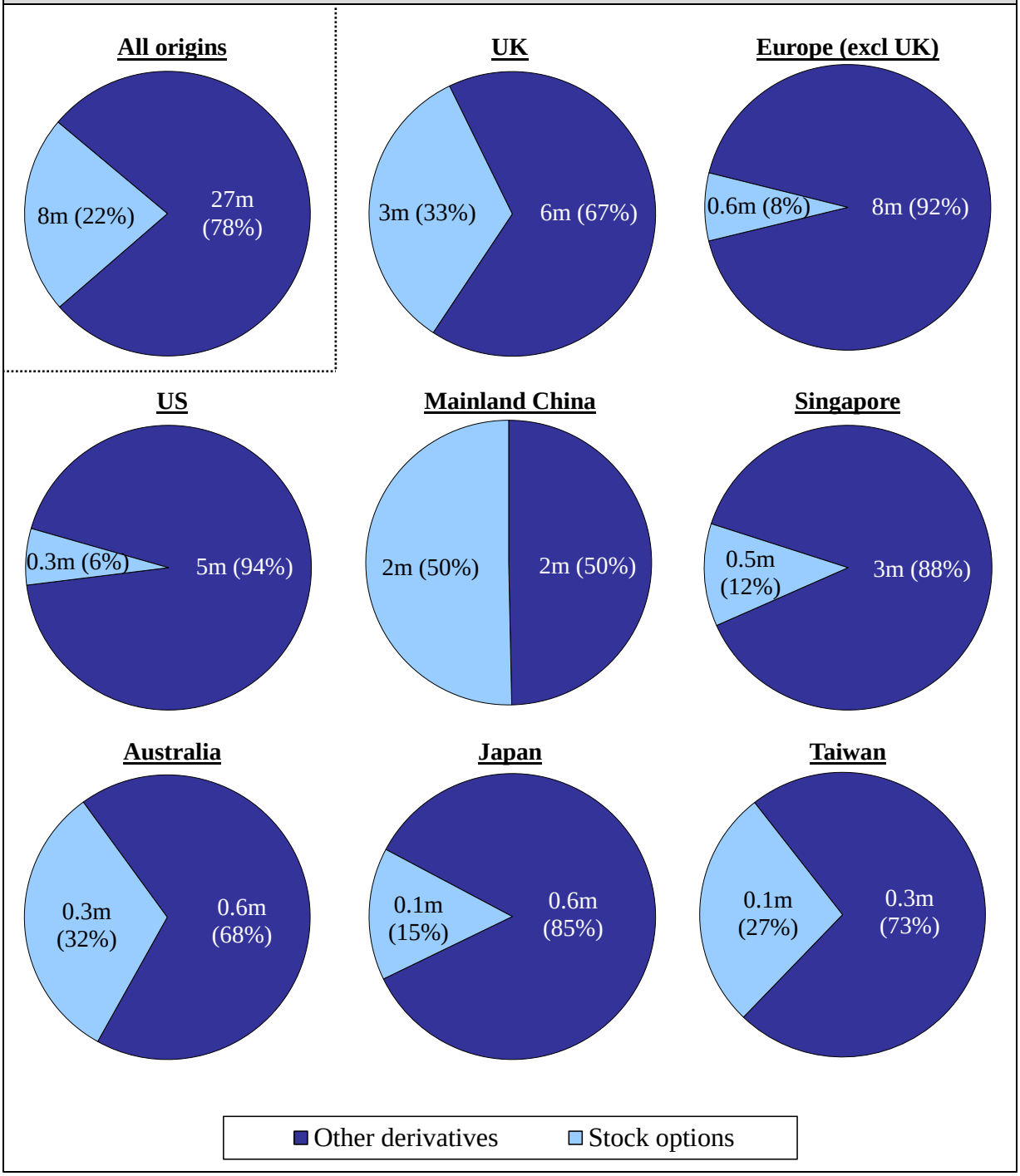
Notes:

(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.

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

As shown in Figure 14, 22% of all ***overseas investor trading volume*** (in number of contracts) was in stock options and 78% in other derivatives. Trading from Mainland investors in volume terms entered in equal proportion into the stock options segment and other derivatives segment. In contrast, all other specific overseas origins under study had their investor trading dominated by derivatives other than stock options. This might be because the majority of Mainland investor trading was from retail investors who were more interested in trading stock options than overseas institutional investors who dominated the trading from other origins.

Figure 14. Composition of overseas investor trading volume from each origin by market segment (Jul 2011 – Jun 2012)



5. RETAIL ONLINE TRADING

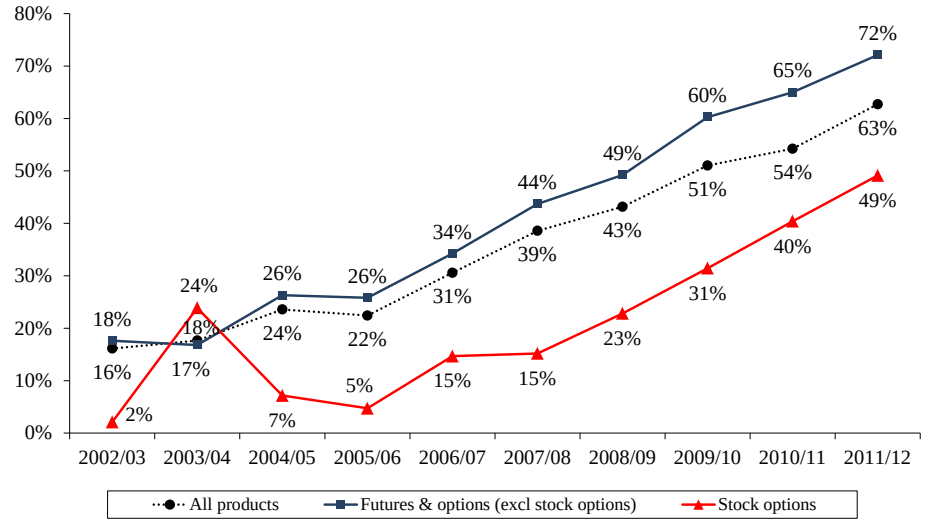
Retail online trading as a proportion of total retail investor trading continued to grow, reaching 63% in 2011/12 from 54% in 2010/11. Its contribution to total market turnover was 13% in 2011/12, compared to 12% in 2010/11.

For stock options, the contribution of retail online trading to total retail investor trading continued its growth from 40% in 2010/11 to 49% in 2011/12 (from 7% of total product turnover in 2010/11 to 8% in 2011/12). The ***use of online trading*** by retail investors was much more prominent for other derivatives — 72% of total retail investor trading in 2011/12 (up from 65% in 2010/11) and 18% of total product turnover in 2011/12 (the same level as in 2010/11).

A total of 105 (up from 91 in 2010/11) or 48% of responding EPs (vs 44% in 2010/11) offered online trading services to retail derivatives investors (referred to as "***online brokers***"). Retail online trading accounted for 46% of online broker's total turnover in 2011/12 (29% for stock options brokers and 66% for other derivatives brokers), down from 58% in 2010/11.

Figure 15. Market share of retail online trading in derivatives trading (2002/03 – 2011/12)

(a) As % of retail derivatives turnover volume



(b) As % of total derivatives turnover volume

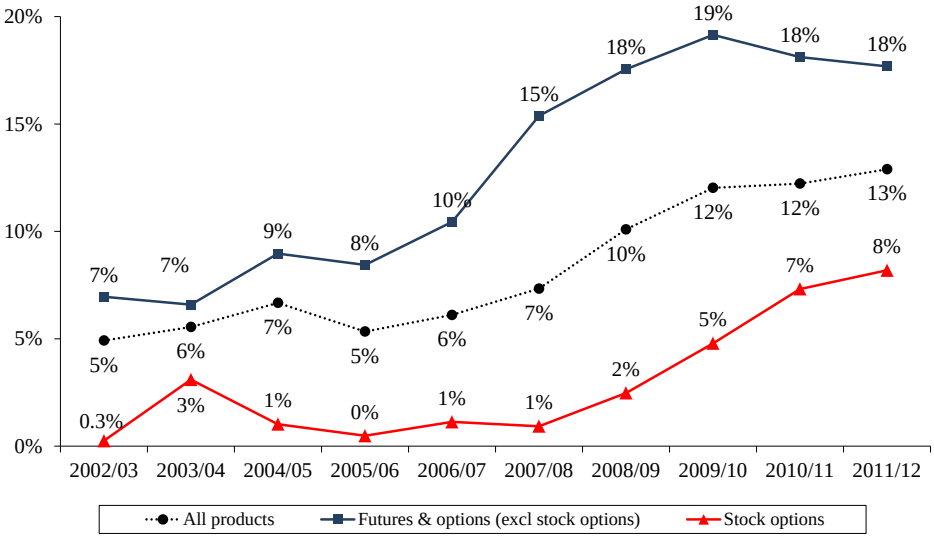


Table 6. Statistics on retail online trading in derivatives (2007/08 - 2011/12)					
Overall market (All futures and options)	**2007/08**	**2008/09**	**2009/10**	**2010/11**	**2011/12**
Online brokers[1]					
Total number of online brokers	48	57	78	91	**105**
- As % of all responding EPs (%)	29%	33%	39%	44%	**48%**
Online trading					
Total implied contract volume (1-sided)[5]	7,755,787	10,398,020	11,963,260	15,494,200	**17,354,525**
- As % of total market turnover[3] (%)	7.3%	10.1%	12.0%	12.2%	**12.9%**
- As % of total agency (investor) trading (%)	18.6%	21.3%	24.0%	24.8%	**25.8%**
- As % of total retail investor trading (%)	38.6%	43.2%	51.0%	54.2%	**62.7%**
- As % of total turnover of online brokers (%)	36.1%	42.6%	54.4%	57.6%	**46.3%**
Futures and options (excl. stock options)	**2007/08**	**2008/09**	**2009/10**	**2010/11**	**2011/12**
Online brokers[1]					
Total number of online brokers	45	52	69	77	**88**
- As % of all responding EPs (%)	38%	42%	50%	53%	**59%**
Online trading					
Total implied contract volume (1-sided)[2]	7,209,475	9,135,894	9,602,615	10,438,395	**11,798,691**
- As % of total product turnover[4] (%)	15.4%	17.6%	19.1%	18.1%	**17.7%**
- As % of total product agency (investor) trading (%)	20.7%	23.0%	25.7%	25.4%	**25.4%**
- As % of total product retail investor trading (%)	43.7%	49.2%	60.3%	65.0%	**72.1%**
- As % of total product turnover of online brokers (%)	36.2%	42.5%	55.9%	62.3%	**65.6%**
Stock options	**2007/08**	**2008/09**	**2009/10**	**2010/11**	**2011/12**
Online brokers[1]					
Total number of online brokers	3	5	9	14	**17**
- As % of all responding EPs (%)	7%	10%	15%	22%	**25%**
Online trading					
Total implied contract volume (1-sided)[2]	546,312	1,262,126	2,360,644	5,055,805	**5,555,833**
- As % of total product turnover[4] (%)	0.9%	2.5%	4.8%	7.3%	**8.2%**
- As % of total product agency (investor) trading (%)	8.1%	13.6%	18.9%	23.7%	**26.6%**
- As % of total product retail investor trading (%)	15.2%	22.8%	31.4%	40.4%	**49.1%**
- As % of total product turnover of online brokers (%)	35.2%	43.4%	48.8%	49.9%	**28.7%**

Notes:

(1) "Online brokers" refers to EPs offering online trading service to retail clients.

(2) The implied contract volume of online trading is calculated by multiplying the percentage share of online trading in the responded sample for that product segment by the total product turnover volume in the market.

(3) 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.

(4) Product turnover refers to the total turnover in number of contracts of the products under study for the product segment in the table.

(5) The implied contract volume of online trading in the overall market is calculated by adding the implied contract volume of online trading for futures and options (excluding stock options) and that for stock options.

GLOSSARY

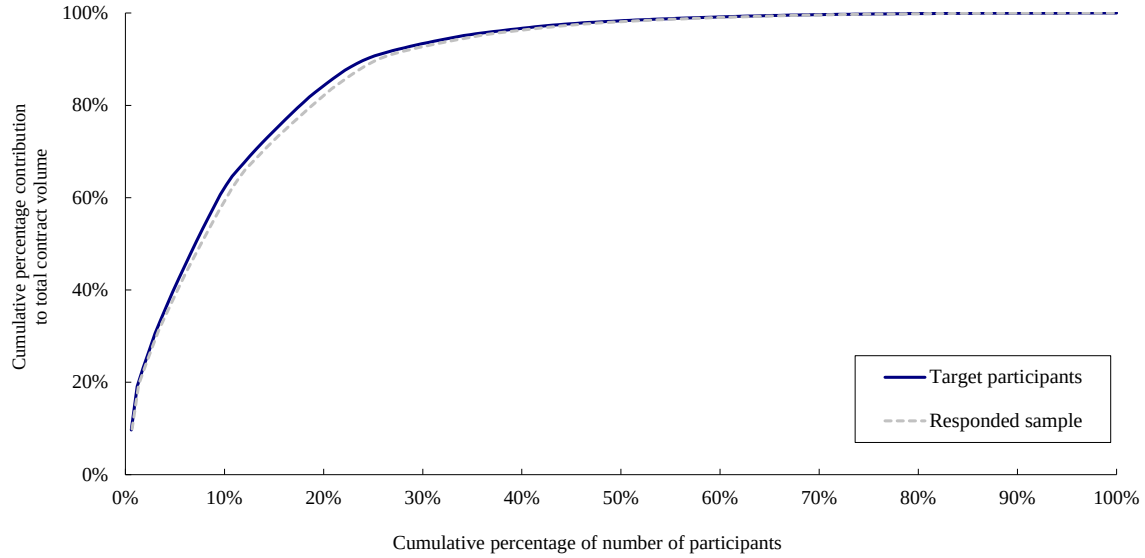
Hedging	Utilisation of futures/options to reduce or eliminate the market risk of a portfolio by compensating for the effect of price fluctuations of an underlying asset.
Pure trading	Trading for potential profit in anticipation of a price movement in either the short or long term, but not for hedging 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 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.
Market maker trading	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.
EP proprietary trading	Trading on the participant firm's own account but not as a market maker.
Individual/Retail investors	Investors who trade on their personal account.
Institutional investors	Investors who are not individual/retail investors.
Local investors	Individual/Retail investors residing in Hong Kong or institutional investors operating in Hong Kong — Hong Kong as the source of funds.
Online brokers	EPs who offer online trading service to individual/retail investors.
Overseas investors	Individual/Retail investors residing outside Hong Kong or institutional investors operating outside Hong Kong — overseas as the source of funds.
Retail online trading	Trading originating from orders entered directly by individual/retail investors and channelled to the brokers via electronic media (e.g. the Internet).
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 of contracts traded) of that product (or the aggregate turnover of all products under study) during the study period.
Notional value	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.

APPENDIX 1. RESPONSE RATE

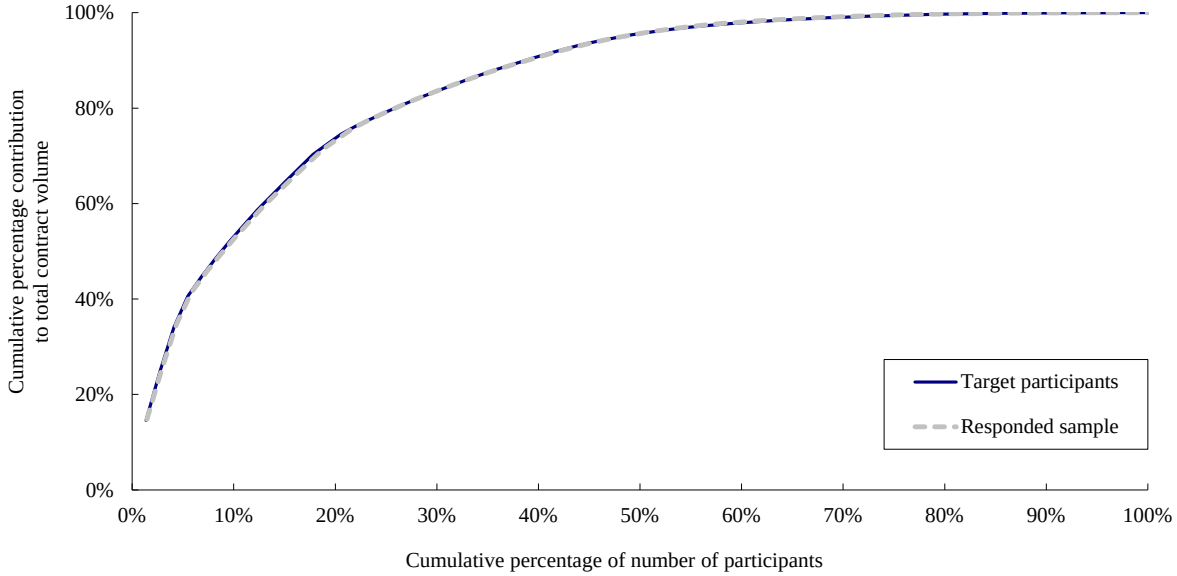
Exchange Participants	Target population	Responded participants	Response rate	% share of turnover in target population
Futures EPs	167	149	89%	98%
Stock Options EPs	73	69	95%	98%
All Participants	240	218	91%	98%

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

(a) Futures Exchange Participants (Jul 2011 – Jun 2012)



(b) Stock Options Exchange Participants (Jul 2011 – Jun 2012)



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

Product	Contract multiplier (HK$ per index point)	Notional value per contract[1] (HK$) (as at 30 June 2012)	Turnover in notional value during the study period	
			(HK$m)	% of total
HSI futures	50	972,073	22,236,142	48.6%
HSI options	50	972,073	9,948,912	21.7%
Mini-HSI futures	10	194,415	2,057,832	4.5%
HHI futures	50	478,742	7,783,992	17.0%
HHI options	50	478,742	2,318,069	5.1%
Mini-HHI futures	10	95,748	185,076	0.4%
Stock options	—[2]	19,660[3]	1,235,967	2.7%
Overall market			45,765,990	100.0%

Notes:

(1) See glossary for the definition of notional value.

(2) The contract size for a stock options class is usually one board lot of the underlying stock except for five option classes with contract size more than one board lot; 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$989 to HK$94,600), based on the stock closing prices as at 30 June 2012 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.

APPENDIX 4. 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 2012. 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 2011 to June 2012.
- Products under study were Hang Seng Index (HSI) futures, HSI options, Mini-HSI futures, H-shares Index (HHI) futures, HHI options, mini-HHI futures and stock options. These products together contributed 98.8% of the total volume of the HKEx derivatives market during the study period.
- 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 done to ensure a high response rate, especially for Participants which were top-ranked in the target population by contract volume.
- The methodology to arrive at the relative contribution of each type of trade to the total market volume has been improved since 2008/09 by applying a weighting factor by product under study to align the responded sample with the actual market turnover composition by product. Each Participant's answers in percentage terms were first multiplied by its actual contract volume by product during the study period obtained internally to arrive at its volume in each respective trade type for each product, based on which the relative contribution of each trade type (aggregate of all responding Participants) for each product was calculated. The weighting factors by product were then applied to the aggregate trading volume of all responding Participants by trade type in the respective product under study before calculating the relative contribution of each trade type to the total market.

- For statistics on online trading, the total reported online trading volume of each product segment — futures and options (excluding stock options) and stock options — was first calculated. This was done by aggregating all responding Participants' figures — each was calculated by multiplying the reported online trading percentage with that Participant's actual contract volume in the product segment. The proportion of the total reported online trading volume in the product segment to the responded sample's total trading volume in the product segment was computed (this approach was adopted since the 2008/09 survey rather than using the proportion to the target population's total as in prior surveys). The implied online trading volume was then calculated by multiplying this proportion by the actual market turnover in each of the product segments during the study period. The total implied online trading volume for the market was calculated by summing up the respective figures for the two product segments (which had different response rates from FEPs and SOEPs respectively; in surveys prior to 2009/10, no such weighting was adopted). The corresponding figures for the overall market in previous surveys were revised accordingly. The proportion of online trading volume to a specific trade type (agency or retail agency) was calculated as the ratio of the implied online trading volume to the implied contract volume of that trade type.

(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 FEPs and one SOEP in the 2011/12 survey could not answer 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 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, especially for a particular trade type or a particular product type or Participant type with a small base. Nevertheless, the error due to non-response should be small because of the high response rate by turnover volume and the responded sample's high representativeness of the target population (see Appendix 1 and 2).

- The estimate of online trading volume in the market is subject to limitations. Firstly, online trading through banks may or may not be reflected in the responses depending on the system connection between the responding EP and the bank through which client orders are routed and the EP's own judgement. Secondly, the offer of online trading by EPs may not have an even distribution within the two target groups of FEPs and SOEPs so that non-responses would generate sampling error even though weighting by target group has been applied. Nevertheless, the second limitation is considered minimal given the high response rate in volume terms.

- 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[8]. 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.

— END —

[8] 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.