

DERIVATIVES MARKET TRANSACTION SURVEY 2014/15

December 2015



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

CONTENTS

	Page
Executive summary	1
1. Introduction	4
2. Transaction purposes	7
3. Trading by investor type	11
3.1 Overall pattern	11
3.2 Trading by product	15
4. Overseas investor trading by origin	20
4.1 Overall pattern	20
4.2 Trading by market segment	23
5. Retail online trading	27
Glossary	29
Appendix 1. Response rate	30
Appendix 2. Representativeness of the responded sample relative to target respondents .	31
Appendix 3. Contract size and notional value of products under study	32
Appendix 4. Survey methodology	33

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 predominantly financial futures and options contracts (excluding the commodity derivatives market operated by the London Metal Exchange, part of the HKEx Group). The 2014/15 survey covers Hang Seng Index (HSI) futures, HSI options, Mini-HSI futures, Mini-HSI options, 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 July 2014 to June 2015 (referred to as 2014/15). The overall response rate was 89% and the respondents contributed 98% of the total turnover in products under study during the study period.

The market turnover volume (ie the total turnover of products under study) in 2014/15 increased by 39% over the previous year, owing largely to an increase of 58% in stock options turnover volume and an increase of 36% in the aggregate turnover volume of HHI products. The contribution of stock options was 55% of the total market volume, albeit only 4% in notional value terms.

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) **Hedging** and **pure trading** were the main transaction purpose of derivatives trading in 2014/15 (44% and 42% respectively). **Arbitrage** turnover accounted for 14% of the overall market turnover in 2014/15, but had recorded an overall increase of 75% year-on-year in implied volume.
- (2) Hedging accounted for the majority of trading in HHI options and also a large share for stock options, HSI options, HSI futures and HHI futures. Pure trading was the key transaction purposes for mini-sized contracts, HSI options and stock options. An increase in the usage of index futures for arbitrage was observed.

Trading by investor type (See section 3)

- (3) In 2014/15, HKEx's derivatives market turnover was almost equally shared by EP principal trading (mainly market maker trading) and agency (investor) trading, a pattern maintained since 2009/10. Among investors, overseas institutional investors had the biggest market share (25%), followed by local retail investors (15%). Local institutional investors and overseas retail investors had relatively small contributions (6% and 3% respectively).
- (4) **Overseas investors (predominantly institutional)** were significant contributors to trading in regular index futures and for the first time to trading in mini-sized index futures as well. **EP principal trading** remained dominant in the trading of options products but its contribution to the trading of index futures was the lowest in the past five years.
- (5) Over the past decade, **overall derivatives market trading** recorded a compound annual growth rate (CAGR) of 20% — driven mainly by the growth in **overseas investor trading volume** (CAGR of 22%) and in **EP principal trading volume** (CAGR of 21%).

Trading by overseas investors by origin (See section 4)

- (6) Among overseas investors, *US investors* overtook UK and other European investors and became the largest contributor group (32% of total overseas investor trading and 9% of total market volume in 2014/15). *UK investors* remained second (26% of total overseas investor trading and 7% of total market volume). *Continental European investors* ranked third (21% of total overseas investor trading and 6% of total market volume). Almost all trading from these Western origins came from institutional investors (at least 90%). Over the past decade, investor trading volume from the US grew at a CAGR of 30%, high than that from the UK (+19%) and Continental Europe (+23%).
- (7) *Mainland China investors* were the largest contributor group from Asia — 10% of overseas investor trading, or about 3% of total market volume. The majority of trading from the Mainland was from retail investors (at least 70%). Over the past decade, investor trading volume from the Mainland achieved a CAGR of 28%, higher than the 22% of total overseas investor trading volume. *Singaporean investors* were also a key contributor group (4% of overseas investor trading, or 1% of total market volume) and the majority of trading volume from this origin was institutional (at least 59%).
- (8) For *stock options*, the major overseas contributors were UK investors and Mainland China investors (32% and 24% respectively of the product's overseas investor trading) while the largest overseas contributors for *index futures and options* were US investors (38% of the index product's overseas investor trading).
- (9) Compared to other origins, investors from *Singapore, Taiwan and Mainland China* had the largest proportion of their total trading volume devoted to stock options (around 50%) while *US investors* had almost all of their total trading devoted to index futures and options.

Product performance (See sections 2-4)

- (10) For *index futures*, the contribution of overseas institutional investors reached the highest level in 2014/15 in each of the products over the recent five years. Along with this, the proportion of trading for arbitrage purposes was also the highest in 2014/15 for each product over the same period.
- (11) *HHI products* attracted an increased contribution from overseas institutional investors in 2014/15, to a greater extent than *HSI products*.
- (12) For *mini-sized HSI and HHI futures*, which are designed for small retail investors, suffered a decline in local retail investor trading to their respective lowest level in recent years. On the other hand, the contribution of overseas institutional investor trading grew significantly to account for more than one-third of the products' turnover in 2014/15. Associated with this pattern was a fluctuated uptrend in the proportion of trading for arbitrage purposes over the years, with a corresponding decrease in hedging and pure trading, for both products.
- (13) For *HSI options* and *Mini-HSI options*, market maker trading dominated (58% and 68% respectively) while investor trading came mainly from local retail investors (18% and 27% of the respective product volumes). Trading in HSI options was mainly for hedging (45%) and pure trading (43%) while trading in Mini-HSI options was mainly pure trading (54%).

-
- (14) For *HHI options*, EP principal trading remained the major contributor (31% from market making; 20% from proprietary trading). The proportion of trading in HHI options for hedging purpose stood at about 60% or more over the years, the highest among the products under study.
- (15) For *stock options*, market maker trading remained at around two-thirds of the product's volume in the past five years while local retail investor trading remained the major investor contributor group. The proportions of trading for hedging purposes and pure trading were similarly significant (46% for each).

Retail online trading (See section 5)

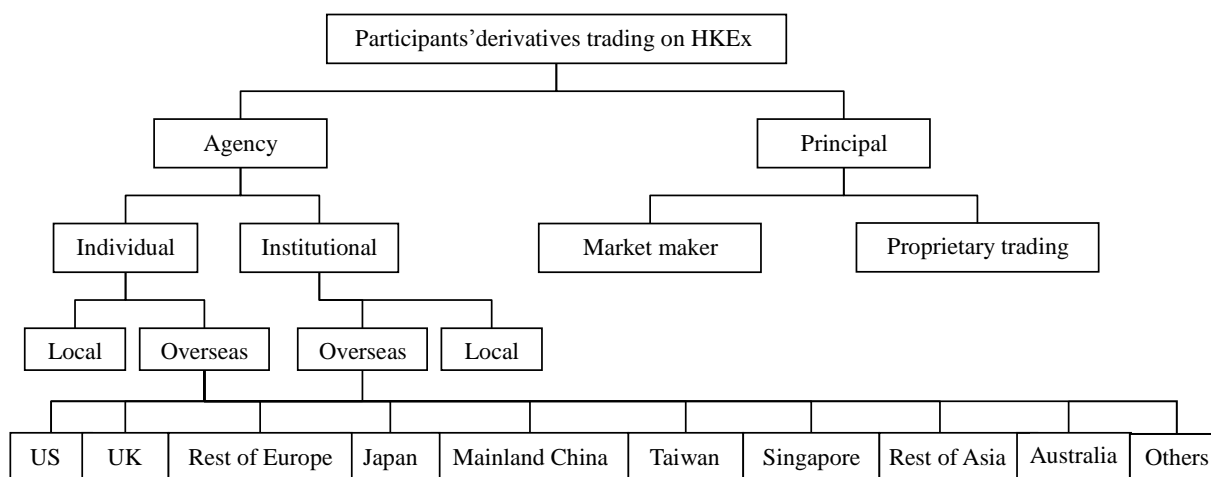
- (16) *Retail online trading* as a proportion of total retail investor trading was 68% in 2014/15, compared to 67% in 2013/14. Its contribution to total market turnover was 12% in 2014/15 (compared to 13% in 2013/14).

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 predominantly comprises financial futures and options contracts (excluding the commodity derivatives market operated by the London Metal Exchange, part of the HKEx Group).

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. The findings are compared with those of the past surveys 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 population¹. Out of the 241 questionnaires sent out, 215 completed questionnaires were returned, representing an overall response rate of 89%. The responded sample represented 98% by total contract volume of the target population in the products under study. (See Appendix 1.)

The survey covers transactions during July 2014 to June 2015² in the major HKEx futures and options products, namely Hang Seng Index (HSI) futures, HSI options, Mini-HSI futures, Mini-HSI options, 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 contract volume of the products under study.

¹ The target population consists of all the EPs which 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 2014/15 throughout the report; the same convention is used for the past surveys.

Other derivative products which individually contributed less than 0.5% of HKEx's total derivatives turnover during the same period were excluded. These products were CES China 120 Index futures, dividend futures, HSI Volatility Index futures, BRICS futures³, HIBOR futures, Three-year Exchange Fund Note futures, stock futures, gold futures⁴, RMB currency futures, London Metal Mini futures⁵ (launched on 1 December 2014) and flexible index (HSI and HHI) options.

In 2014/15, market turnover (products under study only) was 175 million contracts, up 39% from 126 million contracts in 2013/14. The increase in market turnover mainly reflected an increase of 58% in stock options turnover volume and an increase of 36% in the aggregate turnover volume of HHI products (HHI futures: +29%, HHI options: +23% and Mini-HHI futures: +128%). An increase of 6% in the aggregate turnover volume of HSI products (HSI futures: +1%, HSI options: +8%, Mini-HSI futures: +16% and Mini-HSI options: +11%) was also recorded. Stock options remained the dominant contributor to derivatives market turnover (55%, up from 48% in 2013/14). (*See Figure 1.*)

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 index futures and options (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 4% share of notional trading value during the study period (see Appendix 3).

In view of this, detailed breakdowns by stock options/index futures and options 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 volume⁶") 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. The findings are subject to the limitations set out in Appendix 4.

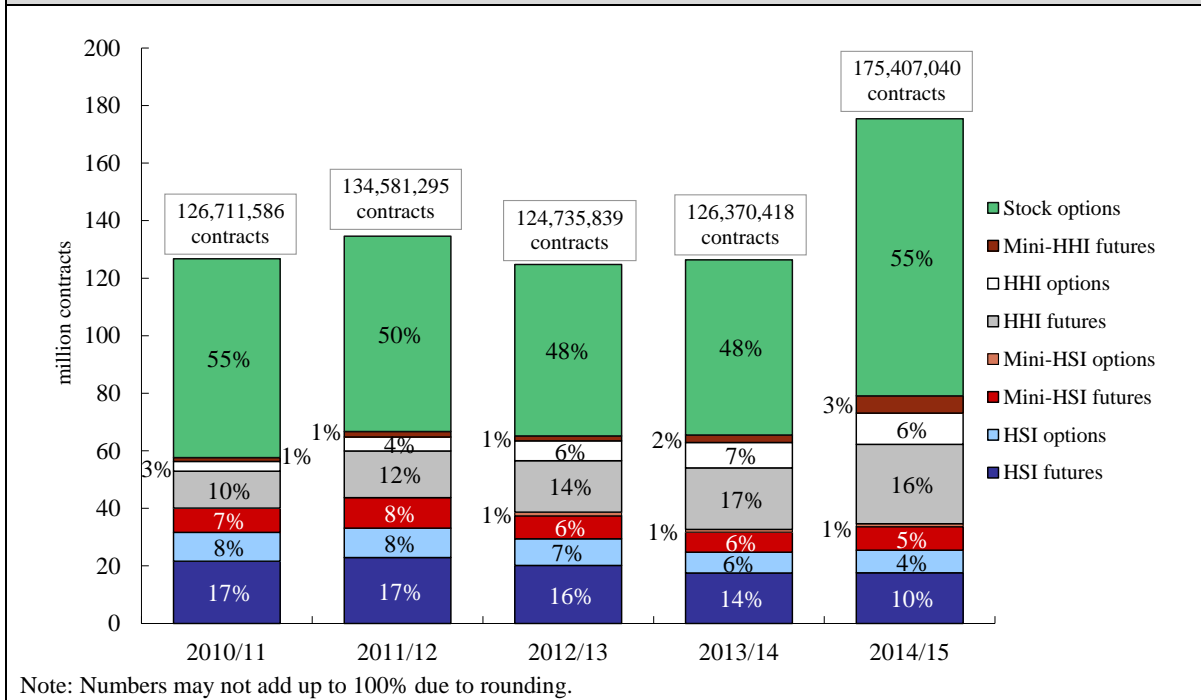
³ These are Brazil's IBOVESPA futures, Russia's MICEX index futures, India's S&P BSE SENSEX Index futures and South Africa's FTSE/JSE Top 40 futures launched under the BRICS Exchange Alliance.

⁴ Trading of gold futures suspended since 27 May 2015.

⁵ These are London Aluminium Mini futures, London Copper Mini futures and London Zinc Mini futures.

⁶ See glossary for the definition of implied contract volume.

Figure 1. Contract volume and percentage of total by product under study (2010/11 – 2014/15)



Product under study	Year-on-year % change (in contract volume)				
	2010/11	2011/12	2012/13	2013/14	2014/15
HSI futures	7%	6%	-12%	-13%	1%
HSI options	48%	2%	-9%	-22%	8%
Mini-HSI futures	-4%	25%	-25%	-12%	16%
Mini-HSI options*	n.a.	n.a.	n.a.	-25%	11%
HHI futures	8%	27%	10%	19%	29%
HHI options	43%	42%	43%	27%	23%
Mini-HHI futures*	n.a.	47%	-12%	55%	128%
Stock options	40%	-2%	-12%	2%	58%
Total product under study	27%	6%	-7%	1%	39%

n.a.: Not applicable in the study

* Mini-HSI options (launched on 18 November 2002) and Mini-HHI futures (launched on 31 March 2008) were included in the survey for the first time in 2012/13 and 2010/11 respectively. These products were omitted in the previous surveys due to their negligible contribution to the total market contract volume.

2. TRANSACTION PURPOSES

The survey assessed the composition of derivatives trading by three purposes — pure trading, hedging and arbitrage. However, 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. Nevertheless, the survey results would show a reasonable indication of the market activities and the changes over time.

Trading distribution by transaction purpose

- Overall, *hedging* and *pure trading* were the two main transaction purposes of derivatives trading in 2014/15. The proportion of turnover for hedging was 44% of the total derivatives market turnover (down from 48% in 2013/14) and that of pure trading was 42% (similar to the 41% in 2013/14). *Arbitrage* turnover accounted for 14% of the overall market turnover in 2014/15, up from 11% in 2013/14.
- In 2014/15, *hedging* accounted for the majority of trading in HHI options (61%, similar to the 60% in 2013/14) and a major proportion of trading in other regular options products — stock options (46%) and HSI options (45%) — and also in HHI futures (43%) and HSI futures (39%). In 2014/15, a decrease in the proportion of hedging across all index futures, in particular for mini-sized contracts, was observed. On the contrary, a notable increase in the proportion of hedging for HSI options (from 35% to 45%) was found.
- *Pure trading* was the main transaction purpose of trading in mini-sized contracts — Mini-HSI options (54%), Mini-HSI futures (47%) and Mini-HHI futures (45%) — and also in stock options (46%, in par with trading for hedging purpose) and HSI options (43%). In 2014/15, a notable decrease in the proportion of pure trading was observed for HSI options products — Mini-HSI options (from 71% to 54%) and HSI options (from 53% to 43%) — along with an increase in the proportion of trading for hedging purpose.
- In 2014/15, the proportion of trading for *arbitrage* in each of the index futures products rose to their respective highest level in the recent five years with a significant increase from 2013/14 — Mini-HSI futures (from 13% to 29%), Mini-HHI futures (from 13% to 28%), HSI futures (from 16% to 25%) and HHI futures (from 18% to 23%)⁷. For index futures as a whole, the proportion of trading for arbitrage rose to the highest level in the past decade (25%) while that of pure trading remained at the lowest level in the past decade (37%). For options products, the proportion of arbitrage remained relatively low in 2014/15, ranging from 7% to 12% for each product and 8% for all options products.

Implied contract volume by transaction purpose

- Overall market turnover in volume terms for each transaction purpose had positive year-on-year growth in 2014/15, in particular for *arbitrage* (up 75%, compared to the increase of 39% in overall derivatives trading). In fact, an increase in the contract volume for arbitrage was observed for each of the products under study except HHI options (-4%) — Mini-HHI futures (+373% from a small base), Mini-HSI options (+355% from a small base), Mini-HSI futures (+165% from a small base), HHI futures (+71%), stock options (+70%), HSI futures (+59%) and HSI options (+10%).

⁷ This owed largely to the trading of the top two FEPs by total contract volume (with an aggregate contribution of 19% in the total index derivatives market turnover) who reported a large percentage of transactions being done for arbitrage.

- The increase in total market turnover for *pure trading* mainly reflected an increase of 66% in stock options' pure trading (compared to the 58% increase in the product's total volume) as well as an increase of 49% in HHI futures' pure trading (compared to the 29% increase in the product volume).
- A 28% increase in total market trading volume for *hedging* was recorded in 2014/15, reflecting mainly an increase in contract volume for hedging for stock options (+49%), HSI options (+39%) and HHI options (+25%). Notably, Mini-HHI futures trading recorded a significant increase of 61% in volume for hedging and so did Mini-HSI options with a 41% increase.

(See Figures 2 – 3 and Table 1.)

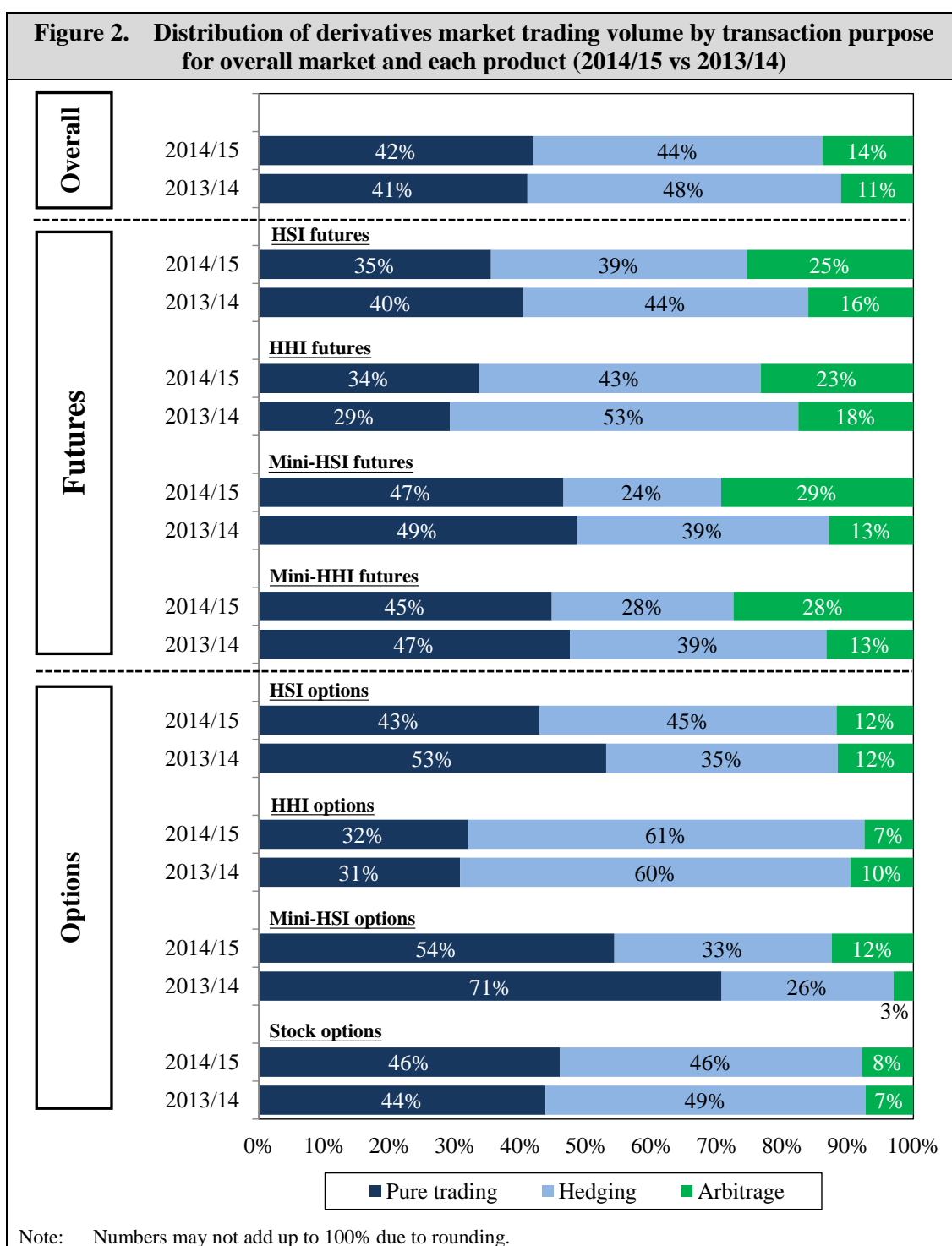
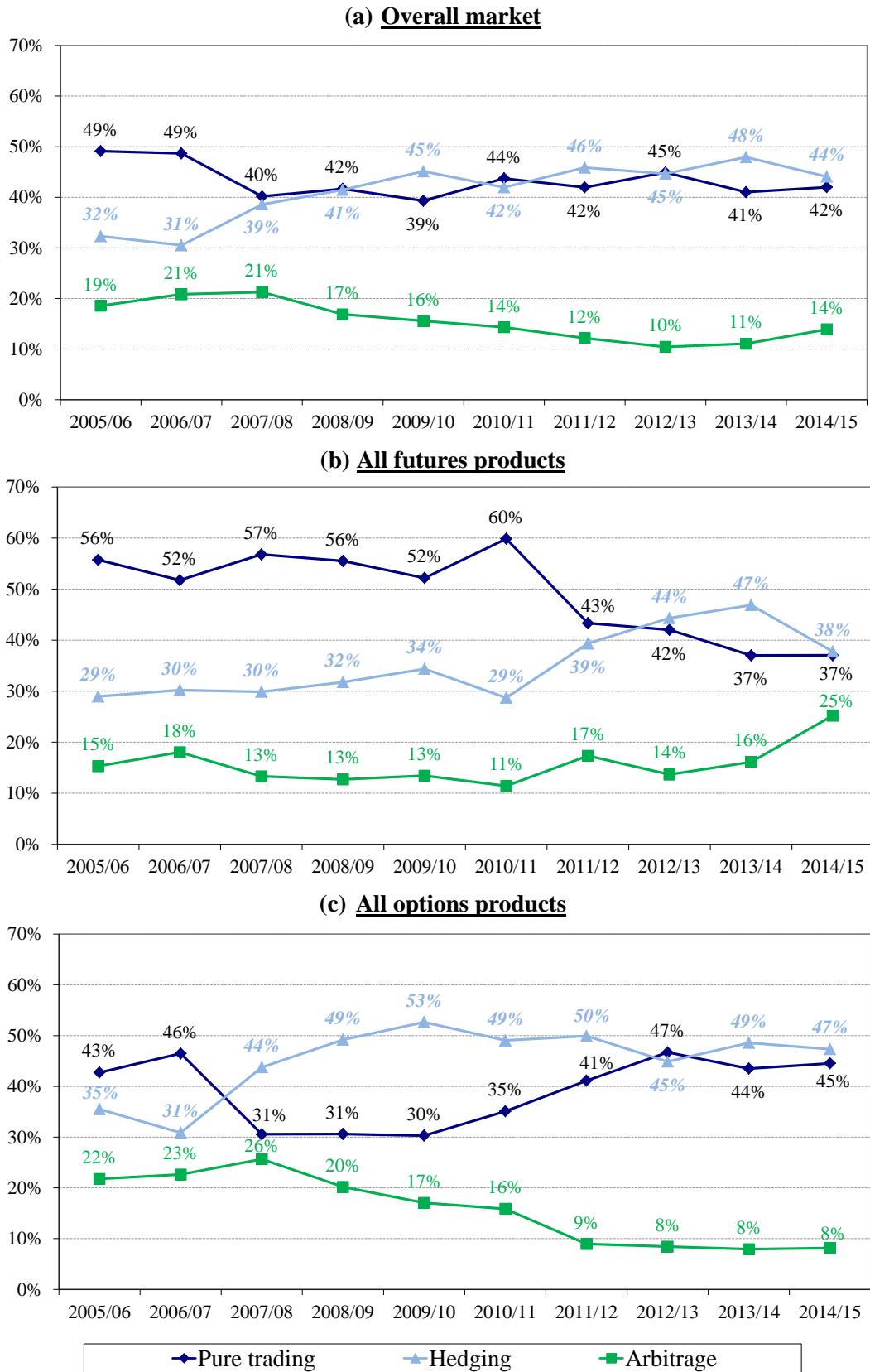


Figure 3. Distribution of derivatives market trading volume by transaction purpose (2005/06 – 2014/15)



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 (2010/11 – 2014/15)								
Product	Purpose	Percentage contribution ⁽¹⁾					Implied contract volume ⁽²⁾ 2014/15	
		2010/11	2011/12	2012/13	2013/14	2014/15	No. of contracts	Y-o-Y change
HSI futures	Pure trading	60.4	44.2	45.6	40.4	35.4	6,245,190	-11.6%
	Hedging	26.8	38.4	40.5	43.6	39.1	6,895,623	-9.6%
	Arbitrage	12.8	17.5	13.9	16.1	25.4	4,482,474	59.5%
	Total	100.0	100.0	100.0	100.0	100.0	17,623,288	0.7%
HHI futures	Pure trading	50.8	32.3	30.6	29.2	33.6	9,262,435	48.6%
	Hedging	37.1	48.5	53.3	53.2	43.1	11,894,718	4.5%
	Arbitrage	12.2	19.2	16.0	17.6	23.3	6,431,574	71.3%
	Total	100.0	100.0	100.0	100.0	100.0	27,588,727	29.1%
Mini-HSI futures	Pure trading	71.6	57.8	55.7	48.5	46.5	3,789,445	11.6%
	Hedging	20.5	27.5	34.5	38.5	24.1	1,962,252	-27.2%
	Arbitrage	7.8	14.7	9.8	12.9	29.4	2,393,977	164.9%
	Total	100.0	100.0	100.0	100.0	100.0	8,145,674	16.4%
Mini-HHI futures ⁽³⁾	Pure trading	63.6	46.9	55.3	47.5	44.7	2,686,177	115.0%
	Hedging	31.2	38.5	40.6	39.2	27.7	1,664,821	61.4%
	Arbitrage	5.2	14.6	4.0	13.3	27.5	1,651,856	372.9%
	Total	100.0	100.0	100.0	100.0	100.0	6,002,854	128.2%
HSI options	Pure trading	39.6	41.1	53.6	53.1	42.8	3,353,499	-12.5%
	Hedging	38.6	46.9	35.6	35.4	45.4	3,555,672	39.2%
	Arbitrage	21.8	12.0	10.8	11.6	11.8	920,711	10.2%
	Total	100.0	100.0	100.0	100.0	100.0	7,829,881	8.4%
HHI options	Pure trading	23.6	23.7	30.5	30.7	31.9	3,459,109	27.9%
	Hedging	60.1	68.4	60.9	59.7	60.6	6,576,532	25.3%
	Arbitrage	16.3	7.9	8.5	9.6	7.5	811,779	-3.8%
	Total	100.0	100.0	100.0	100.0	100.0	10,847,420	23.3%
Mini-HSI options ⁽³⁾	Pure trading	n.a.	n.a.	73.2	70.7	54.3	583,041	-14.3%
	Hedging	n.a.	n.a.	24.7	26.3	33.2	356,959	41.0%
	Arbitrage	n.a.	n.a.	2.1	3.1	12.5	133,771	355.4%
	Total	n.a.	n.a.	100.0	100.0	100.0	1,073,771	11.5%
Index futures & options	Pure trading	54.2	41.6	43.1	38.4	37.1	29,378,895	16.8%
	Hedging	32.3	42.6	44.5	47.0	41.6	32,906,578	6.9%
	Arbitrage	13.5	15.8	12.5	14.6	21.3	16,826,142	76.6%
	Total	100.0	100.0	100.0	100.0	100.0	79,111,615	20.8%
Stock options	Pure trading	35.0	42.4	46.9	43.8	46.0	44,288,969	66.1%
	Hedging	50.0	49.1	44.9	48.9	46.1	44,424,933	49.2%
	Arbitrage	15.0	8.6	8.2	7.3	7.9	7,581,523	70.2%
	Total	100.0	100.0	100.0	100.0	100.0	96,295,425	58.1%
All futures	Pure trading	59.9	43.3	42.0	37.0	37.0	21,983,246	22.5%
	Hedging	28.7	39.3	44.3	46.9	37.8	22,417,415	-1.4%
	Arbitrage	11.4	17.3	13.7	16.1	25.2	14,959,881	91.3%
	Total	100.0	100.0	100.0	100.0	100.0	59,360,543	22.4%
All options	Pure trading	35.1	41.1	46.7	43.5	44.5	51,684,618	52.5%
	Hedging	49.1	49.9	44.9	48.6	47.3	54,914,096	45.2%
	Arbitrage	15.9	8.9	8.4	7.9	8.1	9,447,784	53.3%
	Total	100.0	100.0	100.0	100.0	100.0	116,046,497	49.0%
Overall market	Pure trading	43.7	42.0	44.9	41.0	42.0	73,667,864	42.1%
	Hedging	42.0	45.9	44.7	47.9	44.1	77,331,511	27.7%
	Arbitrage	14.3	12.2	10.4	11.1	13.9	24,407,665	74.5%
	Total	100.0	100.0	100.0	100.0	100.0	175,407,040	38.8%
Total contract volume ⁽⁴⁾		126,711,586	134,581,295	124,735,839	126,370,418	175,407,040		
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 (launched on 31 March 2008) and Mini-HSI options (launched on 18 November 2002) were included in the survey for the first time in 2010/11 and 2012/13 respectively. These products were omitted in the previous surveys due to their negligible contribution to the total market contract volume.								
(4) Actual total contract volume of all products under study during the study period.								

3. TRADING BY INVESTOR TYPE

3.1 Overall pattern

(See Figures 4 – 8.)

Trading distribution by investor type

- In 2014/15, turnover in HKEx's derivatives market was shared almost equally by **EP principal trading** and **agency (investor) trading**, more or less similar to the pattern since 2009/10. The contribution of overseas investor trading outstripped again that of local investors, reaching its highest level in 2014/15 (28%, similar to the 27% in 2013/14). The contribution from local investors was 21%, compared to 23% in 2013/14.
- **EP principal trading** accounted for 51% of total derivatives market contract volume (compared to 50% in 2013/14) — 41% from market maker trading (up from 36% in 2013/14) and 10% from EP proprietary trading (down from 14% in 2013/14). Over the past decade, EP principal trading contributed 52% of cumulative market turnover.
- EP principal trading remained dominant in stock options trading (71%, the same as in 2013/14) but contributed only 27% (down from 31% in 2013/14) in index futures and options. As in the past few years, **the majority of EP principal trading came from stock options** — stock options contributed 55% of the total market turnover but its EP principal trading contributed 76% of total EP principal trading (68% in 2013/14) and 88% of total market making (86% in 2013/14).
- The contribution from **overseas investors** was 28% (25% from institutions) in 2014/15. Their cumulative market share in the past decade was 25% (22% from institutions).
- The contribution from **local investors** was 21% — 15% from retail and 6% from institutions (compared to 16% and 7% respectively in 2013/14). Over the past decade, local investors contributed 24% of cumulative market turnover.
- The contribution from **institutional investors** (local and overseas) to total market turnover was 31% in 2014/15 (the highest level in the past decade), compared to 30% in 2013/14. Their cumulative market share in the past decade was 28%.
- The contribution from **retail investors** (local and overseas) was 18% in 2014/15 (the lowest level in the past decade), compared to 19% in 2013/14. Their cumulative market share in the past decade was 21%.

Implied contract volume by investor type

- **EP principal trading** increased by 40% from 2013/14, reflecting largely a 57% increase in market maker trading.
- All types of **investor trading** recorded a year-on-year volume growth in 2014/15, a pattern not obtained since 2008/09.
- **Overseas investor** trading volume (predominantly from institutions) increased by 45% from 2013/14.
- **Local investor** trading volume increased by 29% from 2013/14 — 30% for retail and 26% for institutions.

- Over the past decade, the overall derivatives market trading recorded a compound annual growth rate (CAGR) of 20% — driven mainly by the growth in overseas investor trading volume (CAGR of 22%) and in EP principal trading volume (CAGR of 21%).

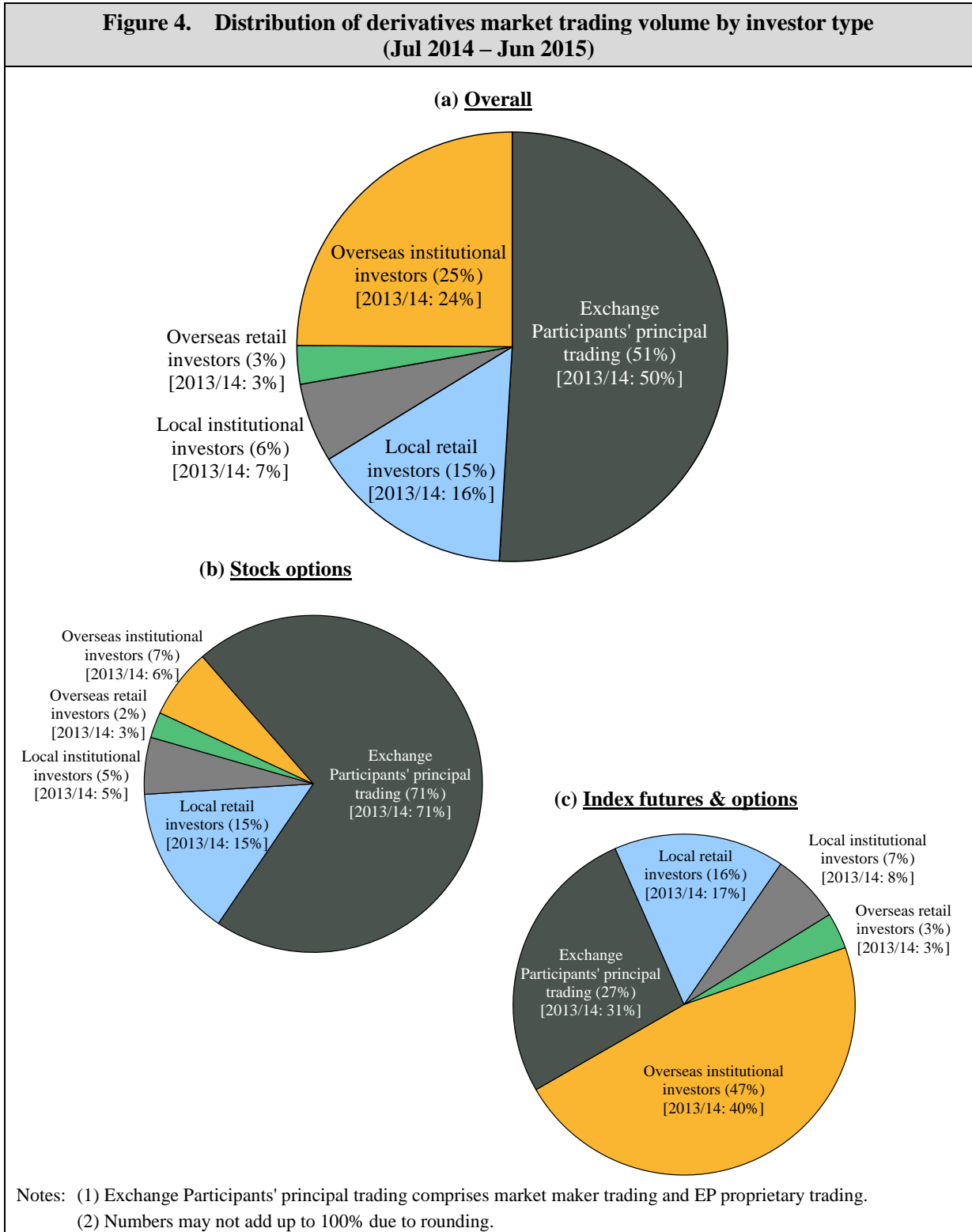
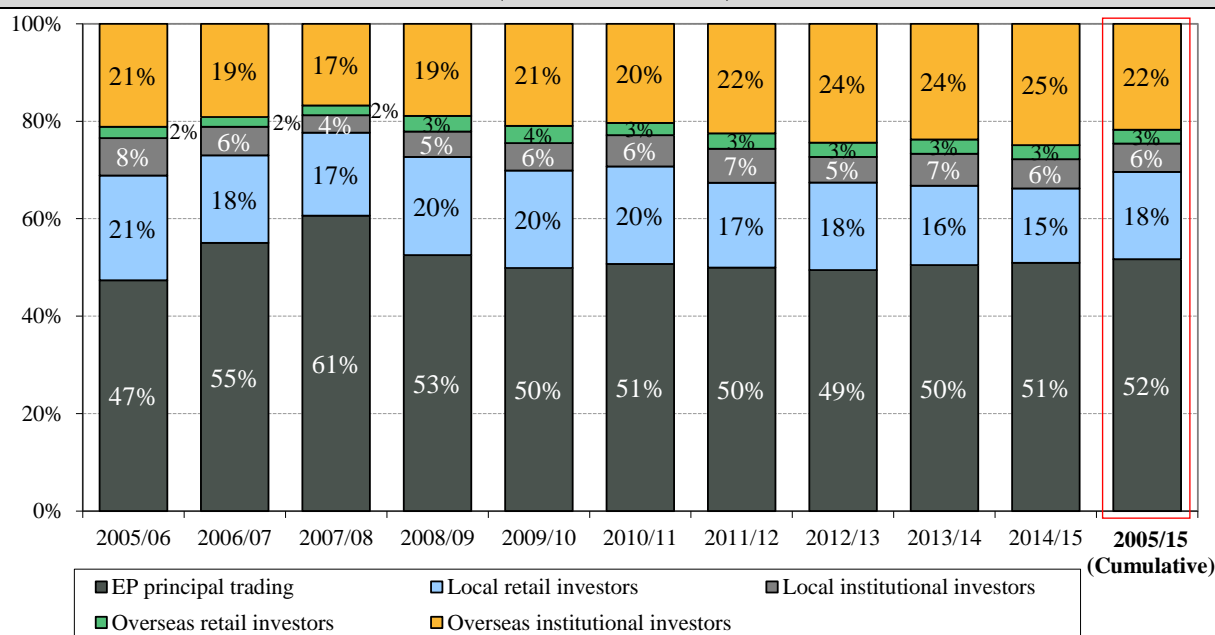
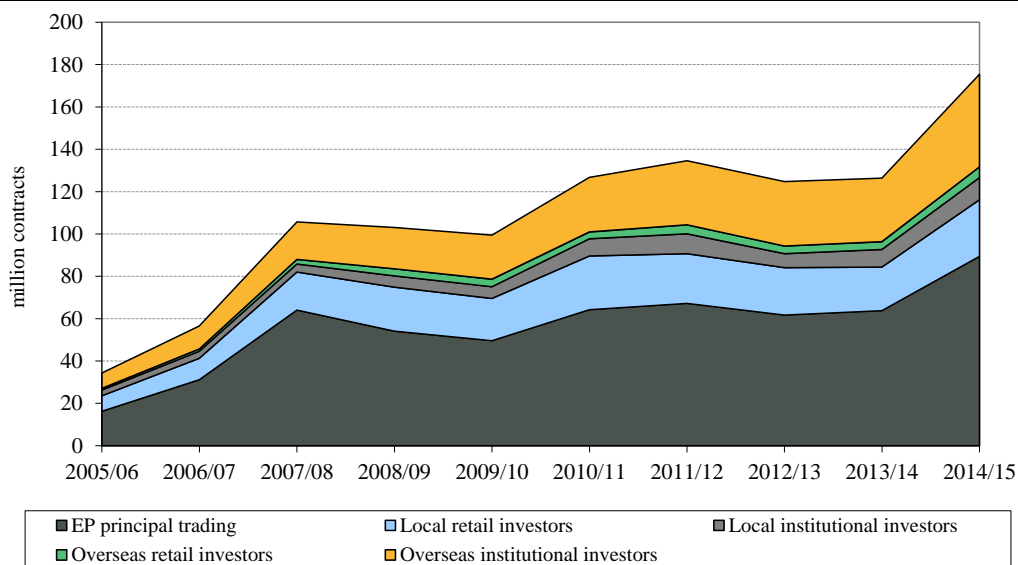


Figure 5. Distribution of derivatives market trading volume by investor type (2005/06 – 2014/15)



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.

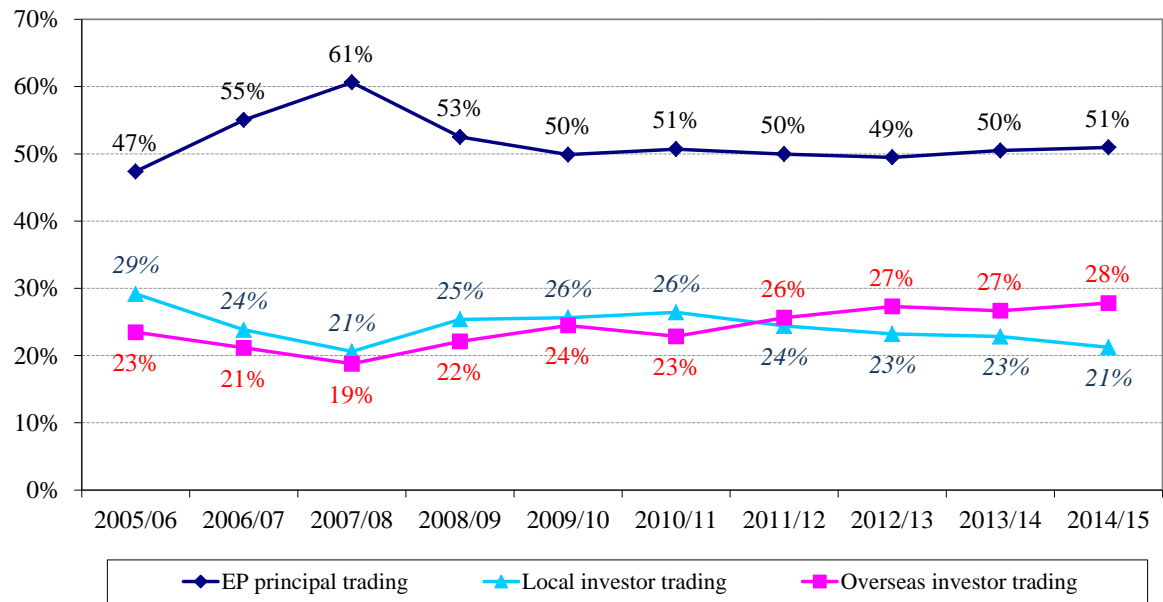
Figure 6. Implied contract volume of derivatives by investor type (2005/06 – 2014/15)



Type of trade	Year-on-year % change										2005/15 CAGR
	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	
EP principal trading	128.14%	91.57%	105.85%	-15.57%	-8.30%	29.52%	4.66%	-8.22%	3.40%	40.07%	20.86%
Market maker	141.11%	95.95%	128.95%	-20.73%	-12.30%	36.80%	4.96%	-10.98%	-0.002%	56.71%	22.58%
Proprietary trading	101.51%	80.79%	44.34%	6.24%	4.31%	10.22%	3.68%	0.99%	13.39%	-3.00%	15.55%
Local investor trading	39.07%	34.75%	61.63%	20.05%	-2.47%	31.36%	-1.96%	-11.81%	-0.36%	29.09%	15.73%
Retail	42.66%	38.21%	76.70%	15.52%	-4.12%	27.35%	-7.63%	-4.37%	-8.22%	30.27%	15.43%
Institutional	29.95%	25.07%	15.11%	41.53%	3.91%	45.67%	15.73%	-30.33%	26.50%	26.18%	16.55%
Overseas investor trading	38.84%	48.65%	65.84%	14.77%	6.96%	18.98%	19.09%	-1.28%	-1.06%	44.72%	22.17%
Retail	52.10%	39.87%	88.65%	56.14%	6.22%	-8.93%	32.26%	-14.67%	1.32%	38.41%	22.71%
Institutional	37.51%	49.63%	63.47%	9.81%	7.08%	23.70%	17.45%	0.60%	-1.34%	45.49%	22.11%
Retail investor trading	43.54%	38.38%	77.89%	19.82%	-2.69%	21.89%	-3.14%	-5.95%	-6.89%	31.50%	16.33%
Institutional investor trading	35.41%	43.08%	52.19%	15.40%	6.40%	28.35%	17.04%	-6.74%	3.59%	41.31%	20.81%
Total	70.56%	64.93%	86.86%	-2.54%	-3.45%	27.41%	6.21%	-7.32%	1.31%	38.80%	19.88%

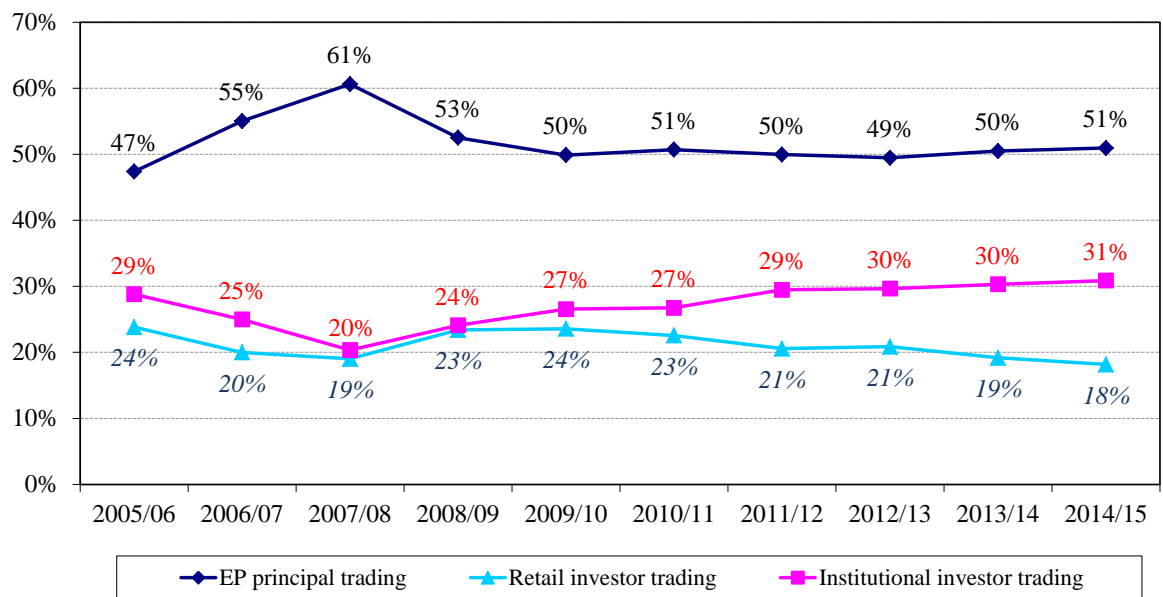
Note: Exchange Participants' principal trading comprises market maker trading and EP proprietary trading.

Figure 7. Distribution of derivatives market trading volume by investor type (local vs overseas) (2005/06 – 2014/15)



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

Figure 8. Distribution of derivatives market trading volume by investor type (retail vs institutional) (2005/06 – 2014/15)



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

3.2 Trading by product

(See Figure 9 and Tables 2 and 3.)

Trading distribution by investor type

- For **HSI futures**, the contribution from overseas institutional investors was the most significant and achieved a record high for the third year in a row, 58% in 2014/15, up from the previous records of around 50% in 2012/13 and 2013/14. The contribution from local retail investors continued its downtrend over the past few years to 17% (compared to 19% in 2013/14). The contribution from EP proprietary trading was 15% of the product's turnover (down from 20% in 2013/14), the lowest level in the past five years.
- For **HHI futures**, overseas investors remained the major participant type. Their contribution reached a new record of 67% in 2014/15 (up from the previous record of 61% in 2013/14), mainly from overseas institutional investors (63%). The contribution from EP proprietary trading was 17% (down from 25% in 2013/14) and was the lowest in the past five years. Local investors' contribution was 16% (9% from retail; 7% from institutions), compared to 15% in 2013/14.
- For **Mini-HSI futures**, overseas institutional investors for the first time became equally important as local retail investors — 37% of the product's turnover for each in 2014/15. Notably, the contribution from overseas institutional investors rose from 21% in 2013/14 while that from local retail investors further decreased from 41% in 2013/14. The contribution from EP proprietary trading was 18% in 2014/15 (down from 29% in 2013/14), the lowest level in the past five years.
- For **Mini-HHI futures**, the contribution of overseas investors surpassed that from local investors in 2014/15, similar to the pattern of Mini-HSI futures. For the first time, overseas institutional investors became the major participant type, contributing 39% of the product's turnover (up from 15% in 2013/14). The contribution from local retail investors was also significant (33%, down from 41% in 2013/14). The contribution from EP proprietary trading was 19% in 2014/15 (down from 35% in 2013/14), the lowest level in the past five years.
- For **HSI options**, EP principal trading remained the major participant type, contributing 61% of the product's turnover in 2014/15 (up from 56% in 2013/14) — 58% from market maker trading (up from 51% in 2013/14) and 3% from proprietary trading (down from 6% in 2013/14). Local investors' contribution was 24%, down from 32% in 2013/14 (driven totally by the decline in local retail investors' contribution from 26% to 18%).
- For **HHI options**, EP principal trading was the major contributor with 51% of the product's turnover in 2014/15 (compared to 49% in 2013/14) — 31% from market maker trading (up from 23% in 2013/14) and 20% from proprietary trading (down from 25% in 2013/14). The contribution from overseas institutional investors was also significant (29%, compared to 28% in 2013/14).
- For **Mini-HSI options**, EP principal trading remained the dominant contributor with 68% of the product's turnover in 2014/15 (compared to 56% in 2013/14) — almost all came from market maker trading (68%, up from 55% in 2013/14) and less than 1% from proprietary trading (1% in 2013/14). The contribution from local retail investors was also large — 27% in 2014/15 (down from 38% in 2013/14).

-
- For *stock options*, EP principal trading remained the major contributor with 71% of the product's turnover in 2014/15 (the same as in 2013/14) — 66% from market maker trading (compared to 65% in 2013/14) and 5% from proprietary trading (6% in 2013/14). Local investors' contribution was 20% — 15% from retail and 5% from institutions (the same as in 2013/14). Overseas investors contributed 9% of the product's turnover, mainly from institutions (7%).
 - While overseas institutional investors were dominant contributors to trading in *index futures*, EP principal trading (mainly market making) dominated in *options trading*, whether index or stock options. Continuous growth in overseas institutional investor contribution to index futures trading was observed in the past few years (from 41% in 2011/12 to 56% in 2014/15) and accounted for more than half of the trading for the first time in 2014/15 while local retail investor contribution to index futures had a declining trend from 26% in 2010/11 to 18% in 2014/15.

Implied contract volume by investor type

- For *HSI futures*, overseas institutional investor trading volume experienced a year-on-year increase of 16%, and was the only contributor to the 0.7% increase in the product's volume. All other trade types experienced a decrease — in particular -21% for EP proprietary trading and -10% for local retail investor volume.
- For *HHI futures*, all types of investor trading experienced year-on-year increases while EP proprietary trading decreased by 9%. Notably, overseas and local investor trading volumes increased by 42% and 39% respectively, compared to a 29% increase in the product's volume.
- For *Mini-HSI futures*, overseas institutional investor trading volume recorded a remarkable, year-on-year increase of 104% while EP proprietary trading decreased by 27%, compared to a 16% increase in product's volume. During the period, local investor trading volume increased by 6%.
- For *Mini-HHI futures*, all types of trading experienced year-on-year increases. A notable increase was observed for overseas institutional investor trading volume (+499%), compared to an increase of 128% in the product's volume.
- For *HSI options*, EP principal trading experienced a year-on-year increase of 19% — +25% for market maker trading but -37% for EP proprietary trading. This compared to an increase of 8% in the product's volume. Local investor trading volume decreased by 19% but overseas investor trading increased by 37% (+45% for overseas institutional investor trading).
- For *HHI options*, EP principal trading increased by 29% (driven by market making) and overseas institutional investor trading increased by 33%, compared to an increase of 23% in the product's volume.
- For *Mini-HSI options*, EP principal trading recorded a year-on-year increase of 34% while local retail investor trading volume decreased by 21%. This compared to an increase of 11% in the product's volume.
- For *stock options*, all types of trading experienced year-on-year increases. The increase in EP principal trading and local investor trading volume, the two key contributors, was 58% and 57% respectively, compared to an increase of 58% in the product's volume.

**Table 2. Distribution of derivatives trading by investor type
(2010/11 – 2011/15)**

Type of investor	Percentage contribution ⁽¹⁾					Implied contract volume ⁽²⁾ 2014/15	
	2010/11	2011/12	2012/13	2013/14	2014/15	No. of contracts	Y-o-Y change
HSI Futures							
EP Proprietary trading	21.0	22.3	19.7	19.6	15.4	2,710,877	-21.1%
Local investors	32.0	29.8	26.9	26.0	23.2	4,093,029	-10.1%
Retail	25.0	21.8	20.5	19.2	17.1	3,012,752	-10.4%
Institutional	7.0	8.0	6.4	6.8	6.1	1,080,277	-9.3%
Overseas investors	47.1	47.9	53.4	54.3	61.4	10,819,382	13.8%
Retail	3.7	3.8	4.8	3.7	3.0	527,051	-18.7%
Institutional	43.4	44.1	48.5	50.6	58.4	10,292,330	16.1%
Total	100.0	100.0	100.0	100.0	100.0	17,623,288	0.7%
HFI Futures							
EP Proprietary trading	23.2	25.9	26.3	24.7	17.4	4,796,613	-9.1%
Local investors	17.2	15.7	14.1	14.6	15.7	4,333,375	38.6%
Retail	9.9	7.3	6.9	6.8	8.8	2,421,437	66.2%
Institutional	7.3	8.3	7.2	7.8	6.9	1,911,938	14.5%
Overseas investors	59.6	58.5	59.5	60.7	66.9	18,458,738	42.4%
Retail	2.2	2.1	1.7	2.5	3.5	971,289	81.7%
Institutional	57.4	56.4	57.8	58.2	63.4	17,487,449	40.7%
Total	100.0	100.0	100.0	100.0	100.0	27,588,727	29.1%
Mini-HSI Futures							
EP Proprietary trading	21.6	24.8	25.0	29.1	18.2	1,482,898	-27.2%
Local investors	53.3	52.3	45.5	43.4	39.9	3,252,798	7.1%
Retail	49.0	46.8	43.7	40.6	37.0	3,011,544	6.1%
Institutional	4.2	5.5	1.8	2.8	3.0	241,254	21.5%
Overseas investors	25.1	22.9	29.5	27.5	41.9	3,409,978	77.5%
Retail	7.5	7.5	8.7	6.2	4.6	376,935	-13.1%
Institutional	17.6	15.4	20.8	21.3	37.2	3,033,043	103.9%
Total	100.0	100.0	100.0	100.0	100.0	8,145,674	16.4%
Mini-HFI Futures ⁽³⁾							
EP Proprietary trading	31.4	41.8	37.2	35.3	18.5	1,111,064	19.6%
Local investors	54.5	43.8	49.7	42.9	35.8	2,151,432	90.8%
Retail	53.1	40.2	48.8	40.6	33.4	2,007,180	87.8%
Institutional	1.4	3.6	0.9	2.2	2.4	144,252	145.8%
Overseas investors	14.2	14.5	13.1	21.8	45.7	2,740,358	377.7%
Retail	8.1	7.7	8.3	7.1	6.9	415,124	123.8%
Institutional	6.1	6.8	4.7	14.8	38.7	2,325,234	499.0%
Total	100.0	100.0	100.0	100.0	100.0	6,002,854	128.2%
Index futures							
EP Proprietary trading	22.0	24.6	23.7	24.1	17.0	10,101,453	-13.5%
Local investors	32.4	30.5	26.0	24.4	23.3	13,830,634	16.8%
Retail	26.0	23.0	20.3	18.0	17.6	10,452,913	19.8%
Institutional	6.4	7.4	5.7	6.4	5.7	3,377,721	8.4%
Overseas investors	45.5	44.9	50.3	51.5	59.7	35,428,456	41.9%
Retail	4.1	4.2	4.4	3.7	3.9	2,290,400	27.1%
Institutional	41.4	40.7	45.8	47.8	55.8	33,138,057	43.1%
Total	100.0	100.0	100.0	100.0	100.0	59,360,543	22.4%
HSI Options							
Principal trading ⁽⁴⁾	51.8	51.4	49.5	56.1	61.4	4,809,009	18.7%
Market makers	43.6	46.1	41.6	50.6	58.2	4,555,302	24.8%
Proprietary trading	8.3	5.3	7.9	5.6	3.2	253,707	-36.7%
Local investors	35.0	28.3	30.1	32.5	24.2	1,893,722	-19.2%
Retail	22.7	18.7	22.7	26.3	18.0	1,407,644	-25.9%
Institutional	12.3	9.7	7.4	6.2	6.2	486,078	9.4%
Overseas investors	13.2	20.3	20.4	11.4	14.4	1,127,150	36.6%
Retail	2.7	2.4	2.7	2.7	2.8	216,803	10.2%
Institutional	10.5	17.8	17.7	8.7	11.6	910,347	44.9%
Total	100.0	100.0	100.0	100.0	100.0	7,829,881	8.4%
HFI Options							
Principal trading ⁽⁴⁾	44.8	47.2	51.2	48.6	50.8	5,505,535	28.8%
Market makers	28.5	33.4	29.0	23.5	30.9	3,352,810	62.2%
Proprietary trading	16.3	13.8	22.2	25.1	19.8	2,152,725	-2.4%
Local investors	30.9	21.9	19.8	22.7	18.3	1,988,029	-0.7%
Retail	4.7	2.7	3.7	3.7	6.0	645,473	99.4%
Institutional	26.2	19.2	16.1	19.1	12.4	1,342,556	-20.0%
Overseas investors	24.3	30.9	28.9	28.7	30.9	3,353,856	32.8%
Retail	1.0	0.4	0.7	1.0	1.4	156,348	82.5%
Institutional	23.3	30.5	28.2	27.7	29.5	3,197,508	31.1%
Total	100.0	100.0	100.0	100.0	100.0	10,847,420	23.3%

(to be continued on next page)

**Table 2. Distribution of derivatives trading by investor type
(2010/11 – 2014/15) (cont'd)**

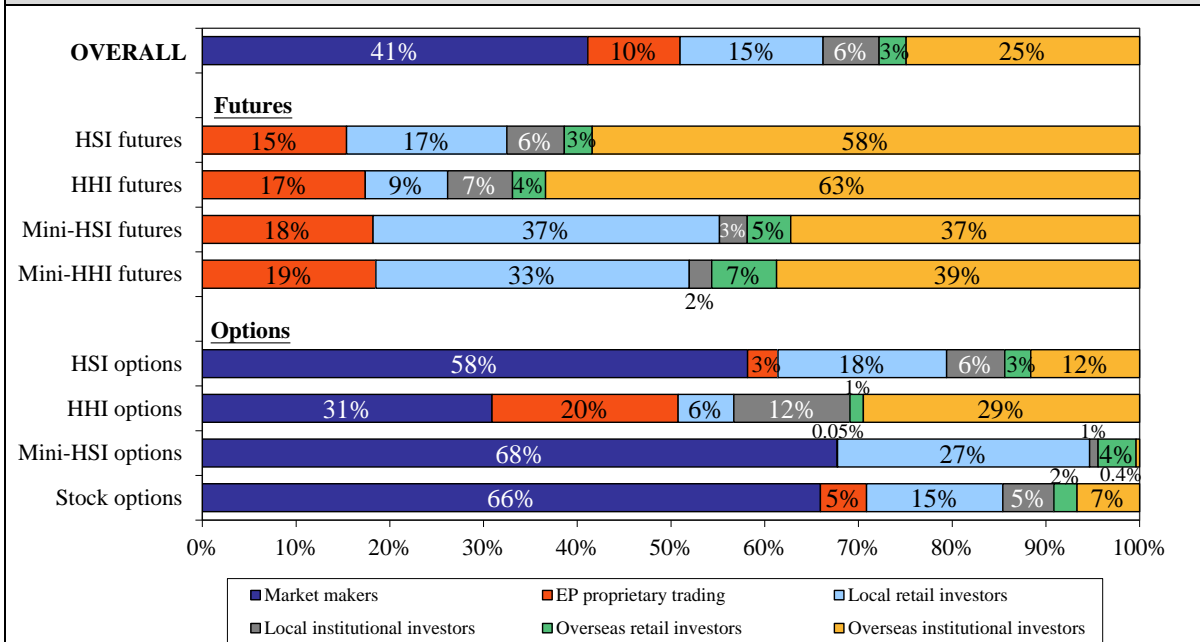
Type of investor	Percentage contribution ⁽¹⁾					Implied contract volume ⁽²⁾ 2014/15	
	2010/11	2011/12	2012/13	2013/14	2014/15	No. of contracts	Y-o-Y change
Mini-HSI Options ⁽³⁾							
Principal trading ⁽⁴⁾	n.a.	n.a.	54.5	56.4	67.8	727,726	34.0%
Market makers	n.a.	n.a.	54.3	55.2	67.7	727,224	36.7%
Proprietary trading	n.a.	n.a.	0.3	1.2	0.05	502	-95.5%
Local investors	n.a.	n.a.	34.7	38.7	27.8	298,477	-20.0%
Retail	n.a.	n.a.	33.8	37.8	26.9	288,734	-20.6%
Institutional	n.a.	n.a.	0.9	1.0	0.9	9,743	4.4%
Overseas investors	n.a.	n.a.	10.7	4.9	4.4	47,568	1.5%
Retail	n.a.	n.a.	7.1	4.4	4.0	43,471	1.9%
Institutional	n.a.	n.a.	3.7	0.4	0.4	4,097	-3.3%
Total	n.a.	n.a.	100.0	100.0	100.0	1,073,771	11.5%
Index options							
Principal trading ⁽⁴⁾	50.0	50.1	50.6	52.2	55.9	11,042,270	24.5%
Market makers	39.7	42.1	37.6	36.8	43.7	8,635,336	38.1%
Proprietary trading	10.3	8.0	13.0	15.4	12.2	2,406,934	-8.1%
Local investors	33.9	26.2	26.4	27.8	21.2	4,180,228	-11.4%
Retail	18.1	13.5	16.0	15.2	11.9	2,341,851	-9.5%
Institutional	15.8	12.7	10.4	12.6	9.3	1,838,378	-13.8%
Overseas investors	16.0	23.7	23.1	20.0	22.9	4,528,574	33.3%
Retail	2.3	1.8	2.3	1.9	2.1	416,622	28.2%
Institutional	13.7	21.9	20.8	18.1	20.8	4,111,952	33.9%
Total	100.0	100.0	100.0	100.0	100.0	19,751,072	16.3%
Index futures & options							
Principal trading ⁽⁴⁾	28.6	30.4	30.9	31.4	26.7	21,143,723	2.9%
Market makers	9.3	9.5	10.1	9.5	10.9	8,635,336	38.1%
Proprietary trading	19.3	20.9	20.8	21.8	15.8	12,508,387	-12.5%
Local investors	32.8	29.5	26.1	25.3	22.8	18,010,862	8.7%
Retail	24.2	20.9	19.1	17.3	16.2	12,794,764	13.1%
Institutional	8.6	8.6	7.0	8.0	6.6	5,216,098	-0.6%
Overseas investors	38.7	40.1	43.0	43.3	50.5	39,957,030	40.9%
Retail	3.7	3.6	3.9	3.2	3.4	2,707,022	27.3%
Institutional	35.0	36.4	39.1	40.1	47.1	37,250,009	42.0%
Total	100.0	100.0	100.0	100.0	100.0	79,111,615	20.8%
Stock options							
Principal trading ⁽⁴⁾	69.2	69.2	69.8	71.1	70.9	68,244,952	57.7%
Market makers	63.6	66.9	66.3	65.3	65.9	63,503,479	59.6%
Proprietary trading	5.6	2.3	3.5	5.7	4.9	4,741,473	36.1%
Local investors	21.1	19.4	20.0	20.2	20.0	19,235,970	56.5%
Retail	16.5	14.0	16.7	15.2	14.5	13,990,133	51.3%
Institutional	4.6	5.4	3.4	5.0	5.4	5,245,837	72.4%
Overseas investors	9.7	11.4	10.2	8.8	9.2	8,814,503	65.1%
Retail investors	1.6	2.7	1.9	2.5	2.5	2,375,912	53.8%
Institutional investors	8.1	8.7	8.3	6.2	6.7	6,438,591	69.7%
Total	100.0	100.0	100.0	100.0	100.0	96,295,425	58.1%
Overall market							
Principal trading ⁽⁴⁾	50.7	50.0	49.5	50.5	51.0	89,388,675	40.1%
Market makers	38.9	38.4	36.9	36.4	41.1	72,138,814	56.7%
Proprietary trading	11.8	11.5	12.6	14.1	9.8	17,249,860	-3.0%
Local investors	26.4	24.4	23.2	22.8	21.2	37,246,832	29.1%
Retail investors	20.0	17.4	18.0	16.3	15.3	26,784,897	30.3%
Institutional investors	6.4	7.0	5.3	6.6	6.0	10,461,935	26.2%
Overseas investors	22.9	25.6	27.3	26.7	27.8	48,771,533	44.7%
Retail investors	2.5	3.2	2.9	2.9	2.9	5,082,934	38.4%
Institutional investors	20.3	22.5	24.4	23.8	24.9	43,688,599	45.5%
Total	100.0	100.0	100.0	100.0	100.0	175,407,040	38.8%

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 (launched on 31 March 2008) and Mini-HSI options (launched on 18 November 2002) were included in the survey for the first time in 2010/11 and 2012/13 respectively. These products were omitted in the previous surveys due to their negligible contribution to the total market contract volume.
- (4) Principal trading comprises market maker trading and EP proprietary trading.

Figure 9. Distribution of derivatives market trading volume by investor type for overall market and each product (Jul 2014 – Jun 2015)



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

	2010/11 Overall	2011/12 Overall	2012/13 Overall	2013/14 Overall	2014/15 Overall	2014/15							
						HSI futures	HSI options	Mini-HSI futures	Mini-HSI options	HHI futures	HHI options	Mini-HHI futures	Stock options
All trading													
Principal[#]	50.7	50.0	49.5	50.5	51.0	15.4	61.4	18.2	67.8	17.4	50.8	18.5	70.9
Agency	49.3	50.0	50.5	49.5	49.0	84.6	38.6	81.8	32.2	82.6	49.2	81.5	29.1
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agency trading													
Local	53.6	48.8	46.0	46.1	43.3	27.4	62.7	48.8	86.3	19.0	37.2	44.0	68.6
Overseas	46.4	51.2	54.0	53.9	56.7	72.6	37.3	51.2	13.7	81.0	62.8	56.0	31.4
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agency trading													
Retail	45.7	41.1	41.3	38.7	37.0	23.7	53.8	50.9	96.0	14.9	15.0	49.5	58.3
Institutional	54.3	58.9	58.7	61.3	63.0	76.3	46.2	49.1	4.0	85.1	85.0	50.5	41.7
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Retail investor trading													
Local	88.8	84.7	86.1	84.8	84.0	85.1	86.7	88.9	86.9	71.4	80.5	82.9	85.5
Overseas	11.2	15.3	13.9	15.2	16.0	14.9	13.3	11.1	13.1	28.6	19.5	17.1	14.5
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Institutional investor trading													
Local	24.0	23.7	17.7	21.6	19.3	9.5	34.8	7.4	70.4	9.9	29.6	5.8	44.9
Overseas	76.0	76.3	82.3	78.4	80.7	90.5	65.2	92.6	29.6	90.1	70.4	94.2	55.1
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Local investor trading													
Retail	75.7	71.3	77.4	71.3	71.9	73.6	74.3	92.6	96.7	55.9	32.5	93.3	72.7
Institutional	24.3	28.7	22.6	28.7	28.1	26.4	25.7	7.4	3.3	44.1	67.5	6.7	27.3
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Overseas investor trading													
Retail	11.1	12.3	10.6	10.9	10.4	4.9	19.2	11.1	91.4	5.3	4.7	15.1	27.0
Institutional	88.9	87.7	89.4	89.1	89.6	95.1	80.8	88.9	8.6	94.7	95.3	84.9	73.0
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

[#] Comprises market maker trading and EP proprietary trading.

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

4. OVERSEAS INVESTOR TRADING BY ORIGIN

4.1 Overall pattern

(See Figures 10 – 13.)

Trading distribution by origin

Overseas investors in aggregate contributed 28% of total market turnover in 2014/15 (compared to 27% in 2013/14) and experienced a year-on-year increase of 45% in contract volume and a CAGR of 22% over the past decade.

- **US investors** surpassed Continental European investors and UK investors and became the largest contributor group in 2014/15 — 32% of overseas investor trading (up from 21% in 2013/14) or 9% of total market turnover (up from 6% in 2013/14)⁸.
- **UK investors** remained the second major overseas contributor group — 26% of overseas investor trading in 2014/15 (compared to 25% in 2013/14) or 7% of total market turnover (the same as in 2013/14).
- **Continental European investors** ranked third — 21% of overseas investor trading in 2014/15 (down from 28% in 2013/14) or 6% of total market turnover (8% in 2013/14).
- The aggregate contribution in 2014/15 from **Asian investors** (Mainland China, Singapore, Japan, Taiwan and the Rest of Asia) was 17% of overseas investor trading (the lowest level in the past five years) or 5% of total market volume (the same as in 2013/14).
 - The majority of the Asian contribution came from **Mainland China investors** — 10% of overseas investor trading (9% in 2013/14), or about 3% of total market volume (2% in 2013/14).
 - The second major Asian contributor was **Singaporean investors** — 4% of overseas investor trading (7% in 2013/14), or 1% of total market volume (2% in 2013/14).

Implied contract volume by origin

- **US** investor trading volume recorded a remarkable year-on-year growth of 116% in 2014/15. **UK** investor trading also recorded a significant volume growth of 48% while **Continental European investors** grew by only 5%. Boosted by the growth in 2014/15, overseas investor trading from the US recorded a CAGR of 30% over the past decade, higher than the CAGRs of investor trading from the UK (+19%) and Continental Europe (+23%).
- Although **Asian investors** had a decline in their aggregate contribution to overseas investor trading (from 20% in 2013/14 to 17% in 2014/15), their aggregate contract volume increased by 22%.
- **Mainland investor trading** volume increased by 55% in 2014/15 and attained a CAGR of 28% over the past decade (compared to 19% for Asian investors as a whole and 22% for total overseas trading).

⁸ This owed largely to the contribution of the top two FEPs by total contract volume (with an aggregate contribution of 19% in the total index derivatives market turnover) who reported a large percentage of transactions being done for their US clients.

- Contract volume of *Singaporean investors*, another key contributor to Asian investor trading, decreased by 16% in 2014/15 and recorded a CAGR of 9% in the past decade.

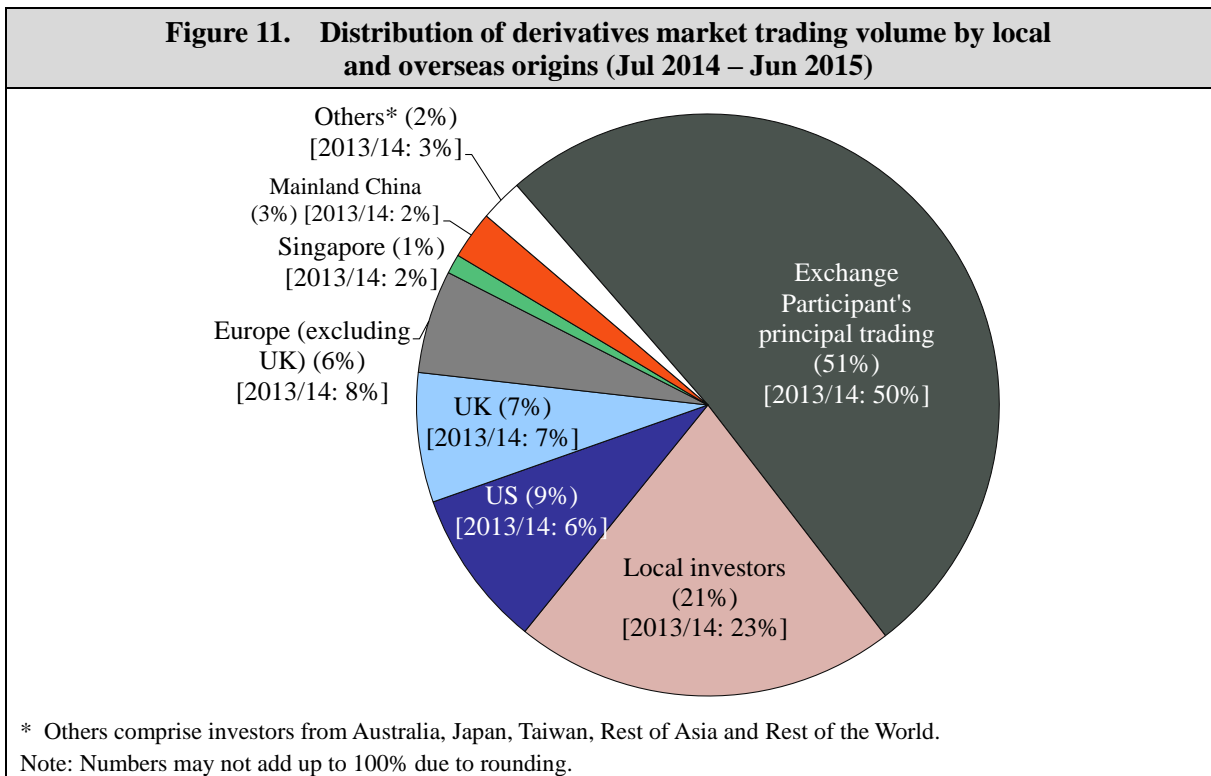
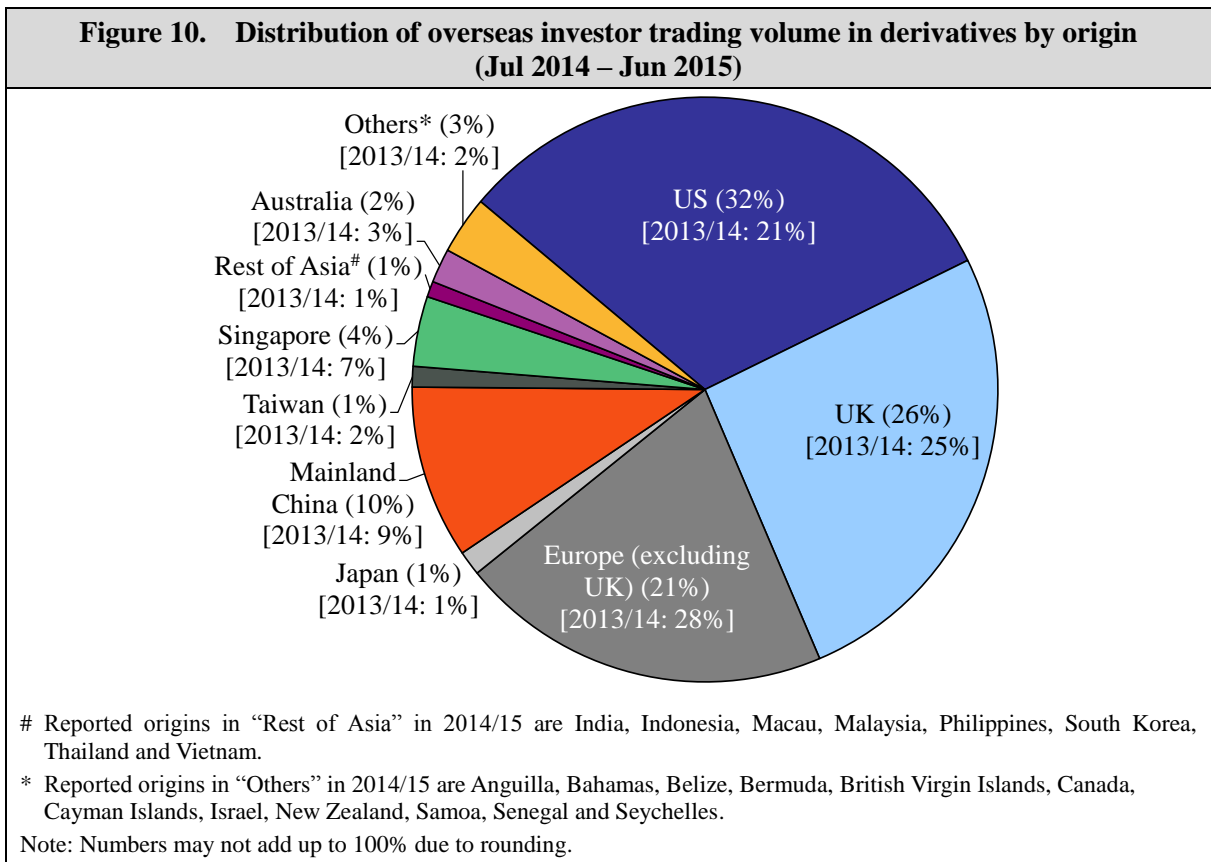
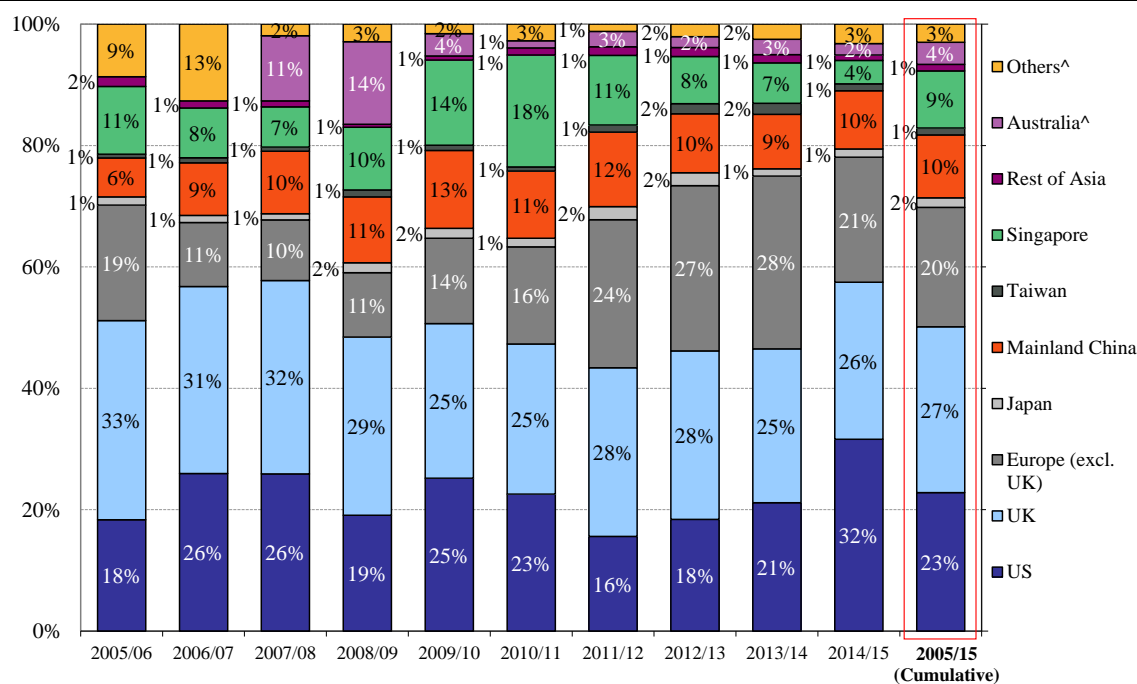


Figure 12. Distribution of overseas investor trading volume in derivatives by origin (2005/06 – 2014/15)

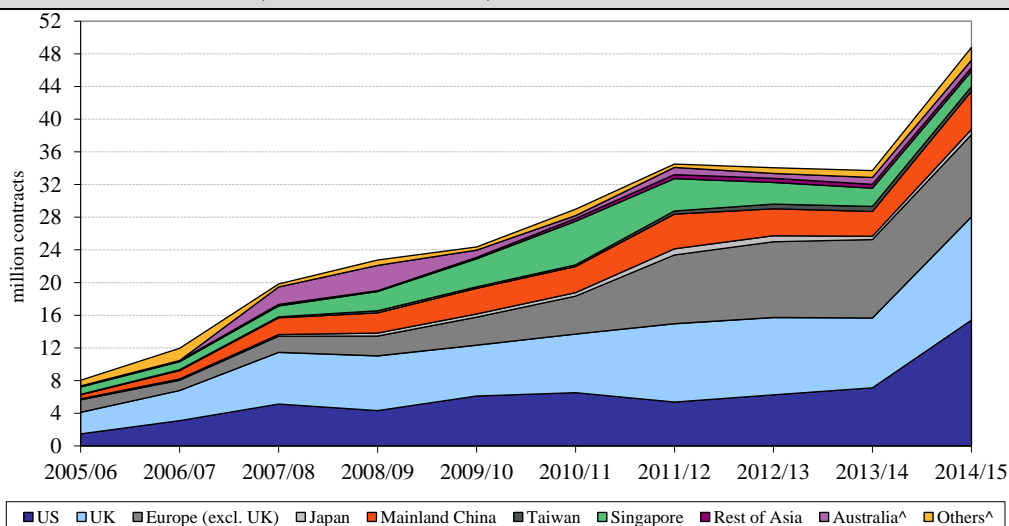


[^] For surveys before 2007/08, Australia was included in “Others”.

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 13. Implied contract volume of overseas investor trading in derivatives by origin (2005/06 – 2014/15)



Overseas origin	Year-on-year % change										2005/15 CAGR
	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	
US	-1.90%	110.60%	65.43%	-15.50%	41.19%	6.61%	-17.74%	16.49%	13.73%	116.41%	29.79%
UK & Europe	37.97%	18.51%	67.89%	9.63%	5.85%	22.53%	52.55%	4.07%	-3.18%	24.96%	20.69%
UK	87.33%	39.52%	71.41%	5.88%	-7.22%	15.46%	33.86%	-1.40%	-9.65%	47.75%	18.98%
Europe (excl. the UK)	-5.14%	-17.75%	57.59%	21.58%	42.07%	35.31%	81.42%	10.31%	3.42%	4.67%	23.25%
Asia	75.63%	41.01%	62.07%	43.19%	31.25%	29.93%	3.51%	-21.17%	-12.97%	21.62%	19.09%
Japan	-19.06%	29.61%	43.49%	83.44%	7.39%	4.70%	80.18%	-3.46%	-43.54%	62.47%	22.30%
Mainland China	15.33%	100.38%	96.75%	21.18%	26.16%	2.51%	32.45%	-21.90%	-8.85%	54.74%	27.67%
Taiwan	230.00%	109.66%	36.92%	88.74%	-20.30%	-1.99%	97.67%	41.06%	10.00%	-10.46%	31.33%
Singapore	196.62%	9.19%	34.00%	78.66%	45.59%	56.02%	-25.84%	-33.03%	-15.35%	-15.81%	8.60%
Rest of Asia	88.40%	8.39%	38.24%	-39.84%	40.38%	109.41%	41.95%	3.52%	-9.25%	-6.48%	14.20%
Australia [^]	-	-	-	45.21%	-71.05%	-61.50%	155.83%	-31.42%	40.20%	8.74%	-
Others [^]	133.24%	116.73%	-75.08%	75.32%	-42.30%	107.40%	-48.36%	72.80%	19.52%	85.26%	9.37%
Total	38.84%	48.65%	65.84%	14.77%	6.96%	18.98%	19.09%	-1.28%	-1.06%	44.72%	22.17%

- : Not applicable

[^] For surveys before 2007/08, Australia was included in “Others”.

Minimum proportion of retail/institutional investor trading by origin

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 (over 99%) came from institutional investors and for the UK (over 96%) and Continental Europe (over 90%) as well.
- Investor trading from Japan and Australia was also predominantly from institutional investors (over 79% for Japan and over 72% for Australia). The majority (over 59%) of Singaporean investor trading also came from institutional investors.
- At least 70% of Mainland investor trading came from retail investors.

(See Table 4.)

Origin	Minimum proportion of the trading coming from	
	Retail investors	Institutional investors
US	~0.0%	99.6%
UK	~0.0%	96.2%
Continental Europe	1.4%	90.6%
Japan	0.6%	79.7%
Mainland China	70.5%	11.5%
Taiwan	9.6%	36.2%
Singapore	1.3%	59.7%
Australia	0.2%	72.1%

Note: The minimum proportions are 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

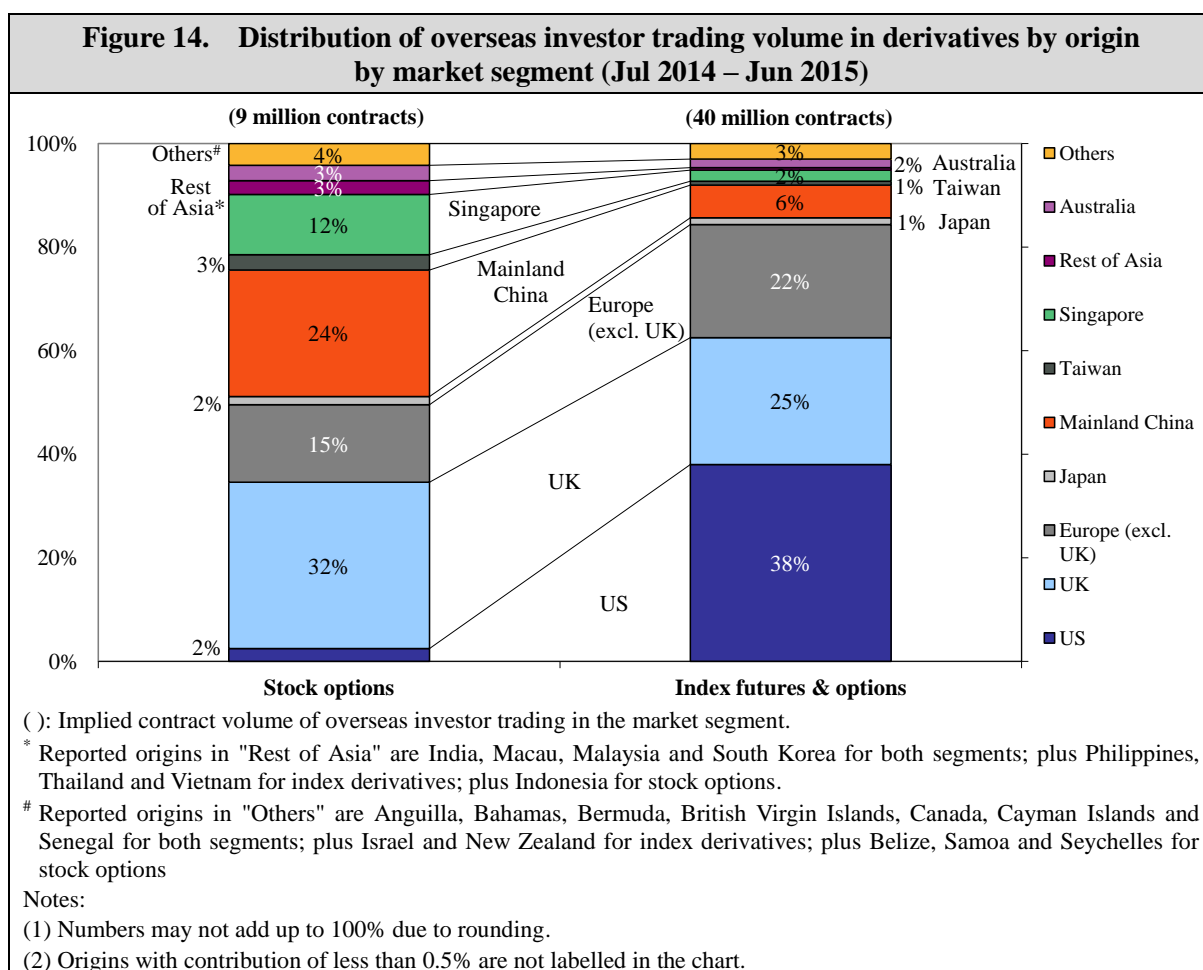
The stock options market segment is served by SOEPs while the market segment in index futures and options is served by FEPs. Overseas investor trading constituted only 9% of stock options trading but 51% of index futures and options trading. The distribution of overseas investor trading by origin for stock options also differed from that of index futures and options.

- For *stock options*, the major overseas contributors were investors from the **UK** (32% of the segment's overseas investor trading, up from 28% in 2013/14) and **Mainland China** (24%, the same as in 2013/14). They were followed by investors from Continental Europe (15%, compared to 16% in 2013/14) and Singapore (12%, compared to 13% in 2013/14). The overall pattern is similar to that in 2013/14.
- For *index futures and options*, the major overseas contributor was investors from the **US** (38%, up from 25% in 2013/14). They were followed by investors from the **UK** (25%, the same in 2013/14) and **Continental Europe** (22%, down from 31% in 2013/14). Mainland investors contributed 6% of the segment's overseas investor trading (the same as in 2013/14).

Implied contract volume by origin

- For *stock options*, investor trading volume from the two key contributor origins — the UK and Mainland China — experienced year-on-year increases of 87% and 71% respectively, higher than the 65% increase in stock options' total overseas investor trading volume. Trading volume from the investors in other origins except the rest of Asia also had year-on-year growths.
- For *index futures and options*, investor trading volume from the major origin — the US — achieved a remarkable year-on-year increase of 116%, compared to the 41% increase in the products' total overseas investor trading volume. Investor trading volume from the UK increased by 39% while Continental European investor trading volume was almost unchanged. Notably, Mainland investor trading volume grew by 43%.
- As shown in Figure 15, overseas investor trading volume concentrated in index products (82%, compared to 84% in 2013/14) and much less in stock options (18%, compared to 16% in 2013/14). *US* investors had little trading in stock options (1%) only. Compared to the western origins, investors from *Singapore, Mainland China and Taiwan* had the largest proportion of their total trading in the HKEx derivatives market devoted to stock options — 54% for Singaporean investors (up from 31% in 2013/14), 47% for Taiwan (up from 25% in 2013/14) and 46% for Mainland (up from 42% in 2013/14).

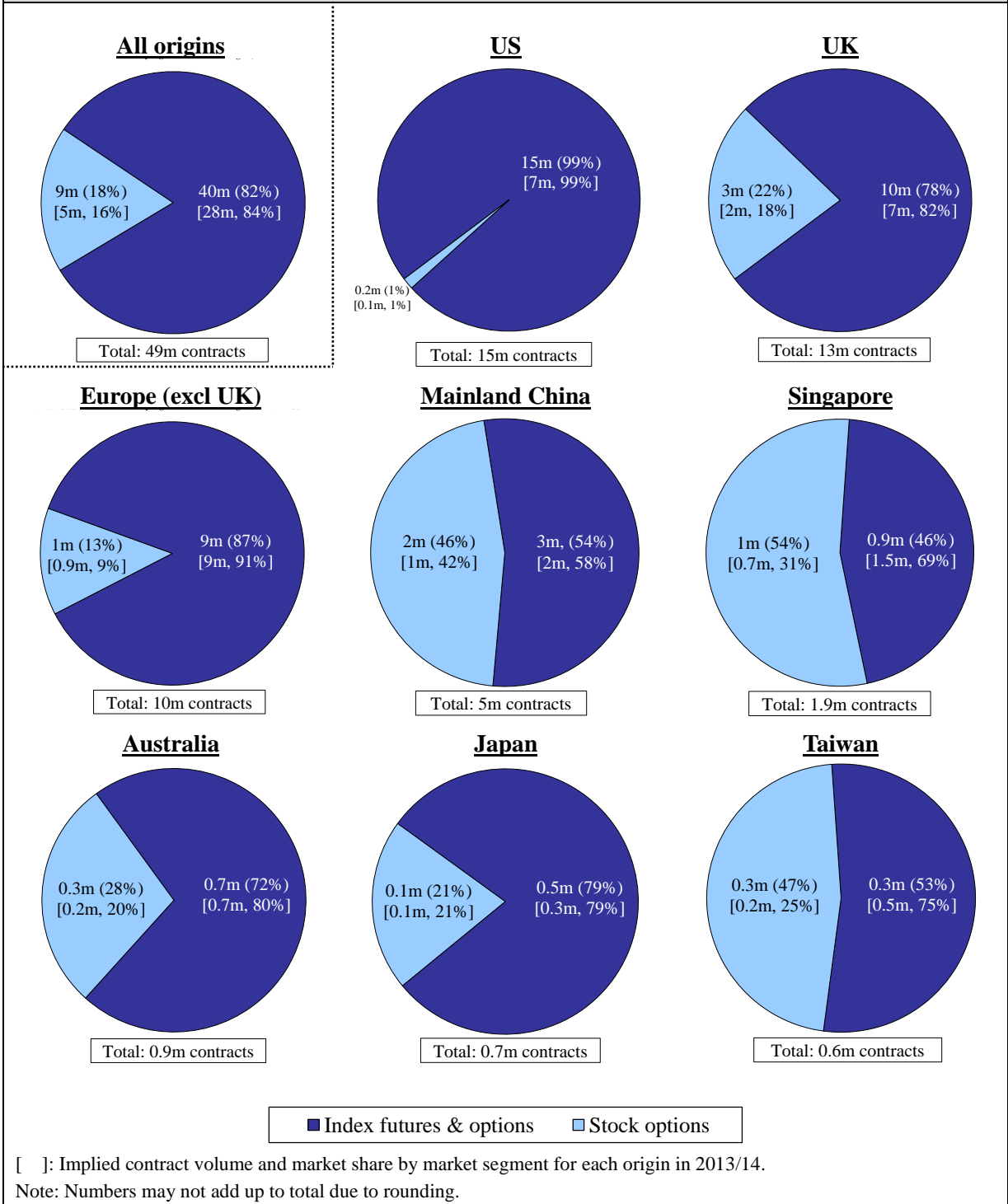
(See Figures 14 – 15, Table 5.)



**Table 5. Distribution of overseas investor trading in derivatives by origin
(2010/11 – 2014/15)**

Overall market (All futures and options)							
Origin	Percentage contribution ⁽²⁾					Implied contract volume ⁽¹⁾ (2014/15)	
	2010/11	2011/12	2012/13	2013/14	2014/15	No. of contracts	Y-o-Y change
US	22.6	15.6	18.4	21.1	31.6	15,414,432	116.4%
Europe	40.7	52.2	55.0	53.8	46.5	22,669,661	25.0%
UK	24.7	27.8	27.8	25.3	25.9	12,622,008	47.8%
Europe (excl. UK)	16.0	24.4	27.3	28.5	20.6	10,047,653	4.7%
Asia	32.8	28.5	22.8	20.0	16.8	8,204,042	21.6%
Japan	1.4	2.2	2.1	1.2	1.4	663,559	62.5%
Mainland China	11.0	12.3	9.7	9.0	9.6	4,670,323	54.7%
Taiwan	0.7	1.2	1.7	1.8	1.1	554,645	-10.5%
Singapore	18.4	11.5	7.8	6.7	3.9	1,889,479	-15.8%
Rest of Asia	1.2	1.4	1.5	1.4	0.9	426,035	-6.5%
Australia	1.2	2.6	1.8	2.5	1.9	922,502	8.7%
Others	2.7	1.2	2.1	2.5	3.2	1,560,896	85.3%
Total⁽¹⁾	100.0	100.0	100.0	100.0	100.0	48,771,533	44.7%
Index futures and options							
Origin	Percentage contribution ⁽²⁾					Implied contract volume ⁽¹⁾ (2014/15)	
	2010/11	2011/12	2012/13	2013/14	2014/15	No. of contracts	Y-o-Y change
US	28.7	18.8	21.9	24.8	38.0	15,195,690	116.2%
Europe	38.2	52.9	54.2	55.6	46.3	18,517,003	17.5%
UK	19.1	23.9	24.1	24.8	24.5	9,789,506	39.3%
Europe (excl. UK)	19.1	29.1	30.0	30.8	21.8	8,727,497	-0.07%
Asia	29.8	25.5	21.4	15.0	11.0	4,390,884	3.5%
Japan	1.6	2.4	2.4	1.1	1.3	524,629	62.0%
Mainland China	9.2	7.9	8.3	6.2	6.3	2,518,177	43.0%
Taiwan	0.7	1.1	1.9	1.6	0.7	295,118	-36.9%
Singapore	18.0	13.1	7.7	5.5	2.2	861,962	-44.4%
Rest of Asia	0.4	1.0	1.1	0.5	0.5	190,998	37.2%
Australia	1.1	2.2	1.6	2.4	1.7	661,292	-2.8%
Others	2.2	0.6	1.0	2.3	3.0	1,192,161	83.3%
Total	100.0	100.0	100.0	100.0	100.0	39,957,030	40.9%
Stock options							
Origin	Percentage contribution ⁽²⁾					Implied contract volume ⁽¹⁾ (2014/15)	
	2010/11	2011/12	2012/13	2013/14	2014/15	No. of contracts	Y-o-Y change
US	2.0	4.4	2.2	1.8	2.5	218,742	130.0%
Europe	49.3	49.7	59.0	44.6	47.1	4,152,658	74.5%
UK	43.4	41.4	44.5	28.3	32.1	2,832,502	87.1%
Europe (excl. UK)	5.9	8.3	14.5	16.2	15.0	1,320,156	52.5%
Asia	42.6	39.0	29.0	46.9	43.3	3,813,158	52.2%
Japan	1.0	1.4	0.8	1.6	1.6	138,930	64.1%
Mainland China	17.3	27.5	16.3	23.6	24.4	2,152,146	71.1%
Taiwan	0.8	1.4	0.7	2.8	2.9	259,527	71.0%
Singapore	19.8	5.9	8.0	13.0	11.7	1,027,517	47.9%
Rest of Asia	3.7	2.7	3.2	5.9	2.7	235,037	-25.7%
Australia	1.5	3.6	2.7	3.1	3.0	261,210	55.4%
Others	4.6	3.3	7.1	3.6	4.2	368,736	92.1%
Total	100.0	100.0	100.0	100.0	100.0	8,814,503	65.1%
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.							

Figure 15. Composition of overseas investor trading volume from each origin by market segment (Jul 2014 – Jun 2015)



5. RETAIL ONLINE TRADING

- **Retail online trading** accounted for 68% of total retail investor trading in 2014/15, compared to 67% in 2013/14. Its contribution to total market turnover was 12% in 2014/15 (compared to 13% in 2013/14).
- For **stock options**, the use of online trading by retail investors bounced back in 2014/15 to a similar level two years ago — 58% (up from 52% in 2013/14, the same as in 2012/13), or 10% of total product volume (compared to 9% in 2013/14).
- For **index derivatives**, the use of online trading by retail investors became steady and remained much more prominent than for stock options — 80% of total retail investor trading, or 16% of total product turnover, a similar pattern in 2013/14.
- A total of 116 EPs (down from 122 in 2013/14) or 54% of responding EPs (vs 53% in 2013/14) offered online trading services to retail derivatives investors (referred to as “**online brokers**”). Retail online trading accounted for 45% of online brokers’ total turnover in 2014/15 (31% for stock options brokers and 71% for index derivatives brokers), down from 47% in 2013/14.

Figure 16. Market share of retail online trading in derivatives trading (2005/06 – 2014/15)

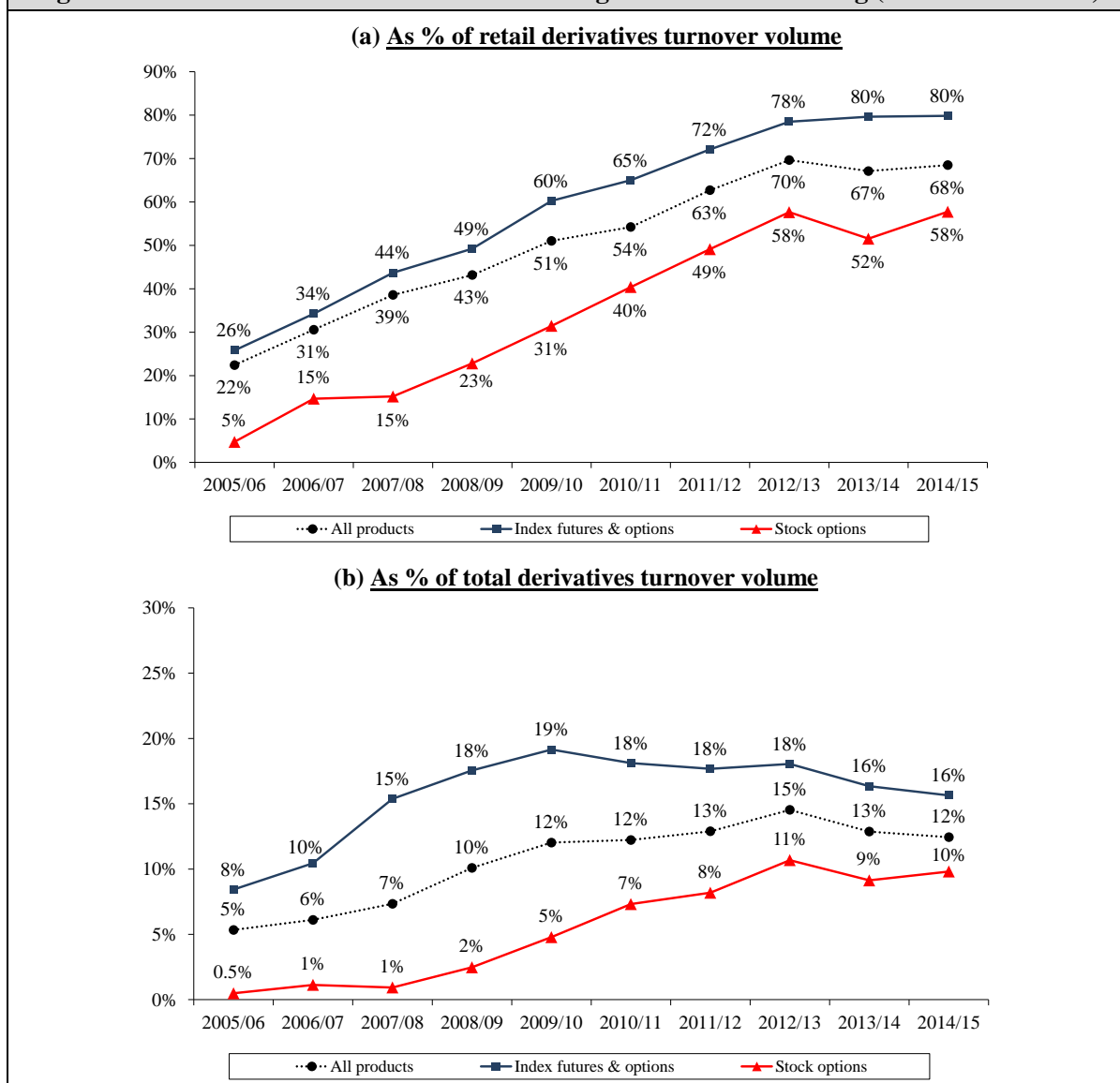


Table 6. Statistics on retail online trading in derivatives (2010/11 – 2014/15)					
Overall market (All futures and options)	2010/11	2011/12	2012/13	2013/14	2014/15
Online brokers⁽¹⁾					
Total number of online brokers	91	105	112	122	116
- As % of all responding EPs (%)	44%	48%	49%	53%	54%
Online trading					
Total implied contract volume (1-sided) ⁽⁵⁾	15,494,200	17,354,525	18,125,661	16,266,956	21,828,087
- As % of total market turnover ⁽³⁾ (%)	12.2%	12.9%	14.5%	12.9%	12.4%
- As % of total agency (investor) trading (%)	24.8%	25.8%	28.8%	26.0%	25.4%
- As % of total retail investor trading (%)	54.2%	62.7%	69.6%	67.1%	68.5%
- As % of total turnover of online brokers (%)	57.6%	46.3%	50.9%	46.9%	45.3%
Index futures and options					
2010/11					
2011/12					
2012/13					
2013/14					
2014/15					
Online brokers⁽¹⁾					
Total number of online brokers	77	88	90	95	89
- As % of all responding EPs (%)	53%	59%	59%	63%	64%
Online trading					
Total implied contract volume (1-sided) ⁽²⁾	10,438,395	11,798,691	11,761,364	10,705,055	12,378,137
- As % of total product turnover ⁽⁴⁾ (%)	18.1%	17.7%	18.0%	16.3%	15.6%
- As % of total product agency (investor) trading (%)	25.4%	25.4%	26.1%	23.8%	21.4%
- As % of total product retail investor trading (%)	65.0%	72.1%	78.5%	79.6%	79.8%
- As % of total product turnover of online brokers (%)	62.3%	65.6%	72.1%	67.9%	70.5%
Stock options					
2010/11					
2011/12					
2012/13					
2013/14					
2014/15					
Online brokers⁽¹⁾					
Total number of online brokers	14	17	22	27	27
- As % of all responding EPs (%)	22%	25%	29%	35%	36%
Online trading					
Total implied contract volume (1-sided) ⁽²⁾	5,055,805	5,555,833	6,364,296	5,561,901	9,449,950
- As % of total product turnover ⁽⁴⁾ (%)	7.3%	8.2%	10.7%	9.1%	9.8%
- As % of total product agency (investor) trading (%)	23.7%	26.6%	35.4%	31.6%	33.7%
- As % of total product retail investor trading (%)	40.4%	49.1%	57.6%	51.5%	57.7%
- As % of total product turnover of online brokers (%)	49.9%	28.7%	33.2%	29.5%	30.9%
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 index futures and options and that for stock options.					

GLOSSARY

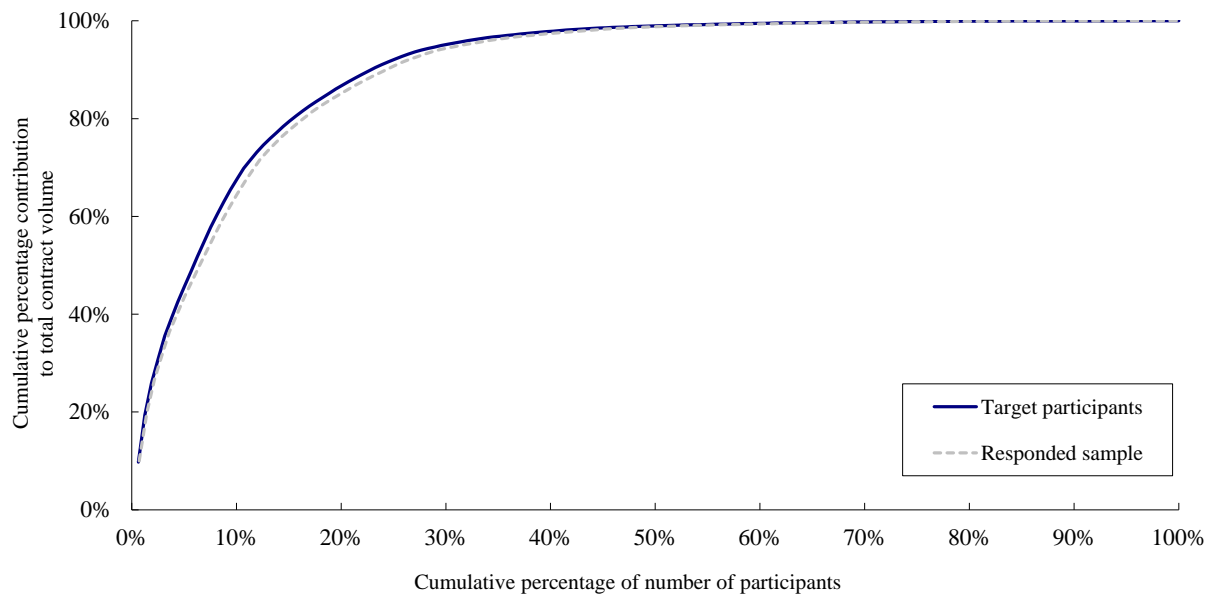
Hedging	Utilisation of futures/options to reduce or eliminate the market risk of a portfolio by compensating for the effect of price fluctuations of an underlying asset.
Pure trading	Trading for potential profit in anticipation of a price movement in either the short or long term, but not for hedging 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

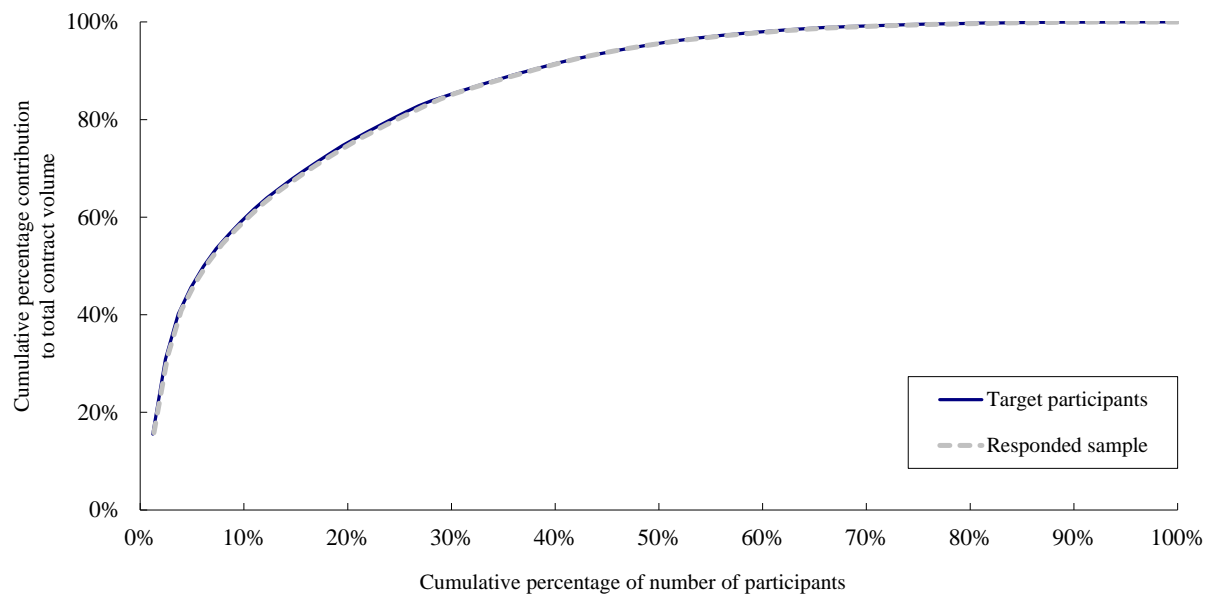
Exchange Participants	Target population	Responded participants	Response rate	% share of turnover in target population
Futures EPs	159	139	87%	98%
Stock Options EPs	82	76	93%	98%
All Participants	241	215	89%	98%

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

(a) Futures Exchange Participants (Jul 2014 – Jun 2015)



(b) Stock Options Exchange Participants (Jul 2014 – Jun 2015)



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 2015)	Turnover in notional value during the study period	
			(HK\$m)	% of total
HSI futures	50	1,312,502	23,130,592	36.1%
HSI options	50	1,312,502	10,276,731	16.0%
Mini-HSI futures	10	262,500	2,138,242	3.3%
Mini-HSI options	10	262,500	281,865	0.4%
HHI futures	50	649,062	17,906,781	27.9%
HHI options	50	649,062	7,040,643	11.0%
Mini-HHI futures	10	129,812	779,244	1.2%
Stock options	— ⁽²⁾	27,820 ⁽³⁾	2,522,939	3.9%
Overall market			64,077,036	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 seven 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\$726 to HK\$131,900), based on the stock closing prices as at 30 June 2015 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 2015. 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 (ie key index futures and options).
- The study period or survey period is from July 2014 to June 2015.
- Products under study were Hang Seng Index (HSI) futures, HSI options, Mini-HSI futures, Mini-HSI options, H-shares Index (HHI) futures, HHI options, Mini-HHI futures and stock options. These products together contributed 99.3% of the total volume of the HKEx derivatives market during the study period.
- The survey was conducted 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 — index futures & 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”. Three FEPs and two SOEPs among the responded EPs in the 2014/15 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-trades⁹. The total contract volume for a FEP and the proportion as market making under execution statistics may differ from that under registration statistics. Execution statistics were used for the survey.

— END —

⁹ 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.