

Research & Policy

CASH MARKET
TRANSACTION SURVEY 2013/14

February 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	3
2. Distribution of market trading value by investor type	4
2.1 The pattern in 2013/14	4
2.2 Historical trend	6
3. Distribution of overseas investor trading value by origin	9
3.1 The pattern in 2013/14	9
3.2 Historical trend	12
4. Retail online trading	15
Glossary	16
Appendix 1. Representativeness of the responded sample vis-à-vis the target population of Exchange Participants	17
Appendix 2. Survey methodology	18

EXECUTIVE SUMMARY

The Cash Market Transaction Survey (CMTS) has been conducted annually since 1991 to study the trading composition of Stock Exchange Participants (EPs). The main objective is to understand the relative contribution of trading value in the HKEx securities market, including the Main Board and the Growth Enterprise Market (GEM), by investor type. The market share of online trading is also assessed.

The 2013/14 survey covered EPs' transactions on both the Main Board and GEM for the 12-month period from October 2013 to September 2014 (referred to as 2013/14). The overall response rate was 90% by number of EPs or 97% by turnover value in the target population.

The key survey findings are summarised below.

Trading value by investor type (See section 2)

- (1) In 2013/14, local investors' contribution to total market turnover increased to 45% (from 38% in 2012/13), surpassing overseas investors' contribution for the first time in five years.
- (2) Overseas investors contributed 39% to total market turnover, down from 46% in 2012/13.
- (3) Overseas investor trading came mainly from institutions (34% of total market turnover vs 5% from retail). Local investor trading also came more from institutions (24% of total market turnover) than from retail investors (20%).
- (4) Institutional investors (local and overseas) contributed 58% to total market turnover (61% in 2012/13), the lowest in the past decade. Retail investors (local and overseas) contributed 25%, up from 22% in 2012/13.
- (5) The contribution of EP principal trading in 2013/14 increased for the seventh consecutive year to a record high of 16% (similar to the level in 2012/13). Over the past decade, EP principal trading grew at a compound annual growth rate (CAGR) of 25% — the highest among all types of trading, compared to a CAGR of 15% for the whole market.

Overseas investor trading (See section 3)

- (6) In 2013/14, the largest contributor of overseas investor trading was UK investors with a contribution of 28% (up from 26% in 2012/13). They were followed by US investors (26%, down from 28% in 2012/13). Mainland investors came third (13%, up from 11% in 2012/13), surpassing Continental European investors (10%) once again since 2008/09.
- (7) Asian investors in aggregate contributed 29% of total overseas investor trading in 2013/14, up from 24% in 2012/13. Mainland investors were the largest contributor group in Asia, followed by Singaporean investors (10%, up from 6% in 2012/13).
- (8) Trading from UK, US, Continental Europe and Australia came predominantly from institutional investors (over 90%). On the contrary, a significant proportion of trading from Mainland China (at least 62%) came from retail investors.

-
- (9) In 2013/14, the total overseas investor trading value decreased year-on-year by 11% — significant drops were recorded for the US (-19%), Continental Europe (-32%) and Australia (-72%, albeit from a small base). Only the investor trading from the Asian specified origins recorded year-on-year increase in value terms; among which, the highest growth was recorded for Singapore (44%).
- (10) Over the past decade, total overseas investors trading recorded a CAGR of 16%. Overseas investor trading from Asia grew at a CAGR of 22%, higher than that from the US (14%) and Europe (13%). Investor trading from Mainland China recorded a CAGR of 28% in the past decade, the highest among all individual specified origins.

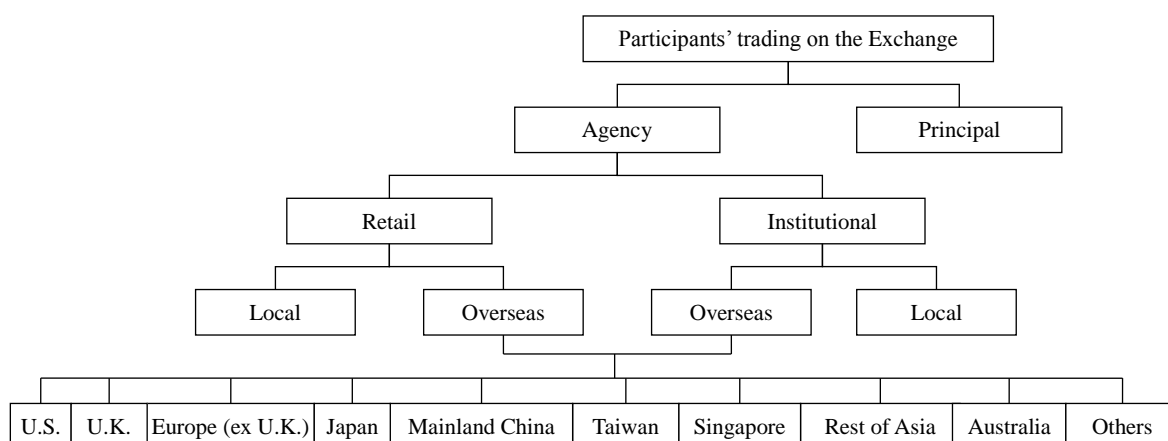
Retail online trading (See section 4)

- (11) In 2013/14, retail online trading accounted for 38% of total retail investor trading (compared to 39% in 2011/12) and 9% of total market turnover (compared to 8% in 2012/13).

1. INTRODUCTION

The Cash Market Transaction Survey (CMTS) has been conducted annually since 1991 to study the trading composition of Stock Exchange Participants (EPs). The main objective is to understand the relative contribution of trading value in the HKEx securities market, including the Main Board and the Growth Enterprise Market (GEM), by investor type (see classification chart below). The market share of online trading¹ is also assessed.

Classification of Stock Exchange Participants' trading



The CMTS 2013/14 covered EPs' transactions on both the Main Board and GEM for the 12-month period from October 2013 to September 2014.²

In October 2014, survey questionnaires were mailed to 481 EPs in the target population. Out of the 481 questionnaires sent, 433 completed questionnaires were received, representing an overall response rate of 90% by number or 97% by turnover value in the target population.³

¹ Please refer to "Glossary" for definition.

² Referred to as the year 2013/14 throughout the report; the same convention is used for the past surveys.

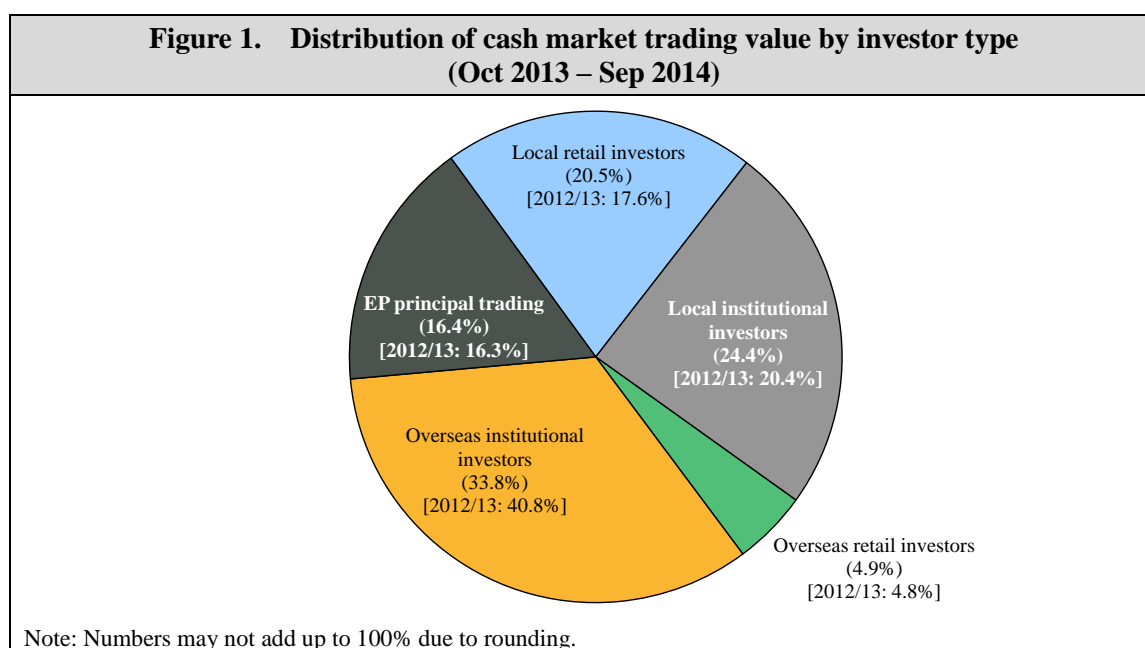
³ See Appendix 2 for details of the survey methodology.

2. DISTRIBUTION OF MARKET TRADING VALUE BY INVESTOR TYPE

2.1 The pattern in 2013/14

The total turnover value of the HKEx securities market in 2013/14 increased year-on-year by 5% to HK\$15.8 trillion. A prominent change in the trading composition in 2013/14 was the significant *increase in the contribution of local investors (both retail and institutional)* to total market turnover. (See Figure 1.)

- **Local investor trading** accounted for 45% of the total market turnover in 2013/14, up from 38% in 2012/13.
 - Contribution of local **retail** investors increased from 18% in 2012/13 to 20% in 2013/14.
 - Contribution of local **institutional** investors increased from 20% in 2012/13 to 24% in 2013/14.
- **Overseas investors** contributed 39% of total market turnover in 2013/14, down from 46% in 2012/13.
 - Contribution of overseas **institutional** investors decreased from 41% in 2012/13 to 34% in 2013/14.
 - Overseas **retail** investors contributed 5% in 2013/14, similar to the level in 2012/13.
- Local and overseas **institutional investors** in aggregate contributed 58% to total market turnover in 2013/14, down from 61% in 2012/13.
- Local and overseas **retail investors** contributed in aggregate 25% of total market turnover in 2013/14, up from 22% in 2012/13.
- **EP principal trading** contributed 16% of total market turnover in 2013/14, similar to their contribution in 2012/13.



Breakdown of investor trading (See Table 1)

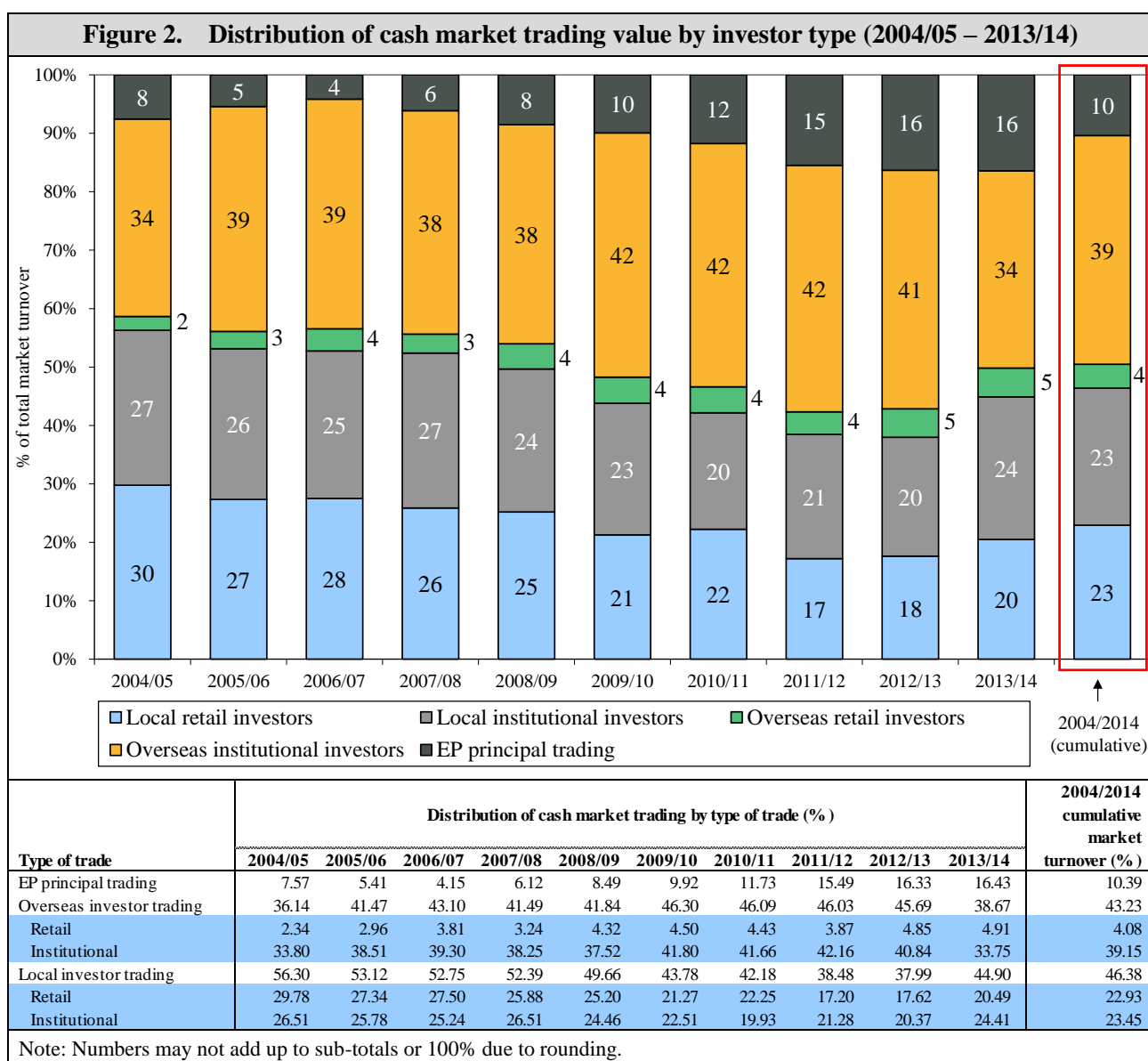
- All investor trading:
 - The large majority (70%) of investor trading continued to come from institutional investors rather than retail investors.
 - Local investor trading had a larger share (54%) than overseas investor trading.
- Each type of investor trading:
 - **Retail investor trading** came predominantly from local sources (81%, up from 78% in 2012/13).
 - More than half of **institutional investor trading** came from overseas (58%, down from 67% in 2012/13).
 - More than half of **local investor trading** came from institutional investors (54%, similar to the level in 2012/13).
 - **Overseas investor trading** came predominantly from institutional investors (87%, down from 89% in 2012/13).

Table 1. Breakdown of contribution by type of trade in cash market (2011/12 – 2013/14)			
Type of trade	2011/12	2012/13	2013/14
All trading			
Investor trading	84.51	83.67	83.57
EP principal trading	15.49	16.33	16.43
	100.00	100.00	100.00
Investor trading			
Retail	24.93	26.85	30.40
Institutional	75.07	73.15	69.60
	100.00	100.00	100.00
Investor trading			
Local	45.53	45.40	53.73
Overseas	54.47	54.60	46.27
	100.00	100.00	100.00
Retail investor trading			
Local	81.64	78.42	80.66
Overseas	18.36	21.58	19.34
	100.00	100.00	100.00
Institutional investor trading			
Local	33.54	33.28	41.96
Overseas	66.46	66.72	58.04
	100.00	100.00	100.00
Local investor trading			
Retail	44.70	46.38	45.64
Institutional	55.30	53.62	54.36
	100.00	100.00	100.00
Overseas investor trading			
Retail	8.40	10.61	12.70
Institutional	91.60	89.39	87.30
	100.00	100.00	100.00

2.2 Historical trend

Figure 2 shows the distribution of cash market trading value by investor type over the past decade.

- **Overseas institutional investors** have been the largest contributor of market turnover among all investor groups over the past decade but their contribution in 2013/14 (34%) decreased significantly to the level of about a decade ago.
- **EP principal trading** accounted for a record high of 16% of the total market turnover in 2013/14, double their contribution of about a decade ago.
- **Cumulative market turnover over the past decade:**
 - Local investors contributed 46% to the cumulative market turnover, with similar contributions (23%) from local retail investors and local institutional investors.
 - Overseas investors contributed 43%, with the vast majority (39%) coming from institutions.



Figures 3 and 4 show the *trend of relative contribution* by different trading types to total market turnover over the past decade.

- After a nine-year continuous drop since 2004/05, the contribution of *local investors* increased to 45% in 2013/14, surpassing that of overseas investors once again.
- The contribution of *institutional investors* dropped to below 60% for the first time in ten years.
- The contribution of *EP principal trading* continued its upward trend for seven consecutive years since 2007/08.

Figure 3. Distribution of cash market trading value by investor type (local vs overseas) (2004/05 – 2013/14)

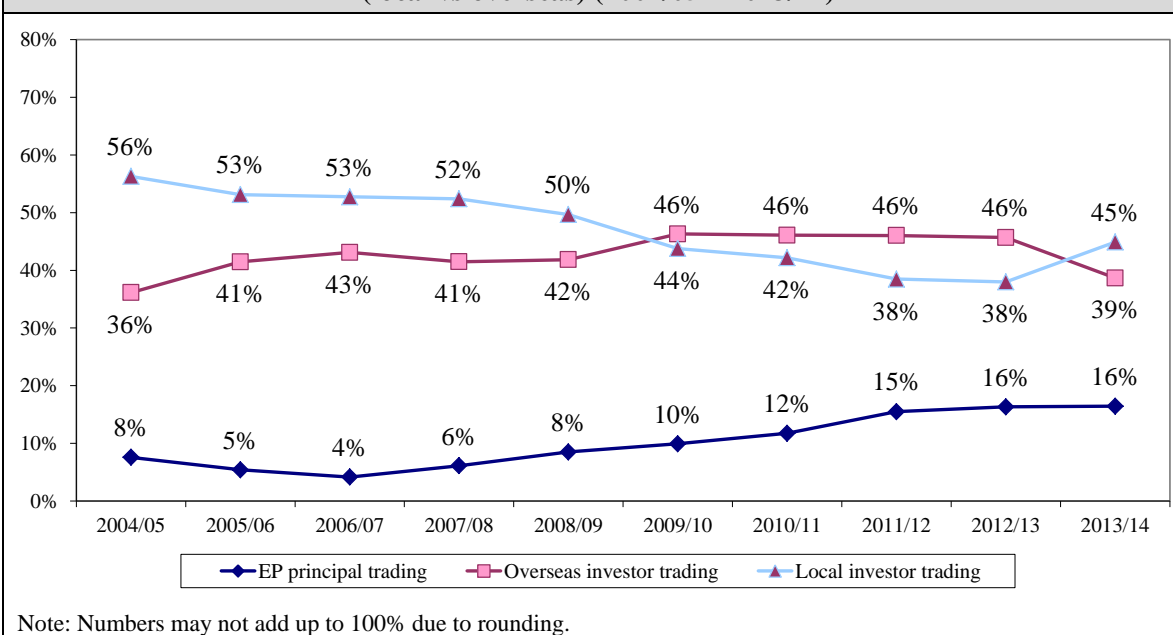


Figure 4. Distribution of cash market trading value by investor type (retail vs institutional) (2004/05 – 2013/14)

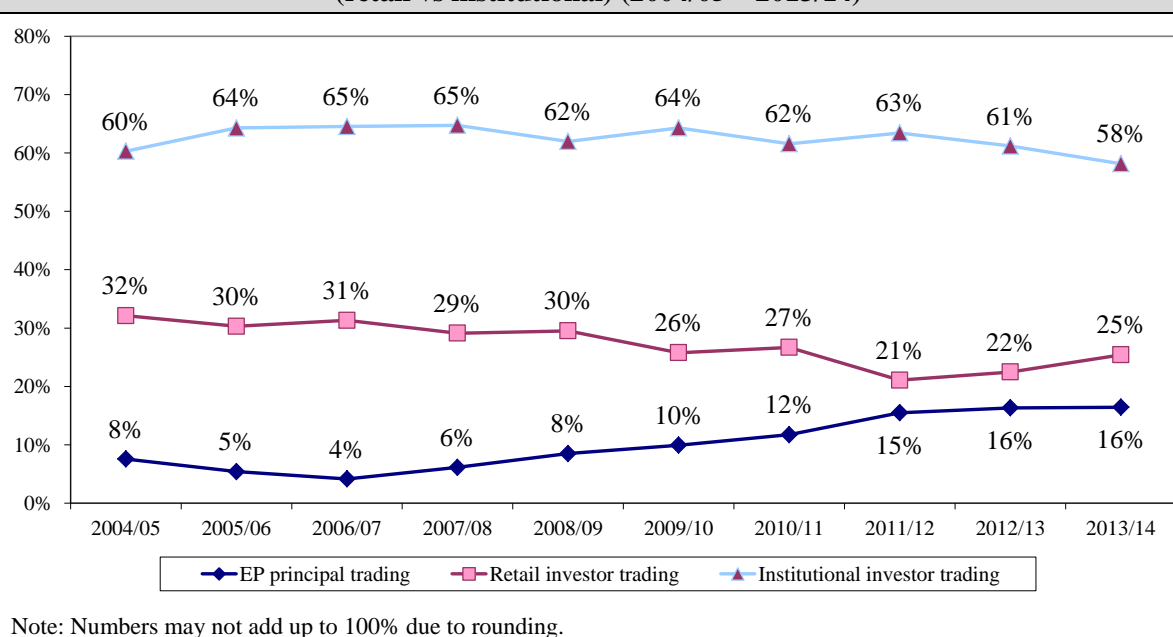
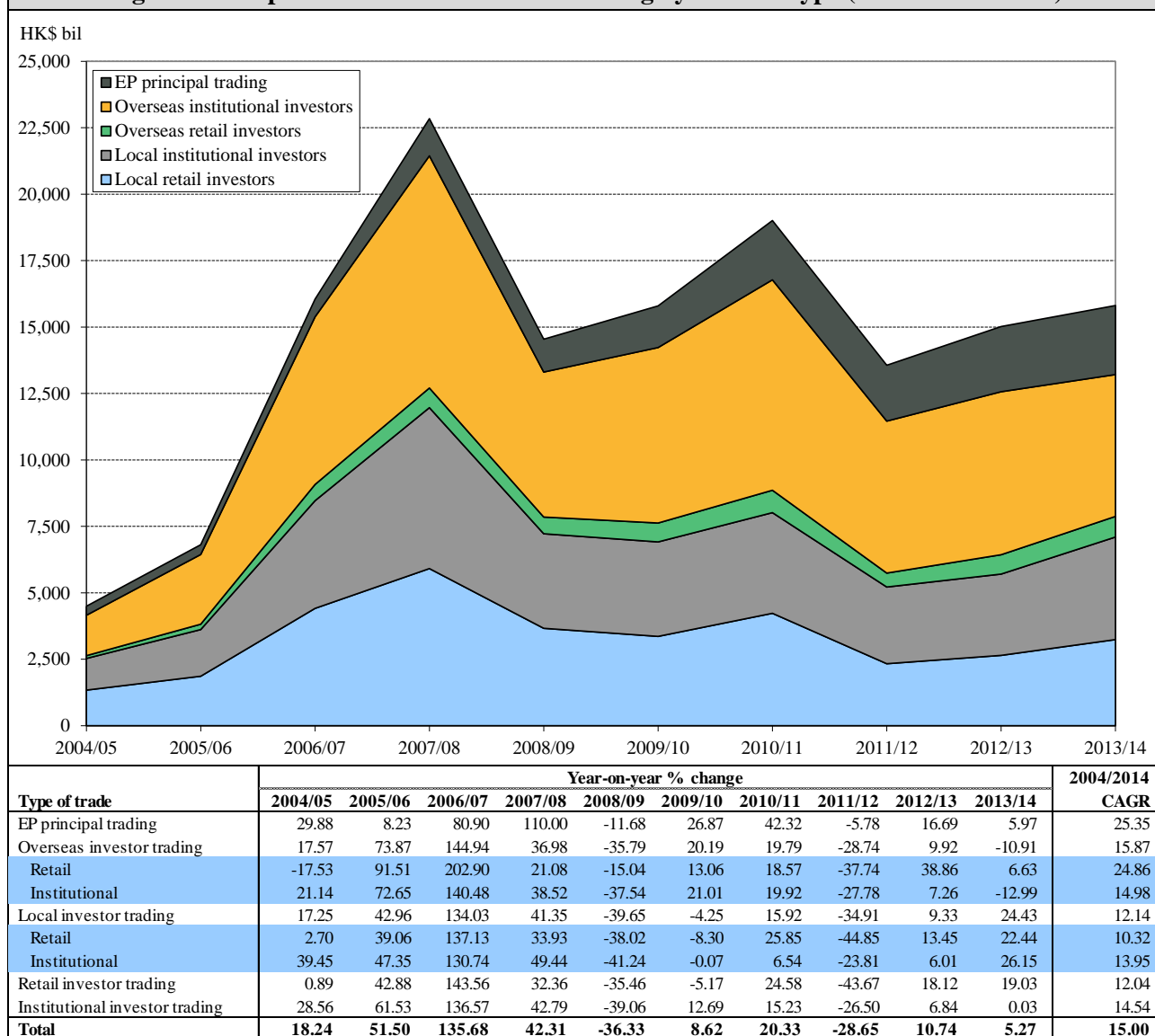


Figure 5 shows the *implied value of cash market trading* by investor type over the past decade.

- A high year-on-year growth was observed in local investor trading (24%). Both retail investor trading and institutional investor trading increased by over 20%.
- Overseas institutional investor trading was the only trading type with year-on-year decrease (-13%).
- **Compound annual growth rate (CAGR)** over the past decade:
 - EP principal trading was still the fastest-growing trading type with a CAGR of 25%, compared to a CAGR of 15% for the total market turnover.
 - A similarly high CAGR (25%) was observed for overseas retail investor trading, though from a very small base.
 - Overseas institutional investor trading had a CAGR (15%) comparable to that of the total market turnover.

Figure 5. Implied value of cash market trading by investor type (2004/05 – 2013/14)



3. DISTRIBUTION OF OVERSEAS INVESTOR TRADING VALUE BY ORIGIN

3.1 The pattern in 2013/14

Overseas investors contributed 39% to total market turnover in 2013/14. The distribution of cash market trading by origin (overseas and local) is shown in Figures 6 and 7.

- **UK investors** surpassed US investors once again to become the largest contributor of overseas investor trading. They contributed 28% of overseas investor trading (up from 26% in 2012/13), or 11% of total market turnover (compared to 12% in 2012/13).
- **US investors**, the second largest contributor, had a contribution of 26% (down from 28% in 2012/13), or 10% of total market turnover (down from 13% in 2012/13).
- **Mainland investors** surpassed Continental European investors to become the third largest contributor of overseas investor trading with a contribution of 13% (up from 11% in 2012/13), or 5% in terms of total market turnover (similar to the level in 2012/13).
- The contribution from **Continental European investors** was 10% (down from 14% in 2012/13), or 4% in terms of total market turnover (down from 6% to 2012/13).
- The **aggregate contribution from European investors** (including UK) was 38%, or 15% in terms of total market turnover, compared to 39% and 18% respectively in 2012/13.
- The **aggregate contribution** of Asian investors was 29% of total overseas investor trading (up from 24% in 2012/13) or 11% of total market turnover (similar to the level in 2012/13). **Singaporean investors** were the second largest Asian contributor (after Mainland investors) to overseas investor trading — 10% of overseas investor trading (up from 6% in 2012/13) or 4% of total market turnover (3% in 2012/13).
- **Australian investors** contributed 2% of overseas investor trading (down from 5% in 2012/13) or 1% of total market turnover (compared to 2% in 2012/13).

Figure 6. Distribution of overseas investor trading value in cash market by origin (Oct 2013 – Sep 2014)

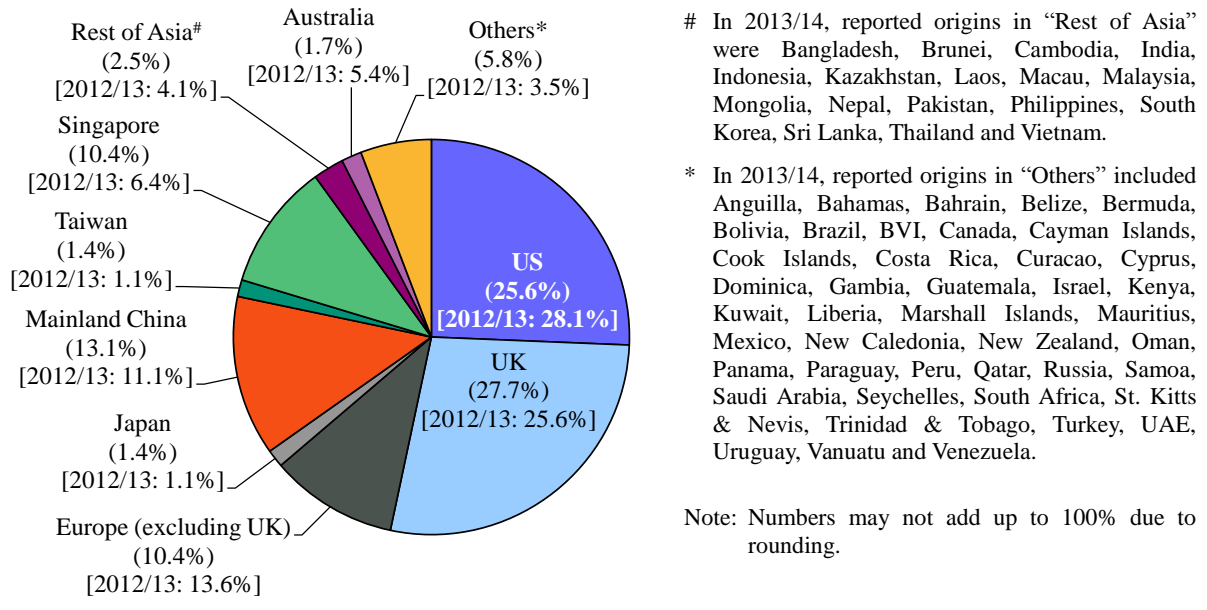
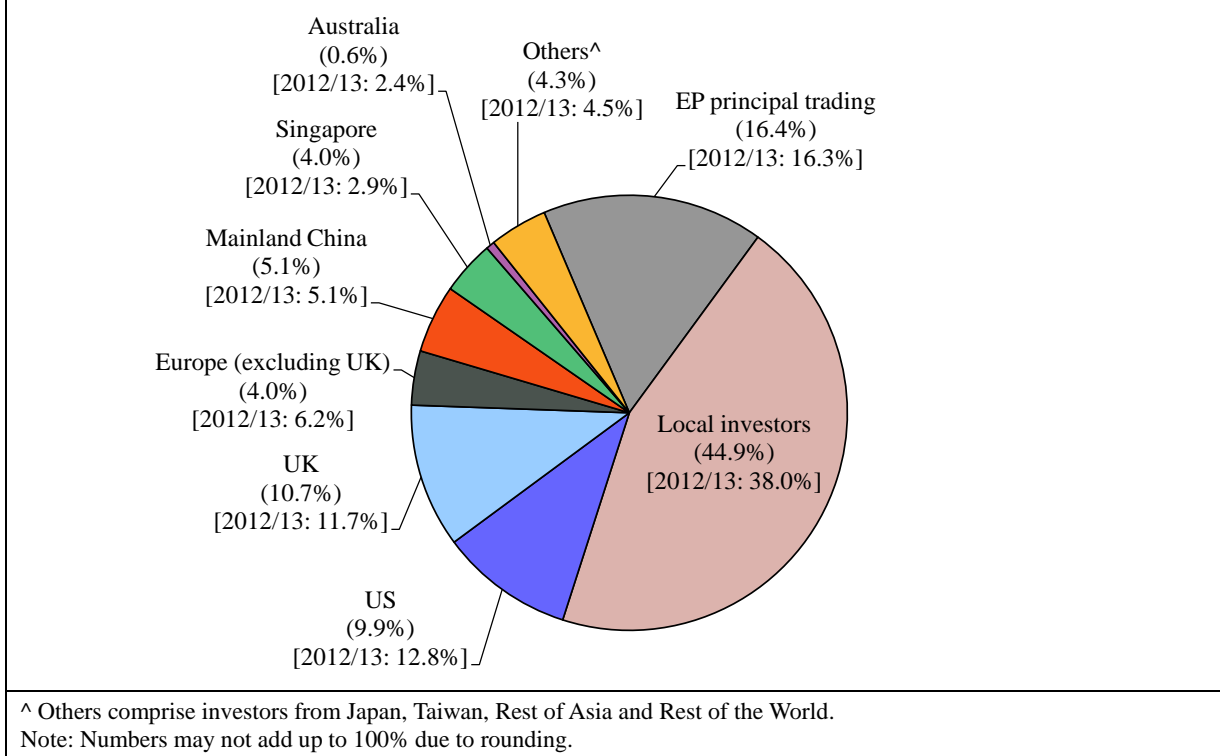


Figure 7. Distribution of cash market trading value by local and overseas origin (Oct 2013 – Sep 2014)



Although the survey did not ask for a breakdown by retail/institutional investor for each overseas origin, a minimum proportion of retail/institutional investor trading from each origin could be deduced from EPs' responses. (See Table 2.)

- Over 90% of overseas investor trading originating from the *UK, US, Australia, Continental Europe* came from *institutional investors*.
- The proportions of institutional investor trading from *Singapore and Japan* were also high (over 88% and 62% respectively).
- At least 62% of investor trading from *Mainland China* came from *retail investors*. Institutional investor trading accounted for at least 19%.

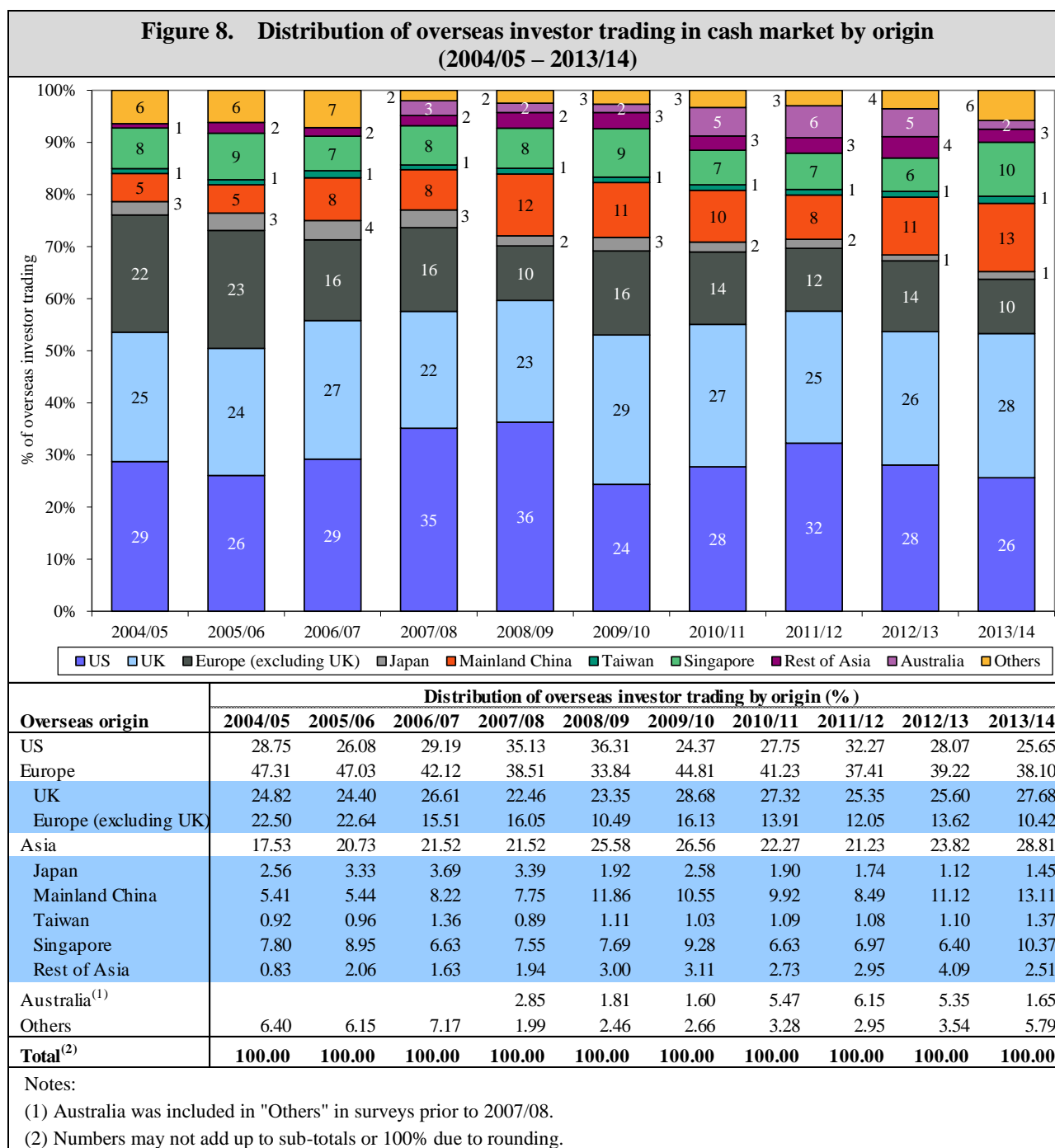
Table 2. Minimum proportion of retail/institutional investor trading from each overseas origin (2013/14)		
Origin	Minimum proportion of the trading coming from	
	Retail investors	Institutional investors
US	0.03%	96.1%
UK	0.1%	96.7%
Europe (excl. UK)	0.2%	91.7%
Japan	0.4%	62.4%
Mainland China	62.5%	19.2%
Taiwan	5.9%	34.5%
Singapore	0.7%	88.2%
Australia	1.3%	94.0%

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.

- From the implied value of trading:
 - At least 64% of total overseas *retail* investor trading came from *Mainland China*.
 - At least 31% and 28% of total overseas *institutional* investor trading came from the *UK* and *US* respectively.

3.2 Historical trend

Figure 8 shows the distribution of overseas investor trading by origin over the past decade.



-
- Investors from the *US and Europe (including the UK)* have been the *main contributors* of overseas investor trading.
 - Since 2004/05, investors from the US and UK have maintained a dominant aggregate contribution of over 50%.
 - Investors from Continental Europe were the third largest contributor most of the time in the decade but their contribution has shrunk to below 20% since 2006/07.
 - The contribution of *Asian investors* stayed above 20% since 2005/06 and reached an all-time high of 29% in 2013/14.
 - The dominant contributors in Asia were investors from *Mainland China and Singapore*.
 - Since 2006/07, Mainland investors have surpassed Singaporean investors and became the largest contributor from Asia.

Figure 9 shows the implied trading values of overseas investor trading over the past decade. In 2013/14, the *total overseas investor trading value* decreased year-on-year by 11% but managed to achieve a CAGR of 16% in the past decade.

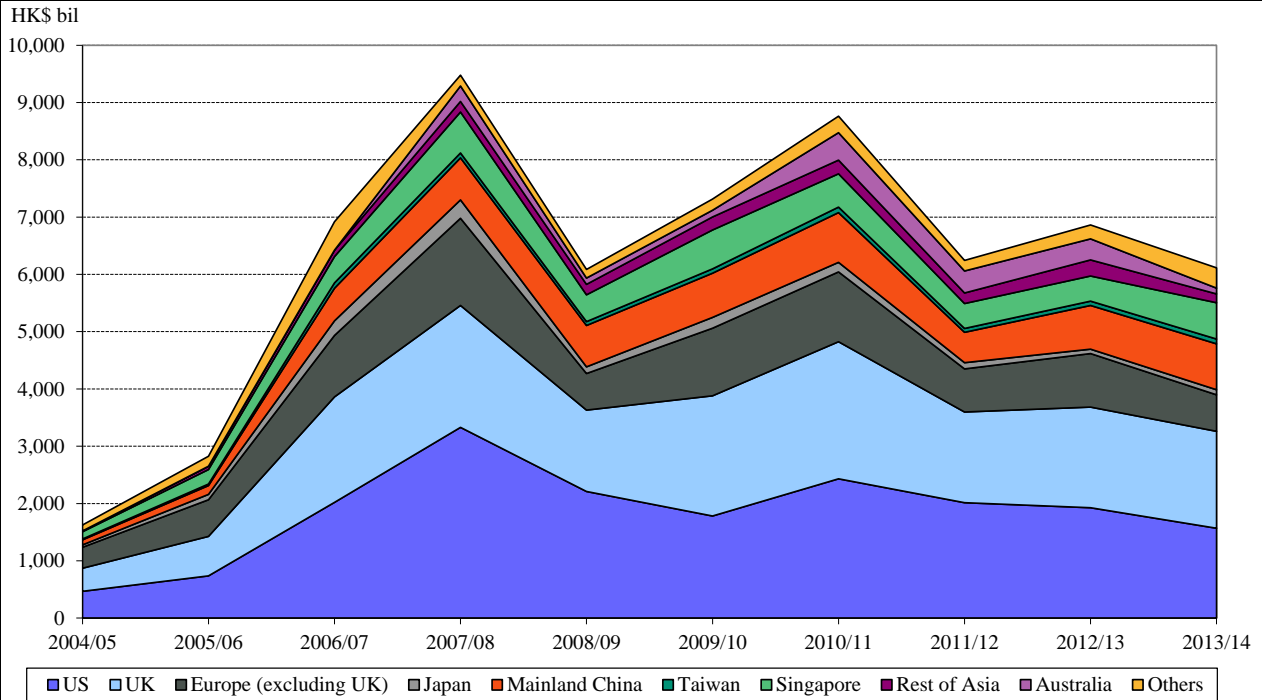
In 2013/14:

- Overseas trading from Asian origins recorded a year-on-year increase in implied value. Among them, overseas investor trading from Singapore recorded the largest increase — 44% — in value terms.
- A number of overseas origins recorded significant decreases in trading value — the US (-19%), Continental Europe (-32%) and Australia (-72%, albeit from a small base). Among them, trading from the US and Australia decreased for the third consecutive year.

In the past decade:

- Among the global regions, investor trading from *Asia* had a CAGR of 22% in value terms, higher than that from the US (14%) and Europe (13%).
- Among the individual origins in Asia, investor trading from *Mainland China* had the highest CAGR of 28% in value terms, which was also the highest among all individual specified origins.
- Investor trading from Continental Europe (with relatively large contribution to total overseas investor trading) and Japan (a very small contribution only) had the lowest CAGRs (6% and 9% respectively) in value terms among all individual origins.

**Figure 9. Implied value of overseas investor trading in cash market by origin
(2004/05 – 2013/14)**



Overseas origin	Year-on-year % change										2004/2014 CAGR
	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	
US	37.35	57.74	174.18	64.82	-33.62	-19.36	36.41	-17.13	-4.38	-18.59	14.41
Europe	5.81	72.84	119.34	25.24	-43.58	59.19	10.20	-35.34	15.24	-13.45	13.11
UK	3.73	70.94	167.18	15.59	-33.25	47.65	14.08	-33.86	11.00	-3.69	17.28
Europe (excluding UK)	8.21	74.94	67.79	41.80	-58.04	84.86	3.29	-38.25	24.16	-31.80	6.37
Asia	4.25	105.56	154.28	36.96	-23.67	24.78	0.47	-32.09	23.35	7.74	22.44
Japan	-3.55	125.46	171.62	25.94	-63.67	61.76	-11.63	-35.04	-29.22	15.48	8.75
Mainland China	-4.42	74.77	270.15	29.16	-1.67	6.89	12.57	-38.97	43.89	5.03	27.84
Taiwan	64.20	80.19	246.84	-9.74	-20.58	12.29	26.57	-29.57	11.90	11.24	21.05
Singapore	9.26	99.33	81.53	55.86	-34.52	44.96	-14.36	-25.13	0.85	44.42	19.58
Rest of Asia	4.63	330.99	93.48	63.27	-0.93	24.78	5.08	-22.94	52.54	-45.27	31.02
Australia ^{(1),(2)}					-59.26	6.39	309.19	-19.83	-4.36	-72.47	-15.10
Others ⁽¹⁾	146.76	67.10	185.15	-61.96	-20.48	29.91	47.67	-36.05	31.90	45.86	14.57
Total	17.57	73.87	144.94	36.98	-35.79	20.19	19.79	-28.74	9.92	-10.91	15.87

Notes:

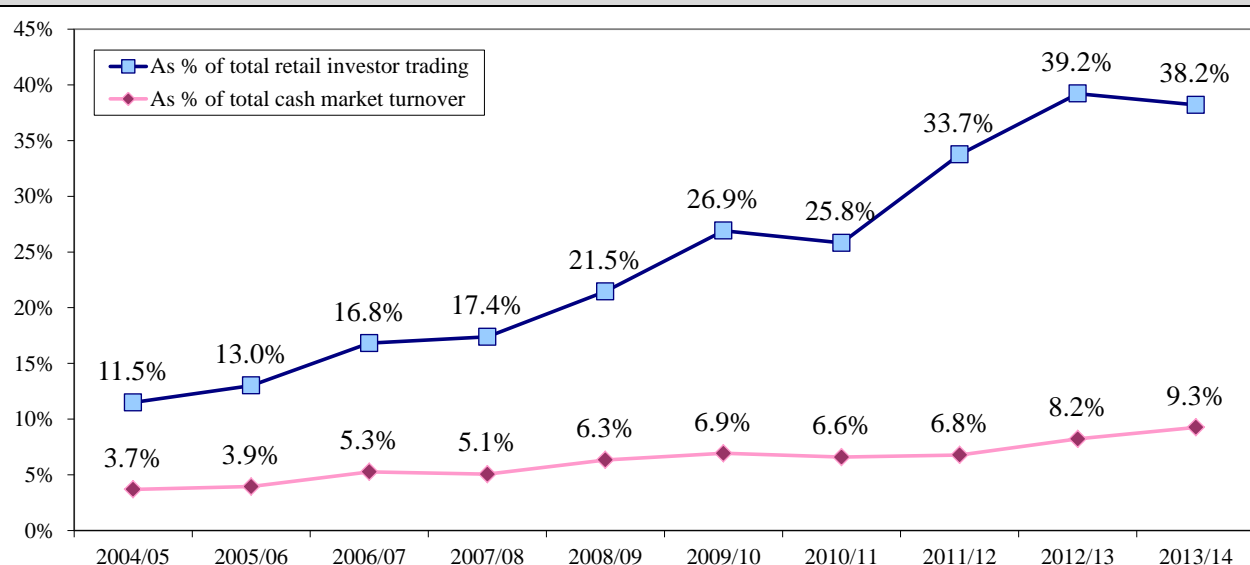
- (1) Australia was included in "Others" in surveys prior to 2007/08, for which year-on-year percentage change in implied value of investor trading was not available. The CAGR of trading from Australian investors was calculated for the period starting from 2007/08 when data for this origin was available. Since "Australia" was spun off from "Others" during the ten-year period, CAGR for "Others" had to be interpreted with care.
- (2) The substantial growth in trading from Australia in 2010/11 was due to a change in reporting by an EP, who reported a substantial contribution to its trading from its sister company in Australia in 2010/11 while in past surveys, this kind of trading carried out for its corporate group was reported as its principal trading.

4. RETAIL ONLINE TRADING

In 2013/14, 247 EPs (57% of all responding EPs) reported themselves as online brokers, compared to 250 EPs or 55% of responding EPs in 2012/13.

- The implied value of retail online trading increased by 19% in 2013/14, compared to the 5% increase in the total market turnover.
- Retail online trading accounted for 38% of total retail investor trading (compared to 39% in 2012/13) and 9% in total market turnover (compared to 8% in 2012/13).
- The upward trend in the contribution of retail online trading to total turnover value of online brokers continued, reaching 29% in 2013/14.

Figure 10. Percentage share of retail online trading value in cash market (2004/05 – 2013/14)



Note: One EP which had a significant proportion of its total turnover as retail agency trading and reported high percentage share of retail online trading prior to 2010/11 did not provide the percentage share of its retail online trading since 2010/11. This EP was excluded from the responded sample in calculating retail online trading in percentage and value terms since then.

Table 3. Statistics on retail online trading in cash market (2009/10 – 2013/14)

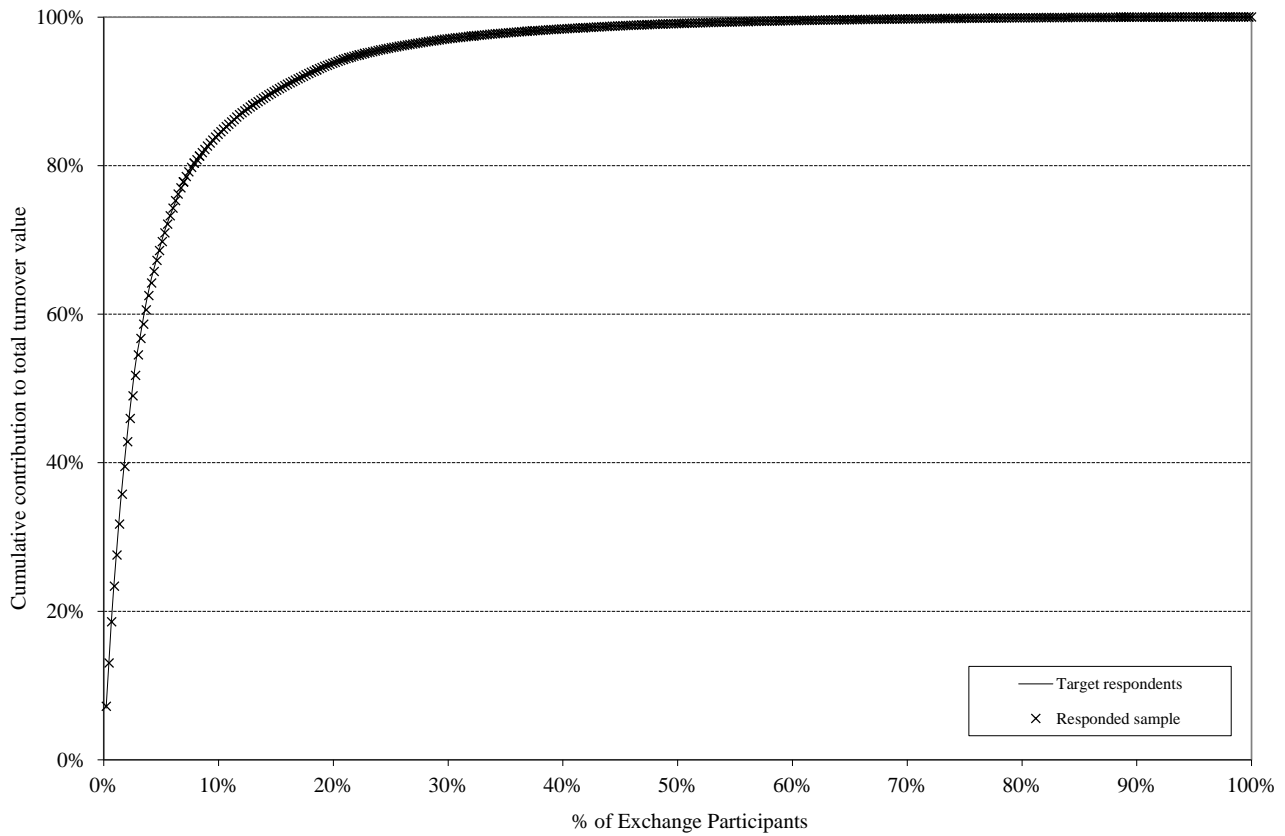
	2009/10	2010/11	2011/12	2012/13	2013/14
Responded sample size	409	431	453	457	433
Online brokers	2009/10	2010/11	2011/12	2012/13	2013/14
Number of online brokers	185	209	245	250	247
- As % of all responding EPs	45%	48%	54%	55%	57%
Online trading	2009/10	2010/11	2011/12	2012/13	2013/14
Total implied trading value (HK\$m)	1,095,691	1,252,109	919,187	1,235,360	1,465,223
- As % of total market turnover	6.94%	6.59%	6.78%	8.22%	9.27%
- As % of all agency (investor) trading	7.70%	7.50%	8.11%	9.95%	11.20%
- As % of total retail investor trading	26.91%	25.82%	33.75%	39.22%	38.20%
- As % of total turnover of online brokers	17.12%	18.35%	22.39%	27.56%	28.94%

Note: One EP which had a significant proportion of its total turnover as retail agency trading and reported high percentage share of retail online trading prior to 2010/11 did not provide the percentage share of its retail online trading since 2010/11. This EP was excluded from the responded sample in calculating retail online trading in percentage and value terms since then.

GLOSSARY

Agency trading	Trading on behalf of the participant firm's clients, including client trading channelled from the firm's parent or sister companies.
Implied value of trading	<p>The implied value of trading for a particular type of trade is calculated by multiplying the percentage contribution to market turnover by that type of trade as obtained from the survey by the actual overall market turnover during the study period.</p> <p>The implied value of trading from a particular overseas origin is calculated by first calculating the implied overseas agency trading value during the study period, and then multiplying it by the percentage contribution to overseas agency trading by that origin as obtained from the survey.</p>
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, with Hong Kong as the source of funds.
Online brokers	Stock Exchange Participants 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, with the source of funds overseas.
Principal trading	Trading on the participant firm's own account.
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).

APPENDIX 1. REPRESENTATIVENESS OF THE RESPONDED SAMPLE VIS-À-VIS THE TARGET POPULATION OF EXCHANGE PARTICIPANTS



APPENDIX 2. SURVEY METHODOLOGY

(1) Target population

The target population included all trading Stock Exchange Participants (EPs) of the cash market who became trading participants prior to the end of March 2014 (i.e. who had been in business for over 6 full months during the study period) and remained so before the fieldwork of the survey began. It excluded EPs whose trading was suspended from July 2014 to September 2014 or ceased on or before September 2014 or who traded for less than 6 months during the study period. This is to avoid distortion of the results by participants who were not in the normal course of business.

All EPs are corporations.

(2) Methodology

The study period is from October 2013 to September 2014.

EPs in the target population were ranked in descending order by turnover value. To achieve a fairer ranking, the actual turnover of new EPs whose trading period was less than 12 months during the study period was annualised for the ranking. The actual turnover of the EPs was used in analysing the results. Ranking of EPs by turnover was for the purpose of monitoring the responses and follow-up in the fieldwork as well as generating response rates by turnover size groups as weighting factors in the subsequent analysis.

The survey sample consisted of all EPs in the target population. Survey questionnaires were mailed to each EP firm in the sample, with close telephone follow-up to ensure a high response rate, especially for the EPs which were top-ranked in the target population by turnover value. In the survey questionnaire, EPs were requested to provide an estimated percentage breakdown of their trading value during the study period in accordance with the prescribed classification. EPs were asked to provide their consolidated trading composition including trading channelled through their affiliate or sister companies as far as possible, if applicable. Those who were known to have such situation but who refused to provide details were treated as cases with missing value for which a mean substitution method⁴ was adopted, except for online trading. For online trading, EPs who reported to be online brokers but were unable to provide the proportion of their retail investor trading as online trading were excluded from the responded sample in calculating the retail online trading in percentage and value terms.

Each responding EP's answers in percentage terms were weighted by the respondent's total turnover value in the overall market accordingly to obtain respective values in the responded sample. The implied percentage shares of different types of trade in the market were then calculated, adjusted by the response rate in value terms relative to the target population.

⁴ The average values obtained from other EPs in the same size group were applied to the missing cases. For this purpose, EPs in the target population were divided into three size groups with equal aggregate contributions to total turnover value of the target population — large-sized brokers (contributing the top one-third of turnover in the target population), medium-sized brokers (contributing the second one-third of turnover) and small-sized brokers (contributing the bottom one-third of turnover).

The implied value of trading for a particular type of trade is determined by multiplying the percentage contribution to total turnover by that type of trade as obtained from the survey by the actual total turnover in the overall market during the study period for that year of survey.

(3) Limitations

In providing the breakdown of total turnover value by the type of trade, many EPs could only provide their best estimates instead of hard data.

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.

In practice, it is not unusual for EPs to convey client orders to other EPs for execution. When providing the breakdown of their investor composition, most of the EPs would treat those EPs who conveyed orders to them as their ultimate clients, i.e. as local institutions, regardless of the client origin.

Some bank-related EPs might not be able to provide the trading composition of client orders originating from their associated banks and would treat the banks as their local institutional clients. This would also affect the result of retail online trading since part of the retail investor trading channelled through banks would be online.

Different EPs would have different corporate group structures and operating models within their corporate groups. Some EPs might be able to provide the investor composition of trading channelled via their sister companies; others may regard their sister companies as their clients and incorporated no further breakdown. In other words, the depth of detail in investor composition across EPs might not be on the same ground.

The non-responded EPs and responded EPs with missing responses for certain questions may have different trading composition from the other responded EPs. The exclusion of these EPs from the applicable analysis might affect the survey results. Since the survey has a high response rate by turnover value and a method of weighting by size group in treating missing responses was adopted to cater for the different trading composition by size group, the impact of non-responded EPs to the overall findings should be small. Nevertheless, there might be some impact on the types of investor trading which had relatively low contribution to market turnover.

— END —