# **BUSINESS REVIEW**

# 2015 Major Achievements

## **Cash Segment**

- Published:
  - consultation conclusions on review of Listing Rules on disclosure of financial information with reference to new Companies Ordinance and HKFRSs
  - consultation conclusions to concept paper on Weighted Voting Rights
  - consultation paper and consultation conclusions on proposed amendments to Environmental,
     Social and Governance Reporting Guide
  - new country guides on "India" and "United States of America Nevada" for listing of overseas companies
  - report on the findings of the latest review of listed issuers' corporate governance practices in 2014 annual reports
- Reviewed various listing-related matters, including:
  - placing guidelines
  - disciplinary and review procedures under Chapters 2A and 2B of Main Board Listing Rules and GEM Listing Rules equivalent
  - simplification of listing documents
- Launched a new dedicated section of "Listing Disciplinary & Enforcement" on HKEX website to enhance transparency and publicity of enforcement matters
- Implemented Stock Connect enhancements, including short selling and enhanced pre-trade checking model, Special Segregated Accounts, for Northbound Trading
- Published consultation paper and conclusions on Volatility Control Mechanism and Closing Auction Session in Cash Market and commenced related system development
- Introduced several new market data promotion programmes to increase accessibility of real-time HKEX data in the Mainland

## **Equity and Financial Derivatives Segment**

- Introduced rule amendments for introduction of sector index futures
- Introduced 5 new stock options classes and 34 new stock futures contracts
- Published consultation paper and conclusions on Volatility Control Mechanism in Derivatives Market and commenced related system development
- Strengthened Large Open Positions (LOP) monitoring for stock index futures and options by requiring investors with open position exceeding 60 per cent of position limit with same underlying index to report all positions in products concerned
- Enhanced Stock Options Mobile Apps to include stock index options information
- Encouraged participation in existing RMB futures market by holding training sessions in the Mainland, participating in seminars held by EPs and holding onshore trading competition
- Approval obtained from the Securities and Exchange Commission of the US for Class No-Action Relief to allow EPs to engage eligible broker-dealers/institutions in the US in trading of stock options, H-shares Index Options and Mini-Hang Seng Index Options at HKEX
- Hosted second annual RMB FIC Conference
- Stipulated in trading rules capital adjustment methods for stock options and futures in relation to bonus warrant issues, spin-offs, mergers and privatisation
- Expanded Primary Market Maker programme to include a total of 18 stock option classes

## **Commodities Segment**

- Introduced cash-settled London Nickel, Tin and Lead mini contracts on HKFE
- Launched LME premium contracts and ferrous contracts
- Enhanced Platinum and Palladium price administration process and obtained independent confirmation that this process complies with principles of the International Organization of Securities Commissions
- Implemented full 12 point plan on warehouse reform
- Extended HKFE/LME reciprocal membership arrangement for one year to 31 December 2016
- Organised LME Week, LME Week Asia, LME Singapore Metals Night and LME Dinner
- Promoted the Group's commodities business (in particular in Asia) by organising and participating in metal-related seminars held in Greater China

# **Clearing Segment**

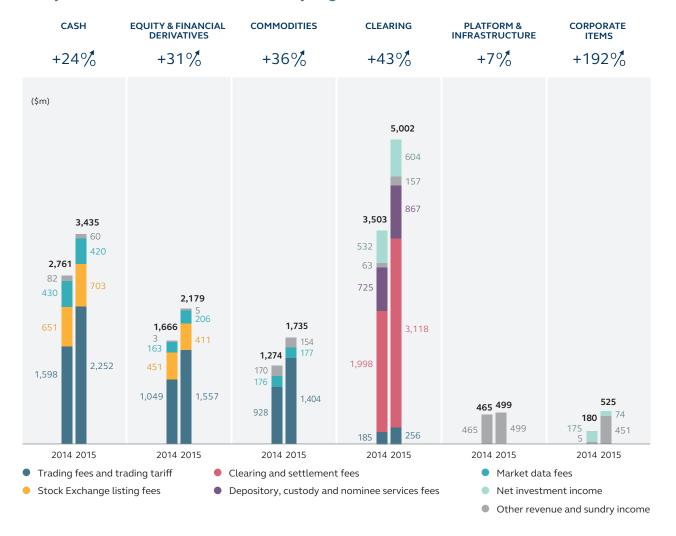
- Obtained third country Central Counterparty recognition in EU for HKSCC, HKCC, SEOCH and OTC Clear
- Launched risk management data repository for HKSCC, HKCC and SEOCH
- Completed validation of HKSCC, HKCC and SEOCH's risk management policies and models by an independent consultant, confirming that existing policies and models conform to "Principles for Financial Market Infrastructures" published by the Committee on Payment and Settlement Systems and the International Organization of Securities Commissions
- Enhanced the triggering and collection mechanisms of Guarantee/Reserve Funds of HKSCC, HKCC and SEOCH
- Tightened concentration risk policy of HKCC and SEOCH
- Completed system development for client clearing services, non-cash collateral services and cross currency swaps clearing in OTC Clear
- Enhanced OTC Clear's collateral risk policy for acceptance of non-cash collateral
- Prepared for introduction of mandatory OTC derivatives clearing and reporting by starting trade reporting to Hong Kong Trade Repository
- Obtained approval from US Commodity Futures Trading Commission for exempt derivative clearing organisation status for OTC Clear
- Expanded clearing solution provided by LME Clear to support launch of LME premium futures and ferrous contracts, and accept RMB as collateral
- Introduced two new services by LME Clear for the LME market including a compression service and acceptance of LME warrants as collateral

#### **Platform and Infrastructure Segment**

- Implemented enhancements to HKEX Orion Market Data Platform-Derivatives Market (OMD-D)
- Completed requirement phase for new Cash Market trading platform HKEX Orion Trading Platform-Securities Market (OTP-C)
- Defined the CCASS functional boundary and technical architecture roadmap for next generation clearing platform
- Completed the Proof of Concept of cloud computing technologies

# Business Update and Analysis of Results by Operating Segment

## Analysis of Revenue and Other Income by Segment



# Analysis of EBITDA and EBITDA Margin by Segment \*



 $<sup>{\</sup>color{blue} \star \; \text{Further details of the results by segment are set out in note 4 to the Consolidated Financial Statements of this Annual Report.} \\$ 

# **Cash Segment**

# **Key Market Indicators**

	2015	2014	Change
ADT of equity products traded on the Stock Exchange <sup>1, 2</sup> (\$bn)	79.9	56.2	42%
ADT of Northbound Trading <sup>2</sup> (RMBbn)	6.4	5.6	14%
Average daily number of trades of equity products traded on the Stock Exchange <sup>1, 2</sup>	1,197,332	889,684	35%
Number of newly listed companies on Main Board <sup>3</sup>	104	103	1%
Number of newly listed companies on GEM	34	19	79%
Number of companies listed on Main Board at 31 Dec	1,644	1,548	6%
Number of companies listed on GEM at 31 Dec	222	204	9%
Total	1,866	1,752	7%
Market capitalisation of companies listed on Main Board at 31 Dec (\$bn)	24,426	24,892	(2%)
Market capitalisation of companies listed on GEM at 31 Dec (\$bn)	258	179	44%

<sup>1</sup> Excludes DWs, CBBCs and warrants which are included under the Equity and Financial Derivatives segment and includes \$3.4 billion of average daily trade value for Southbound Trading under Stock Connect (2014: \$0.9 billion)

<sup>3</sup> Includes 14 transfers from GEM (2014: 7)

	2015 \$bn	2014 \$bn	Change
Total equity funds raised on Main Board			
- IPOs	260.3	230.3	13%
- Post-IPO	833.2	699.0	19%
Total equity funds raised on GEM			
- IPOs	2.8	2.2	27%
– Post-IPO	19.3	11.2	72%
		0.40.7	100/
Total	1,115.6	942.7	18%

# **Business Update**

The Cash segment experienced strong momentum in the second quarter of 2015 and a number of new records were set in 2015:

# **New Record Highs**

	2015	Pre-2015	record
Market capitalisation (\$bn)	31,550 (26 May 2015)	26,540	(4 Sep 2014)
Total turnover of equity products traded on the Stock Exchange (\$bn)	19,746	16,895	(2007)
ADT of equity products traded on the Stock Exchange (\$bn)	79.9	68.7	(2007)
ETFs turnover (\$bn)	2,171	1,168	(2014)
Number of newly listed companies (including transfers from GEM)	138	122	(2014)
Total equity funds raised (\$bn)	1,115.6	942.7	(2014)
Post-IPO funds raised (\$bn)	852.5	710.2	(2014)

 $_{\rm 2}$   $\,$  Includes buy and sell trades under Stock Connect which was launched in November 2014  $\,$ 

## **Listing Rules**

In 2015, the Stock Exchange made various proposals and conclusions on Listing Rules amendments as set out in the following table. Details of the consultations and other main policy issues arising in 2015 as well as the proposals that will be under review in 2016 are set out in the 2015 Listing Committee Report which is available on the HKEX website.

### **Proposals and Conclusions in 2015**

	Consultation paper <sup>1</sup>	Consultation conclusions <sup>1</sup>	Effective date of changes (if any)
Review of Listing Rules on disclosure of financial information     with reference to the new Companies Ordinance and HKFRSs and     proposed minor housekeeping Rule amendments	Aug 2014	Feb 2015	
<ul> <li>amendments relating to disclosure of financial information</li> </ul>			Accounting periods ended on or after 31 Dec 2015
- amendments unrelated to disclosure of financial information			1 Apr 2015
Concept paper on Weighted Voting Rights	Aug 2014	Jun 2015	N/A
<ul> <li>Review of the Environmental, Social and Governance Reporting Guide (ESG Reporting Guide)</li> </ul>	Jul 2015	Dec 2015	
<ul> <li>Rule amendments and upgrade of General Disclosures in ESG Reporting Guide from recommended to "comply or explain", as well as revised recommended disclosures</li> </ul>			Financial years commencing on or after 1 Jan 2016
<ul> <li>upgrade of Key Performance Indicators in "Environmental" subject area of ESG Reporting Guide from recommended to "comply or explain"</li> </ul>			Financial years commencing on or after 1 Jan 2017

<sup>1</sup> All the consultation papers and conclusions are available under the News & Consultations (Market Consultations) section of the HKEX website.

#### Key Initiatives by the Stock Exchange in 2015 to Promote Issuers' Self-compliance with the Listing Rules

- Issued series of (i) guidance letters on major areas concerning market quality and listed issuers, including cash company rules, trading halts, and issue of convertible securities by issuers; and (ii) listing decisions on interpretation of the Listing Rules, including placing of unlisted warrants under general mandate, application of sufficient operations/assets under Main Board Listing Rule 13.24
- Published reports on the Stock Exchange's review of disclosure in issuers' annual reports and key observations under the
  financial statements review programme, and provided guidance and recommendations to issuers to promote transparency
  and high quality disclosures
- Published findings of the Stock Exchange's latest review of listed issuers' corporate governance practices which examined the level of issuers' compliance with the Corporate Governance Code and Corporate Governance Report
- Organised 12 seminars (10 sessions in Hong Kong, and 2 sessions in Beijing and Shanghai) for issuers and market practitioners on listing compliance updates, listing enforcement strategies, current themes and case studies, and updates on the new internal control section of the Corporate Governance Code and ESG Reporting Guide

## IPO Processing, Compliance and Monitoring

The following tables illustrate the work of the Stock Exchange in processing new listings and monitoring issuers' compliance for the purposes of maintaining an orderly, informed, and fair market under Section 21 of the SFO.

## Stock Exchange's IPO Work

	2015	2014
Number of listing applications vetted <sup>1</sup>	256	232
Number of applications brought to the Listing Committees (or their delegates) for decisions	149	140
– within 120 calendar days	104	101
– between 121 to 180 calendar days	26	26
– after more than 180 calendar days	19	13
Number of applications for which approval was granted in principle <sup>2</sup>	151	148
Number of requests for guidance from listing applicants or		
their advisers seeking clarifications of listing matters	170	124
- Average response time (in business days)	6	6
Number of listing applications for transfer of listing from GEM to Main Board accepted	18	12
• Applications listed <sup>3</sup>	156	135
New listing applications rejected <sup>4</sup>	9	13
New listing applications withdrawn	9	7
New listing applications returned	3	4
Application in process at year-end	74	39

- 1 Comprises 217 (2014: 194) new applications and 39 (2014: 38) existing applications brought forward from previous year
- 2 At the end of 2015, 14 (2014: 21) approved applications had not yet been listed, and 1 (2014: 8) approved application had lapsed during the year.
- 3 Includes 18 investment vehicles listed on Main Board and deemed new listings (2014: 13)
- 4 In 2015, 1 rejection decision (2014: 2) was subsequently reversed by the Listing (Review) Committee upon review.

The Listing Rules complementing the new sponsor regulation came into full effect on 1 October 2014. The return rate of listing applications in 2015 (ie, the number of applications returned by the Stock Exchange expressed as a percentage of the total number of applications received during the relevant period) was 1 per cent compared with 2 per cent in 2014.

#### **Number of Compliance and Monitoring Actions**

	2015	2014
Announcements of issuers vetted	54,688	48,761
Circulars of issuers vetted	2,085	1,761
Share price and trading volume monitoring actions undertaken <sup>1</sup>	13,757	7,417
Complaints handled	558	445
Cases (including complaints) referred to Listing Enforcement Team for investigation	26	22

<sup>&</sup>lt;sup>1</sup> In 2015, monitoring actions undertaken included 1,931 enquiries (2014: 1,356) on unusual share price and trading volume movements, and the actions undertaken led to 182 resumption announcements (2014: 129) on trading suspensions.

#### **Long Suspension**

	Main	Main Board		GEM	
Status of Long Suspended Companies (at year-end)	2015	2014	2015	2014	
Resumption of trading of securities during the year	25	21	3	3	
Cancellation/withdrawal of listing during the year	1	6	2	0	
Companies in the third stage of delisting	2	2	N/A	N/A	
Companies notified of the Stock Exchange's					
intention to cancel their listing $^{\rm 1}$	1	0	3	3	
Companies suspended for 3 months or more	51	37	7	8	

<sup>1</sup> For GEM, the figures represent companies who had failed to maintain sufficient operations or assets to warrant their continued listing. In these cases, the Stock Exchange had notified the companies of its intention to cancel the companies' listing and place them in a one-stage delisting procedure (as compared to 3 stages for Main Board).

# **Listing Enforcement**

The 5 themes approved by the Listing Committee during 2014 remained the focus for investigation and enforcement activity for the year. Details are set out in the 2015 Listing Committee Report which is available on the HKEX website. To improve transparency, a dedicated "Enforcement" section, housing all enforcement related information and statistics in a single location on the HKEX website, was launched during the year.

#### **Enforcement Statistics**

	2015	2014
Investigations <sup>1</sup>	<b>52</b> <sup>2, 3</sup>	60
Public censures <sup>4</sup>	5	4
Public statements/criticisms <sup>4</sup>	1	1
No sanction following disciplinary action	0	1
Warning/caution letters <sup>5</sup>	5	14

- 1 Figures cover cases concluded during the year, and cases which remained active at year-end.
- <sup>2</sup> There were 22 outstanding investigations (82 per cent of which commenced in 2015) at the end of 2015 as compared to 20 investigations (80 per cent of which commenced in 2014) at the end of 2014.
- 3 In 2015, 2 cases originating from complaints were subject to enforcement investigation, and might give rise to disciplinary proceedings after investigation.
- <sup>4</sup> Figures represent only the primary regulatory action from a disciplinary matter. They exclude any other actions taken at a lower level, eg private reprimand, in the same case.
- <sup>5</sup> The warning and caution letters were primarily delivered in circumstances where action before the Listing Committees was not considered appropriate.

## **Costs of Listing Function**

The costs of the front line regulation of listed issuers, performed by the Listing Committee and the Listing Division, are absorbed by the Cash and Equity and Financial Derivatives segments based on the listing fee income of the two segments.

## **ETF Market Development**

Following the enactment of the Stamp Duty (Amendment) Bill 2014 on 4 February 2015, a stamp duty waiver for all ETFs listed in Hong Kong took effect on 13 February 2015. The total turnover of ETFs increased by 86 per cent to \$2,171 billion (2014: \$1,168 billion), a record high.

ETFs Statistics	2015	2014
Total turnover of ETFs (\$bn)	2,171	1,168
Number of newly listed ETFs	14	12
Number of ETFs delisted	3	6
Number of listed ETFs at 31 Dec	133	122
Number of ETF managers at 31 Dec	26	26
Number of ETF market makers at 31 Dec	34	34
Number of ETFs that have RMB counters at 31 Dec	29	20

Underlying benchmark of ETFs newly listed in 2015	Number
A-share market	6
Hong Kong equity futures	2
US equity market	2
Hong Kong equity market	1
Hong Kong and US sector	1
Asia-Pacific equity market	1
Onshore RMB bond market	1

The HKEX website was awarded the 11<sup>th</sup> Annual ETF Global Awards – Most Informative ETF Website in Asia-Pacific by exchangetradedfunds.com and HKEX was awarded the ETF and Indexing Awards 2015 – Best ETF Exchange by Asia Asset Management.

## Shanghai-Hong Kong Stock Connect

Shanghai-Hong Kong Stock Connect has been operating smoothly following its launch in the fourth quarter of 2014 despite volatile markets over the past year.

HKEX has continued to enhance the Stock Connect programme including allowing short selling of eligible SSE Securities and the introduction of an enhanced pre-trade checking model, Special Segregated Accounts (see also commentary under the Clearing segment).

Since the launch of Stock Connect, the number of information vendors in the Mainland has more than doubled. 17 of the key Mainland brokers are participating in the Fixed Fee Monthly Fee Service or Daily Charge Service promotion programmes which were launched in March 2015 and together contributed over 60 per cent of Southbound Trading.

To continue promoting growth in market data usage in the Mainland, HKEX has further extended a number of Mainland related marketing programmes.

HKEX organised around 100 workshops, reaching over 10,000 market practitioners and investors on the mechanism and rules of Stock Connect.

The total revenue and other income generated by Stock Connect during 2015 was \$200 million (2014: \$68 million).

#### **Mainland Development**

Throughout the year, HKEX increased efforts to promote Hong Kong as the preferred listing venue for quality Mainland issuers, including hosting 19 and presenting at over 100 listing seminars and training workshops.

HKEX will continue to monitor major Mainland policy changes including the registration-based listing regime and the potential launch of the Strategic Emerging Industries Board. HKEX will also continue to focus on attracting quality Mainland enterprises to list in Hong Kong given the broader and deeper investor pool coupled with Hong Kong's efficient and transparent listing regime.

## **Volatility Control Mechanism and Closing Auction Session**

After consulting the market during the year, HKEX concluded that there is substantial market support for the introduction of Volatility Control Mechanism and Closing Auction Session for securities. The Volatility Control Mechanism is designed to safeguard market integrity from extreme price volatility arising from trading incidents and covers HSI and H-shares Index constituent stocks in the securities market. Implementation is planned for the second half of 2016. The new Closing Auction Session is designed to meet the diverse trading needs of investors by enabling trade execution at the securities' closing prices and will be rolled out in 2 phases. Phase 1 is planned for the third quarter of 2016 and will include all the Hang Seng Composite LargeCap and MidCap index constituent stocks, as well as H shares which have corresponding A shares listed on the exchanges in Mainland China and all ETFs. Phase 2 will be rolled out after a review of the operation of Phase 1 and will include all equity securities and funds.

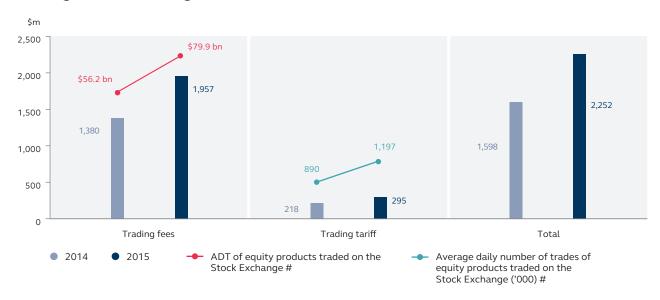
## **Analysis of Results**

# **Summary**

	2015 \$m	2014 \$m	Change
Trading fees and trading tariff <sup>1</sup>	2,252	1,598	41%
Stock Exchange listing fees <sup>1</sup>	703	651	8%
Market data fees <sup>1</sup>	420	430	(2%)
Other revenue and sundry income	60	82	(27%)
Total revenue and other income	3,435	2,761	24%
Operating expenses <sup>2</sup>	(531)	(461)	15%
EBITDA	2,904	2,300	26%
EBITDA margin	85%	83%	2%

- 1 Excludes DWs. CBBCs and warrants which are included under the Equity and Financial Derivatives segment
- 2 Includes Listing Division costs related to equity products traded on the Stock Exchange

### **Trading Fees and Trading Tariff**



 ${\tt\#\ Excludes\ DWs,\ CBBCs\ and\ warrants\ which\ are\ included\ under\ the\ Equity\ and\ Financial\ Derivatives\ segment}$ 

Trading fees and trading tariff rose by \$654 million or 41 per cent due to a rise in ADT and average daily number of trades of equity products. The percentage increase was slightly less than the 42 per cent growth in ADT as the increase was partly offset by more market maker exempt trades on ETFs<sup>1</sup> and an increase in average transaction size, which impacted the growth in trading tariff (income is based on number of trades).

<sup>1</sup> Approximately 50 per cent of ETF trades were exempted.

## **Stock Exchange Listing Fees**

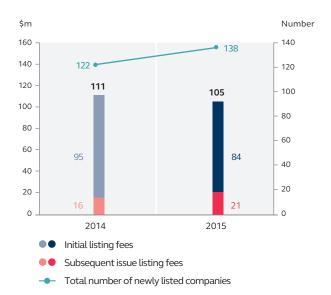
	2015 \$m	2014 \$m	Change
Annual listing fees	590	532	11%
Initial and subsequent issue listing fees	105	111	(5%)
Others	8	8	0%
Total	703	651	8%

### **Annual Listing Fees**



Annual listing fees increased with the rise in the total number of listed companies. The 11 per cent increase in annual listing fees exceeded the 7 per cent increase in the number of listed companies due to the full year impact of the annual listing fees of companies that were listed in 2014.

### Initial and Subsequent Issue Listing Fees



Despite an increase in the number of newly listed companies and the total IPO funds raised, initial and subsequent issue listing fees declined due to a cap on listing fees for newly listed companies and a lower number of lapsed and withdrawn IPO applications not listed within 6 months of application.

#### **Other Revenue**

Other revenue dropped by \$22 million or 27 per cent due to lower brokerage fees on direct IPO allotments.

#### **EBITDA**

Operating expenses increased by \$70 million or 15 per cent mainly due to higher legal and professional fees on strategic initiatives, an increase in IT maintenance expenses and staff costs. The higher staff costs were attributable to headcount increases for strategic initiatives including Stock Connect, annual payroll adjustments and an increase in variable pay. As the percentage increase in revenue was higher than that of operating expenses, the EBITDA margin increased from 83 per cent to 85 per cent.

# **Equity and Financial Derivatives Segment**

# **Key Market Indicators**

	2015	2014	Change
ADT of DWs, CBBCs and warrants traded on the Stock Exchange (\$bn)	25.7	13.3	93%
Average daily number of trades of DWs, CBBCs and warrants traded			
on the Stock Exchange	242,948	172,815	41%
Average daily number of derivatives contracts traded on the Futures Exchange <sup>1</sup>	393,948	274,844	43%
Average daily number of stock options contracts traded on the Stock Exchange	374,346	301,797	24%
Number of newly listed DWs	6,336	7,560	(16%)
Number of newly listed CBBCs	11,213	9,983	12%
Average daily number of contracts traded during AHFT <sup>1,2</sup>	21,555	11,903	81%
	At	At	
	31 Dec 2015	31 Dec 2014	Change
Open interest of futures and options <sup>1</sup>	7,266,630	7,958,356	(9%)

<sup>1</sup> Excludes London Metal Mini Futures contracts which are included under the Commodities segment

#### **Business Update**

As with the Cash segment, 2015 was also a record year for the Equity and Financial Derivatives segment, with a number of new records set.

## New Record Highs - Full Year

		Pre-2015 i	record
ADT of DWs, CBBCs and warrants traded on the Stock Exchange (\$bn)	25.7	19.4	(2007)
Total turnover of DWs, CBBCs and warrants traded on the Stock Exchange (\$bn)	6,345	4,771	(2007)
Number of newly listed CBBCs	11,213	9,983	(2014)
	2015 Number of contracts	Pre-2015   Number of c	
Total futures and options <sup>1</sup>	189,768,610	142,430,249	(2014)
H-shares Index Futures	33,379,310	21,984,297	(2014)
Mini H-shares Index Futures	7,506,543	3,429,393	(2014)
USD/CNH Futures	262,433	205,049	(2014)
Stock futures	729,013	459,190	(2013)
H-shares Index Options	15,304,215	8,998,897	(2014)
Flexible H-shares Index Options	39,848	36,621	(2014)
Stock options	92,463,479	74,543,861	(2014)
AHFT 1	5,237,882	2,892,507	(2014)

<sup>1</sup> Excludes London Metal Mini Futures contracts which are included under the Commodities segment

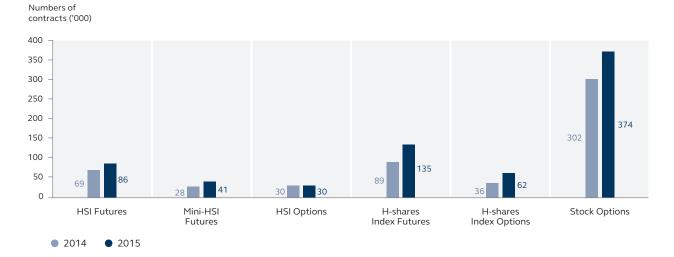
<sup>2</sup> Equivalent to 8 per cent of the total number of the same contracts traded during the day session (2014: 6 per cent)

## New Record Highs - Single Day Volume and Open Interest

Apart from the record high full-year trading volumes, a number of record high single day volumes and open interest of various contracts were achieved during 2015 as follows:

	Single Da	Single Day Volume		nterest
	Date (2015)	Number of contracts	Date (2015)	Number of contracts
Stock options	13 Apr	1,221,324	27 May	11,159,128
H-shares Index Futures	26 Aug	467,559	29 Dec	519,817
Mini H-shares Index Futures	8 Jul	74,511	-	-
H-shares Index Options	4 Sep	188,957	25 Sep	2,618,350
Mini Hang Seng Index Futures	25 Aug	94,001	-	-
USD/CNH Futures	12 Aug	8,061	-	-
HSI Volatility Index Futures	29 May	105	-	-
Flexible H-shares Index Options	-	-	26 Jun	44,480
HSCEI Dividend Point Index Futures	-	-	30 Dec	101,430

## Average Daily Volume of Major Futures and Options Contracts



## **Stock Options Market Development**

5 new stock option classes were introduced in 2015. At the end of December 2015, there were 84 stock option classes available for trading, 18 of which were under the Primary Market Maker programme.

Advanced options education courses were held for more than 450 experienced options traders in April and May 2015 to improve their product knowledge. The courses covered advanced topics including implied volatility, options Greeks concept and their trading strategies and risk management methods. Other stock options seminars and briefing sessions held by HKEX in the year attracted over 6,000 attendees.

#### **Stock Futures Market Development**

In response to the increased demand for investment products from Mainland investors, 34 new stock futures contracts were introduced in the fourth quarter of 2015. The underlying stocks of these new futures contracts, together with 6 existing stock futures contracts, were the top 40 active stocks in Southbound Trading under Stock Connect, which accounted for about 60 per cent of Southbound Trading turnover. At 31 December 2015, the total number of stock futures contracts available for trading was 74.

## **RMB Currency Futures Market Development**

People's Bank of China introduced a new daily fixing framework on 11 August 2015 leading to depreciation of the USD/CNH rate by around 3 per cent. Subsequently, the trading volume of USD/CNH Futures hit an all-time high of 8,061 contracts on 12 August 2015. The overall number of USD/CNH Futures traded in 2015 increased by 28 per cent over 2014 to 262,433 contracts, a record high. HKEX has continued to promote USD/CNH Futures to investors in Hong Kong and other parts of Asia in particular in the Mainland and Singapore. The Active Trader Programme launched in January 2015 helped to further develop the market by introducing additional players from the international and regional trading community.

# Other FIC Development

In light of the continuing internationalisation of the RMB, HKEX continued to evaluate the market appetite for RMB FIC products. On 11 June 2015, HKEX hosted its second RMB FIC Conference and received positive feedback from attendees, which included industry experts and business leaders.

# **Volatility Control Mechanism**

A consultation paper was released in January 2015 on the proposed introduction of Volatility Control Mechanism in the Derivatives Market in addition to the Cash Market. The consultation conclusions, which were released in July 2015, indicated substantial market support. HKEX plans to implement the Volatility Control Mechanism in the Derivatives Market in the fourth guarter of 2016.

# Pre-Trade Risk Management System

The increasing use of automated electronic trading has introduced new risks to the Derivatives Market. In order to promote stability in Hong Kong's market, HKEX will introduce a Pre-Trade Risk Management System to facilitate EPs' own pre-trade risk management needs. The system will be mandatorily applied to all orders of the Hong Kong Futures Automated Trading System. EPs can set limits for their firms according to their risk profiles and orders that breach the limits will be rejected. Internal testing was completed in October 2015 and external readiness test was conducted in January 2016. The system is currently scheduled for launch in the second quarter of 2016.

## Service Enhancement and Other Product Development

Under an order granted by the Commodity Futures Trading Commission in March 2015, SFC-licensed corporations are now permitted to solicit and accept orders and funds for trading futures on HKFE directly from US customers. In August 2015, HKEX obtained approval from the US Securities and Exchange Commission for a Class No-Action Relief in order to allow its EPs to engage eligible broker-dealers/institutions in the US in trading Stock Options, H-shares Index Options and Mini-Hang Seng Index Options at HKEX. These allow broadening of HKEX's derivatives product distribution to US investors.

HKEX is working closely with the SFC on a proposed hedging exemption regime that would enable institutional investors to apply for additional position limits to facilitate hedging or arbitrage.

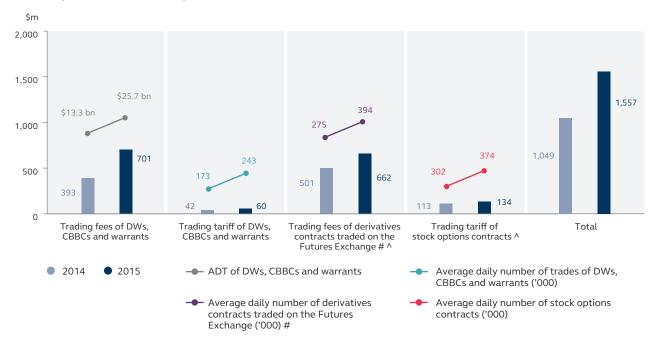
## **Analysis of Results**

## Summary

	2015 \$m	2014 \$m	Change
Trading fees and trading tariff	1,557	1,049	48%
Stock Exchange listing fees	411	451	(9%)
Market data fees	206	163	26%
Other revenue and sundry income	5	3	67%
Total revenue and other income	2,179	1,666	31%
Operating expenses <sup>1</sup>	(446)	(400)	12%
EBITDA	1,733	1,266	37%
EBITDA margin	80%	76%	4%

<sup>1</sup> Includes Listing Division costs related to DWs, CBBCs and warrants

# **Trading Fees and Trading Tariff**



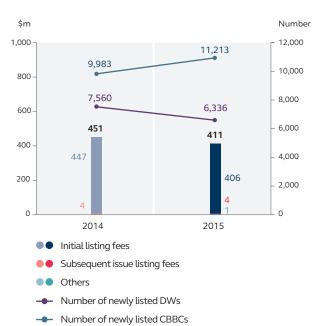
<sup>#</sup> Excludes London Metal Mini Futures contracts which are included under the Commodities segment

Trading fees and trading tariff for the segment are generated from trading of derivatives on the Stock Exchange (ie, DWs, CBBCs, warrants, and stock options) and trading of futures and options on the Futures Exchange. A portion of the trading fees and trading tariff for the futures and options contracts is allocated to the Clearing segment (see Clearing Segment below) as the trading and clearing fees of these products are bundled together in the form of trading fees and tariff.

Trading fees and trading tariff from trading of DWs, CBBCs and warrants rose due to increased ADT and average daily number of trades. The percentage increase was less than the 93 per cent growth in ADT as the increase was partly offset by lower growth in fees from new issues and the impact of an increase in average transaction size which reduced the growth in trading tariff.

Trading fees from futures and options traded on the Futures Exchange rose with the increase in average daily number of contracts traded. The overall growth was partly offset by a higher proportion of derivatives contracts in 2015 being lower fee products such as H-shares Index Futures and Options.

<sup>^</sup> Excludes trading fees and trading tariff allocated to the Clearing segment (Derivatives contracts traded on the Futures Exchange – 2015: \$195 million; 2014: \$136 million; stock options contracts – 2015: \$61 million; 2014: \$49 million)



Stock Exchange listing fees are mainly derived from initial and subsequent issue listing fees for DWs and CBBCs. The decrease in fees by \$40 million or 9 per cent was due to a lower number of newly listed DWs, partly offset by an increase in the number of newly listed CBBCs (which generate a lower fee than DWs).

### **EBITDA**

Operating expenses rose by \$46 million or 12 per cent principally due to higher index license fees from increased trading volume and higher staff costs attributable to increased headcount, annual payroll adjustments and higher variable pay. As the percentage revenue growth was higher than that of operating expenses, the EBITDA margin improved from 76 per cent to 80 per cent.

# **Commodities Segment**

# **Key Market Indicators**

	2015	2014	Change
Average daily volume of metals contracts traded on the LME (lots)			
Aluminium	247,198	272,015	(9%)
Copper	162,247	161,403	1%
Lead	51,271	51,756	(1%)
Nickel	81,817	76,533	7%
Zinc	118,723	125,846	(6%)
Others	8,933	12,651	(29%)
Total	670,189	700,204	(4%)
	At 31 Dec 2015	At 31 Dec 2014	Change
Total futures MOI (lots)	2,314,219	2,268,769	2%

## **Business Update**

#### **LME**

The commercialisation of the LME's trading fees was implemented on 1 January 2015. Although there was a significant downturn in the demand for base metals in 2015, the average daily volume of metals contracts traded was only 4 per cent lower than 2014.

The total futures MOI at the end of the year rose by 2 per cent to 2,314,219 lots. During the year, MOI peaked at 2,507,186 lots.

In the first quarter of 2015, the LME disposed of its remaining shareholding in LCH to Borsa Istanbul.

The key focus for the LME in 2015 was to continue its reform of the physical delivery network and widening participation in the market it operates.

In respect of the physical delivery network, during 2015, the LME conducted a series of market wide consultations on further reforms with the intention of introducing a cap on the rent that can be charged by an LME-approved warehouse for metal held in a delivery queue, and an increased minimum load-out rate for metal stored in LME warehouses.

Connected with the LME's reform package and as part of the overall strategy to enhance market participation, the LME successfully launched its LME Aluminium Premium contracts, which now allows participants to hedge the regional "all-in" price to ensure the metal they receive is readily available in a non-queued LME warehouse at a convenient location.

In addition to these, the LME successfully launched 2 new cash settled ferrous contracts – LME Steel Rebar and LME Steel Scrap in the fourth quarter of 2015. These new contracts allow industry participants to reduce their risk exposure by hedging more steps in the steel production process.

During 2015, as part of its Liquidity Roadmap, the LME successfully introduced a series of measures designed to encourage market participation by simplifying access to the market. These included (i) increasing the LMEselect tick sizes to align both the electronic and open outcry markets, (ii) lifting the LMEselect order-to-trade ratio restriction for outright 3<sup>rd</sup> Wednesday monthly contracts, (iii) encouraging liquidity on nearby monthly prompts for the market, (iv) introducing pre-trade risk management functionality for LMEselect, (v) reforming membership structure to facilitate market participation and liquidity on LMEselect, and (vi) introducing liquidity provider programmes and market making programmes designed to enhance liquidity for the market.

#### **Introduction of Second Asia Commodities Contracts**

On 14 December 2015, the second batch of London Metal Mini Futures – London Nickel/Tin/Lead Mini Futures – commenced trading in Hong Kong on the Futures Exchange. The Active Trader Programme for London Metal Mini Futures was successfully completed by the end of 2015.

As part of its strategy to transform into a leading global vertically-integrated multi-asset class exchange, HKEX will continue to research and develop new commodities-related products and set new commodities benchmarks, in particular for Mainland China.

## Extension to the HKFE/LME Reciprocal Membership Arrangement

The HKFE/LME Reciprocal Membership Arrangement has been extended for 1 year to 31 December 2016 in order to broaden access to and provide liquidity for the London Metal Mini Futures contracts and to encourage the Futures Exchange's Participants to become LME members. Under the reciprocal arrangement, HKFE and the LME will waive their respective first year's annual subscription and application processing fees for new applicants who already hold a membership at either one of the exchanges.

#### **Promotional Activities**

The LME held its third LME Week Asia in Hong Kong in May 2015. The annual event consisted of the Metals Seminar and Gala Dinner, which attracted over 700 participants and over 1,600 guests respectively. The 2016 LME Week Asia will be held in Hong Kong on 14 June 2016.

The China Reception held during LME Week in London in October 2015 attracted over 400 senior executives. The first bespoke exchange programme with China Futures Association members was a special highlight for the week – the one-week training was attended by more than 30 senior executives from over 20 high-profile Chinese financial firms.

HKEX also continued to organise and participate in a series of metal-related seminars held in Greater China.

# **London-Hong Kong Connect**

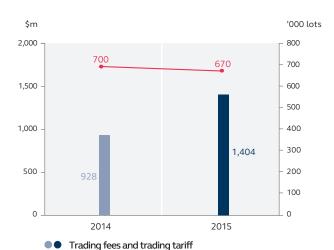
On 21 October 2015, HKFE, HKCC, the LME and LME Clear signed a memorandum of understanding for the proposed development of a trading link between HKFE and the LME and a clearing link between HKCC and LME Clear, to be named "London–Hong Kong Connect". The proposal is aimed at expanding the potential investor base of the LME market, giving the LME a new presence in Asia and supporting the development of Hong Kong as a commodities trading centre. Implementation of the trading and clearing links is subject to regulatory approvals in Hong Kong, the UK and the EU.

## **Analysis of Results**

# Summary

	2015 \$m	2014 \$m	Change
Trading fees and trading tariff	1,404	928	51%
Market data fees	177	176	1%
Other revenue:			
Commodities stock levies and warehouse listing fees	102	117	(13%)
Others	52	53	(2%)
Total revenue	1,735	1,274	36%
Operating expenses	(546)	(568)	(4%)
EBITDA	1,189	706	68%
EBITDA margin	69%	55%	14%

#### **Trading Fees and Trading Tariff**



Despite a 4 per cent drop in the average daily volume of metals contracts traded, trading fees and trading tariff rose by \$476 million or 51 per cent as a result of commercialising the LME's trading fees effective from 1 January 2015.

 Average daily volume of metals contracts traded on the LME ('000 lots)

#### **EBITDA**

Operating expenses dropped by \$22 million or 4 per cent. The decrease was attributable to a reduction in legal fees for litigation as no material legal costs were incurred in 2015 and \$5 million was recovered from the insurers in respect of previous litigation in the UK (2014: \$43 million of litigation costs were incurred). Other reductions in operating expenses were due to lower legal and professional fees incurred for strategic projects and savings on IT costs as a result of insourcing a previously outsourced IT team in May 2014. The decrease in operating expenses was partly offset by higher staff costs due to increased headcount, annual payroll adjustments and increase in variable pay. As a result, EBITDA increased by 68 per cent to \$1,189 million and the EBITDA margin rose from 55 per cent in 2014 to 69 per cent in 2015.

# **Clearing Segment**

# **Key Market Indicators**

	2015 \$bn	2014 \$bn	Change
ADT on the Stock Exchange	105.6	69.5	52%
Average daily value of Settlement Instructions (SIs) settled by CCASS	254.7	205.6	24%

## **Business Update**

## **Regulatory Review**

In April 2015, HKSCC, HKCC, SEOCH and OTC Clear were recognised by the European Securities and Markets Authority as Third-Country CCPs under the European Market Infrastructure Regulation, allowing European financial institutions to continue to participate in our markets. The European Market Infrastructure Regulation recognition also gives our CCPs a "qualifying CCP" (QCCP) status across the EU, enabling the European CPs to benefit from lower capital requirements under the European Union Capital Requirements Regulation.

In response to the Public Quantitative Disclosure Standards for Central Counterparties published by Committee on Payments and Market Infrastructures and Board of the International Organization of Securities Commissions in February 2015, HKSCC, HKCC, SEOCH and OTC Clear published their quantitative disclosure on the HKEX website to give stakeholders a better understanding of the risks associated with our CCPs.

The Securities and Futures and Companies Legislation (Uncertificated Securities Market Amendment) Ordinance was gazetted in March 2015. HKEX is working closely with the SFC and other stakeholders on finalising the details of the operational arrangements to prepare for the launch of an uncertificated securities market in Hong Kong.

## **Cash and Derivatives Clearing**

Since the launch of Stock Connect, the clearing and settlement services of Northbound and Southbound trades have been operating smoothly. Several enhancements were made to Stock Connect in 2015, the most notable of which was the Special Segregated Account model. This addressed Northbound investors' biggest concern by enabling them to meet Stock Connect's pre-trade checking requirement without first transferring shares to their brokers before their sell orders are executed. Counterparty risk in A-share settlement faced by investors is therefore significantly reduced under the Special Segregated Account model (see also commentary under the Cash segment). In addition, to enhance CPs' operational efficiency in Northbound trade settlement, a number of CCASS settlement functions have been enhanced and the service hours of certain CCASS functions were extended since December 2015.

Looking forward, the next important enhancement to Stock Connect will be the introduction of an additional same-day RMB money settlement run for payments related to Stock Connect SIs in April 2016. This enhancement will offer SIs same-day stock delivery against RMB payments, thereby reducing overnight counterparty risk that may arise between CPs, custodians and investors.

To make our clearing houses more responsive to market turnover and volatility changes, HKSCC, HKCC and SEOCH revised the triggering and collection mechanism of their Guarantee/Reserve Funds in July 2015. Under the enhanced mechanism, the 3 clearing houses collect a 25 per cent (previously 5 per cent) buffer on top of the calculated maximum risk exposure. In addition, HKCC and SEOCH implemented revised concentration risk policies in September 2015 to require higher margin collateral from CPs with concentrated risk exposures.

To ensure international best practices, an independent consultant was engaged by HKSCC, HKCC and SEOCH to validate their risk management models in 2015. The validation concluded that the existing risk management policies and models conform to the PFMI. HKSCC, HKCC and SEOCH have also set out plans to enhance their margining and stress testing methodologies based on the recommendations made by the consultant.

HKEX has now recovered 100 per cent of its admitted claims from the liquidators of Lehman Brothers Securities Asia Limited, totalling \$160 million plus a further \$38 million of post-liquidation interest (\$118 million of this was recovered in 2015).

### **OTC Clear**

In 2015, OTC Clear issued 1,260 ordinary shares and 420 non-voting ordinary shares to HKEX and the holders of its non-voting ordinary shares respectively at a total consideration of \$353 million. This additional funding will support OTC Clear's future development needs and product expansion plans.

Having obtained the various necessary regulatory recognitions, OTC Clear admitted Hong Kong branches of PRC-incorporated, UK-incorporated and US-incorporated banks as Clearing Members in 2015. Subject to regulatory approval, OTC Clear plans to introduce client clearing service, cross currency swaps clearing service and accept non-cash collateral in the first half of 2016. In addition, OTC Clear aims to introduce a clearing service for Foreign Exchange deliverables by the end of 2016.

#### **LME Clear**

LME Clear had a successful first full year of operation in 2015 and demonstrated its ability to deliver a robust, resilient service with risk management focus. LME Clear was also able to demonstrate its capability for innovation through expanding its clearing service and implementing new services for the LME metals market in 2015 which included accepting RMB and LME warrants as collateral, the launch of LME premium and ferrous contracts, and the introduction of compression services. In 2016, LME Clear intends to launch further ferrous contracts in conjunction with the LME and to prepare for The Markets in Financial Instruments Directive 2.

#### **Analysis of Results**

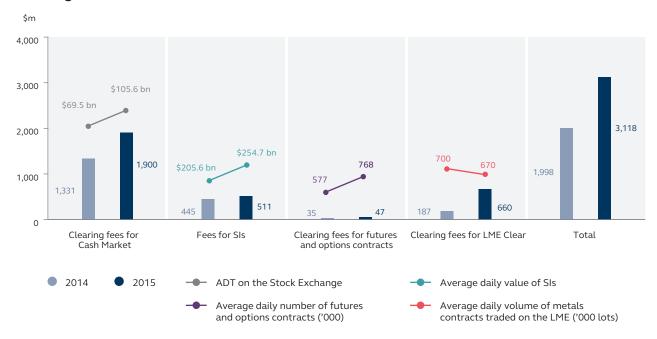
#### **Summary**

	2015 \$m	2014 \$m	Change
Trading fees and trading tariff – allocated from			
Equity and Financial Derivatives segment	256	185	38%
Clearing and settlement fees	3,118	1,998	56%
Depository, custody and nominee services fees	867	725	20%
Other revenue and sundry income	157	63	149%
	4,398	2,971	48%
Net investment income	604	532	14%
Total revenue and other income Operating expenses	5,002 (692)	3,503 (586)	43% 18%
EBITDA	4,310	2,917	48%
EBITDA margin	86%	83%	3%

## **Trading Fees and Trading Tariff**

Trading fees and trading tariff reallocated for clearing derivatives products rose due to an increase in the number of derivatives contracts traded (see commentary for the Equity and Financial Derivatives segment above).

## **Clearing and Settlement Fees**



Clearing and settlement fees rose due to increased ADT on the Stock Exchange, higher volume of SIs, and \$660 million of clearing fees generated by LME Clear, which was launched in September 2014 (2014: \$187 million). Excluding LME Clear, the increase in clearing and settlement fees for the Cash Market and fees from SIs was lower than the 52 per cent increase in ADT on the Cash Market and the 24 per cent increase in average daily value of SIs respectively. The differences were due to an increase in transaction size that resulted in fewer transactions being subject to the minimum clearing fee and more transactions being subject to the maximum clearing fee.

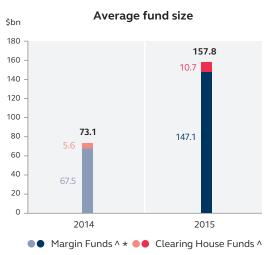
## **Depository, Custody and Nominee Services Fees**

Depository, custody and nominee services fees rose by \$142 million or 20 per cent due to the introduction of portfolio fees following the launch of Stock Connect in November 2014 along with higher scrip fees, stock withdrawal fees, corporate action fees, and dividend collection fees. The increase in scrip fees was attributable to more companies having their first book close and/or declaring a dividend in 2015 than in 2014.

### Other Revenue and Sundry Income

Other revenue increased due to the one-off post-liquidation interest payment of \$38 million from the liquidators of Lehman Brothers Securities Asia Limited, and higher accommodation income received from LME Clear CPs on their collateral lodged with LME Clear following the launch of LME Clear in September 2014.

#### **Net Investment Income**



The increase in the average fund size of the Margin Funds during the year was due to the first full year impact of significant amounts of cash collateral collected from LME Clear CPs since its launch on 22 September 2014. Additional margin deposits were also collected in Hong Kong reflecting increased open interest and higher margin requirements per contract.

The increase in the average fund size of the Clearing House Funds was also due to the first full year impact of contributions from LME Clear CPs. Additional Clearing House Funds contributions were also collected from the clearing houses in Hong Kong in response to market fluctuations and changes in risk exposure.

- ^ Includes funds received from LME Clear CPs from 22 September 2014
- Includes Mainland security and settlement deposits received from CPs in respect of trading of A shares on the SSE through Stock Connect from 17 November 2014

The analysis of net investment income is as follows:

		2015		2014		
	Margin Funds \$m	Clearing House Funds \$m	Total \$m	Margin Funds \$m	Clearing House Funds \$m	Total \$m
Net investment income from:						
Cash and bank deposits	570	21	591	490	22	512
Debt securities	14	-	14	20	-	20
Exchange loss	(1)	-	(1)	_	_	
Total net investment income	583	21	604	510	22	532
Net investment return	0.40%	0.19%	0.38%	0.75%	0.40%	0.73%

The higher net investment income on the Margin Funds in 2015 was attributable to interest income on an increased average fund size. The overall net investment return reduced, from 0.73 per cent in 2014 to 0.38 per cent in 2015, due to a decrease in short-term interest rates and regulatory restrictions on the investment of LME Clear's Margin Funds and Clearing House Funds.

#### **EBITDA**

Operating expenses increased by 18 per cent following the launch of LME Clear in September 2014 and higher staff costs for increased headcount, annual payroll adjustments and higher variable pay. Due to the 43 per cent increase in revenue and other income, the EBITDA margin increased from 83 per cent in 2014 to 86 per cent in 2015.

# **Platform and Infrastructure Segment**

#### **Business Update**

After the launch of the HKEX Orion Central Gateway (OCG) in the Cash Market in June 2014, most EPs migrated their Open Gateway to OCG in 2015. Migration of all EPs to OCG is targeted for completion by the end of June 2016, at which time the legacy Open Gateway would be decommissioned. The OCG benefits EPs by reducing infrastructure costs, introducing certain new services, and adopting industry messaging standards.

The replacement of Multi-workstation System, First and Second Trading Terminals of the current AMS by the New Securities Trading Devices was completed in the third quarter of 2015.

Requirement definition for the implementation of Orion Trading Platform – Securities Market (OTP-C) was completed in October 2015. Preparation of detailed specifications is in progress, and system development for OTP-C is scheduled to commence right after the detailed design phase in the second quarter of 2016 and planned to complete by the end of 2016. Testing and other market readiness activities will be carried out in 2017.

In response to the significant increase in trading volume in the second quarter of 2015, where a number of new records were reached, a capacity upgrade was implemented in 2015 to increase CCASS processing capacity from a maximum daily volume of 7.5 million trades to 12.5 million trades. The maximum daily volume experienced to date was 3.6 million on 9 April 2015.

HKEX has recently initiated the requirement definition stage for the first phase of the development of a Next Generation Clearing Platform (NGCCP) encompassing Cash Central Counterparty Clearing, Collateral Management and Risk Management. During this stage, HKEX aims to define the requirements of NGCCP functions and the new business capabilities envisioned for the Hong Kong securities market, as well as the related technology and architecture roadmap.

HKEX initiated a websites revamp project in December 2015 to enhance web accessibility and user experience. New information architecture and content management technology will be introduced, a more powerful search engine implemented and web design optimised for mobile users. The project will be delivered in two phases, with the revamped Group website launched in the fourth quarter of 2016 and the redesigned HKEX corporate website rolled out in the second quarter of 2017.

# **Analysis of Results**

## **Summary**

	2015 \$m	2014 \$m	Change
Network, terminal user, dataline and software sub-license fees	389	356	9%
Hosting services fees	105	98	7%
Others	5	11	(55%)
Total revenue Operating expenses	499 (148)	465 (152)	7% (3%)
EBITDA	351	313	12%
EBITDA margin	70%	67%	3%

## Network, Terminal User, Dataline and Software Sub-license Fees

Network, terminal user, dataline and software sub-license fees rose by \$33 million or 9 per cent. This arose from an increase in Cash Market trading system line rental income following the launch of OCG and network usage fees relating to Stock Connect, but was partly offset by a drop in sales of throttles due to the one-off purchases made by Participants in 2014 in preparation for the launch of Stock Connect.

## **Hosting Services Fees**

Hosting services fees increased by \$7 million or 7 per cent, due to an increase in the number of racks taken up by customers.

#### **EBITDA**

Operating expenses decreased by \$4 million or 3 per cent due to reduced IT costs directly consumed by Participants. Coupled with a 7 per cent increase in total revenue, the EBITDA margin increased from 67 per cent to 70 per cent.

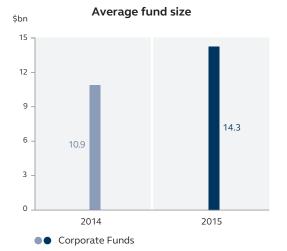
# **Corporate Items**

"Corporate Items" is not a business segment but comprises central income (including net investment income of the Corporate Funds) and central costs (costs of central support functions that provide services to all operating segments and other costs not directly related to any operating segments).

### **Revenue and Other Income**

	2015 \$m	2014 \$m	Change
Net investment income	74	175	(58%)
Gain on disposal of a leasehold property	445	-	N/A
Others	6	5	20%
Total	525	180	192%

### **Net Investment Income**



The average fund size increased from \$10.9 billion in 2014 to \$14.3 billion in 2015 principally due to the retention of cash generated by the business over the past year.

The analysis of net investment income is as follows:

	2015 \$m	2014 \$m
Net investment income from:		
Cash and bank deposits	71	76
Equity securities	30	53
Debt securities	30	66
Exchange loss	(57)	(20)
Total net investment income	74	175
Net investment return	0.52%	1.62%

Included in net investment income – equity securities was a \$31 million gain on sale of the remaining stake of the LME's investment in shares of LCH (2014: \$23 million of fair value gain from revaluation of the investment). Excluding the LCH gains, net investment income of the Corporate Funds in 2015 decreased by \$109 million principally due to lower fair value gains on equity and debt securities caused by the depressed markets, a higher proportion of investments in short-term deposits for regulatory purposes, and higher foreign exchange losses for hedging LME Group's operating costs (offset, in whole or in part, by lower operating costs of LME Group).

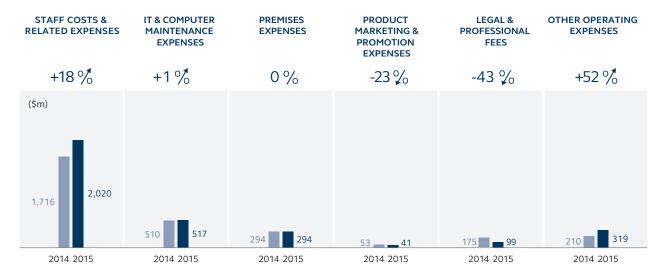
As the valuations of investments reflect movements in market prices, fair value gains or losses may fluctuate or reverse until the investments are sold or mature.

## Gain on Disposal of a Leasehold Property

In 2015, the Group disposed of a leasehold property in Hong Kong and a gain of \$445 million was recorded.

# **Expenses, Other Costs and Taxation**

### **Operating Expenses**



Staff costs and related expenses increased by \$304 million or 18 per cent mainly due to increased headcount for strategic initiatives including Stock Connect, the insourcing of a previously outsourced IT team by the LME Group, annual payroll adjustments, and an increase in variable pay due to improved results of the Group.

Legal and professional fees decreased by \$76 million or 43 per cent as no material litigation costs were incurred in 2015 (2014: \$43 million was incurred), \$5 million was recovered from the insurers in respect of litigation in the UK and lower legal and professional fees were incurred on strategic projects.

Other operating expenses increased by \$109 million or 52 per cent due to higher fees from an increase in committed bank credit facilities, higher investment management services costs and operating expenses for LME Clear after its launch, and an increase in repairs and maintenance expenses and index license fees.

## **Depreciation and Amortisation**

	2015 \$m	2014 \$m	Change
Depreciation and amortisation	684	647	6%

Depreciation and amortisation increased by \$37 million or 6 per cent due to the depreciation of new IT systems, such as HKEX Orion Market Data Platform and trading and clearing systems for Stock Connect, in 2015.

#### **Finance Costs**

	2015 \$m	2014 \$m	Change
Finance costs	114	196	(42%)

The decrease in finance costs was mainly due to the full conversion of the Convertible Bonds in the second quarter of 2015, and the refinancing of the floating rate bank loan at a lower interest rate from July 2014.

#### **Taxation**

	2015 \$m	2014 \$m	Change
Taxation	1,347	900	50%

Taxation increased due to higher profit before taxation in 2015, but was partly offset by higher non-taxable income (including the gain on sale of a leasehold property) and a deferred tax credit of \$65 million resulting from the enactment of a reduction in UK Corporation Tax rates.