

BUSINESS REVIEW

Major Achievements (2012) and Key Initiatives (2013)

Listing and Regulatory Affairs › Listing

2012

- Published consultation papers on the following topics:
 - trading halts;
 - amendments to the Listing Rules consequential on the statutory backing to continuing obligation to disclose inside information; and
 - board diversity
- Published consultation conclusions on the following topics:
 - Environmental, Social and Governance Reporting Guide;
 - amendments to the Listing Rules consequential on the statutory backing to continuing obligation to disclose inside information; and
 - board diversity
- Issued a guide on connected transaction Rules
- Issued a guide on enhancing regulation of the listed structured products market
- Published guidance on listing of business trusts and stapled securities
- Pursued simplification of listing documents and procedures
- Worked with the SFC on a revised Joint Policy Statement regarding the listing of overseas companies and other related guidance
- Reviewed and promoted Hong Kong Depositary Receipt regime
- Continued developing closer regulatory cooperation with other exchanges

2013

- Publish consultation conclusions on trading halts
- Publish consultation on further review of the connected transaction Rules
- Pursue further simplification of listing documents and procedures
- Publish a revised Joint Policy Statement regarding the listing of overseas companies and other related guidance
- Review disclosure requirements of Appendix 16 to the Main Board Listing Rules with reference to International Financial Reporting Standards/HKFRSs
- Review operation of Chapter 18 of the Main Board Listing Rules (Mineral Companies)
- Amendments to Listing Rules and procedures to complement the SFC's reform of the sponsor regime

Listing and Regulatory Affairs › Enterprise Risk Management and Surveillance

2012

- Obtained the Board's approval for enhancements of the HKEx Market Contingency Plan Framework
- Reported significant risks to the Senior Management Committee, the Risk Management Committee and the Board based on the HKEx Enterprise Risk Management (ERM) Framework
- Enhanced management reports on bank guarantee collateral
- Developed and implemented the Counterparty Risk Ranking Methodology to enhance monitoring of EPs and CPs
- Developed and implemented Securities Markets Automated Research, Training & Surveillance (SMARTS) resilience for enhancing SMARTS backup arrangement

2013

- Refine the HKEx ERM Framework to enable business functions in assessing and managing risks from new HKEx business activities and environment
- Enhance Large Open Position system to support HKEx's new products
- Review Counterparty Risk Ranking Methodology for ranking EPs and CPs
- Enhance SMARTS surveillance system to synchronise with the OMD and HKEx new products development

Global Markets > Cash and Derivatives Trading**2012**

- Implemented Phase 2 changes to the trading hours in the Cash Market and Derivatives Market
- Revised selection criteria for designated securities eligible for short selling
- Implemented trade reporting requirements for automated trading services (ATS) transactions
- Facilitated launch of 35 new ETFs traded on the Exchange with a wide range of underlying assets
- Organised training courses related to AMS/3
- Organised and participated in 20 ETF related events to promote the ETF market
- Prepared systems for introduction of AHFT
- Introduced Dynamic Price Banding mechanism for spot Mini-HSI Futures
- Introduced HSI Volatility Index Futures
- Introduced BRICS futures under the BRICS Exchanges Alliance
- Organised Continuous Professional Training (CPT) courses on HKATS operations and trading procedures
- Held briefing sessions and seminars on derivatives organised under joint promotion programme with EPs

2013

- Work with EPs to facilitate launch of the OCG for the Cash Market
- Continue promoting the ETF market to retail investors, institutional investors, and intermediaries
- Define the functional requirements for the OTP for the Cash Market
- Introduce AHFT
- Extend Dynamic Price Banding mechanism to spot HSI Futures and spot H-shares Index Futures
- Implement business initiatives under the Stock Options Revamp project
- Conduct CPT courses jointly with the HKSI on HKEx's products and services
- Organise training courses and briefings related to HKEx's products and services for EPs

Global Markets > RMB Business**2012**

- Facilitated launch of 4 RQFII A-share ETFs traded on the Exchange
- Established the Dual Counter model for RQFII A-share ETFs as well as for equity
- Admitted 6 RMB-traded securities (1 equity security, 4 ETFs, and 1 REIT) into the TSF
- Facilitated launch of 3 RMB-traded DWs traded on the Exchange
- Introduced RMB Currency Futures based on USD/CNH currency pair
- Completed system readiness for trading and clearing of RMB-traded futures and options
- Expanded coverage of the TSF beyond RMB-traded shares to RMB-traded equity-related ETFs and REITs
- Streamlined the registration process for TSF Participants
- Further enhanced IT infrastructure and functionalities to support RMB products

2013

- Facilitate launch of more RQFII A-share ETFs
- Introduce options and futures based on RQFII A-shares ETFs
- Explore diversification of RMB currency futures
- Continue working with CPs and other market participants in their preparation for RMB derivatives business

Global Markets > LME**2012**

- Launched LMEswaps contracts
- Introduced the Exchange User Fee
- Launched live forward price curve
- Admitted the first Chinese member
- Continued engagement on behalf of the members with governmental bodies
- Broadened education and outreach efforts in Asia and the Indian Sub-Continent
- Held inaugural LME Week Asia
- Continued CSR activities with the Tower Hamlets Education Business Partnership

2013

- Develop products and services relevant to Asia
- Realise Asian expansion strategy in commodities
- Continue to refine existing products and services
- Develop OTC bullion clearing service
- Develop and build a trade repository
- Ensure European Market Infrastructure Regulation (EMIR) readiness for LME, LCH.Clearnet Limited, and LME Clear
- Continue to engage with stakeholders through the existing committee structure and via consultations
- Continue to engage with global and regulatory bodies in ongoing regulatory discussions

Global Markets > Market Data**2012**

- Rolled out the end-user licence agreement for the Cash Market data products
- Introduced commercial package for non-display usage of the Cash and Derivatives Market data
- Incorporated the GFIS for the launch of the Mainland Market Data Hub (MMDH) in Shanghai
- Enriched historical data products
- Promoted the Basic Market Price Service to the Mainland and other markets
- Promoted market data business in the mainland of China

2013

- Roll out a suite of market data product feeds for the Cash Market after the launch of the OMD
- Launch and promote the MMDH in Shanghai
- Implement commercial package for non-display usage of the Cash and Derivatives Market data
- Review reference data products
- Continue promoting market data business in the mainland of China

Global Markets > CESC**2012**

- Signed joint venture agreement with Shanghai Stock Exchange and the Shenzhen Stock Exchange, which led to the establishment of the CESC
- Launched CES China 120 Index (CES120), the first index in the new CESC Cross Border Index Series

2013

- Develop sub-indices including a pure A-shares index and a Hong Kong Mainland index based on CES120 constituents
- Introduce other cross-border indices under CESC Cross Border Index Series
- Introduce CESC Cross Border Index Series products such as futures and options

Global Markets > Product and Index Development**2012**

- Promoted the BRICS Exchanges Alliance initiative and BRICS futures to investors and other market participants
- Worked with other BRICS alliance members to build liquidity in BRICS futures
- Worked with other BRICS alliance members to complete a request for proposals to develop a composite index comprising listings from members' markets

2013

- Work with other BRICS alliance members to expand second phase initiatives in developing a set of composite indices across asset classes representing markets in Brazil, Russia, India, China, and South Africa
- Expand CNH currency product series
- Initiate new product development in fixed income, currency and derivatives based on indices

Global Markets > Mainland Development**2012**

- Signed an MOU with the Ministry of Finance of the PRC on listing and trading of RMB-denominated sovereign bonds
- Signed MOUs on cooperation and exchange of information with 7 Mainland counterparts and authorities
- Organised 4 Hong Kong exchange programmes for CSRC

2013

- Sign MOUs with other relevant entities in line with HKEx's Mainland strategy
- Continue organising Hong Kong exchange programmes tailored to the professional needs of relevant Mainland authorities as appropriate

Global Markets › Issuer and Client Services

2012

- Organised 23 seminars and conferences and participated in over 60 conferences in Hong Kong, the mainland of China and overseas to promote listing in Hong Kong
- Conducted 55 trips to the mainland of China and 18 trips to overseas markets to meet potential applicants for a listing in Hong Kong
- Co-organised and participated in listing promotion activities for mining and energy companies and other companies
- Conducted over 130 meetings with provincial governments as well as the PRC Central Government regulators and authorities
- Conducted approximately 1,000 meetings with prospects and influencers, and worked closely with influencers to identify and pursue major upcoming IPOs

2013

- Continue listing promotion activities in Hong Kong, the mainland of China and selected overseas markets to help attract quality companies to list in Hong Kong
- Continue promoting RMB fundraising opportunities at HKEx
- Continue promoting HKEx's strength as a listing centre for Mainland and overseas mining and energy companies with business nexus with the mainland of China
- Continue collaborating with government units and associations to host promotional events locally and internationally
- Continue identifying industry-specific potential issuers
- Continue promoting HKEx's products and services to listed companies, other market participants and potential issuers

Global Clearing › Cash and Derivatives Clearing

2012

- Enhanced the processing of SIs to settle in any eligible currency (ie, HKD, RMB or USD) in CCASS
- Standardised the money settlement arrangements with all Settlement Banks of HKCC
- Admitted new equity securities of an international issuer from Japan into CCASS
- Admitted Dual Counter RMB-traded equity securities of an issuer into CCASS
- Admitted 35 new ETFs (including 4 RQFII A-share Dual Counter ETFs), 6,056 new CBBCs, 5,886 new DWs (including 3 DWs traded in RMB), 21 bonds (including 6 RMB-traded bonds issued by the Ministry of Finance of the PRC and 1 iBond issued by the Government) into CCASS
- Enhanced DCASS for the introduction of AHFT

2013

- Continue supporting the SFC's preparation of subsidiary legislation for a scripless securities market in Hong Kong
- Continue working on clearing and settlement arrangements to facilitate the listing of international issuers in Hong Kong
- Perform self-assessment of observance of principles for financial market infrastructures issued by the Committee on Payment and Settlement Systems (CPSS) and the International Organization of Securities Commissions (IOSCO)

Global Clearing > OTC Clear

2012

- Worked with the Government and regulators to introduce interim legislative measures to enable voluntary clearing of OTC derivatives in Hong Kong
- Incorporated OTC Clear to operate the OTC derivatives clearing business
- Drafted and consulted with the market on the rules and procedures of OTC Clear
- Completed system development for new OTC clearing platform and prepared for testing with clearing members
- Marketed OTC clearing services to banks and licensed corporations and supported their on-boarding
- Discussed with a group of banks to offer them minority stakes in OTC Clear

2013

- Finalise approval from the SFC for OTC Clear to be a recognised clearing house
- Introduce OTC clearing services, initially on interest rate swaps and non-deliverable forwards, and expand product coverage
- Introduce client clearing services
- Enhance collateral management service
- Seek recognition as an approved clearing house in the European Union and the US

Global Clearing > LME Clear

2012

- Established the LME Clear Programme and commenced the platform system implementation work
- Conducted regular meetings with Member Working Groups to collect comments on legal, operations and IT development
- Designed LME Clear's business process model and appointed key suppliers and partners for the LME Clear Programme
- Conducted regular briefings for members and independent software vendors

2013

- Complete business and risk policies, secure payment system, collateral management functionality, and detailed default management rules and procedures
- Deliver core clearing and risk technology platforms and start functional and member testing
- Implement required corporate governance arrangements for LME Clear
- Submit central counterparty authorisation application to the UK and European regulatory authorities

Global Clearing > Clearing Risk Management

2012

- Published consultation conclusions on proposed Clearing House Risk Management Reform Measures and implemented the following measures:
 - introduced a standard margin system and a Dynamic Guarantee Fund at HKSCC;
 - revised certain price movement assumptions in clearing houses' stress testing;
 - revised counterparty default assumption in stress testing;
 - revised collateral assumptions at HKCC and SEOCH; and
 - introduced various means of financial support to reduce impact of risk management reform on CPs
- Enhanced risk management monitoring and control of concentration, country and affiliation risks of bank guarantors with affiliates that are CPs, General CPs, bank facility providers, designated banks, settlement banks, structured product issuers, and/or structured product guarantors
- Implemented Counterparty Risk Ranking Methodology and applied it to all HKSCC, HKCC, and SEOCH CPs
- Initiated daily calculations of multiple scenarios of clearing house liquidity stress testing as part of ongoing liquidity planning strategic development
- Delivered risk management measures to support:
 - Phase 2 changes to trading hours in the Cash and Derivatives Markets;
 - clearing of RMB-traded products;
 - listing of international issuers in Hong Kong;
 - introduction of BRICS futures; and
 - launch of AHFT
- Achieved the following as part of risk management framework development for OTC clearing business:
 - established prudential risk management policies which are denoted in rules and procedures of OTC Clear;
 - implemented a robust risk modelling infrastructure reviewed and validated by a qualified third party; and
 - developed and back-tested a margin/pricing model reviewed by independent third party for compliance with international standards (CPSS-IOSCO's principles and requirements of The Financial Services Authority of the UK)

2013

- Conduct detailed assessment on degree of observance of counterparty risk management related standards specified in principles for financial market infrastructures issued by CPSS and IOSCO and develop action plans to close any significant gaps identified
- Implement post-launch enhancements to the HKSCC margin and Dynamic Guarantee Fund systems for better reporting capability and operational flexibility
- Collaborate with HKEx's Treasury to enhance emergency liquidity management planning of clearing houses to achieve desired level of observance of new industry standards applicable to liquidity risk
- Review and develop a portfolio margining policy applicable to HKCC and SEOCH
- Continue delivering appropriate risk management support and solutions to facilitate successful delivery of HKEx's new products and services
- Prepare on-boarding and market rehearsal activities for potential clearing members before launch of OTC clearing services
- Assess addition of asset classes to expand OTC clearing services

Information Technology > HKEx Orion Programme**2012**

- Migrated the Cash Market trading network to SDNet/2
- Achieved technical readiness of the OMD for the Cash Market for initial customer testing and finalised requirements of the OMD for the Derivatives Market
- Developed the OMD for launch of the MMDH
- Commenced development of the OCG allowing increased efficiency for EPs' access to the Cash Market
- Held briefings and technical seminars on the OCG and BSS vendor exhibitions for EPs and/or system vendors
- Completed a proof-of-concept exercise for the OTP
- Commenced migration of HKATS/DCASS to the Genium INET

2013

- Complete migration of network circuits for EPs and IVs of the Derivatives Market and the Cash Clearing to SDNet/2
- Launch the OMD for the Cash Market and prepare for introduction of the OMD to the Derivatives Market
- Launch the MMDH for distribution of the Cash Market data in the mainland of China
- Launch the OCG for the Cash Market
- Commence development of the OTP for the Cash Market
- Complete migration of HKATS/DCASS to the Genium INET

Information Technology > Hosting Services**2012**

- Developed commercial offerings and introduced them to potential market users through information sessions and trade conferences
- Launched the Hosting Services to provide support for the Cash Market trading

2013

- Continue promoting the Hosting Services business to the market
- Roll out the Hosting Services for the Derivatives Market trading

Information Technology > Other IT initiatives**2012**

- Commenced a programme to implement various security enhancement initiatives as recommended in an IT security risk and infrastructure review completed in 2012
- Completed relocation of IT office and primary data centre for the Cash Market to the TKO Data Centre
- Upgraded capacity of HKATS to cope with growth of options business
- Launched HKEx Mobile and HKEx Group website

2013

- Continue proceeding with IT security enhancement programme
- Complete relocation of data centres for the Derivatives Market and the Cash Clearing to the TKO Data Centre

Listing and Regulatory Affairs

Listing

Review of Listing Rules

After taking into account the market comments collected from a public consultation, the Corporate Governance Code was revised with effect from 1 April 2012. New Code provisions were introduced, including, inter alia, the requirement of publishing updated lists of directors with their roles and functions identified, and the terms of reference of issuers' nomination, remuneration, and audit committees. A vast majority of issuers had adopted the new Code provisions before the effective date.

Proposals on Listing Rules amendments made in 2012 and proposals under review in 2013 are set out in the following tables.

Proposals made in 2012	Consultation Paper *	Consultation Conclusions *	Effective date of changes (if any)
<ul style="list-style-type: none"> Trading Halts – to allow publication of price sensitive information announcements during trading hours subject to a short halt in trading in shares of the issuer 	Jul 2012	Feb 2013 (tentatively)	Subject to consultation conclusions
<ul style="list-style-type: none"> Rule Changes Consequential on the Enactment of the Securities and Futures (Amendment) Ordinance 2012 to Provide Statutory Backing to Listed Corporations' Continuing Obligation to Disclose Inside Information 	Aug 2012	Nov 2012	1 Jan 2013
<ul style="list-style-type: none"> Board Diversity – to include a Code provision requiring an issuer to adopt a policy concerning board diversity and to disclose the policy or a summary of the policy in its corporate governance report 	Sept 2012	Dec 2012	1 Sept 2013

* All the consultation papers and conclusions are available on the HKEx website.

Proposals under review in 2013

- Consultation on further review of the connected transaction Rules
- Work with the SFC to issue a revised Joint Policy Statement regarding the listing of overseas companies and other related guidance
- Further simplification of listing documents and procedures
- Review operation of Chapter 18 of the Main Board Listing Rules (Mineral Companies)
- Review disclosure requirements of Appendix 16 to the Main Board Listing Rules with reference to International Financial Reporting Standards/HKFRSs
- Amendments to the Listing Rules and procedures to complement the SFC's reform of the sponsor regime

Environmental, Social and Governance Reporting Guide

The consultation conclusions on the Environmental, Social and Governance Reporting Guide (ESG Guide) were published in August 2012 after a 4-month consultation. The ESG Guide was introduced as a recommended practice applicable to issuers with financial year ended after 31 December 2012. Subject to further consultation, HKEx plans to raise the obligation level of some requirements to “comply or explain” by 2015.

Throughout 2012, HKEx provided talks and seminars, and participated in conferences organised by professional bodies and industry groups to explain the ESG Guide to interested parties.

Guide on Enhancing Regulation of Listed Structured Products Market

In July 2012, HKEx published the Guide on Enhancing Regulation of the Listed Structured Products Market, which embraces a number of regulatory enhancement measures focusing on: (i) the enhancement of issuers' internal controls and the standardisation of listing documents; (ii) the improvement of liquidity provision standards; and (iii) the management of issuers' credit risks.

The Guide was introduced to foster higher standards across structured products issuers and liquidity providers with the ultimate objective of strengthening protection for investors and promoting the healthy long-term development of the listed structured products market in Hong Kong.

IPO Processing, Compliance and Monitoring

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

Statistics of IPO work

	2012	2011
• Number of listing applications vetted	205 ¹	286
• Number of first comment letters issued to new listing applicants	111 ²	212
– Average time (in calendar days) between receipt of application and issuance of first comment letter	15	16
• Number of applications brought to the Listing Committees (or their delegates) for decisions	83	147
– Number of applications reviewed by the Listing Committees (or their delegates) within 120 calendar days	27	85
– Number of applications reviewed by the Listing Committees (or their delegates) within more than 180 calendar days	26	17
• Number of applications to which approval was granted in principle	84 ³	167
• Number of requests for guidance from listing applicants or their advisers seeking clarifications of the Listing Rules relevant to new listing applications to which responses were made	106	165
– Average response time (in calendar days)	6	7
• Number of listing applications for transfer of listing from GEM to the Main Board accepted	10	14

Notes:

- 1 141 were new applications and 64 applications were brought forward from 2011.
- 2 The number was smaller than the total number of new applications accepted because a number of cases (eg, investment vehicles seeking listing under Chapter 20 of the Main Board Listing Rules and transfer of listing from GEM to the Main Board) required no comments from the Listing and proceeded to the approval process directly. Including transfers of listing from GEM to the Main Board, the number of first comment letters issued was 114 and the average number of days taken was 15.
- 3 As at the end of 2012, 15 approved applications had not yet been listed, and 20 approved applications lapsed during the year.

Number of IPO transactions

	2012	2011	2010	2009	2008
• New listing applications accepted	141	247	204	123	137
• Applications listed	100	112	141	93	57
– Companies listed on the Main Board under Chapter 8	50	75	94	64	29
– Investment vehicles listed on the Main Board	35	10	27	19	7
– Transfer of listing from GEM to the Main Board	2	12	12	4	18
– Companies listed on GEM	12	13	7	5	2
– Deemed new listings	1	2	1	1	1
• New listing applications rejected	8	3	2	0	1
• New listing applications withdrawn	12	1	9	3	8
• Applications in process as at year-end	50	64	39	31	27
• Active applications with approval granted but not yet listed at year-end	15	51	23	12	24

Number of compliance and monitoring actions

	2012	2011	2010	2009	2008
• Announcements of issuers vetted	42,124	32,508	32,099	27,588	20,784
– Pre-vetted	147	151	188	1,589	4,266
– Post-vetted ¹	41,977	32,357	31,911	25,999	16,518
• Circulars of issuers vetted	1,643	1,565	1,782	1,731	2,849
– Pre-vetted	1,155	1,228	1,344	1,275	2,761
– Post-vetted	488	337	438	456	88
• Share price and trading volume monitoring actions undertaken ²	3,947	4,507	5,091	8,112	8,439
– Clarification announcements published by issuers in response to enquiries on unusual share price and/or trading volume movements	348 ³	360	328	840	2,627
• Enquiries raised about press reports ⁴	77	156	221	311	536
– Clarification announcements published by issuers in response to enquiries about press reports	27	35	55	81	43
• Complaints handled	604	657	630	599	516
• Cases (including complaints) referred to Listing Enforcement Department for investigation	35	58	59	54	86

Notes:

- 1 Including clarification announcements published by issuers in response to unusual share price and/or trading volume movements in their securities
- 2 In 2012, monitoring actions undertaken included 694 enquiries (2011: 693) on unusual share price and trading volume movements, and the actions undertaken led to 53 resumption announcements (2011: 59) on trading suspensions addressing dissemination of unpublished price sensitive information.
- 3 Including 160 qualified announcements (2011: 184) and 188 standard negative announcements (2011: 176)
- 4 Figures cover written enquiries only. The Exchange also raised verbal enquiries to issuers in relation to press reports. In 2012, there were 168 verbal enquiries and 44 of them resulted in clarification announcements published by issuers.

Post-vetted announcements

	2012	2011
Subject to detailed post-vetting *	10,037	9,448
Required follow-up actions by issuers (eg, clarification announcements)	21%	22%
Involved Listing Rules non-compliance	14%	15%
Required follow-up actions by the Exchange	3%	4%

* Representing 24 and 29 per cent of all post-vetted announcements in 2012 and 2011 respectively

Key initiatives by the Exchange in 2012 to promote issuers' self-compliance with the Listing Rules

- Published a series of listing decisions and frequently asked questions providing further guidance on Listing Rules
- Issued periodic letters to issuers on Listing Rules amendments and provided guidance on frequently asked questions about topics such as disclosure obligations and connected transactions
- Published a Plain Language Guide on connected transactions to facilitate issuers' understanding of the relevant requirements

Under the Financial Statements Review Programme, the Exchange reviews, on a sample basis, the periodic financial reports published by issuers. The 2012 review included 120 financial reports released by issuers between May 2011 and September 2012. It resulted in: (i) 4 cases that were referred to the Financial Reporting Council for its enquiry and/or investigation into issuers' possible non-compliance with accounting requirements, or auditing irregularities in the preparation of published financial statements; and (ii) 3 cases that were referred to the HKICPA for its independent enquiry and/or investigation into its members' possible non-compliance with the auditing and accounting standards issued by the HKICPA. In January 2013, the Exchange published a report of key findings and observations from its 2012 review. It was the fourth report since the programme began and is available on the HKEx website.

The Exchange encourages directors and other persons responsible for financial reporting to take note of the matters discussed in the report and to review their existing financial reporting systems to ensure that the information presented in their financial reports is: (i) specific, relevant, and material; (ii) in compliance with the disclosure requirements; and (iii) useful to users in making investment decisions.

Communication with Issuers

The Exchange has continued its programme of issuer education and market outreach to issuers and other stakeholders with a view to promoting issuers' self-compliance with the Listing Rules and facilitating mutual understanding of regulatory issues through continued dialogue. Some of the key events held in 2012 are highlighted below.

Event	Place	Purpose of event
• Seminar on simplification of listing documents	Hong Kong	To provide market practitioners with an interactive forum to familiarise them with the simplified approach for a succinct and informative listing document
• Media workshop on listed structured products market regulations	Hong Kong	To promote market awareness of HKEx's listed structured products regulatory enhancement initiatives
• 5 seminars on the new inside information disclosure regime and connected transactions	Beijing, Hong Kong, and Shanghai	To promote issuers' self-compliance with the Listing Rules and facilitate mutual understanding of regulatory issues

Operational Efficiency

The following table summarises the Exchange's service standards for monitoring and guidance actions as well as its subsequent responses to issuers' actions. It is the Exchange's objective to continue improving the transparency, quality, efficiency, and predictability of its service.

Service for initial responses	Service standard	% of cases meeting service standard	
		2012	2011
• Pre-vetting activities			
– Initial response to pre-vetted announcements	Same day	90%	77%
– Initial response to pre-vetted circulars (very substantial acquisition)	10 business days	97%	95%
– Initial response to pre-vetted circulars (other than very substantial acquisition)	5 business days	98%	98%
• Issuer enquiries ¹			
– Initial response to issuer's enquiries	5 business days	93%	96%
• Waiver applications ²			
– Initial response to waiver applications (other than application for delay in despatch of circulars)	5 business days	95%	93%
• Post-vetting activities			
– Initial response to post-vetted results announcements	5 business days	98%	99%
– Initial response to post-vetted announcements (other than results announcements)	1 business day	100%	96%

Notes:

1 In 2012, 435 written enquiries (2011: 393) on Listing Rules interpretations and related matters were handled.

2 In 2012, 256 waiver applications (2011: 262) from strict compliance with requirements under the Listing Rules were processed.

Long Suspension

Status of long suspended companies (as at year-end)

	Main Board		GEM	
	2012	2011	2012	2011
Resumption of trading of securities during the year	23	10	4	2
Cancellation/withdrawal of listing during the year	3	2	1	0
Companies in the 3 rd stage of delisting	5	4	N/A	N/A
Companies notified of the Exchange's intention to cancel their listing	1	0	3	2
Companies suspended for 3 months or more	43	39	10	11

Listing Enforcement

In the enforcement of the Listing Rules, the Exchange adopts the strategy of (i) referring cases of egregious conduct which may involve a breach of the SFO to the SFC; (ii) referring cases of suspected violations of laws and other rules and regulations to the appropriate law enforcement agencies such as the ICAC and the Commercial Crime Bureau of the Hong Kong Police; (iii) taking disciplinary actions against serious breaches of the Listing Rules; and (iv) issuing warnings or taking no action for other less serious conduct, where appropriate.

When the SFC commences an investigation of a case, the Exchange will normally suspend its investigation and provide support to the SFC. After the SFC's completion of an investigation, the Exchange will consider if a reactivation of its investigation is required. Under this arrangement, the Exchange has suspended the investigation of 12 cases.

The Exchange will also provide other law enforcement agencies with technical advice on the application of the Listing Rules in given circumstances, and witness statements to support their prosecutions.

Compliance with the Listing Rules is the collective and individual responsibility of directors whether they hold executive or non-executive roles in the management of the issuer. Compliance with some of the important obligations can be achieved through compliance systems and internal controls. Directors may be subject to disciplinary sanctions should they be held liable for substantive breaches of Listing Rules by the issuer. In addition, they may be subject to disciplinary sanctions should they be held liable for failing to create and maintain adequate internal controls by which compliance can be achieved.

During 2012, a number of investigations arising from breaches of the Listing Rules were completed, leading to the imposition of public and private sanctions on the issuers or directors by the Listing Committees. There are currently 6 cases at different stages of the disciplinary process. The number of disciplinary hearings and review hearings increased from 10 in 2011 to 20 in 2012 (14 hearings regarding disciplinary actions were concluded in the year and 6 hearings for those disciplinary actions which remained ongoing as at year-end), resulting in the need for a heavy commitment of regulatory resources.

Number of disciplinary actions

	2012	2011	2010	2009	2008
Investigations ^{1,2}	91 ^{3,4}	142	133	147	171
Public censures ⁵	8	6	7	4	10
Public statements/criticisms ⁵	0	3	1	4	5
Private reprimands	4	0	1	1	0
Warning/caution letters ⁶	20 ⁷	42	27	28	68

Notes:

- Figures cover investigations in progress carried forward from the preceding year but concluded during the year; and investigations commenced during the year.
- The average time for completion of an investigation (at which point in time a decision as to the level of regulatory action (if any) is taken) was 10.8 months for cases in which the investigation commenced in 2011 and 2012 (5.6 months, as disclosed last year, for cases in which investigations commenced in 2010 and 2011).
- Due to the increased complexity of the suspected breaches and parties (including individuals and corporations) involved in investigations in 2012, there were 37 outstanding cases (89 per cent of which commenced in 2012) as at the end of 2012 as compared to 31 cases (all commenced in 2011) as at the end of 2011.
- In 2012, 1 case originating from a complaint was subject to enforcement investigation, and which might give rise, after investigation, to disciplinary proceedings.
- Figures represent only the primary regulatory action from a disciplinary matter, and exclude any other actions taken at a lower level, eg, private reprimand in the same case.
- The warning and caution letters were primarily delivered by the Listing in circumstances where action before the Listing Committees was not considered appropriate.
- The reduction in the number of warning and caution letters issued in 2012 as compared to 2011 was primarily due to the fact that in 2011 the Exchange conducted investigations into a number of cases involving possible directors' securities dealings in breach of the Listing Rules, which accounted for a larger number of investigations conducted and a significant proportion of the warning or caution letters issued in 2011.

Number of directors subject to disciplinary sanctions as a result of contested or settlement cases

	2012	2011	2010	2009	2008
Executive directors	37	17	30	20	67
Non-executive directors	12	7	4	10	17
Independent non-executive directors	17	15	18	16	26
Total	66*	39	52	46	110

* As at the end of 2012, a total of 51 executive directors, non-executive directors, and independent non-executive directors were subject to ongoing disciplinary action in which their cases were at various stages of the process or subject to settlement negotiations.

To further improve the efficiency of investigations, training on investigation techniques was offered to staff of the Listing in 2012. Improvements continue on the internal decision-making structures so as to enable earlier identification of serious misconduct and breaches of the Listing Rules. This helps facilitate the delivery of regulatory outcomes as quickly as possible while observing the principles of natural justice and due process. Continued improvements have been made to enhance transparency of the disciplinary process by providing the market with increasing details in the announcements of any disciplinary actions taken. The relevant information as to the imposed public sanctions is available on the HKExnews website.

In addition, the Exchange continues to make recommendations to the Listing Committees on remedial action to correct breaches and to improve corporate governance in the future, including: (i) an obligation to retain external assistance in the creation of adequate and effective compliance structures or revisions resulting in such structures; and (ii) a requirement for directors to undergo training at recognised professional bodies for specific periods of time to improve their knowledge of, and performance in, compliance matters. Proposed revisions to the procedures for the disposal of disciplinary matters were submitted to the Listing Committees for their consideration in November 2012, after which a soft consultation involving legal practitioners has been commenced. The consultation findings will be reported to the Listing Committees who will decide how and when to proceed.

Number of contested or settlement cases

	2012	2011	2010	2009	2008
Involving "Internal Control Review" direction	4	1	1	6	4
Involving "Retention of Compliance Adviser" direction	7	1	5	5	5
Involving "Training of Directors" direction	10	7	6	7	4

Listing Operations

During 2012, a total of 5,982 DW listing applications (2011: 7,089) and 6,090 CBBC listing applications (2011: 5,394) were processed. In addition, a total of 109 new debt securities (2011: 50), including Exchange Fund Notes and Government Bonds, were listed in 2012.

Number of DWs

	2012	2011	2010	2009	2008
Newly listed DWs	5,886	6,917	7,826	4,230	4,822
Further issues of DWs	96	172	410	204	209
Delisted DWs	6,166	8,038	6,045	3,874	6,294
DWs listed as at year-end	3,747	4,027	5,148	3,367	3,011
Percentage change in number of listed DWs	(7%)	(22%)	53%	12%	(33%)

Number of CBBCs

	2012	2011	2010	2009	2008
Newly listed CBBCs	6,056	5,334	6,541	8,072	4,231
Further issues of CBBCs	34	60	93	49	50
CBBC knockouts	4,432	4,087	4,835	5,899	2,837
Delisted CBBCs	1,311	1,410	2,334	1,795	211
CBBCs listed as at year-end	1,214	901	1,064	1,692	1,314
Percentage change in number of listed CBBCs	35%	(15%)	(37%)	29%	903%

The Latest Listed Company Information section, which housed a total of 1,523,305 archived issuer documents for public access free of charge as at the end of 2012, remained one of the most popular sections on the HKExnews website during 2012. The Exchange also administers the filing and publication of Disclosure of Interests (DI) notices through the HKExnews website in accordance with the SFC's requirements and specifications under Part XV of the SFO.

Primary market information statistics (Main Board and GEM)

	2012	2011	2010	2009	2008
Number of issuer news filings processed by the Exchange	224,050 ¹	201,597	202,492	191,266	143,410
Hit rates for HKExnews website (m)	341	288	235	176	121
Number of searches for issuer documents (m)	44 ²	35	33	25	22
Number of DI filings processed by the Exchange	49,905	53,480	49,958	46,574	54,965
Hit rates for DI filings (m)	168	117	38	27	28

Notes:

- 1 The majority of issuers' submissions were uploaded within 2 seconds (excluding the Internet transmission time which is beyond HKEx's control).
- 2 80 per cent of searches were responded to within 0.14 seconds (excluding the Internet transmission time which is beyond HKEx's control).

Enterprise Risk Management and Surveillance

Enterprise Risk Management Framework

In 2012, HKEx conducted regular reviews of all identified significant risks across the organisation based on the HKEx ERM Framework as well as identified and assessed new significant risks on different areas such as credit, liquidity, market, operational and strategic, using a common platform and standardised process. All identified significant risks were scored in terms of their potential impact and likelihood, and were reported to the Senior Management Committee (renamed and restructured as Management Committee from 7 January 2013), the Risk Management Committee and the Board with associated action plans and controls designed to mitigate the risks, where applicable, at appropriate levels.

Counterparty Surveillance

In September 2012, HKEx enhanced the monitoring of EPs and CPs by introducing a dynamic risk-based participant surveillance tool, Counterparty Risk Ranking Methodology. EPs and CPs are analysed and ranked based on a set of quantitative and qualitative factors to determine their risk level and provide a structured and proactive approach in monitoring each of them.

Number of failures to comply with financial requirements and position limits requirements

	2012 *	2011	2010	2009	2008
Financial requirements					
EPs	5	5	3	11	7
CPs	8	9	11	16	8
Position limits requirements					
Derivatives contracts	0	0	1	0	3
Stock options contracts	3	5	2	3	1

* In 2012, 3 cases involving violation of the SFO were referred to the SFC; and other cases were issued compliance advice letters.

HKEx has continued to perform due diligence check on new applications for registration as EPs, CPs, and market makers, including reviewing applicants' financial and internal control capability and their compliance with HKEx requirements on market making affiliate and corporate entity.

Number of new applications

	2012	2011	2010	2009	2008
EPs and CPs	43	52	38	11	21
Market makers	28	10	13	8	8

Market Surveillance

HKEx conducted a number of investigations on the trading activities of EPs in 2012. Under the MOU between the SFC and HKEx on matters relating to market surveillance, HKEx referred 24 cases to SFC for further investigation of possible violations of the codes, rules and regulations made by the SFC relating to HKEx's securities and derivative markets. These cases mainly involved suspected market manipulation and false trading activities.

In 2012, HKEx developed a SMARTS resilience system to enhance its surveillance capability and business continuity in monitoring market activities on a real-time and continuous basis.

Global Markets

Cash Trading

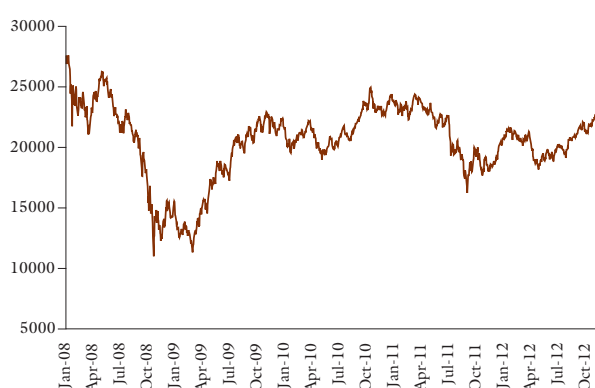
Market Performance

In 2012, 52 companies were newly listed on the Main Board (including 2 transfers from GEM), and 12 on GEM. Total capital raised, including post-listing funds, reached \$305.4 billion. As at 31 December 2012, 1,368 and 179 companies were listed on the Main Board and GEM respectively with a total market capitalisation of \$21,950.1 billion. In addition, there were 3,747 DWs, 1,214 CBBCs, 100 ETFs, 9 REITs, and 269 debt securities listed as at 31 December 2012. The average daily turnover value in 2012 was \$53.7 billion on the Main Board and \$135.8 million on GEM, a decline of 23 per cent and 47 per cent respectively as compared with 2011.

Closing indices (as at year-end)

	2012	2011	Change
HSI	22656	18434	23%
HSCEI	11436	9936	15%
Hang Seng China-affiliated Corporations Index	4531	3682	23%
S&P/HKEx LargeCap Index	27082	22252	22%
S&P/HKEx GEM Index	381	474	(20%)

HSI (01/2008 – 12/2012)



S&P/HKEx GEM Index (01/2008 – 12/2012)

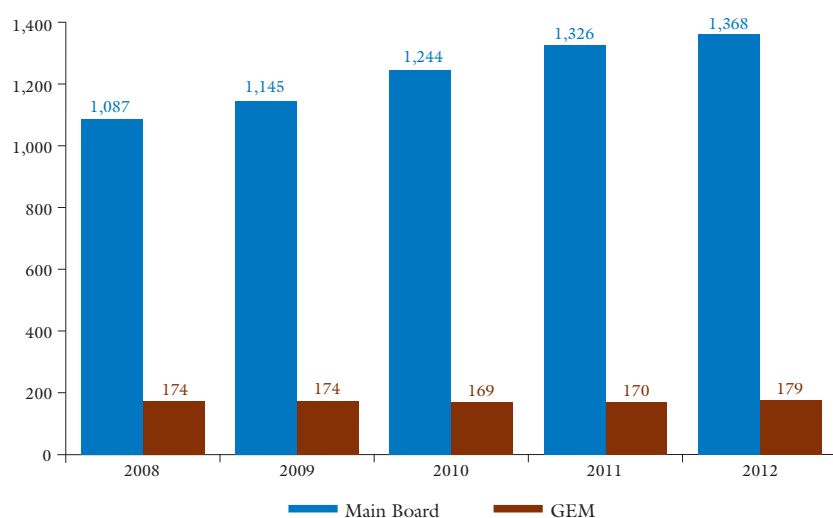


Market performance of Main Board and GEM

	Main Board			GEM		
	2012	2011	Change	2012	2011	Change
IPO funds raised (\$bn)	89	259	(66%)	1.1	1.3	(16%)
Market capitalisation as at year-end (\$bn)	21,872	17,453	25%	78	85	(7%)
Number of listed companies as at year-end	1,368	1,326	3%	179	170	5%
Number of listed securities as at year-end	6,723	6,551	3%	180	172	5%
Total turnover value (\$bn)	13,268	17,091	(22%)	34	63	(46%)
Average daily turnover value (\$m)	53,715	69,476	(23%)	136	256	(47%)

Note: Figures have been rounded.

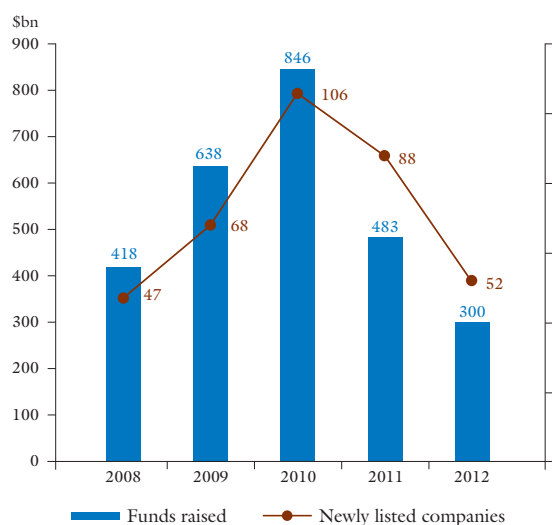
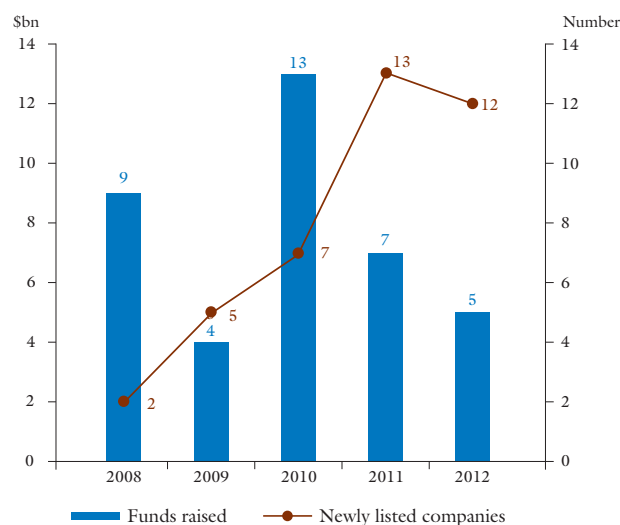
Number of listed companies (as at year-end)



Number of listed companies by industry classification * – Main Board and GEM (as at year-end)

	2012	2011	2010	2009	2008
Energy	74	63	52	44	34
Materials	140	132	123	105	93
Industrial Goods	140	119	120	111	113
Consumer Goods	370	388	359	330	327
Services	243	230	212	209	198
Telecommunications	18	18	18	18	17
Utilities	43	43	39	32	24
Financials	126	117	109	102	100
Properties & Construction	216	203	198	191	174
IT	163	161	160	154	158
Conglomerates	14	22	23	23	23
Total	1,547	1,496	1,413	1,319	1,261

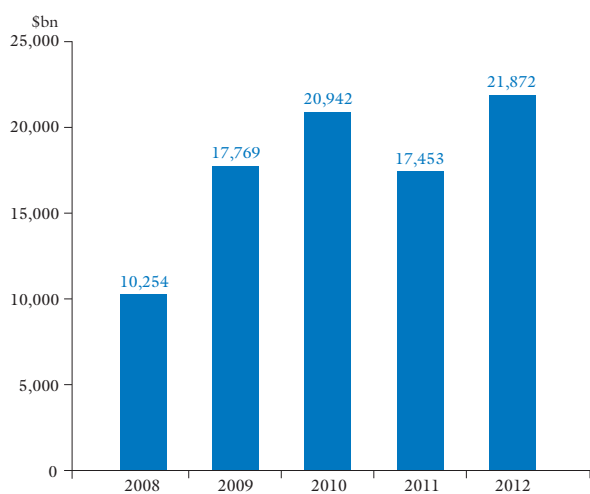
* According to the Hang Seng Indexes Company Limited

Main Board –
Total equity funds raised and number of
newly listed companies *GEM –
Total equity funds raised and number of
newly listed companies

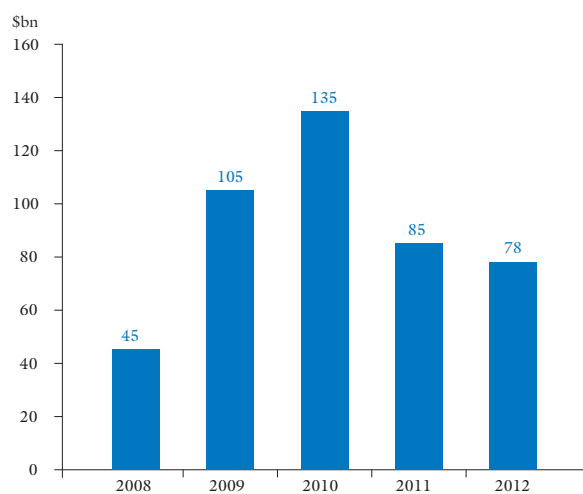
* Including the number of companies transferred from GEM

Note: Figures have been rounded.

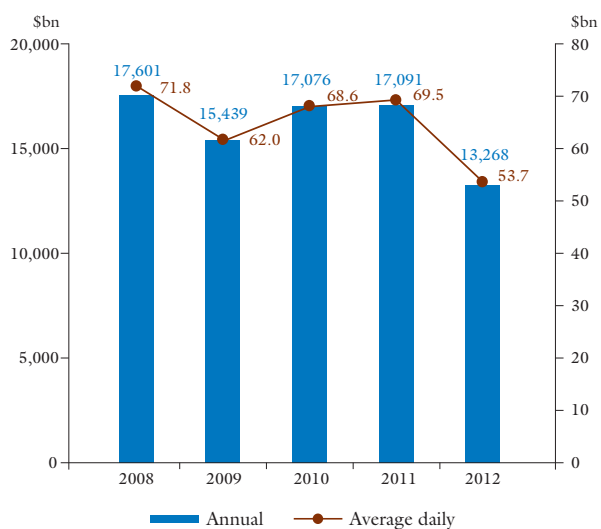
Main Board – Market capitalisation (as at year-end)



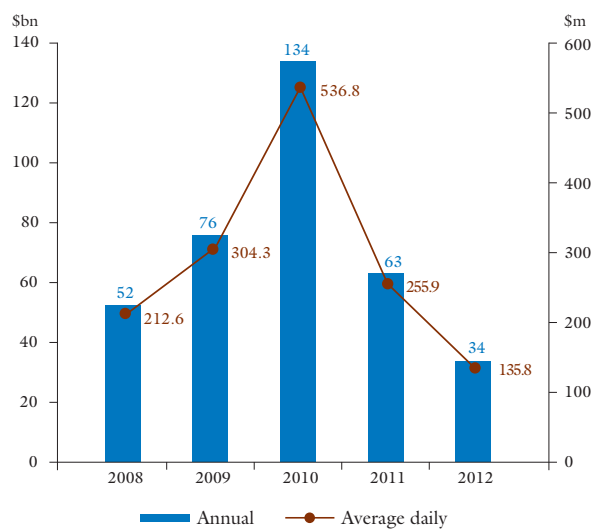
GEM – Market capitalisation (as at year-end)



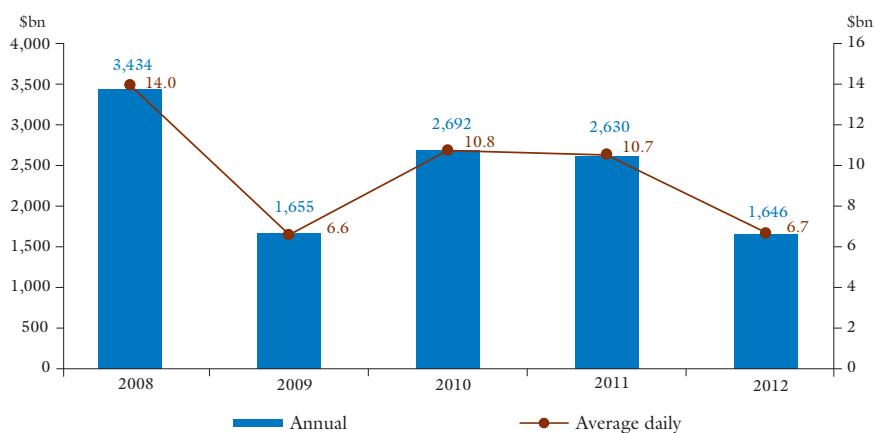
Main Board – Total annual and average daily turnover value



GEM – Total annual and average daily turnover value

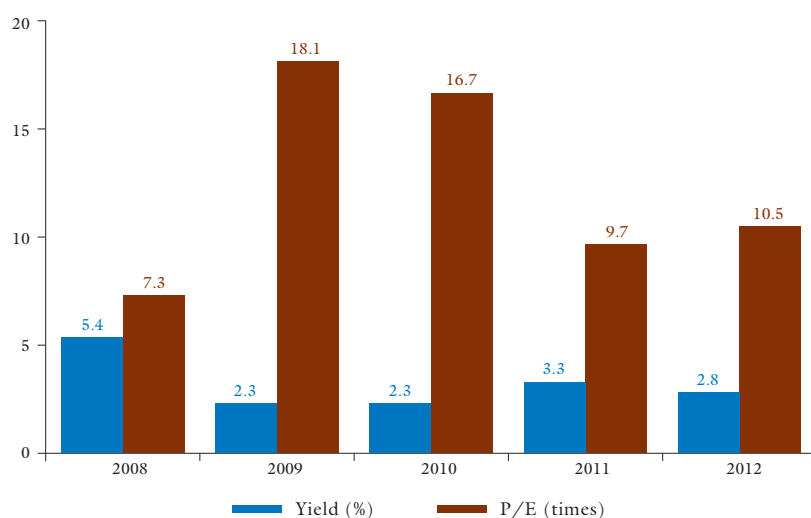


Main Board – Total annual and average daily turnover value of DWs



Note: Figures in the above diagrams have been rounded.

Main Board – Average yield and P/E ratio (as at year-end)



Main Board – New listings

	2012	2011	2010	2009	2008
Listed Companies *	52	88	106	68	47
Preference Shares	0	0	1	0	0
Warrants	5,889	6,924	7,838	4,241	4,840
Equity Warrants	3	7	12	11	18
DWs	5,886	6,917	7,826	4,230	4,822
CBBCs	6,056	5,334	6,541	8,072	4,231
Debt Securities	109	50	38	23	20
Unit Trusts and Mutual Funds	35	9	27	19	7

* Including the number of companies transferred from GEM

ETF Market Development

Hong Kong's ETF market had a record year in 2012 in terms of both the number of new ETF listings as well as developments in product variety and trading mechanisms.

There were 35 ETFs newly listed on the Exchange during the year (2011: 8), including the first 4 RQFII ETFs, which are all traded in both RMB and HKD counters, and the first silver and platinum ETFs. The new ETFs track a diversified range of underlying benchmarks. As at 31 December 2012, HKEx had 100 listed ETFs, 21 ETF managers, and 24 ETF market makers.

Underlying benchmark of ETF newly listed in 2012	Number
Regional markets	15
Global and regional industry sectors	7
A-share markets	4
Hong Kong market	4
Precious metals	4
Money market	1

In 2012, the total turnover of ETFs amounted to \$522 billion (2011: \$545 billion), accounting for 4 per cent of the total market turnover (2011: 3 per cent). There was a higher turnover of ETFs in the fourth quarter of 2012 which contributed more than 6 per cent of total market turnover during the period (2011: 3 per cent). The increase was mainly attributed to a higher turnover of 4 RQFII ETFs after their HKD counters commenced trading in the fourth quarter and increased trading in the Tracker Fund of Hong Kong.

The Group is honoured to have received the “Best Asian Exchange for Listing ETFs” award for the second consecutive year from “etfexpress”, a website that covers the ETF industry.

New Trading Hours

Following a series of market simulations in February 2012 to assist EPs and IVs in verifying their readiness, the second phase of the new trading hours in the Cash and Derivatives Markets was implemented smoothly on 5 March 2012.

Trading hours in Cash Market *

Pre-opening session	09:00-09:30
Morning session	09:30-12:00
Afternoon session	13:00-16:00
Total trading hours	5.5

* For a normal trading day

Tightening of Eligibility Criteria for Designated Securities for Short Selling

As a result of the growth in the average market capitalisation of listed companies in Hong Kong and the increase in market turnover velocity in the past decade, HKEx implemented changes to the criteria for designated securities for short selling in July 2012. The new criteria are related to the minimum market capitalisation and turnover velocity, now \$3 billion (previously, \$1 billion) and 50 per cent (previously, 40 per cent) respectively.

Trade Reporting Requirements for Automated Trading Services Transactions

An ATS transaction is a transaction executed or concluded or entered into through “automated trading services” provided by an EP under a licence granted by the SFC for trading in listed securities. To improve the market transparency of ATS transactions, EPs with ATS operations are required, with effect from October 2012, to report their ATS transactions with an identifier into AMS/3 immediately, and in any case, within 1 minute after the conclusion of the transactions. The aggregate ATS transaction turnover value is published on the HKEx website on a monthly basis.

Derivatives Trading

Market Performance

In 2012, the turnover of H-shares-related products was noteworthy, with all-time highs in some cases. Various other contracts also reached new record levels, setting new standards for one-day volume and open interest.

	% of year-on-year increase in turnover
H-shares Index Futures	6
HSCEI Dividend Point Index Futures	248
H-shares Index Options	67

Record high volume and open interest for major derivatives in 2012

	Volume		Open interest	
	Date	Number of contracts	Date	Number of contracts
H-shares Index Futures	27 Nov	227,986	21 Dec	260,943
Mini H-shares Index Futures	–	–	24 Apr	6,684
HSI Dividend Point Index Futures	1 Aug	3,000	28 Dec	8,024
HSCEI Dividend Point Index Futures	24 May	20,802	29 Oct	77,555
USD/CNH Futures *	14 Nov	950	14 Dec	3,850
HSI Options	–	–	27 Jun	560,087
Mini-HSI Options	18 May	13,917	29 May	32,651
H-shares Index Options	14 Sept	67,677	27 Dec	926,985
Flexible HSI Options	24 Oct	3,575	2 Nov	17,878

* Launched on 17 September 2012

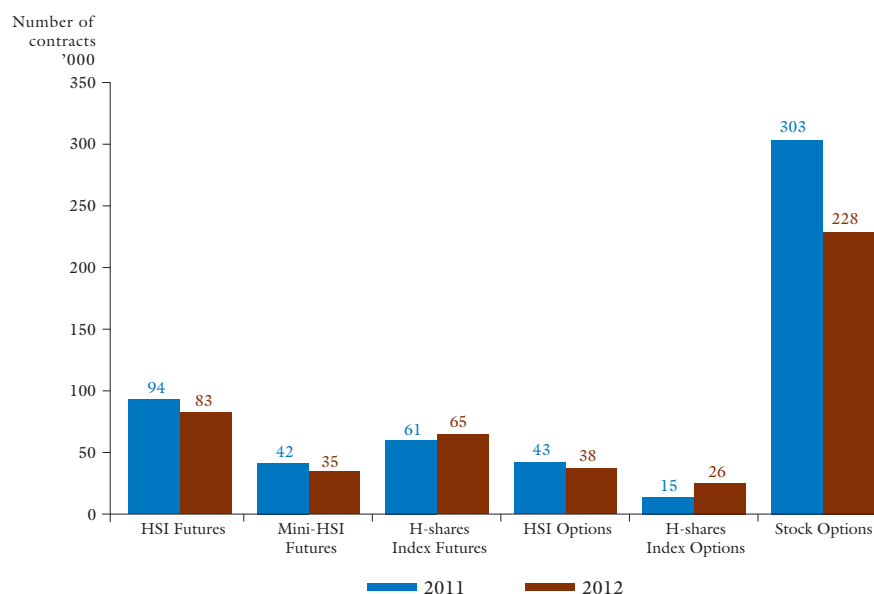
Derivatives Market statistics

	2012		2011	
	Volume	Period-end open interest	Volume	Period-end open interest
	Number of contracts	Number of contracts	Number of contracts	Number of contracts
Futures				
HSI Futures	20,353,069	139,344	23,085,833	86,409
Mini-HSI Futures	8,545,847	6,638	10,294,537	5,129
H-shares Index Futures	15,923,813	181,909	15,003,870	106,277
Mini H-shares Index Futures	1,560,515	2,276	1,845,116	1,520
HSI Dividend Point Index Futures	20,793	1,969	11,196	4,460
HSCEI Dividend Point Index Futures	184,786	48,879	53,054	34,270
HSI Volatility Index Futures ¹	1,526	8	–	–
IBOVESPA Futures ²	7	0	–	–
MICEX Index Futures ²	8	0	–	–
Sensex Index Futures ²	190	0	–	–
FTSE/JSE Top40 Futures ²	0	0	–	–
Stock Futures	322,715	19,516	444,014	11,277
1-Month HIBOR Futures	10	0	245	25
3-Month HIBOR Futures	150	0	414	24
3-Year Exchange Fund Note Futures	0	0	0	0
USD/CNH Futures ³	20,277	3,673	–	–
Gold Futures	2	0	3,716	0
Total	46,933,708	404,212	50,741,995	249,391
Options				
HSI Options	9,230,145	260,785	10,667,426	184,402
Mini-HSI Options	1,230,997	12,363	954,414	3,873
H-shares Index Options	6,300,889	589,342	3,771,799	158,628
Flexible HSI Options	14,183	9,468	9,260	7,510
Flexible H-shares Index Options	11,171	9,821	23,510	3,500
Stock Options	56,081,545	4,031,961	74,325,068	5,329,494
Total	72,868,930	4,913,740	89,751,477	5,687,407
Total Futures and Options	119,802,638	5,317,952	140,493,472	5,936,798

Notes:

- 1 Launched on 20 February 2012
- 2 Launched on 30 March 2012
- 3 Launched on 17 September 2012

Average daily turnover of major derivatives



After-hours Futures Trading

In November 2012, HKATS introduced a Dynamic Price Banding mechanism for Mini-HSI Futures. This enhanced feature is aimed at mitigating risk arising from input errors by rejecting all limit buy/sell orders outside the prevailing upper/lower price band. With this system refinement in place, HKEx's trading and clearing systems are all ready for the implementation of AHFT. Simulation tests were held for EPs and CPs intending to participate in AHFT to verify the readiness of their trading and clearing activities and associated operations. With the SFC's approval of the related rule amendments, HKEx plans to introduce AHFT on 8 April 2013, under which HSI and H-shares Index Futures will be available for trading from 17:00 to 23:00 (after-hours trading) in addition to the regular trading sessions (ie, 9:15 to 12:00 and 13:00 to 16:15). Mini futures contracts and Gold Futures will be considered for inclusion in AHFT at a later stage. HKEx will arrange briefing sessions for Participants in early March 2013 to explain the trading, clearing and risk management arrangements for AHFT.

Introduction of New Futures and Options Contracts

HSI Volatility Index Futures was introduced for trading in February 2012 to provide investors with a single futures contract for hedging volatility risk in, or obtaining pure volatility exposure to, Hong Kong's stock market.

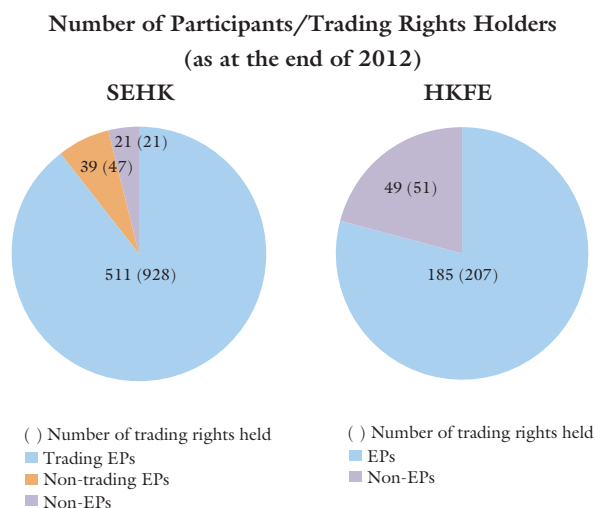
On 30 March 2012, the Futures Exchange introduced 4 HKD-denominated benchmark equity index futures – Brazil's IBOVESPA futures, Russia's MICEX Index futures, India's Sensex Index futures, and South Africa's FTSE/JSE Top40 futures. These contracts enable investors to get exposure to the BRICS markets through HKEx. Meanwhile, HSI and/or H-shares Index futures were cross-listed on each of the BRICS exchanges.

To further broaden the option classes at HKEx, 3 new stock option classes, Galaxy Entertainment Group Limited, Sands China Ltd, and Standard Chartered PLC, were introduced for trading in 2012, while stock options for the HKD-traded CSOP FTSE China A50 ETF and ChinaAMC CSI 300 Index ETF were introduced in early 2013.

Participant Services

At the end of 2012, there were 550 SEHK Participants and 185 HKFE Participants, including 22 SEHK Participants and 16 HKFE Participants admitted in 2012.

HKEx and the HKSI jointly organised 15 CPT courses on HKATS operations and trading procedures in 2012. There were also 7 training courses related to AMS/3. In addition, a total of over 6,400 people participated in 64 briefing sessions and 30 seminars on derivatives organised under HKEx's joint promotion programme with EPs.



RMB Business

Introduction of RMB Products

In 2012, a number of milestones were set in HKEx's RMB product development which reinforced Hong Kong's position as a leading offshore RMB centre.

Following the Mainland's approval in April 2012 of the use of the RQFII quota to issue RMB-denominated ETFs tracking A-share indices for listing on the Exchange, 4 RQFII A-share ETFs were listed on the Exchange in 2012, and all of them are traded under the Dual Counter model (ie, HKD

and RMB counters). The addition of RQFII A-share ETFs broadens HKEx's RMB product offerings and provides investors with an additional product choice of investment in A-shares. The Dual Counter model facilitates investors' trading in RMB.

RQFII A-share ETF	Benchmark index
ChinaAMC CSI 300 Index ETF	CSI 300 Index
CSOP FTSE China A50 ETF	FTSE China A50 Index
E Fund CSI 100 A-Share Index ETF	CSI 100 Index
Harvest MSCI China A Index ETF	MSCI China A Index

In October 2012, the listing of RMB-traded shares issued by Hopewell Highway Infrastructure Limited on the Exchange (in addition to its HKD-traded shares) marked the debut of the first RMB-traded equity security outside the mainland of China. In December 2012, the first DW traded in RMB was listed on the Exchange.

The RMB Currency Futures contract introduced for trading by HKEx in September 2012 is based on the currency pair, USD and CNH, and was the world's first deliverable RMB currency futures to be quoted, margined and settled in RMB. The new futures contract provides RMB users a tool for managing RMB exchange rate risk exposure. Regulatory approval of the relevant rule amendments has been obtained for the introduction of RMB-traded options on RMB-traded equity securities listed on the Exchange, and those products will be introduced when opportunities arise.

Number of RMB products traded on SEHK or HKFE as at the end of 2012

Equity security ¹	1
Debt securities	47
ETFs ²	5
DWs	3
REIT	1
Currency Futures	1

Notes:

- 1 Traded under the Dual Counter model
- 2 Including 4 ETFs traded under the Dual Counter model

Enhancements to trading and clearing infrastructure

In 2012, HKEx further enhanced its trading and clearing infrastructure to support the launch of RMB products.

Enhancements to improve HKEx's service capability for RMB products

- the TSF suspension function to support requirements of partner banks under extreme market volatility conditions
- the automated order rejection by AMS/3 upon full consumption of the TSF funding pool
- the extension of coverage of the TSF beyond RMB-traded shares to equity-related ETFs and REITs traded in RMB
- CCASS enhancement to facilitate file uploading of multi-counter transfer instructions by Participants with high transaction volume
- CCMS enhancement to facilitate margin offset between products of different settlement currencies including RMB

The registration process for TSF Participants was streamlined in January 2013, whereby EPs which fulfil the TSF registration criteria with overall readiness may apply to be TSF Participants directly without the need to complete the mandatory system testing prescribed by HKEx. As at the end of 2012, there were 6 TSF securities and 45 TSF Participants.

LME

Market Performance

Trading volume in LME contracts rose by almost 10 per cent in 2012 coming on the back of a 22 per cent increase in 2011 and resulting in truly impressive compound growth, especially when compared with the exchange industry more generally where any increase in turnovers was a rare event during 2012. This positive outcome was mainly due to the fact that commodities and metals in particular, are essential to the growth of emerging economies, and the work done to modernise and stabilise the IT aspects of the trading infrastructure, making LME more accessible to participants.

Implementation of the Exchange User Fee

Upon the approval of a new Exchange User Fee to be charged on client contracts in December 2011, the Exchange User Fee was refined to exclude short-dated carries (anything from Tom (ie, the next business day) to 15 days inclusive), and was set at US\$0.79 per lot. Implementation of the new Exchange User Fee allows LME to maintain an appropriate investment programme, to maintain its regulatory capital requirements, and to continue to grow in an increasingly competitive market. The impact on LME of the introduction of the Exchange User Fee will be kept under constant review.

Operation of LME's Approved Warehouses

In April 2012, the load out rate for the largest warehouses was doubled to 3,000 tonnes per day. As a consequence, the LME warehouse network delivered out 2.3 million tonnes of aluminium alone during 2012. Nevertheless, LME decided that a further revision to load out rates would be appropriate, requiring that in certain circumstances from 1 April 2013, an additional 500 tonnes per day of a metal other than the dominant metal in any given warehouse should be loaded out, and on top of that, up to 60 tonnes per day of nickel and tin (combined) should be loaded out. These, all amount, in some instances, to an increase in the load out rate of nearly 140 per cent since March 2012.

LME will keep the operation of the warehousing system under constant review and will continue to tune the system when such tuning is both necessary and effective.

Impact of New European Market Infrastructure Regulation

The introduction of the new EMIR regulatory environment has had a major impact on LME and its members, though the full force of the changes will not be felt until 2014/2015. Certain assumptions that were made when LME Clear was first mooted have had to be dramatically revised, and the operation of LME's core systems is impacted by the need to make trading, and particularly clearing, EMIR compliant. From LME's perspective, there will be opportunity in the EMIR-driven changes, including the potential for the construction of a trade repository. EMIR mandates that all trades, both on-exchange and OTC, must be recorded the consequent positions be aggregated so that regulators can see clearly what is happening across markets. The regulatory push to clearing, to on-exchange execution, and to the registration of OTC business should strengthen the position of LME in its markets.

Establishment of User Committee

LME members and the broader metals industry have always played a significant role in the running of LME through their participation in the operational committees. All the operational committees will continue to meet and their advice will continue to be important to the decision-making process. A User Committee has been newly created under the LME board to ensure that there remains a direct line of communication from LME's users to the board.

Number of LME members (as at the end of 2012)

Category 1	11
Category 2	27
Category 3	2
Category 4	4
Category 5	49

Introduction of New Products

In January 2012, LME introduced LMEswaps for all LME non-ferrous contracts. An LMEswap is an on-exchange contract between two parties where the cash difference between the agreed fixed price and the floating Monthly Average Settlement Price, or MASP, is financially settled at the end of the averaging period. LMEswaps are the first of their type in the world traded on-exchange and bring transparency to pre- and post-trade prices. They are designed specifically for members of the metal community who need to hedge against the monthly average price with the added security of clearing.

In response to a member consultation on LME's Closing Prices, LME on 6 February 2012 began publishing live forward prices for all metals traded in the last Ring session of the day (the afternoon Kerb) which adds further transparency to the procedures used to establish the Closing Prices. The forward curve is available for the key prompt dates and displayed on a daily basis from 16:15 by LME licensed data vendors and on the electronic wallboards in the Ring dealing area. As the prices for the forward curve change during the Kerb session, they will be amended and displayed accordingly.

Broadening Education and Outreach in Asia

LME has been broadening its education and outreach efforts in Asia amid growing interest in futures trading in the region.

In 2012, seminars were designed and run out of Asia for the purpose of providing traders, investors and industry players in the region with a greater understanding of how LME contracts can be used to manage the impact of price volatility and the regulation, pricing, hedging and delivery procedures for trading on LME.

In December 2012, visits were made to Mumbai and New Delhi as part of an educational tour of India. The sell-out tour, which consisted of day-long seminars for Indian delegates to familiarise them with metals price risk management tools, had received enormous support from the Indian industry.

Mainland Development

HKEx has continued to broaden and deepen its relationships with the Mainland authorities (at the Central Government level as well as the provincial and local levels) and market participants. It has signed MOUs with all 6 Mainland exchanges (ie, the China Financial Futures Exchange, the Dalian Commodity Exchange, the Shanghai Futures Exchange, the Shanghai Stock Exchange, the Shenzhen Stock Exchange, and the Zhengzhou Commodity Exchange). In 2012, over 130 meetings were conducted with the governments of 22 Mainland cities, including Beijing, Chongqing, Hunan, Liaoning, Nanjing, Shanghai, Sichuan, and Tianjin, as well as Central Government regulators and authorities.

MOUs signed in 2012

- at the Central Government level (on listing and trading of RMB-denominated sovereign bonds in Hong Kong)
 - Ministry of Finance of the PRC
- at provincial and local levels (on cooperation and exchange of information)
 - Financial Affairs Offices of Hebei, Heilongjiang, Shaanxi, and Shandong provinces
 - Beijing Xicheng District Government
- with Mainland counterparts (on cooperation and exchange of information)
 - China Financial Futures Exchange
 - Shanghai Futures Exchange

HKEx organises exchange programmes for the Mainland authorities to strengthen their understanding of its businesses and to forge closer working relationships. In 2012, it arranged exchange programmes for over 50 senior officials from various departments of CSRC, including Listed Company Supervision, Fund Supervision, and Futures Supervision, as well as the Enforcement Bureau. In addition, HKEx co-organised training workshops on corporate governance standards of listed issuers for about 100 senior Mainland executives. The training was in Hong Kong and the other co-organisers were The Hong Kong Polytechnic University and the Research Institute of Hong Kong and Macao Affairs Office of the State Council.

Issuer and Client Services

In line with its core strategy to generate organic growth, HKEx has continued to promote Hong Kong as a pre-eminent listing venue for Mainland and international companies seeking capital, brand awareness, Asia exposure, and a liquid secondary market. Throughout 2012, HKEx maintained a high level of marketing activity, including roadshows in the mainland of China and in many other markets around the world, to identify and meet with potential issuers. In addition, HKEx collaborated closely with the Mainland and Hong Kong governments to organise promotional activities in strategically important Mainland cities and regions to attract companies to list in Hong Kong.

In 2012, HKEx hosted over 20 events for potential issuers, ranging from large conferences to small roundtable discussions and workshops, in 10 Mainland cities and Hong Kong. HKEx also made 55 trips to different Mainland cities and 18 trips internationally to speak at listing promotion events and meet with government officials and potential issuers, including companies that are looking for a secondary listing and leading companies in a number of sectors and industries.

Major events in which HKEx participated in 2012 to promote Hong Kong as a pre-eminent listing venue

Event	Place	Target groups
• Mining Indaba	Cape Town	International mining and energy companies
• 3 rd Annual Russia Investment Summit	Hong Kong	International investment community
• 5 th Annual Mines & Money Hong Kong 2012	Hong Kong	Natural resources companies
• Brazil Invest	Hong Kong	Brazilian companies
• Capital Raising in Hong Kong Seminar	Kuala Lumpur	Malaysian and other South East Asian companies
• LME Week	London	Natural resources companies
• PDAC 2012	Toronto	Natural resources companies
• 6 th Capital Raising & Investment Conference	Ulaanbaatar	Mongolian companies

RMB fundraising in Hong Kong remains a key focus as substantive discussions continue with potential and listed issuers as well as influential intermediaries. HKEx continued to promote RMB fundraising opportunities to listing prospects and market participants through roadshows and conferences.

Major events in which HKEx participated in 2012 to promote RMB fundraising opportunities in Hong Kong

Event	Place	Organiser(s)
• Hong Kong Business Seminars	Amsterdam & Milan	Hong Kong Trade Development Council
• 3 rd ASIFMA-ISDA Offshore RMB Markets Conference	Hong Kong	Asia Securities Industry & Financial Markets Association
• Paris Europlace Financial Forum	Hong Kong	HKMA, and Banque de France
• Global Financial Centre Seminar	New York	HKMA, SFC, and InvestHK
• Think Global, Think Hong Kong	Tokyo	Hong Kong Trade Development Council

Market Data

Market Performance

As at the end of 2012, there were 158 and 87 real-time and delayed IV licences respectively (2011: 149 and 80). The licensed IVs altogether offered a total of 954 types (2011: 914) of real-time market data services.

Products subscribed	Number of real-time IVs	
	2012	2011
Securities market data	146	139
Derivatives market data	66	64
Issuer Information Feed Service	12	11
More than 1 data product group	58	57

End-user Licence for Market Data

In view of the positive market response to the introduction of an end-user licence for the Derivatives Market data in 2011, HKEx extended the end-user licence to cover the Cash Market data in December 2012 for licensees' internal usage of Cash Market datafeed – MDF 3.8. As at the end of 2012, there were 23 End-user Licensees (mainly EPs and market makers) for the Derivatives Market data.

Non-display Usage of Market Data

Traditionally, market data has been used mainly by people in a “display” mode on screens. With the advance of technology and the increasing popularity in automated trading in recent years, market data is increasingly being used by machines, or the so-called “non-display” mode. In response to changes in market behaviour, HKEx announced in July 2012 the introduction of a new policy for non-display usage of HKEx real-time’s market data which took effect from January 2013.

Types of “non-display” usage of real-time market data

- “automated trading application” – any application that accesses HKEx’s real-time market data for automatic calculation, processing, and analysis, and that application will determine the quantity, price, and timing of order execution
- “derived data (with tradable products)” – the use of real-time market data to partly or wholly derive (i) the price of a tradable product; or (ii) the value of an underlying instrument of a tradable product
- “others” – other non-display usages of real-time market data such as the use of data in risk management systems, portfolio management applications, back-office support, and creation of indices, excluding indices for tradable products and etc

Extension of Discount Programme of Real-time Market Data for Mainland Users and Mainland Television Subscribers

The discount programme for Mainland users of HKEx’s real-time market data has been extended until the end of 2013. More than 10,300 individual investors and 3,500 institutional investors in the mainland of China registered under the programme will continue to enjoy the discounted rates of \$80 and \$120 respectively for HKEx securities market data along with a free derivatives data package without price depth.

The discount programme which enables Mainland television subscribers to provide HKEx’s real-time securities market data to its viewers in the mainland of China has also been extended to the end of 2013. The subscriber fee remains at a flat rate of \$10,000 per month.

Mainland Market Data Hub

In view of the substantial growth of demand for Hong Kong market data in the mainland of China and the growing number of Mainland IVs offering the data, HKEx established the GFIS, a wholly-owned subsidiary of HKEx, in Shanghai in 2012 to coordinate its market data distribution in the mainland of China. As part of the HKEx Orion programme, a market data hub will be launched in Shanghai in the third quarter of 2013. Initially, it will offer securities market and index datafeed products. This initiative will strengthen HKEx’s Mainland connectivity, enable Mainland investors to access HKEx’s market data through a reliable, scalable, and cost-effective infrastructure, and mark HKEx’s first significant technical infrastructure footprint in the mainland of China. A Founding Members Programme was launched in February 2013 to allow IVs and other interested parties to participate in the early set-up of the market data hub and joint marketing efforts with HKEx.

CESC

In October 2012, the CESC officially commenced operations in Hong Kong, just 4 months after HKEx, the Shanghai Stock Exchange, and the Shenzhen Stock Exchange announced the signing of a joint venture agreement. It brings together the experience and expertise of the 3 exchanges and aims to contribute to the further internationalisation of China’s capital markets by providing global investors with exposure to the world’s second largest economy through Hong Kong. On 10 December 2012, the CESC launched CES120, the first index in the new CESC Cross Border Index Series. CES120 is disseminated to the HKEx real-time MDF IVs for their redistribution free of charge. The CESC will develop sub-indices, including a pure A-shares index and a Hong Kong Mainland index based on CES120 constituents, and plans to introduce other cross-border indices as well as index-related products in early 2013.

Constituents of CES120

- 80 most liquid and largest* stocks listed on the Shanghai Stock Exchange and the Shenzhen Stock Exchange
- 40 most liquid and largest* Mainland companies listed on SEHK

* In terms of market value

Product and Index Development

The member exchanges of the BRICS alliance (comprising Brazil's BM&FBOVESPA, Russia's Moscow Exchange MICEX-RTS, India's BSE Limited, HKEx, and South Africa's JSE Limited) listed local currency versions of benchmark equity index futures and/or options of other alliance members in the first half of 2012 and provided joint product education for respective market participants in the second half of 2012. The BRICS exchanges engaged major index vendors in developing a set of new composite indices comprising of local markets from each jurisdiction. The composite indices would reflect various asset classes as the basis for new products to serve investors globally in cash and derivatives markets and a vehicle to access existing BRICS liquidity pools internationally. The BRICS exchanges alliance initiated the efforts in developing and testing product concepts and work together with the selected vendor to determine the scope of the next engagement in the first quarter of 2013.

Global Clearing

Cash and Derivatives Clearing

CCASS statistics

	2012	2011	Change
Average daily Exchange Trades handled by CCASS			
Number of trades	775,742	873,654	(11%)
Value of trades (\$bn)	53.9	69.7	(23%)
Share quantity involved (bn)	137.5	162.2	(15%)
Average daily SIs settled by CCASS			
Number of SIs	73,247	83,833	(13%)
Value of SIs (\$bn)	178.5	211.2	(15%)
Share quantity involved (bn)	44.2	47.8	(8%)
Average daily ISIs settled by CCASS			
Number of ISIs	343	469	(27%)
Value of ISIs (\$m)	227.2	261.1	(13%)
Share quantity involved (m)	98.7	123.7	(20%)
Average daily settlement efficiency of CNS stock positions on due day (T+2)	99.91%	99.88%	–
Average daily settlement efficiency of CNS stock positions on the day following the due day (T+3)	99.99%	99.99%	–
Average daily buy-ins executed on T+3			
Number of brokers involved	4	6	(33%)
Number of buy-ins	4	7	(43%)
Value of buy-ins (\$m)	1.5	2.4	(38%)
Shares deposited in the CCASS depository			
Number of shares (bn)	3,663.7	3,694.2	(1%)
Percentage of the total issued shares of the admitted securities	70%	70%	–
Value of shares (\$bn)	12,330.1	9,599.9	28%
Percentage of the total market capitalisation of the admitted securities	52%	50%	–

Scripless Securities Market

HKEx continues to support the SFC in preparing the draft subsidiary legislation based on the operational arrangements recommended by the Scripless Securities Market Working Group. A market consultation for the enabling legislation is tentatively planned for 2013.

CCASS Service Enhancement

In May 2012, new features were introduced in CCASS to improve the SIs' operational efficiency. Participants can now opt to settle SIs in any eligible currency (HKD, RMB, and USD) instead of in the trading currency of the securities only. In addition, a new reference field was added for SI input which allows Participants to handle IPOs with better control and higher efficiency.

HKCC's Settlement Bank Arrangement

Money settlement arrangements with all Settlement Banks of HKCC were standardised in August 2012 to streamline the payment flows and to facilitate a higher level of the banks' participation in RMB settlement.

DCASS Enhancement

To prepare for the introduction of AHFT, DCASS was enhanced in November 2012 to allow CPs to support the clearing of HSI Futures, H-shares Index Futures, and Gold Futures during the after-hours trading session.

Self-assessment of Principles for Financial Market Infrastructures

In April 2012, the CPSS and the IOSCO issued the report “Principles for financial market infrastructures” (PFMI Report) which contains new international standards for payment as well as clearing and settlement systems. These standards are designed to maintain and promote global financial stability, and are applicable to financial market infrastructures including central securities depositories, securities settlement systems, and central counterparties.

In order to stay on a par with international standards, HKEx is conducting self-assessment of HKSCC, HKCC, and SEOCH observance levels against the PFMI Report’s principles in their capacities as either central counterparty, central securities depository, or securities settlement system. The assessment, through a gap analysis, is targeted to be completed in the first half of 2013, after which HKEx will develop plans for financial resources and enhancements to its systems, policies, and operations for ensuring compliance with these principles, as appropriate.

Participant Services

In 2012, there were 24,344 CCASS Participants, including 599 IPs admitted in 2012. HKEx organised 24 training courses related to CCASS or DCASS for CPs and market participants in 2012.

Number of CCASS Participants (as at the end of 2012)

Clearing Agency Participant	1
Custodian Participants	40
Direct CPs	493
General CPs	9
IPs	23,796
Stock Pledge Participants	5

OTC Clear

In preparation for the development of a new regulatory regime for the OTC derivatives market in Hong Kong, the HKMA and the SFC are planning to introduce the legislative proposal to the Legislative Council in the first half of 2013.

With this backdrop, HKEx established OTC Clear, the clearing house for its OTC derivatives clearing business, in 2012. Feedback from discussions with potential clearing members has been positive. After incorporating market views and suggestions into the rules and procedures of OTC Clear, HKEx submitted them to the SFC for its review. Subject to the SFC’s approval of OTC Clear as a recognised clearing house, HKEx is targeting to introduce its OTC derivatives clearing services in the second quarter of 2013. Initially, the product coverage will be interest rate swaps on RMB, HKD, USD and Euro, and non-deliverable forwards for RMB, Taiwan dollar, Korean Won and Indian Rupee.

As regards the OTC clearing and settlement system, or OCASS, the system development work was largely completed in December 2012. OTC Clear is arranging for testing with clearing members in the first quarter of 2013. Before the official launch of the OTC derivatives clearing services, market rehearsals to simulate the operations in production will be conducted with clearing members.

In the last quarter of 2012, OTC Clear started promoting its OTC clearing services to individual banks and licensed corporations and working closely with them on the clearing membership applications. Discussion with a group of strategic partners on the proposal to offer them minority stakes in OTC Clear is in progress. HKEx also worked with middleware vendors to co-organise seminars and briefing sessions for market participants to raise their awareness and understanding of trade registration platforms’ services and features.

To prepare for the launch of OTC clearing services, HKEx organised various events in 2012 for potential OTC Clear clearing members. Highlights are set out below.

Event	Purpose of event
<ul style="list-style-type: none"> • 4 HKEx OTC clearing briefing seminars 	To provide the clearing structure, operational work flows and risk management framework of the OTC derivatives clearing services, and introduce the trade affirmation services provided by middleware vendors
<ul style="list-style-type: none"> • HKEx OTC clearing briefing seminar – system vendors 	To present OTC clearing system solutions from 5 IT vendors
<ul style="list-style-type: none"> • HKEx OTC clearing MarkitWire and DS Match workshop 	To present the functionalities of the trade matching and trade submission platform from IT vendors
<ul style="list-style-type: none"> • 3 OTC Clear – web portal training workshops 	To introduce the OTC Account Services Information System, or OASIS, web portal functionalities

HKEx also co-organised and/or participated in a number of events to promote its OTC clearing services to the market and the public.

LME Clear

The design and construction of LME Clear, LME's vertically integrated clearing house, continued during 2012. Implementation work for the clearing and risk management platform commenced in the third quarter, and 3 member working groups, covering legal, operations, and IT aspects, were formed in the fourth quarter. Since November 2012, regular member working group meetings on operations and IT have been held.

A high level service description and the technical specifications have been distributed to members for their readiness work. The risk management framework, detailed rulebook, and procedures are scheduled for members' consultation in the first quarter of 2013. It is expected to launch LME Clear in 2014.

Clearing Risk Management

In March 2012, HKEx published consultation conclusions on the HKEx Clearing House Risk Management Reform Measures with a view of strengthening its clearing house risk management regime. The consultation drew over 600 responses from CPs, professional and industry associations, market practitioners, and individuals. The responses were broadly supportive and the measures were successfully implemented in 2012.

The key measures were: (i) the introduction of a standard margin system and a Dynamic Guarantee Fund at HKSCC; (ii) the revisions to certain price movement assumptions in the clearing houses' stress testing; (iii) the revisions to the counterparty default assumption in the stress testing; (iv) the revisions to the collateral assumptions at HKCC and SEOCH; and (v) the introduction of various means of financial support to reduce the impact of risk management reform on CPs.

For OTC clearing, to ensure the robustness of OTC Clear's risk management model and framework in line with the international standards, risk management reviews covering margin calculation, pricing, default management and guarantee fund stress testing were completed by independent third party consultants in 2012.

Information Technology

Production Systems' Stability and Reliability

During 2012, all major trading, clearing and settlement, and market data dissemination systems for the Cash and Derivatives Markets continued to perform reliably.

IT Security Enhancements

HKEx has commenced a 2-year programme to implement various IT security enhancement initiatives following the completion of an IT security risk and infrastructure review in the first quarter of 2012. The programme involves enhancements in security technologies, people, and processes with an objective to raise IT security to a higher level of maturity. A number of key improvements were successfully completed in 2012. The target is to roll out the remaining initiatives in phases in 2013 and the first half of 2014.

New Data Centre and IT Office Consolidation

Construction of the TKO Data Centre was completed with occupancy permit obtained in August 2012. The relocation of the IT office to the new building and the first phase of data centre migration, involving the Cash Market, were conducted smoothly in October 2012. The relocation of all other primary data centres will be conducted in phases in 2013.

HKEx Orion Programme

The HKEx Orion technology initiatives programme was launched in March 2012. The programme comprises a set of projects which will progressively transform HKEx's market platforms to improve market access, connectivity, speed, and functionality.

SDNet/2 provides higher bandwidth scalability for future business growth and offers the choice of multiple network carriers for diversity and competitive pricing. The backbone infrastructure was duly implemented as part of AMS/3.8 project. The first phase migration of network circuits for EPs and IVs of the Cash Market to SDNet/2 was completed in July 2012. The migration of EP and IV network circuits for the Derivatives Market and the Cash Clearing is planned for the first quarter and second half of 2013 respectively.

The OMD is an integrated low-latency data feed adopting a common message format across all asset classes traded on the HKEx markets. The OMD will enable HKEx to: (i) offer a suite of market data product feeds with content, market depth, and bandwidth requirements tailored to suit the needs of different types of customers; and (ii) establish points of presence for market data distribution outside of Hong Kong such as in the mainland of China. Implementation work for the OMD commenced in the first quarter of 2012, and customers were given access to the planned system for the Cash Market in December 2012. Rollout for the Cash Market is scheduled for the second quarter of 2013 and that for the Derivatives Market by the first quarter of 2014.

HKEx also commenced development of the OCG for the Cash Market in the third quarter of 2012. The OCG will significantly reduce EPs' costs by offering market access without the need for any gateway equipment to be deployed in their premises as well as offering additional features such as FIX (Financial Information eXchange) support and "drop-copy". BSS vendor exhibitions were organised to facilitate EPs' selection of BSS solutions for the OCG. The OCG is tentatively targeted for launch in the fourth quarter of 2013.

For the Cash Market trading system, HKEx is preparing for the eventual replacement of AMS/3 with the OTP. The OTP is a new Cash Market trading system aimed at providing low latency, high capacity, and new business functionality. A proof-of-concept exercise was completed in 2012. The development and implementation of the project are expected to take place in 2013 and 2014 respectively.

On the Derivatives Market front, HKEx is working on the migration of HKATS/DCASS onto a new technology platform (Genium INET) to facilitate technology alignment with vendor's product roadmap, and achieve significant improvement in capacity and reduction in order latency for further development of the Derivatives Market. The Genium INET platform is targeted to be rolled out in the fourth quarter of 2013.

Hosting Services

The Hosting Services offered by HKEx provide a local area network infrastructure in the TKO Data Centre which supports users' low latency connections to HKEx's systems. Total capacity of the hosting floors can support up to 1,200 racks of server space. The initial phase, comprising 320 racks, was implemented in the fourth quarter of 2012. About one-third of the capacity has been subscribed by about 60 companies including EPs, IVs, technology vendors, and telecommunication service providers. Support for Cash Market trading through the network was launched in December 2012, with approximately 20 hosting service users trading on the infrastructure.

With an open ecosystem approach to support Hong Kong's financial markets community, HKEx's Hosting Services enable users to interact with each other efficiently and conveniently subscribe for software services, market data feeds, and managed services provided by various technology vendors and IVs. Besides, 14 financial extranets and telecommunication service providers have set up networks at the carrier-neutral data centre. Global connectivity can be supported by the Hosting Services by simple cable patching. To promote the Hosting Services to the trading community and technology vendors, HKEx organised the HKEx Hosting Services Ecosystem Founding Members Conference and the Exchange Technology Forum, and participated in the Asia Pacific Trading Summit and the Trading Architecture Asia event in 2012.

The Hosting Services will be extended to support the Derivatives Market trading and low-latency direct connection to the OMD by the third quarter of 2013.

HKEx Mobile and HKEx Group Website

HKEx Mobile (m.hkex.com.hk), a new mobile website which is compatible with most popular smartphone operating systems, was launched in April 2012 to promote greater access to up-to-date HKEx news and market information.

In December 2012, the HKEx Group website (www.hkexgroup.com) was launched to give an overview of the Group, including LME and the CESC.

Treasury

The Group's funds available for investment comprise Corporate Funds, Margin Funds and cash collateral and Clearing House Funds, totalling \$46.0 billion on average in 2012 (2011: \$48.2 billion).

As compared with 31 December 2011, the overall size of funds available for investment as at 31 December 2012 increased by 3 per cent or \$1.4 billion to \$47.1 billion (31 December 2011: \$45.7 billion). Details of the asset allocation of the investments as at 31 December 2012 against those as at 31 December 2011 are set out below.

	Investment Fund Size \$bn		Bonds *		Cash or Bank Deposits		Global Equities	
	2012	2011	2012	2011	2012	2011	2012	2011
Corporate Funds	7.8	9.7	24%	53%	69%	43%	7%	4%
Margin Funds and cash collateral	36.8	34.5	6%	18%	94%	82%	0%	0%
Clearing House Funds	2.5	1.5	0%	19%	100%	81%	0%	0%
Total	47.1	45.7	9%	25%	90%	74%	1%	1%

* Included certain principal-guaranteed structured notes

Investments are kept sufficiently liquid to meet the Group's operating needs and liquidity requirements of the Margin Funds and cash collateral and Clearing House Funds. Excluding equities held under the Corporate Funds (\$0.5 billion as at 31 December 2012 and \$0.4 billion as at 31 December 2011), which have no maturity date, the maturity profiles of the remaining investments as at 31 December 2012 (\$46.6 billion) and 31 December 2011 (\$45.3 billion) were as follows:

	Investment Fund Size \$bn		Overnight		>Overnight to 1 month		>1 month to 1 year		>1 year to 3 years		>3 years	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
Corporate Funds	7.3	9.3	44%	20%	3%	4%	33%	42%	10%	17%	10%	17%
Margin Funds and cash collateral	36.8	34.5	22%	19%	10%	24%	62%	52%	3%	4%	3%	1%
Clearing House Funds	2.5	1.5	67%	49%	7%	7%	26%	44%	0%	0%	0%	0%
Total	46.6	45.3	28%	20%	9%	19%	56%	50%	4%	6%	3%	5%

Credit exposure is well diversified. The Group's bond portfolio (which includes certain principal-guaranteed structured notes) held is of investment grade and, as at 31 December 2012, had a weighted average credit rating of Aa3 (31 December 2011: Aa3) and a weighted average maturity of 2.7 years (31 December 2011: 1.8 years). Deposits are placed only with the note-issuing banks in Hong Kong, investment grade licensed banks and restricted licence banks approved by the Board from time to time.

Risk management techniques, such as Value-at-Risk (VaR) and portfolio stress testing, are used to identify, measure, monitor and control market risks. VaR measures the expected maximum loss over a given time interval (a holding period of 10 trading days is used by the Group) at a given confidence level (95 per cent confidence interval is adopted by the Group) based on historical data (1 year is used by the Group). The overall risk, as measured by the VaR methodology, during 2012 and 2011 was as follows:

	Average VaR \$m		Highest VaR \$m		Lowest VaR \$m	
	2012	2011	2012	2011	2012	2011
Corporate Funds	19.4	23.9	27.2	27.5	7.9	17.5
Cash collateral ¹	0.1	0.3	0.2	0.3	< 0.1	0.1
Margin Funds ¹	1.4	5.1	3.3	7.5	0.6	3.2
Margin Funds and cash collateral ²	1.0	N/A	1.5	N/A	0.6	N/A
Clearing House Funds	0.1	0.7	0.2	1.8	< 0.1	0.1

Notes:

1 Up to October 2012

2 Following the HKEx Clearing House Risk Management Reform in November 2012, HKSCC introduced margining as a measure to safeguard against exposures to future market movements. Thereafter, "Margin Funds" and "Cash collateral" are combined as "Margin Funds and cash collateral".

Details of the Group's net investment income are set out in the Revenue and Other Income section under the Financial Review and note 8 to the consolidated financial statements of this Annual Report.