

HONG KONG MONETARY AUTHORITY

Briefing to the Legislative Council Panel on Financial Affairs

15 November 2016



DISCUSSION TOPICS

Updates on

- Financial and Economic Environment
- Currency Stability
- Banking Stability
- Financial Infrastructure
- Hong Kong as an International Financial Centre
- Investment Environment and Performance of the Exchange Fund
- Hong Kong Mortgage Corporation

2



FINANCIAL AND ECONOMIC ENVIRONMENT

3



GLOBAL ECONOMIC GROWTH FORECASTS

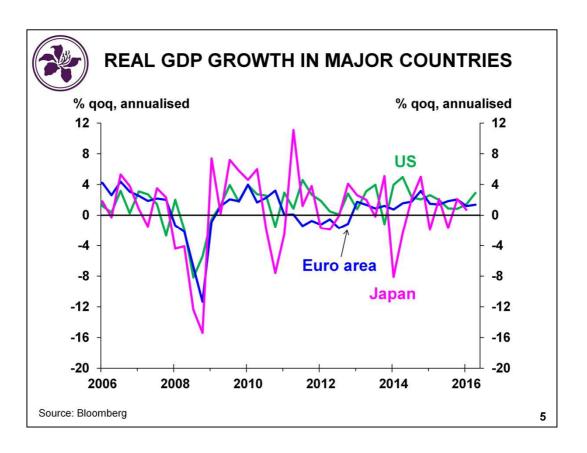
Real GDP Growth

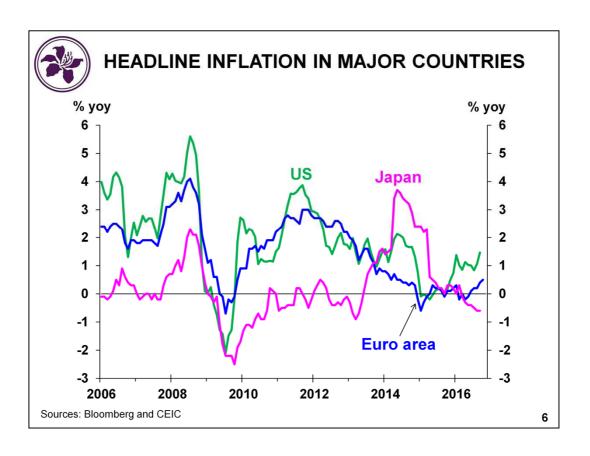
(% year-on-year)

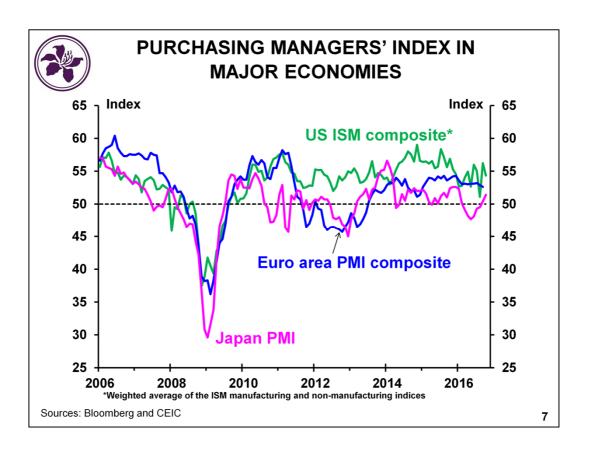
	2015	2016 Forecasts	2017 Forecasts
US	2.6	1.5	2.2
Euro area	2.0	1.6	1.3
Japan	0.5	0.6	0.9
Asia (ex-Japan)	5.9	5.7	5.6
Mainland China	6.9	6.6	6.3
Hong Kong	2.4	1.3	1.7

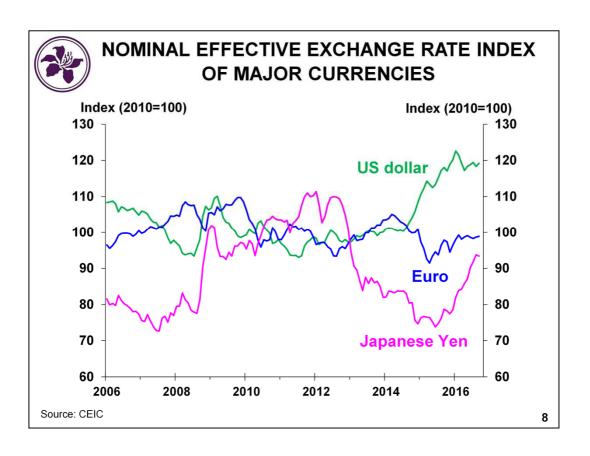
Sources: October Consensus Forecasts and Official Statistics

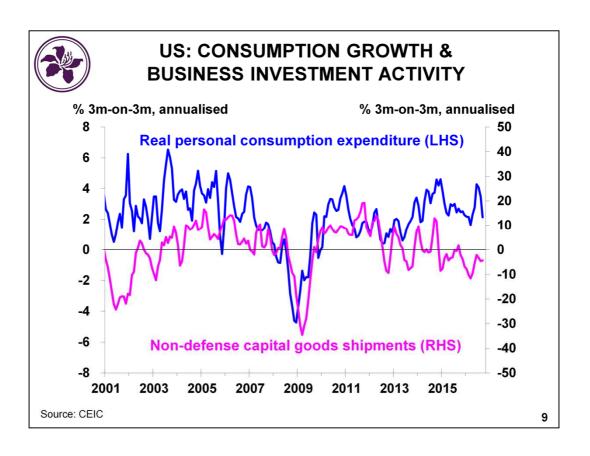
4

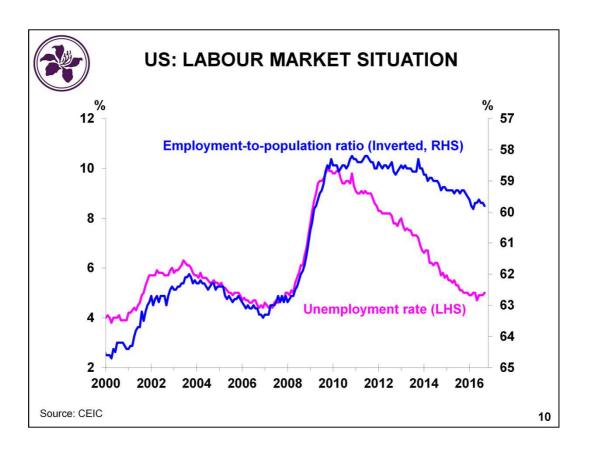


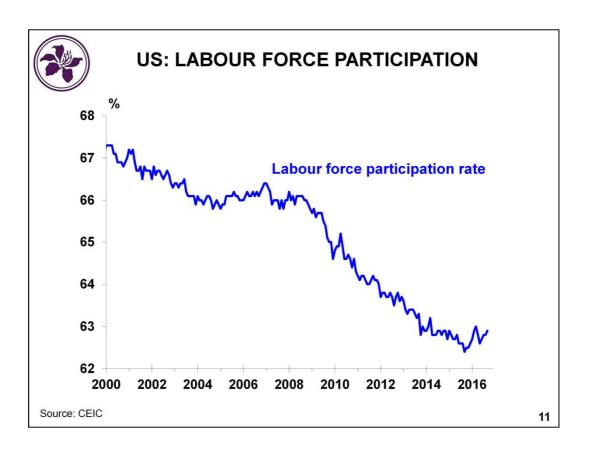


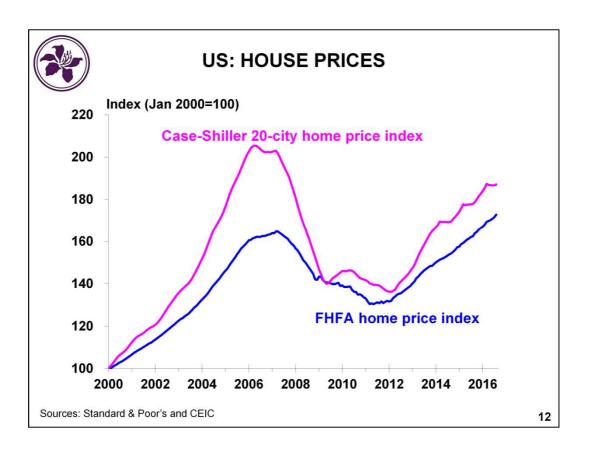


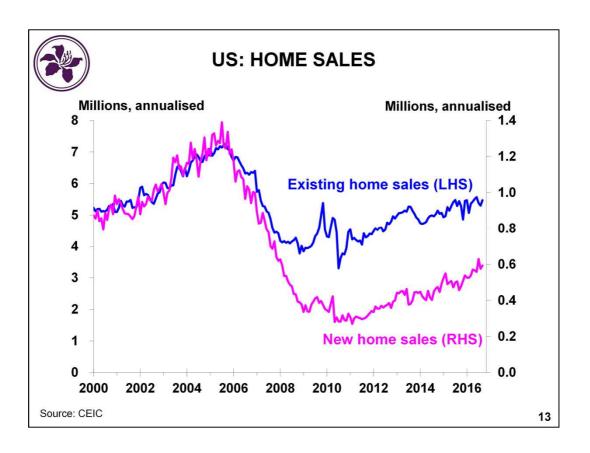


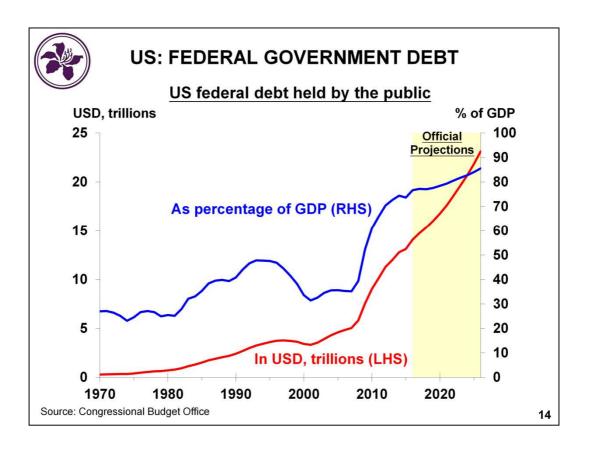


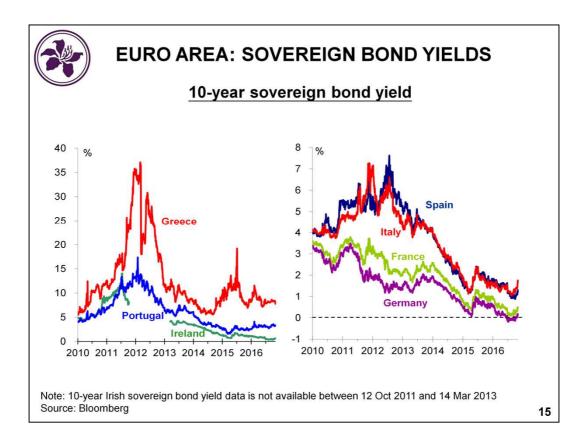


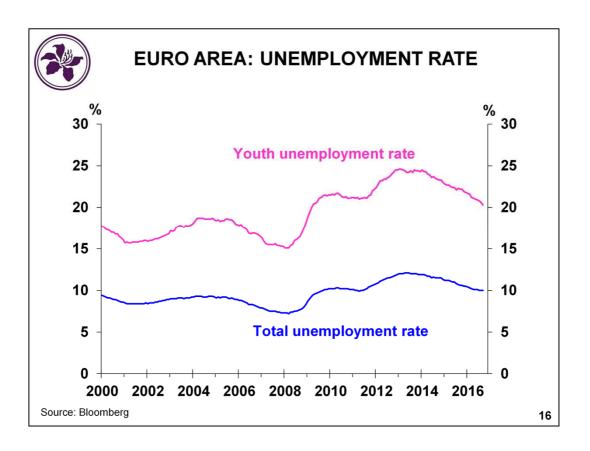


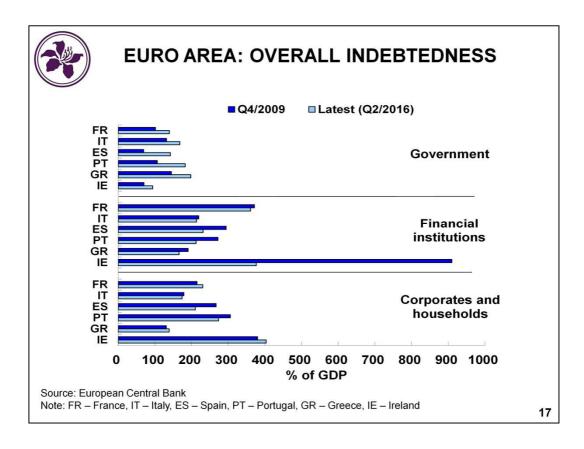


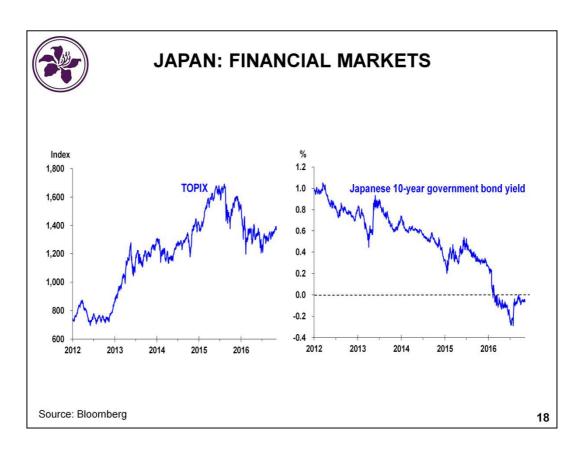


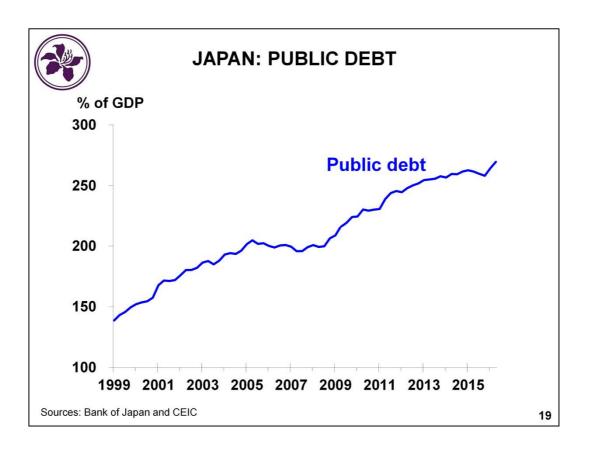


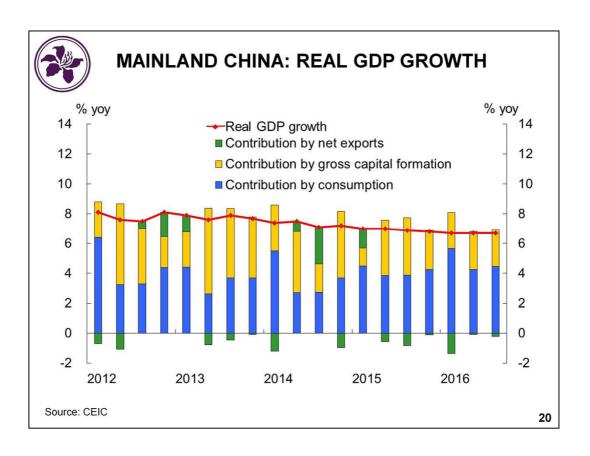


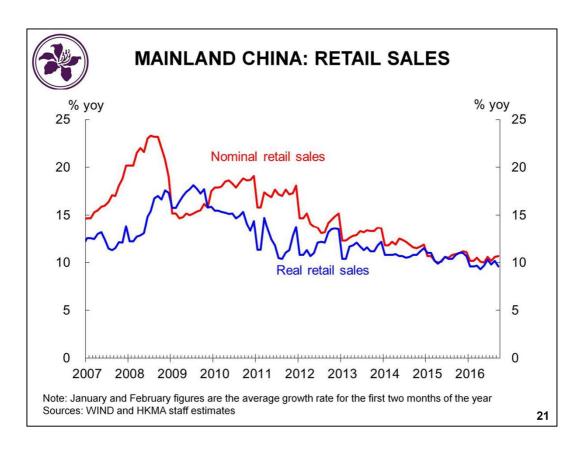






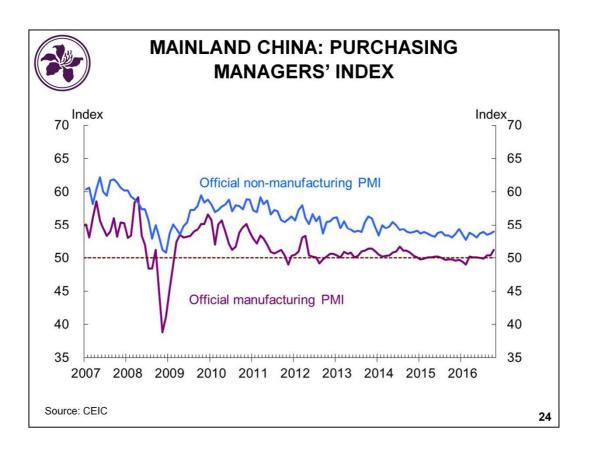


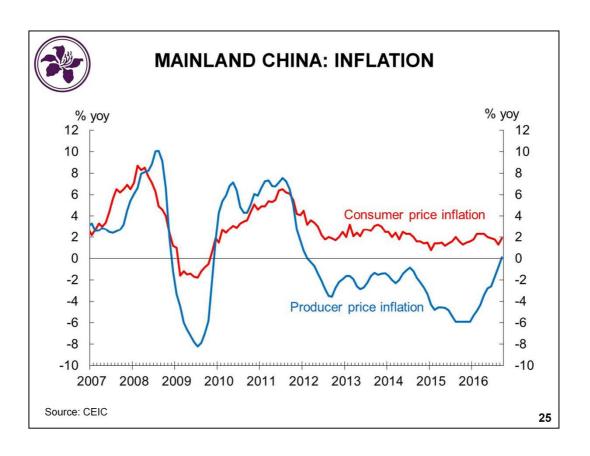


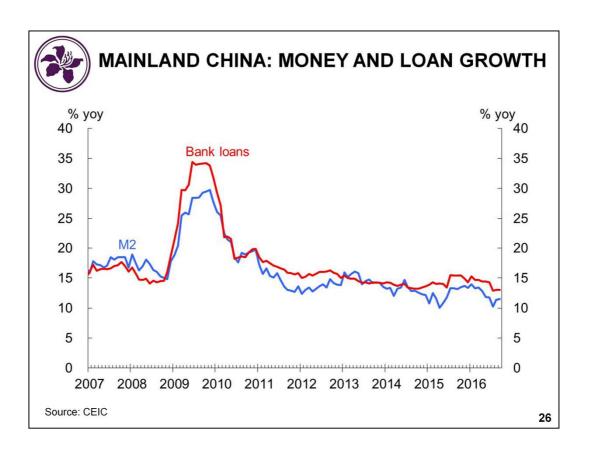


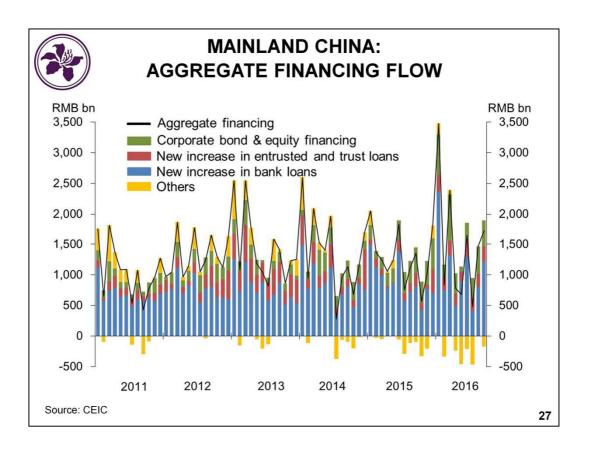


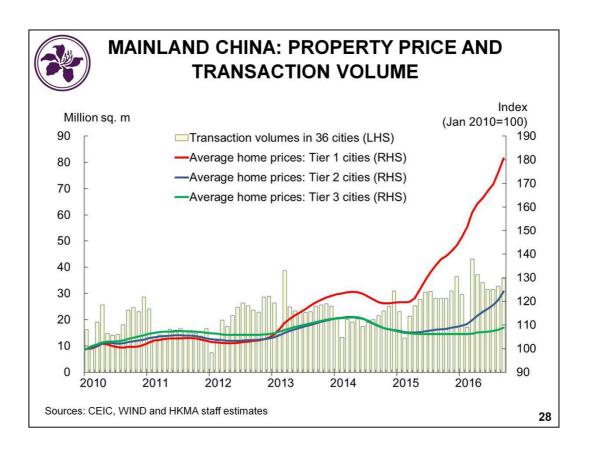


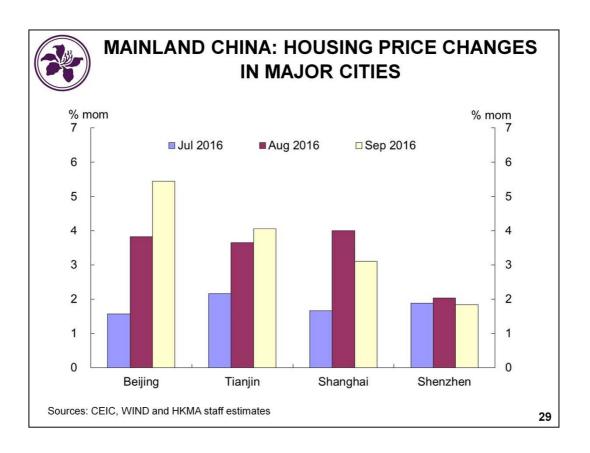


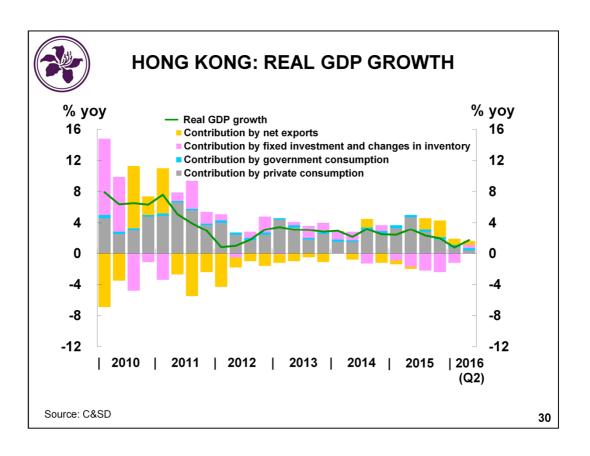


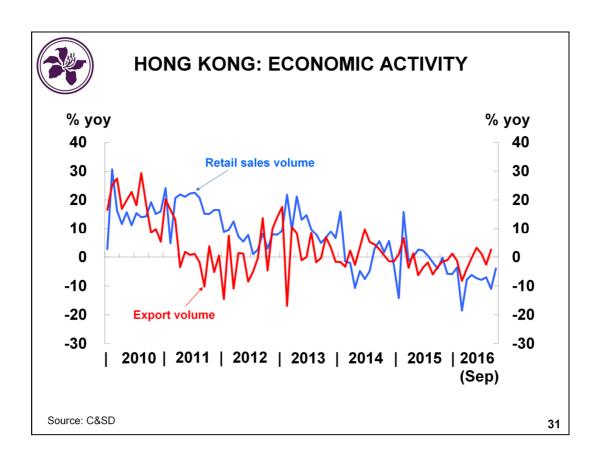


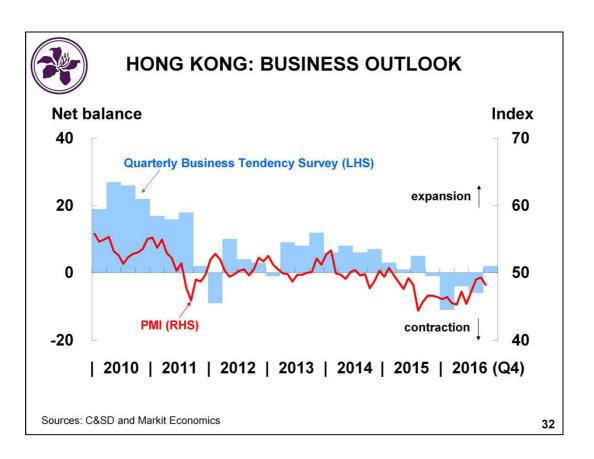


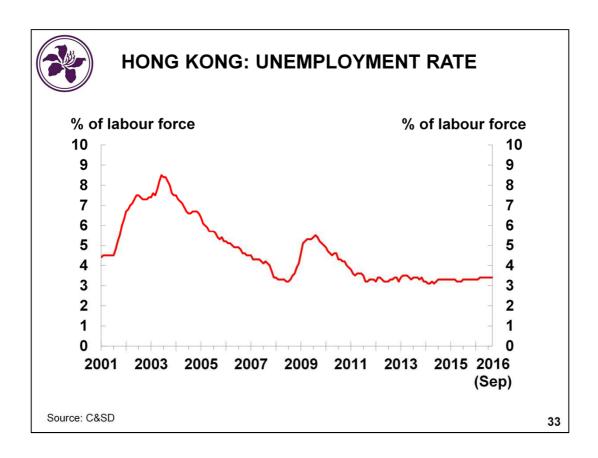


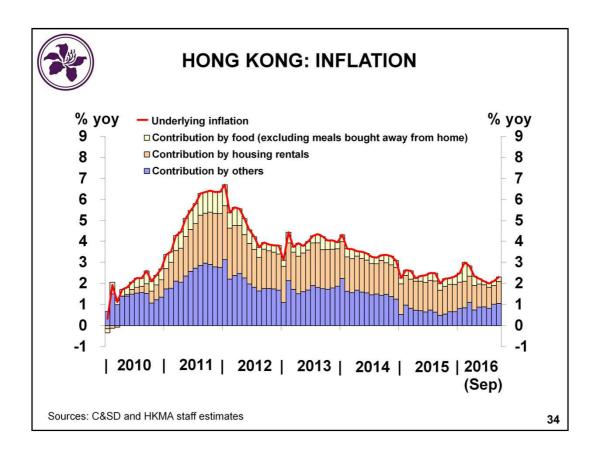


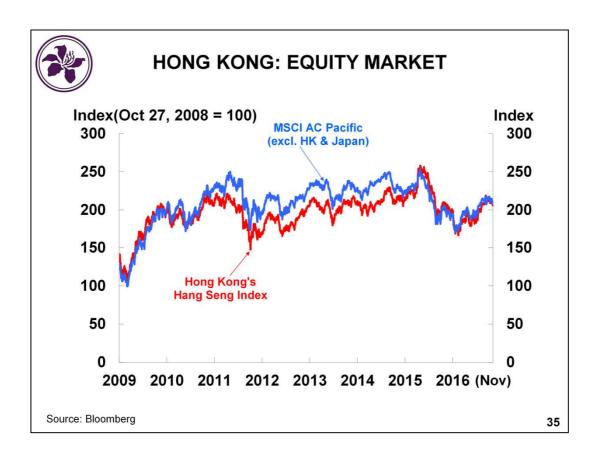


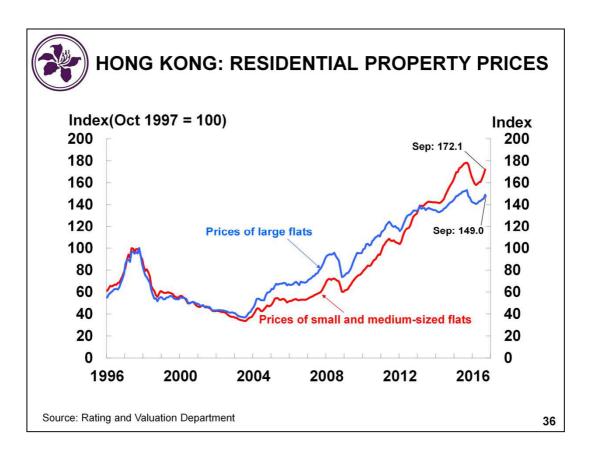


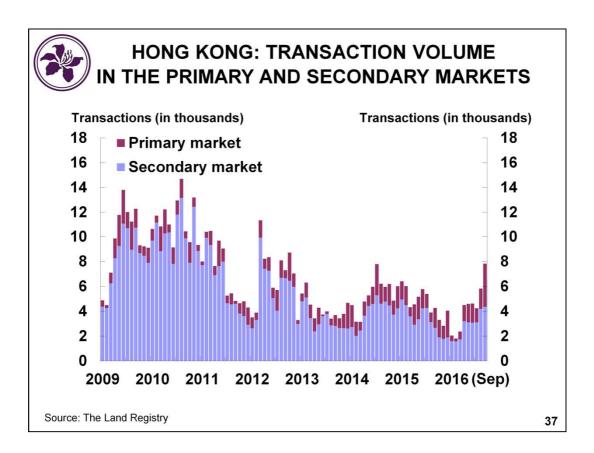


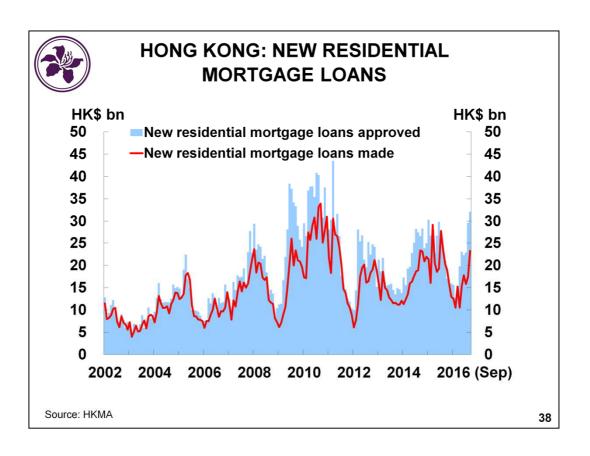


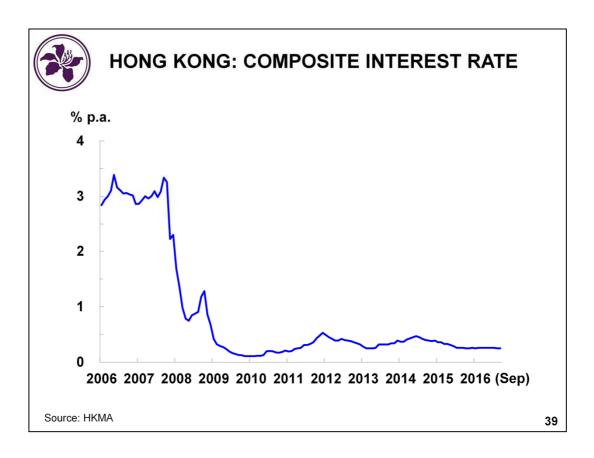


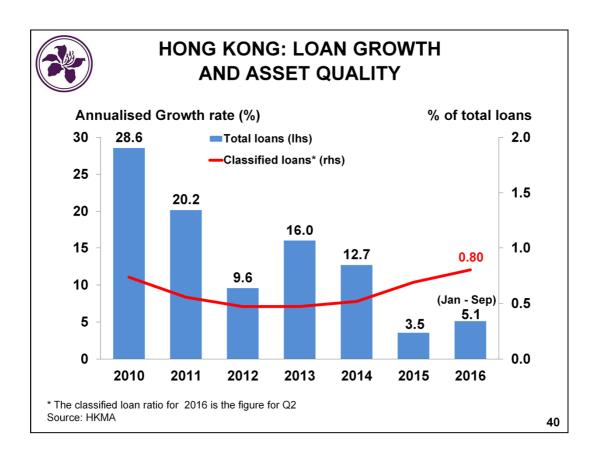


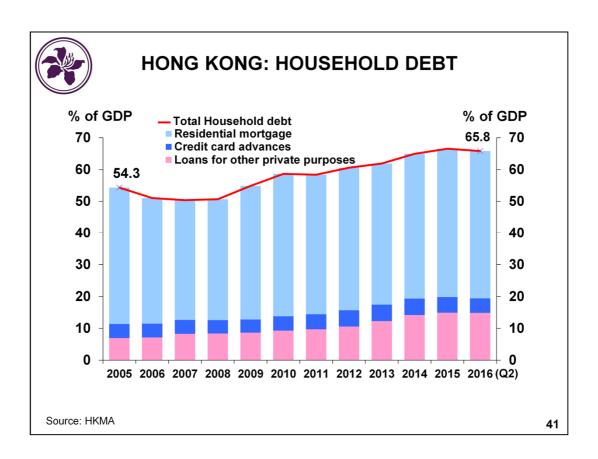






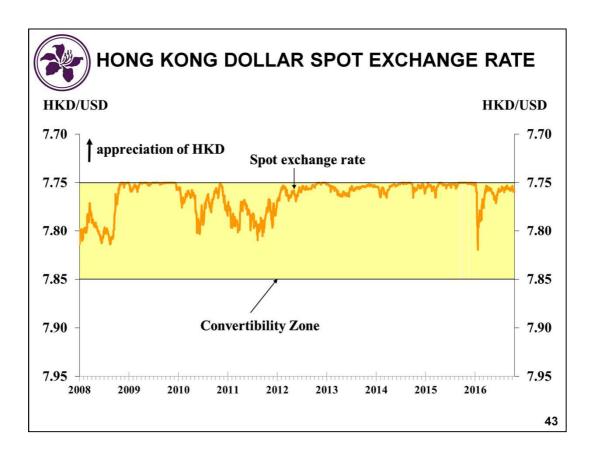




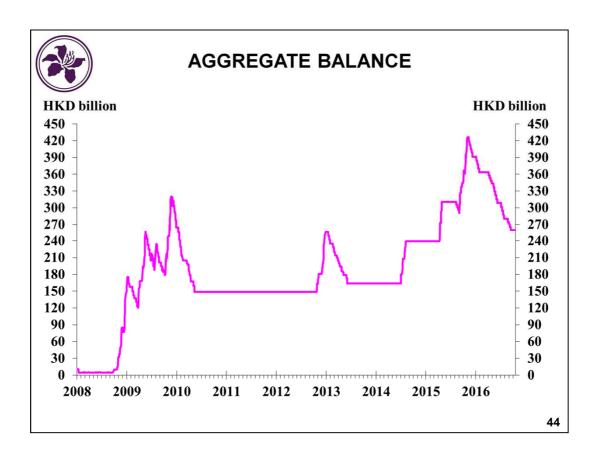




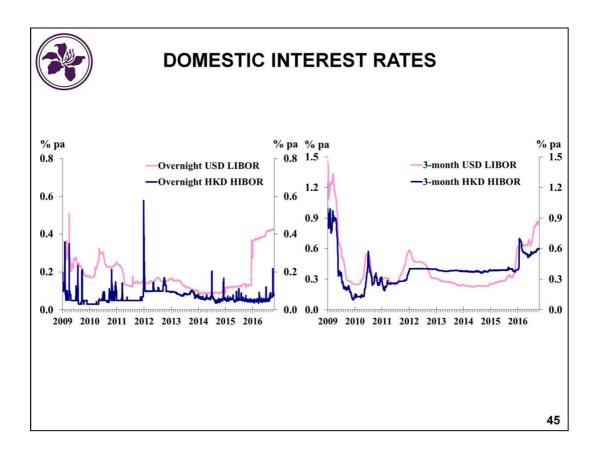
CURRENCY STABILITY



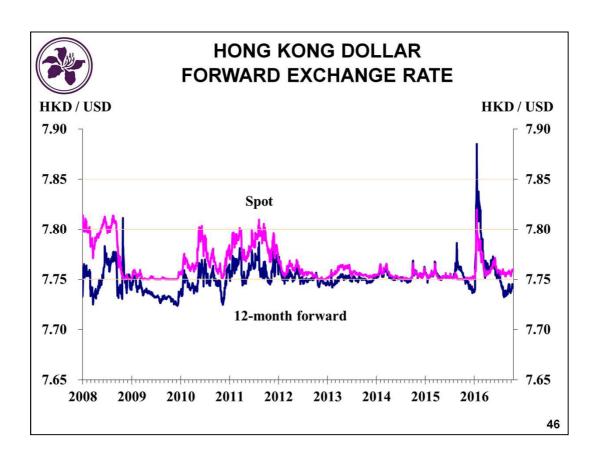
- In June, with changes in market expectations of US interest rate hikes and the UK's vote to leave the European Union, the global financial markets became more volatile, putting downward pressures on some emerging market currencies and equities.
- Notwithstanding these, the Hong Kong dollar spot exchange rate was broadly stable, trading mostly in the range of 7.753 to 7.760 in the past few months after easing briefly to about 7.77 levels in early June.



 A total of HK\$84 billion of additional Exchange Fund Bills (EFBs) were issued between May and September to meet banks' strong demand for EFBs for liquidity management purpose. Accordingly, the Aggregate Balance declined from HK\$343.4 billion at the end of April to HK\$259.5 billion by the end of September, and stayed steady thereafter.



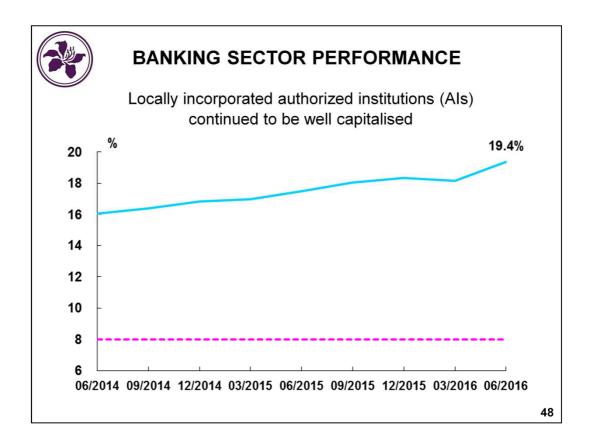
- The short-term HKD interbank interest rates were broadly steady at nearzero levels even though the USD interest rates rose owing to the impending money market fund reforms due in mid-October. The brief increase in overnight HIBOR at end-September mainly reflected quarter-end funding demand.
- Additional issuance of Exchange Fund Bills between May and September has no impact on interbank interest rates.



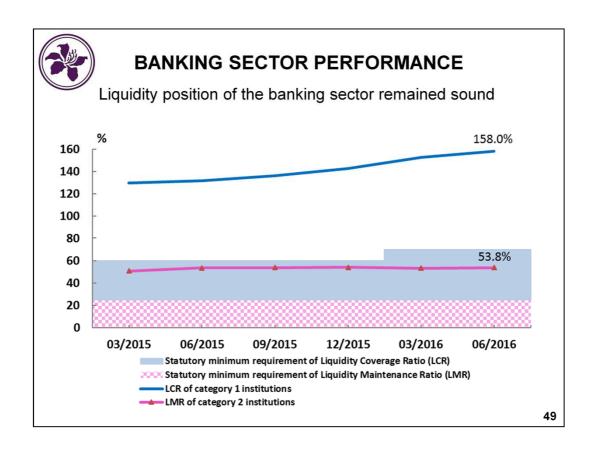
 Reflecting wider interest rate differentials between Hong Kong dollar and US dollar, the 1-year HKD forward points eased from a premium of +33 pips at the end of April to a discount of about -150 pips lately.



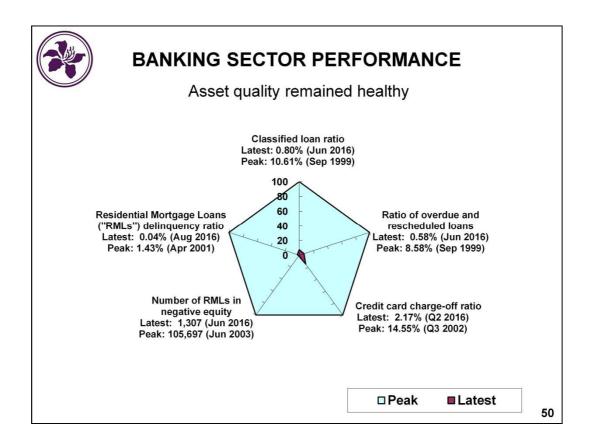
BANKING STABILITY



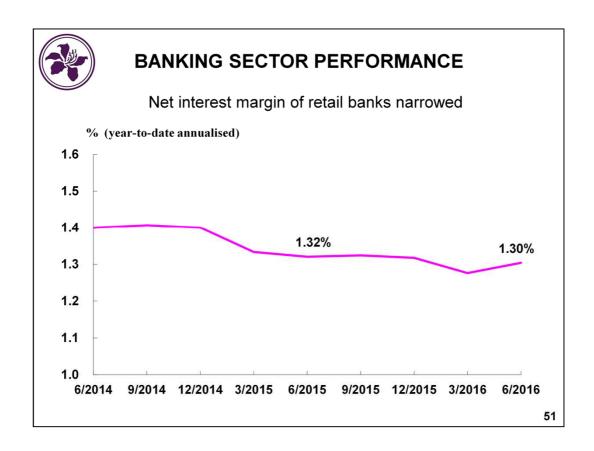
The consolidated capital adequacy ratio (CAR) of locally incorporated Als increased to 19.4% at end-June 2016 from 18.2% at end-March 2016, as capital base (+7.9%) rose faster than risk-weighted amount (+1.0%). The consolidated CAR remained well above the international minimum standard of 8%.



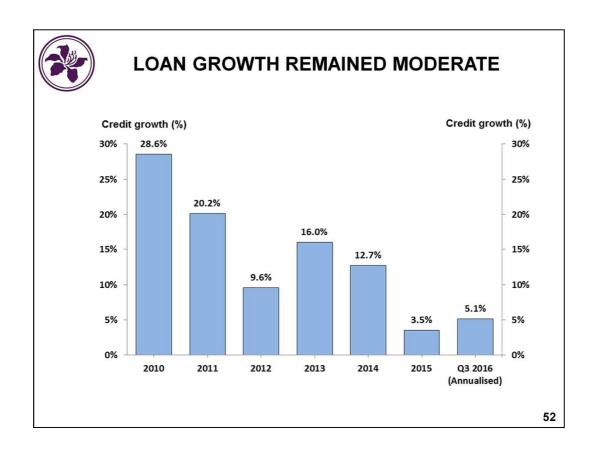
 In Q2 2016, the quarterly average Liquidity Coverage Ratio of category 1 Als was 158.0%, well above the 70% statutory minimum requirement applicable for 2016. For category 2 Als, their quarterly average Liquidity Maintenance Ratio was 53.8%, well above the 25% statutory minimum requirement.



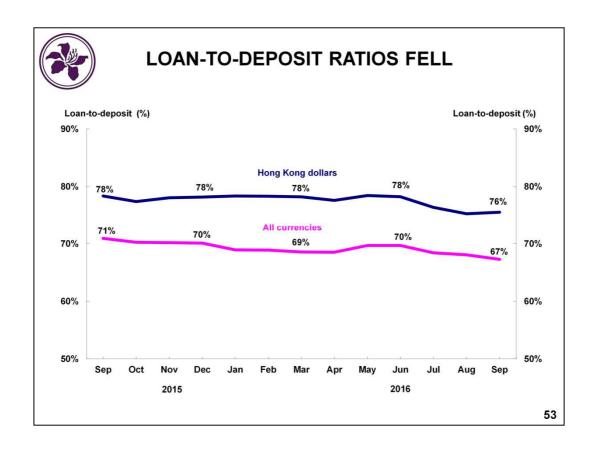
 Asset quality of retail banks' loan portfolio deteriorated slightly but remained healthy.



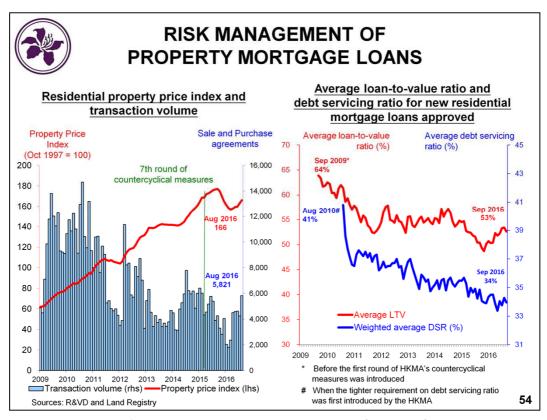
 The net interest margin (NIM) of retail banks' Hong Kong offices narrowed to 1.30% in the first half of 2016 from 1.32% a year earlier. It was due to a number of factors, including a lower return on RMB-denominated assets, and investment of surplus funds by retail banks in lower-yielding assets such as government bonds.



• Hong Kong banking sector's total loans grew by 5.1% on an annualised basis in the first three quarters of 2016, slightly higher than the 3.5% increase in 2015.



- The Hong Kong banking sector's Hong Kong dollar loan-to-deposit ratio fell to 76% at end-September 2016 from 78% at end-June 2016.
- The all currencies loan-to-deposit ratio edged down to 67% at end-September 2016 from 70% at end-June 2016.



Latest statistics for residential mortgage loans ("RMLs")

	Monthly average in 2014	Monthly average in 2015	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016
Number of sale and purchase agreements	5,317	4,665	4,494	4,586	4,620	4,243	5,821	7,826
Number of new RML applications	10,481	9,626	8,816	9,961	9,844	10,281	13,300	13,536
Number of new RMLs approved	7,337	7,059	5,967	7,011	6,842	6,784	8,764	9,356

Latest statistics for residential property prices

Property	price index	Period	Property price index	
Rating and Valuation Department (10/1997=100)	Latest position	08/2016	166.2	
	Recent Peak	09/2015	177.0	
	Peak in 1997	10/1997	100.0	
Centaline (6/7/1997=100)	Latest position	02/10/2016	141.0	
	Recent Peak	13/09/2015	146.9	
	Peak in 1997	19/10/1997	102.9	



BASEL STANDARDS IMPLEMENTATION

- Amendment of Banking (Disclosure) Rules (BDR) to implement revised Basel Pillar 3 disclosure package
- Amendment of Banking (Capital) Rules (BCR) to introduce revised Basel capital treatment for counterparty credit risk exposures and equity investment in funds
- Amendment of Banking Ordinance primarily to update requirements on exposure limits

55

BDR and BCR amendments

We are undertaking the necessary steps for making two sets of amendment rules, one for the BDR and the other for the BCR, to implement a number of revised Basel standards arising from the Basel III reform since 2013:

- the revised disclosure standards to be incorporated in the BDR will enhance banks' regulatory disclosures in terms of clarity, comprehensiveness, user relevance and comparability. We are conducting statutory consultation on the draft amendment rules as required under the Banking Ordinance and will submit the rules to the LegCo for negative vetting shortly so that it will take effect by the time when the authorized institutions (Als) make their first quarterly disclosures in a financial year starting on or after 1 January 2017.
- the revised capital standards to be incorporated in the BCR will enhance the risk-sensitivity of the risk-weighting of counterparty credit risk exposures and equity investments in funds. We have recently decided to postpone the implementation of these standards from 1 January 2017, tentatively for a year, to align with the observed implementation progress in other major markets. We consider this appropriate from the perspectives of both cross-border coordination and maintenance of a level playing field. We will however undertake the required statutory consultation on the amendment rules early in order to enable Als to prepare their systems for the application of the standards.

Exposure Limits

We consulted the industry in March on (i) the local implementation of the Basel Committee's new large exposures framework and (ii) the updating of some of our local rules on exposure limits. This will require an amendment to the Banking Ordinance to incorporate a rule-making power enabling the Monetary Authority to issue rules governing Als' concentration risk regarding their exposures to single or linked counterparties. It is likely that rules will be issued in two batches to enable us to update certain local rules first (i.e. section 87 of the Banking Ordinance) and subsequently to introduce the revised Basel large exposures framework in line with the Basel Committee on Banking Supervision scheduled timeline.

Recovery Planning

We have also consulted the industry on including provisions relating to recovery planning into the Banking Ordinance to increase clarity and transparency in this area and provide the Monetary Authority with necessary powers to ensure that Als are well prepared and implement appropriate recovery plans as required.



HONG KONG RESOLUTION REGIME

- To meet international standards: Financial Stability Board's "Key Attributes of Effective Resolution Regimes for Financial Institutions" (Key Attributes)
- Financial Institutions (Resolution) Ordinance (FIRO) enacted by LegCo in June 2016 (but not yet in force)
- FIRO establishes legal basis for cross-sector resolution regime for financial institutions in Hong Kong. Monetary Authority (MA) will be the resolution authority for authorized institutions and certain financial market infrastructure

- FIRO, which was enacted by the LegCo in June 2016, is designed both to meet the "Key Attributes of Effective Resolution Regimes for Financial Institutions" prescribed by the Financial Stability Board and to enhance the resilience of the financial system in Hong Kong should a financial institution, with potential systemic impact, ever fail.
- FIRO establishes the legal basis for a cross-sector resolution regime for financial institutions in Hong Kong. Once brought into force it will provide the designated resolution authorities (the MA for banks) with powers to prepare for and, if necessary, undertake the resolution of a failed, systemically important financial institution by securing the continuity of critical financial services it provides and imposing losses on its shareholders and creditors instead of public funds.
- FIRO will come into effect on a date to be appointed by the Secretary for Financial Services and the Treasury. Currently work is underway to prepare for the activation of the FIRO powers, including the preparation of a set of rules on "protected arrangements" which will become the subsidiary legislation under FIRO.



HONG KONG RESOLUTION REGIME — NEXT STEPS

- FIRO to be brought into operation and subsidiary legislation developed
- Resolution planning
- Cross-border cooperation with key jurisdictions on resolution planning
- Contribute to the development of internationally harmonised resolution regimes (e.g. participation in Financial Stability Board (FSB) policy development and knowledge sharing with regional Asia-Pacific regulators)

- Priority is to bring FIRO into operation and develop subsidiary legislation, covering the rules and regulations made under FIRO, in particular the regulations on protected arrangements, loss-absorbing capacity and contractual requirements recognising stay on early termination rights.
- Continue to contribute to the development of internationally harmonised resolution regimes by participating in FSB policy formulation regarding: internal total loss-absorbing capacity, bail-in mechanics and continuity of access to financial market infrastructures (e.g. payment/securities settlement systems); and sharing knowledge with regional Asia-Pacific regulators to improve consistency in resolution regimes in the region.
- Advance resolution planning for priority authorized institutions (Als) (e.g. Als that are regarded as systemically important domestically), such as setting resolution strategies, conducting resolvability assessments and identifying actions to remove impediments to resolution (e.g. issuance of loss-absorbing capacity instruments, setting up of bankruptcy remote service companies etc.).
- Continue cross-border cooperation with other key jurisdictions by: participating
 in the crisis management groups of relevant G-SIBs as a host authority;
 leading regional resolution planning as a home authority and establishing
 cross-border cooperation agreements and information sharing arrangements
 as necessary.



BANKING SERVICES DELIVERY CHANNELS (1)

 Branches and ATMs of Hong Kong retail banks are all over Hong Kong Island, Kowloon and New Territories

	Year 2005	Year 2015
Number of branches	1,122	1,174
Number of ATMs	2,361	3,249

 Around 30% of financial transactions are conducted at branch counters, while the remaining transactions are completed through other channels (e.g. ATMs, internet and phone banking services)

- Currently, branches and ATMs of Hong Kong retail banks are all over Hong Kong Island, Kowloon and New Territories. Compared to 1,122 branches and 2,361 ATMs at the end of 2005, there are 1,174 branches and 3,249 ATMs at the end of 2015.
- While basic banking services are generally available in most areas, there is still room for improvement in some remote areas and public housing estates. Regarding the concerns over inadequate banking services in Tin Shui Wai North, we understand that, owing to refurbishment of a shopping mall in Tin Shui Wai North, a bank had to relocate its branch there to another shopping mall in Tin Shui Wai South in order to continue providing banking services to the residents in Tin Shui Wai. In terms of actual operation, unlike the cases of other retailers, the process of re-establishing a bank branch involves much more complex procedures, like the installation of system network and security facilities, etc. For this reason, it would be difficult for the bank to relocate its branch back to Tin Shui Wai North within a short period of time after the shopping mall is refurbished. Furthermore, there are currently 19 ATMs (offered by 6 banks) providing 24-hour basic banking services in Tin Shui Wai North, which is around 4 times more than the number 10 years ago.
- In fact, apart from physical bank branches, banks also have different channels to provide services. We understand that around 30% of the financial transactions were conducted at the counters of physical bank branches at the end of 2014, and the remaining financial transactions were completed through other channels like ATMs, internet and phone banking services. Overall, the various banking services delivery channels can broadly fulfil the needs for basic banking services of the general public, including cash withdrawal, cash deposit, passbook update, balance enquiries, fund transfer, etc.



BANKING SERVICES DELIVERY CHANNELS (2)

The HKMA notes that there is room for improvement for services of physical bank branches in some remote areas, and has taken the following measures:

- Remind banks to take into account the needs and suggestions of the community in their plans for branch networks, and coordinate communication and cooperation among banks and the LINK
- Encourage banks to utilise new technologies and operation modes to supplement existing banking network, including:
 - Mobile branches
 - ➤ Video teller machines
 - ➤ Automatic teller machines
 - Launch of simplified ATM cards, and organisation of educational talks for senior citizens
 - Exploring the use of biometric authentication technology to operate ATMs in order to provide further convenience to the public

- The HKMA understands the public's expectation about accessibility of banking services, and
 has been communicating and cooperating with the banking industry to extend the coverage of
 the banking network and to implement measures to facilitate accessibility of basic banking
 services to the general public, particularly senior citizens and customers in need.
- Currently, among the over 200 public housing estates in Hong Kong, a dozen or so do not have branch services within walking distance, and there is also room for improvement in the coverage of banking networks in some remote areas. We have been reminding banks that, while operating on commercial principles, they should also take into account the needs and suggestions of the community with respect to physical bank branches in their plans for branch networks. The HKMA also facilitates the banking industry and the LINK to communicate and cooperate with each other to jointly enhance banking services in the shopping centres of public housing estates.
- Apart from physical bank branches, with technological advancement, the HKMA also encourages banks to utilise new technologies and operation modes to supplement the existing banking network.
- Two note-issuing banks in Hong Kong have in turn launched their "mobile branches" which go around 10 public housing estates, including Tin Ching Estate and Tin Heng Estate in Tin Shui Wai North, to provide services to residents in the neighbourhood. We understand that more mobile branches are on the way to provide basic banking services to the residents in public housing estates. The work involved in planning for and operating a mobile branch is not straight forward. For example, the technical design of the vehicles needs to fulfil the relevant regulatory requirements. This, coupled with the initial development and set-up costs, demonstrates that the banks concerned shoulder the responsibilities for serving the residents in the public housing estates and the neighbourhood. Operations of the mobile branches are still at an initial stage, and we understand that the current utilisation is still far from saturation points. The HKMA will continue to monitor the operations of mobile branches and customers' needs, and will work with the banks concerned to enhance the services where appropriate.

- Furthermore, several banks have introduced video teller machines (VTMs) to provide interactive banking services to customers and complement the services of traditional ATMs by providing other services like time deposit placement, foreign currency exchange, exchange rate enquiries, etc. The services of VTMs are provided by real persons via the screen. Through the video camera at the VTMs, bank staff at customer service centres can have real-time conversation with customers, assist them to use VTMs and answer their enquiries on banking services. This is particularly useful to senior citizens and other people in need. We understand that a bank will set up in Tin Shui Wai North a self-service banking centre, with VTM services and staff stationed there, to provide basic banking services like opening bank accounts.
- At present, ATMs of banks are all over Hong Kong. The HKMA notes the concerns of people in need, including senior citizens and grassroots who are not familiar with computer operation, and has been reminding banks to take special care of them. Since 2007, the banking industry has introduced simplified ATM cards which simplify the options available at ATMs, reduce the steps needed for cash withdrawal, and display larger fonts on the screen, so as to help senior citizens and other customers in need operate ATMs more easily. The Hong Kong Association of Banks also organises more than 10 ATM education talks for senior citizens each year to demonstrate to them the use of simplified ATM cards. A few hundreds senior citizens participated in such education talks every year to learn how to use simplified ATM cards for basic banking services. The HKMA will continue to encourage the industry to promote the use of simplified ATM cards. Some banks also station staff at certain self-service banking centres to provide assistance to customers.
- We understand that a bank is currently studying the use of biometric authentication technology to operate ATMs in order to further facilitate the use of ATMs by the public.
- In addition, where needed, the public can also withdraw cash at over 2,500 outlets of around 20 merchants, including supermarkets and convenience stores, upon purchase with EPS EasyCash, with a maximum withdrawal amount of HK\$500.
- In the long run, with the advancement of technology, a lot of banking services can be provided through channels other than physical branches, such as ATMs, internet and phone banking services. At the end of 2015, there were about 10.41 million personal internet banking accounts in Hong Kong.
- While providing banking services through electronic channels is the trend, the HKMA will still work closely with the banking industry in enhancing accessibility of basic banking services to the general public, particularly senior citizens and grassroots living in public housing estates. Take Tin Shui Wai North as an example. While a bank branch needed to be relocated to Tin Shui Wai South due to refurbishment of a shopping mall, there are other banking facilities in Tin Shui Wai North, including 2 mobile branches, 19 ATMs, and an upcoming VTM which will be manned by staff, in addition to a physical bank branch.



FINANCIAL INFRASTRUCTURE



FINANCIAL INFRASTRUCTURE

- Continue to maintain safety and efficiency of financial infrastructure
- Reporting by banks to the over-the-counter (OTC) derivatives trade repository (TR) of the HKMA has been smooth. The TR will be further developed to meet local reporting requirements and international standards

61

Operation of financial infrastructure

 The Hong Kong Dollar, US dollar, Euro and RMB Real Time Gross Settlement systems, the Central Moneymarkets Unit (CMU) and the TR for OTC derivatives have been operating smoothly.

OTC derivatives trade repository

- Since the reporting function of the TR was launched in July 2013, reporting by banks to the TR has been smooth.
- A series of system operation training, system testing sessions and regulation briefings have been organised to support the Securities and Futures (OTC Derivatives Transactions-Reporting and Record Keeping Obligations) Rules which came into force on 10 July 2015. Similar events will be organised to support the Securities and Futures (OTC Derivatives Transactions-Reporting and Record Keeping Obligations) (Amendment) Rules, which will come into force on 1 July 2017.



REGULATORY REGIME FOR STORED VALUE FACILITIES (SVF)

- The HKMA granted SVF licences to 5 and 8 SVF issuers on 25 August 2016 and 4 November 2016 respectively
- SVF licensees are introducing or enhancing their services according to their business plans, providing the public with more choices
- In addition to supervision of SVF licensees, the HKMA has stepped up publicity programme via various channels to remind the public of points to note (including security and privacy issues) when using SVFs

62

Implementation of the regulatory regime for SVF:

- A press conference was held on 25 August 2016 to announce the granting of SVF licences to 5 SVF issuers:
 - Alipay Financial Services (HK) Limited
 - HKT Payment Limited
 - Money Data Limited
 - TNG (Asia) Limited
 - Octopus Cards Limited
- Granted the second batch of SVF licences to 8 SVF issuers on 4 November 2016:
 - 33 Financial Services Limited
 - Autotoll Limited
 - ePaylinks Technology Co., Limited
 - K&R International Limited
 - Optal Asia Limited
 - PayPal Hong Kong Limited
 - Transforex (Hong Kong) Investment Consulting Co., Limited
 - UniCard Solution Limited
- Issued "Guideline on Supervision of Stored Value Facility Licensees", "Practice Note on Supervision of Stored Value Facility Licensees" and "Guideline on Anti-Money Laundering and Counter-Terrorist Financing (For Stored Value Facility Licensees)" in September 2016 to facilitate SVF licensees' compliance with the relevant regulatory requirements under the "risk-and-principle-based" approach adopted by the HKMA in supervising SVF licensees as well as requirements on anti-money laundering and counter-terrorist financing.

Public education program:

A series of consumer education programmes (e.g. radio and TV Announcements in the Public Interest (APIs), online advertisements and publications) have been launched to enhance the public awareness of the new regulatory regime and issues associated with the use of retail payment products and services.



E-CHEQUE: PROGRESS UPDATE

- The e-Cheque service was launched on 7 December 2015 and expanded to cover cross-boundary payment following the launch of the joint e-Cheque clearing between Hong Kong and Guangdong province on 20 July 2016
- The operations of e-Cheque infrastructure have been smooth and robust, and the usage of e-Cheques has been increasing steadily
- The acceptance of e-Cheques was gradually broadened to include various Government departments, Mandatory Provident Fund Schemes Authority (MPFA) and public utility companies
- The HKMA continues to conduct consumer education campaigns to enhance the public awareness of e-Cheques

- 10 banks offer e-Cheque issuance service, including HSBC, Hang Seng, BoC(HK), Bank of East Asia, Wing Lung, Fubon, Chiyu, Nanyang Commercial Bank, Agricultural Bank of China and OCBC Wing Hang. Meanwhile, all banks accept the deposit of e-Cheques.
- Under the joint e-Cheque clearing between Hong Kong and Guangdong province, e-Cheques issued by banks in Hong Kong can be deposited with banks in Guangdong province online with settlement completed on T+1 basis.
- Inland Revenue Department, Rating and Valuation Department, The Treasury, Environmental Protection Department and Food and Environmental Hygiene Department of the Government currently allow the public to make bill payments by e-Cheques through the Pay e-Cheque portal. In addition, the MPFA launched an e-Cheque collection portal in September 2016 to facilitate employers and trustees to make payments to the MPFA by e-Cheques.
- To further enhance the public awareness of e-Cheques, the HKMA and HKAB have embarked on a new round of consumer education campaign. These include the placement of e-Cheque advertisements on bus bodies, bus shelters, TV network along the MTR trackside and popular mobile apps. A series of roving exhibitions will also be organised at major shopping malls to promote e-Cheque to the public in an interactive manner in the fourth quarter of this year.



ROLES OF THE FINTECH FACILITATION OFFICE (FFO)

1. Clustering and outreaching platform

 Organise industry liaison events for fintech industry players and interested parties to exchange ideas and share information and insights about market development

2. Research and application (R&A) initiator

- Launched the "Cybersecurity Fortification Initiative", which consists of three pillars – the Cyber Resilience Assessment Framework, the Professional Development Programme and the Cyber Intelligence Sharing Platform
- Collaborating with the Hong Kong Applied Science and Technology Research Institute and industry players on a research project on the blockchain technology

3. Interface between the industry and the HKMA

 Help fintech stakeholders to better understand the regulatory landscape for banking and payment services in Hong Kong, and respond to industry enquiries



PROGRESS OF THE CYBERSECURITY FORTIFICATION INITIATIVE

1. Cyber Risk Assessment Framework

- Completed industry consultation in August 2016
- Refinements to the framework underway
- Details to be announced by the end of 2016 to allow banks to conduct cybersecurity assessments

2. Professional Development Programme

- Completed industry consultation in August 2016
- Industry expert panel is developing the equivalent qualification framework and reviewing other recommendations collected during the consultation
- Launching the programme and announcing details of the equivalent qualification framework by the end of 2016

3. Cyber Intelligence Sharing Platform

 To be launched by the end of 2016, with the participation by all licensed banks



LATEST FINTECH INITIATIVES

1. HKMA-ASTRI Fintech Innovation Hub ("The Hub")

- The FFO announced the establishment of the Hub on 6 September 2016
- The Hub is equipped with all necessary computer resources to enable industry players (such as banks, payment service providers, fintech start-ups, the HKMA, etc.) to try out and evaluate new fintech solutions and conduct proof-of-concept trials

2. Supervisory policies to facilitate fintech development

- The HKMA has been all along encouraging banks to use fintech to improve their services
- E-banking supervisory policy was revised in September 2015
- Fintech Supervisory Sandbox was launched in September 2016
- Banks are actively exploring new fintech products



ENHANCED COMPETENCY FRAMEWORK

- Introduced the Enhanced Competency Framework (ECF) for enhancing the professional competence of banking practitioners and attracting more talents to join the banking industry in Hong Kong
- ECF is not a mandatory regime but a set of professional competence standards of key banking functions
- Setting benchmark can promote personal and career development, hiring and training of professionals, and skills and knowledge transfer
- First two ECF modules on anti-money laundering and counter-terrorist financing as well as cybersecurity will start in December 2016
- Other modules on credit risk management, retail wealth management, treasury management and compliance will be gradually launched in the next two to three years
- In order to enhance the professional competence of banking practitioners and support talent development, the HKMA is developing the ECF for six major functional areas which are central to the safety and soundness of banks, and where manpower and skill shortages are more apparent. This initiative can contribute to the sustainable growth of the industry and talent development in Hong Kong.
- ECF is not intended to be a mandatory qualification or licensing regime for banking practitioners as this may not provide the flexibility to cater for a fast-expanding banking industry and changing business environment.
- It is expected that the ECF, which sets out the professional standards and competency requirements for the banking industry in a systematic way, can benefit banking practitioners and the banking industry in several ways. These include better personal and career development, facilitating hiring of suitable professionals and designing ongoing training programmes, and establishment of a channel for transfer of skills and knowledge across the relevant industry segments.
- Taking into account views from the industry and demand for talents in the respective
 areas, the first two ECF modules to be developed will be anti-money laundering and
 counter-terrorist financing as well as cybersecurity. These two modules will start in
 December 2016. The remaining ECF modules will be developed in the coming years with
 priority subject to consultation with the industry.



CONSUMER EDUCATION PROGRAMME

- Cross-media promotion was launched to educate the public on the new regulatory regime for Stored Value Facilities (SVFs) and smart tips on using SVFs
- Thematic campaign was launched on responsible borrowing
- Publicity was also arranged to remind bank customers to use two-factor authentication for online share trading





Publicity materials on "responsible borrowing" and "SVFs"

- The HKMA launched cross-media promotion campaign on SVFs to educate the public on the new regulatory regime for SVFs and the points to note when using SVFs, in particular the need to understand the terms and conditions of SVFs (including fees, privacy policy, user rights and obligations) and manage the float in SVFs wisely according to payment needs. Publicity is being made across different media platforms, including videos, radio, print, internet, smartphone apps, etc.
- Another thematic campaign was also launched to advocate "responsible borrowing". Through videos, radio clips, print, internet and mobile publicity, members of the public are reminded to assess their financial needs, repayment ability and read the terms and conditions carefully before obtaining a loan.
- Publicity was arranged on radio and internet to disseminate safety tips in order to remind bank customers to use two-factor authentication for online share trading.



ENHANCEMENTS TO DEPOSIT PROTECTION SCHEME

- Following the implementation of the gross payout approach, the Deposit Protection Scheme (DPS) is able to make payouts to affected depositors within 7 days under most circumstances
- Completed revisions to IT system, information submission requirements and the return on relevant deposits
- With a more effective DPS in place, eligible banks may adopt a lower run-off factor for certain types of expected cash outflow for the purpose of calculating their Liquidity Coverage Ratios. The industry has been consulted on the proposed treatment and the finalised arrangement will be announced in due course

- Following the gazettal of the Deposit Protection Scheme (Amendment) Ordinance 2016 on 24 March 2016, compensation payments will be made using the gross payout approach if there is a bank failure. Under most circumstances, the DPS is able to reimburse affected depositors of a failed bank within 7 days upon triggering of the DPS. This helps contribute to a more robust financial safety net in line with global reform trends.
- Deposit Protection Board has also adjusted its IT system and revised the information submission requirements and the return on relevant deposits to ensure smooth transition to the gross payout approach.
- With a more effective DPS in place, eligible banks may adopt a lower run-off factor for certain types of expected cash outflow (e.g. applying a 3% instead of 5% outflow rate for "stable retail deposits") for the purpose of calculating their Liquidity Coverage Ratios. They can therefore manage their liquidity position more effectively in their daily operation.



COIN COLLECTION PROGRAMME

- The Coin Collection Programme as a pilot scheme has been extended up to September 2018. Two Coin Carts collect coins from members of the public in the 18 districts on a rotation basis and free of charge
- From the start in October 2014 to October 2016, the two Coin Carts had served 230,000 people, collecting 200 million coins with a total face value of \$239 million



GOVERNMENT BOND PROGRAMME

Institutional part

- Thirteen issues totalling HK\$76.3 billion were outstanding as at end October 2016
- Two Islamic bonds totalling US\$2 billion were outstanding as at end October 2016

Retail part

- Three iBonds and one Silver Bond totalling HK\$33 billion were outstanding as at end October 2016
- The inaugural Silver Bond of HK\$3 billion was successfully issued in August. Total subscription amount was HK\$8.9 billion. The number of subscribers was 76,009
- The sixth issue of iBond was successfully issued in June.
 Total subscription amount was HK\$22.5 billion. The number of subscribers was 507,978



REGULATORY DEVELOPMENT OF THE OTC DERIVATIVES MARKET

- Following the enactment of the Securities and Futures (Amendment) Ordinance 2014, which provides for the regulatory regime for the over-the-counter (OTC) derivatives market, the rules for the first phase of reporting and related record keeping obligation under the regime took effect in July 2015
- The first phase of mandatory clearing and related record keeping obligations took effect on 1 September 2016
- The rules for the second phase of reporting obligations will commence on 1 July 2017



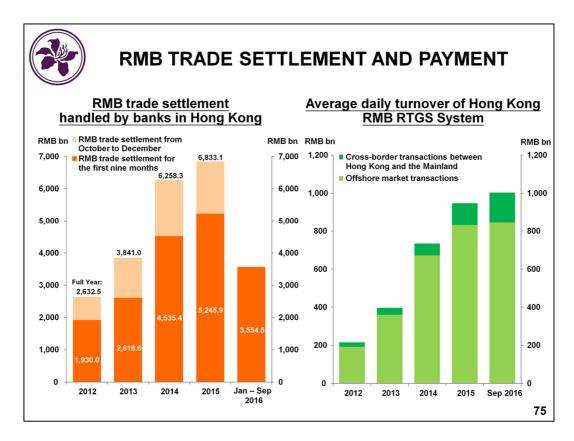
FINANCIAL BENCHMARK REFORM IN HONG KONG

- Having regard to local market conditions, Hong Kong has been reviewing the need and feasibility in reforming major interest rate and foreign exchange (FX) benchmarks along international recommendations promulgated to enhance the transparency and robustness of benchmarks that are widely used in the global financial markets
- For FX benchmarks, the USD/HKD and USD/CNY(HK) Spot Rates are determined based on actual transactions with effect from 1 August 2016
- For interest rate benchmarks, the HKMA is analysing relevant transaction data to study reform feasibility, and will work with the industry to consult stakeholders on the proposed way forward

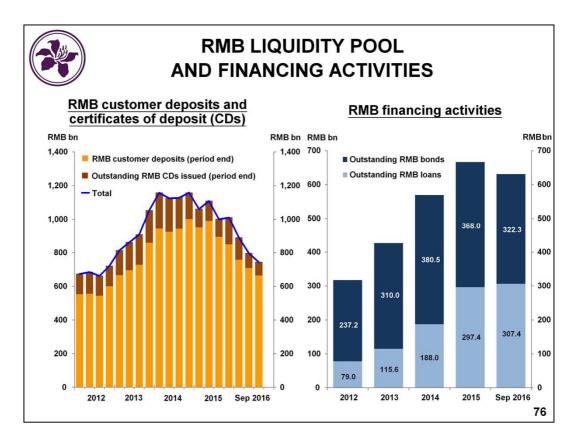
- In July 2013, the International Organization of Securities Commissions (IOSCO) promulgated a set of principles, containing an overarching framework of recommended practices for financial benchmarks in general. The Financial Stability Board (FSB) also established the Official Sector Steering Group (OSSG) and the Foreign Exchange Benchmark Group (FXBG) to review, and make recommendations on, interest rate benchmarks (the three major IBORs, i.e. London Interbank Offered Rate (LIBOR), Euro Interbank Offered Rate (EURIBOR) and Tokyo Interbank Offered Rate (TIBOR)) and FX benchmarks (WM/Reuters 4pm London Spot Rate) that are widely used in the global financial markets.
- The thrust of the international recommendations is that if market conditions permit, financial benchmarks should be calculated based on actual transactions only. On how to implement the relevant recommendations, both IOSCO and FSB take the view that there is no one-size-fits-all method. Individual jurisdictions should implement the recommendations in a manner commensurate with the size and risks of the relevant benchmark-setting processes.
- The HKMA has been working with the administrator of Hong Kong's financial benchmarks, namely the Treasury Markets Association (TMA), to reform the Hong Kong Interbank Offered Rate (HIBOR) as appropriate. The HKMA will take into account international progress and developments as reference for our local review.



HONG KONG AS AN INTERNATIONAL FINANCIAL CENTRE



- In the first three quarters of 2016, RMB trade settlement handled by banks in Hong Kong amounted to RMB3,554.5 billion.
- In September 2016, the daily average turnover of Hong Kong RMB Real Time Gross Settlement (RTGS) system reached RMB1,002.5 billion.



- At end-September 2016, RMB customer deposits and outstanding RMB certificates of deposit amounted to RMB665.5 billion and RMB77.7 billion respectively, totaling RMB743.2 billion, down 26% since the end of 2015. Nevertheless, liquidity management of Hong Kong banks remains robust, the offshore RMB market in Hong Kong continues to function in an orderly manner, and current liquidity pool is adequate to support large amount of RMB financial transactions and payments.
- Outstanding RMB loans reached new high at end-September 2016, amounting to RMB307.4 billion, up 3% from the end of 2015. Outstanding dim sum bonds amounted to RMB322.3 billion, down 12% from the end of 2015. In the first three quarters of 2016, dim sum bond issuance totalled RMB33.5 billion.



MAINTAINING RMB BUSINESS LINKS WITH OTHER JURISDICTIONS

	Sep 2016	2015	2014	2013
No. of participating banks of Hong Kong's RMB clearing platform	212	217	225	216
Of which: Branches and subsidiaries of overseas banks and overseas presence of Mainland banks	187	192	200	191
Amount due to overseas banks (RMB billion)	85.0	105.7	145.2	166.0
Amount due from overseas banks (RMB billion)	127.4	132.1	193.3	164.5

- The HKMA maintained ongoing dialogues with other offshore RMB centres and continued to strengthen our marketing efforts through active participation in industry events to promote Hong Kong's RMB business platform and our unique role as a springboard between the Mainland and the rest of the world.
- We conducted a roadshow in Frankfurt, Germany at the Hong Kong Trade Development Council's "Think Asia, Think Hong Kong" campaign in September 2016 to promote the role of Hong Kong in supporting multinational companies to embrace the growing opportunities in the Mainland. We also spoke at an industry conference for overseas central bank representatives in July, the Treasury Markets Summit and the Hong Kong Institute of Bankers' Annual Banking Conference in September respectively, elaborating on opportunities arising from RMB internationalisation and the Belt and Road Initiative.



DEVELOPING HONG KONG AS A CTC HUB

- To attract multinational and Mainland enterprises to set up their corporate treasury centres (CTCs) in Hong Kong will bring more banking, financing and risk management activities in Hong Kong, deepen our capital markets and provide impetus to the development of headquarters economy in Hong Kong
- Inland Revenue (Amendment) (No. 2) Ordinance 2016 was gazetted and came into operation on 3 June 2016 to allow, under specified conditions, the deduction of interest expenses in calculating profits tax for the intra-group financing business of corporations, and to reduce profits tax rate for specified treasury activities by 50 per cent (i.e. to 8.25%) for qualifying CTCs
- We will continue to engage the industry and step up marketing effort to promote Hong Kong as a preferred regional location for CTCs

- Developing Hong Kong into a regional hub for corporate treasury centres has been one of the important areas of work of the HKMA in recent years. With their vast, global business networks, some multinational corporations (MNCs) process numerous large-value payments on a daily basis. Under their treasury management systems, it is common for cash management, receipt/payment processing, financing, risk management, etc. to be centralised to facilitate management of these corporate treasury functions. The development of Hong Kong as a CTC hub would complement many of Hong Kong's existing strengths, such as the global offshore renminbi business hub, capital formation, banking networks, etc., thereby reinforcing Hong Kong's status as an international financial centre and promoting the development of headquarters economy in Hong Kong.
- The HKMA has been working closely with the private sector and other Government agencies in organising various marketing activities to promote Hong Kong as a preferred regional destination for CTCs. To that end, we have met with over 280 corporations, financial institutions and industry associations as of June 2016.

CONTINUED DEVELOPMENT AS AN INTERNATIONAL ASSET MANAGEMENT CENTRE

- The HKMA continues to promote Hong Kong's platform as an asset management centre
- The combined fund management business in Hong Kong reaches US\$2.2 trillion at the end of 2015
- Continued increase in the number of licensed corporations and licensed individuals for asset management
- Close to 70 of the 100 largest global money managers have offices in Hong Kong
- Growing network of prominent asset owners, including the Abu Dhabi Investment Authority (ADIA), which has opened office in Hong Kong in October 2016.
- 22 private banks have opened for business in Hong Kong since 2009, bringing the total to 47 banks offering private wealth management services in Hong Kong as of August 2016
- According to the Securities and Futures Commission (SFC)'s survey, 68.5% of the combined fund management business in Hong Kong was sourced from non-Hong Kong investors in 2015, attesting to the fact that Hong Kong is a preferred location for asset management business in the region.
- The number of licensed corporations for asset management increased from 680 in 2008 to 1,197 as of the second quarter of 2016.
- Close to 70 of the 100 largest global money managers (ranked by assets under management as of end-2015) have offices in Hong Kong, and over 60 of them are licensed by the SFC.
- Hong Kong is a hub for global asset owners. In October 2016, ADIA, one of the largest sovereign wealth funds in the world, has chosen Hong Kong to open its first office in Asia Pacific.
- Achieved leading positions as an asset management centre in Asia Pacific:
 - 1. Hong Kong is the second largest private equity hub in Asia. The total capital under management in private equity funds in Hong Kong reached US\$120 billion as of the second quarter of 2016.
 - 2. About 50% of RMB Qualified Foreign Institutional Investor managers and 60% of Qualified Foreign Institutional Investor managers, as well as close to 80% of Mainland fund management and securities firms with Qualified Domestic Institutional Investor licence have a presence in Hong Kong as of August 2016.
 - 3. Hong Kong is also the largest hub for hedge funds in Asia, with the number of funds increased from 676 in 2012 to 778 as of end-September 2014.



DEVELOPMENT OF ISLAMIC FINANCE

- Following the success of the two sukuk issuances in the past two years, the Government will look for opportunities to launch the third sukuk when market conditions are conducive
- The HKMA will develop a detailed issuance plan having regard to market conditions
- The HKMA will also continue to share its previous sukuk issuance experiences with enterprises which have funding needs



INFRASTRUCTURE FINANCING FACILITATION OFFICE (IFFO)

- Infrastructure Financing Facilitation Office (IFFO) was launched in early July 2016 with the mission to facilitate infrastructure investments and their financing by working with a cluster of key stakeholders
- The functions of IFFO are:
 - 1. providing a platform for information exchange and experience sharing:
 - 2. building capacity and knowledge on infrastructure investments and financing;
 - 3. promoting market and product development; and
 - 4. facilitating infrastructure investment and financing flows
- As of October 2016, over 50 organisations from Mainland China, Hong Kong and overseas have joined as partners. They include multilateral financial agencies and development banks, public sector investors, private sector investors/asset managers, banks, infrastructure project developers and operators, and professional service firms

 IFFO has been proactively working on different aspects since its launch on 4 July 2016.

- IFFO co-organised its inaugural conference with Boao Forum of Asia on 5 July 2016, covering a series of economic and financial issues of wide concern, including monetary policy and economic growth, cross-border capital flows, infrastructure and its financing, Asian financial cooperation, etc.
- IFFO has participated in various overseas and local conferences and events to discuss infrastructure investment and financing.
- IFFO hosted its first executive workshop co-organised by International Finance Corporation and Eastspring Investments on 26-28 October, with the theme of "Private Participation in Infrastructure Project Finance in Emerging Markets".

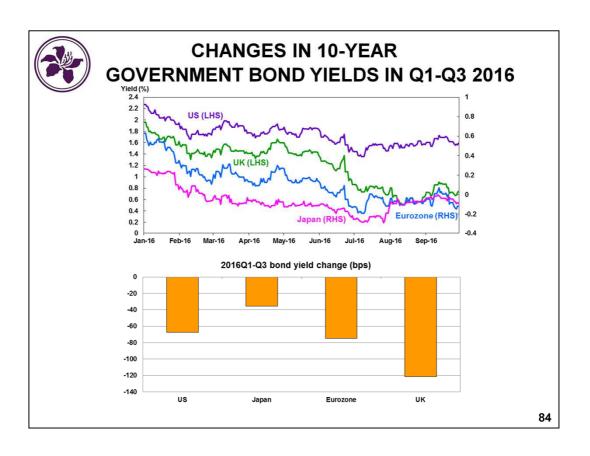


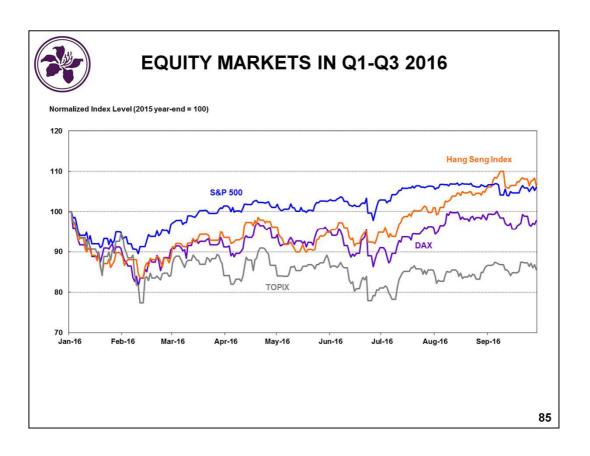
INVESTMENT ENVIRONMENT AND PERFORMANCE OF THE EXCHANGE FUND

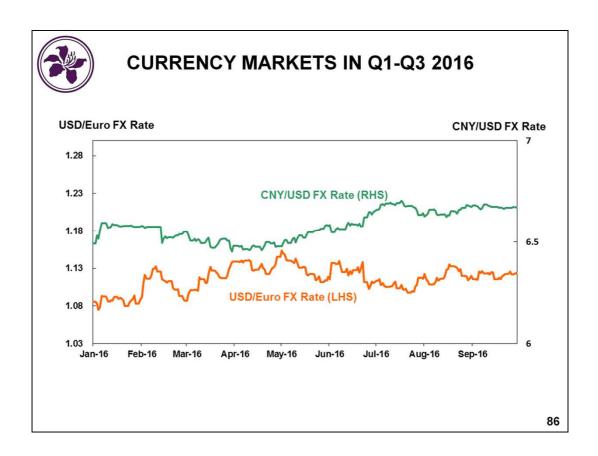


INVESTMENT ENVIRONMENT IN Q3 2016

- Interest rates: 10-year US Treasury and Japanese government bond yields crept up in Q3 2016, on growing expectations of Federal Reserve rate hike later in the year and the Bank of Japan's increasing focus on suppressing short-term yields. On the other hand, major 10-year European government bond yields stayed largely unchanged or even declined, as European government bond prices held up well amidst lingering Brexit uncertainties
- **Equity markets**: Major equity markets remained well supported in Q3 2016 by the accommodative central bank monetary policies after the Brexit referendum
- Exchange rates: The US dollar moved sideways against the major currencies, including the euro and the renminbi, in Q3 2016









INVESTMENT INCOME

	k	— 201 (unaudit	•		2015	2014
(HK\$ billion)	Jan - Sep	Q3	Q2	Q1	Full Year	Full Year
Hong Kong equities*			2.7	(6.2)	(5.0)	6.5
Other equities			5.1	(9.9)	7.1	33.7
Bonds			19.3	25.0	15.9	47.3
Other investments@			4.3	1.3	11.1	9.9
Foreign exchange#			<u>(12.5)</u>	<u>15.2</u>	<u>(44.9)</u>	<u>(52.7)</u>
Investment income/(loss)			18.9	25.4	(15.8)	44.7

^{*} Excluding valuation changes of the Strategic Portfolio

[©] Including valuation changes of private equity and real estate investments held under the Long-Term Growth Portfolio (LTGP).

[#] This is primarily the effect of translating non-US dollar foreign currency assets into Hong Kong dollar after deducting the portion for currency hedging



INCOME AND EXPENDITURE

	k	— 2016 —— (unaudited)	──	2015	2014	
(HK\$ billion)	Jan - Sep	Q3 Q	2 Q1	Full year	Full year	
Investment income/(loss)		18.	9 25.4	(15.8)	44.7	
Other income		0.	1 0.0	0.2	0.2	
Interest and other expenses		(1.7	<u>(1.2)</u>	(4.8)	_ (5.2)	
Net income/(loss)		17.	3 24.2	(20.4)	39.7	
Fee payable to Fiscal Reserves*#		(5.7	(6.0)	(46.7)	(27.5)	
Fee payable to HKSAR government funds and		(0.	(0.0)	(4.4.7)	(2.0)	
statutory bodies*		(2.4	(2.3)	(14.7)	(8.6)	

 $^{^{\}ast}~$ The rate of fee payment is 3.3% for 2016, 5.5% for 2015 and 3.6% for 2014

[#] This does not include the 2016 fee payment to the Future Fund because such amount will only be calculated when the figures on the LTGP annual performance for 2016 are available



EXCHANGE FUND ABRIDGED BALANCE SHEET

(HK\$ billion)	30 Sep 2016	31 Dec 2015	31 Dec 2014
ASSETS	(unaudited)		
Deposits		290.5	315.6
Debt securities		2,462.0	2,146.3
Hong Kong equities *		148.2	156.8
Other equities		392.4	416.3
Other assets #		129.8	114.0
Total assets		3,422.9	3,149.0
		=====	=====
LIABILITIES AND FUND EQUITY			
Certificates of Indebtedness		357.9	340.2
Government-issued currency notes & coins in circulation		11.3	11.0
Balance of the banking system		391.3	239.2
Exchange Fund Bills and Notes issued		827.8	752.4
Placements by banks and other financial institutions		66.9	64.0
Placements by Fiscal Reserves		833.5	788.7
Placements by HKSAR government funds and statutory bodies		280.9	261.1
Other liabilities		108.4	56.9
Total liabilities		2,878.0	2,513.5
Accumulated Surplus		544.9	635.5
Total liabilities and fund equity		3,422.9 =====	3,149.0 =====

^{*} Including shares of the Hong Kong Exchanges and Clearing Limited in the Strategic Portfolio

Including fund injection to Exchange Fund's investment holding subsidiaries at a carrying amount of HK\$96.0 billion at 31 Dec 2015 and HK\$82.6 billion at 31 Dec 2014



HISTORICAL INVESTMENT INCOME

(HK\$ billion)					
Year	Full Year	Q4	Q3	Q2	Q1
2001	7.4	13.6	10.4	(2.0)	(14.6)
2002	47.0	26.3	(2.1)	26.5	(3.7)
2003	89.7	33.5	8.4	41.1	6.7
2004	56.7	33.0	14.1	(7.2)	16.8
2005	37.8	7.3	19.0	13.6	(2.1)
2006	103.8	36.0	37.1	12.5	18.2
2007*	142.2	33.4	61.8	26.3	20.7
2008*	(75.0)	8.3	(48.3)	(20.4)	(14.6)
2009*#	107.7	10.6	71.9	58.7	(33.5)
2010*#	79.4	5.9	74.5	(12.1)	11.1
2011*#	27.1	22.1	(41.4)	21.6	24.8
2012*#	111.6	30.3	42.4	(5.6)	44.5
2013*#	81.2	30.7	54.7	(23.3)	19.1
2014*#	44.7	6.1	(17.8)	43.3	13.1
2015*#	(15.8)	21.0	(63.8)	18.7	8.3
2016*# (unaudited)	N/A	N/A		18.9	25.4

^{*} Excluding valuation changes of the Strategic Portfolio

Including valuation changes of private equity and real estate investments held under the LTGP



HONG KONG MORTGAGE CORPORATION



MORTGAGE INSURANCE PROGRAMME (MIP)

- Since its launch in March 1999, the MIP has helped over 121,700 families attain home ownership
- In the first nine months of 2016, the total drawdown amount under the MIP was HK\$15.3 billion and the average loan size was HK\$3.4 million
- About 80% of drawn down loans were for secondary market properties



REVERSE MORTGAGE PROGRAMME (RMP)

- As at end of September 2016, 1,342 applications have been received:
 - Average age of borrowers: 69 years old
 - Average monthly payout: HK\$15,300
 - Payment terms: 10-year (29%), 15-year (16%), 20-year (13%), life (42%)
 - Average property value: HK\$5.2 million
 - Average property age: 30 years
- On 13 October 2016, an enhancement was launched to extend the RMP to cover subsidised sale flats with premium not yet paid



SME FINANCING GUARANTEE SCHEME (SFGS)

- To take timely and appropriate measures to stimulate the economy, support local enterprises and safeguard employment, the Financial Secretary announced in the 2016-17 Budget Speech the extension of application period for the 80% loan guarantee product until 28 February 2017
- The 80% loan guarantee product has been well received by the market. As at end of September 2016, 11,210 applications were approved, involving a total loan amount of around HK\$44.9 billion. Key data of the approved applications are as follows:

Average guarantee period	4.6 years
Proportion of application from manufacturing and non-manufacturing industries	24% and 76% (in terms of no. of applications approved)
Enterprises with less than 50 employees	91%

Average loan size	HK\$4.01 million
Average loan interest rate and average guarantee fee rate	4.81% p.a. 0.54% p.a.
Benefitted enterprises and the related no. of employees	6,960 enterprises and 179,681 employees

94

Industry types of approved applications for 80% loan guarantee products:

Manufactu	ıring sector –	23.8%
_	Textiles and clothing	4.6%
_	Electronics	2.2%
_	Plastics	1.9%
_	Printing and publishing	1.7%
Non-manu	ıfacturing sector –	76.2%
_	Trading	46.0%
_ _	Trading Wholesale and retail	46.0% 8.8%
_ _ _	9	



MICROFINANCE SCHEME

- Launched in June 2012, trial period up to 2018 and maximum aggregate loan amount up to HK\$200 million
- As at end of September 2016, the Scheme received 397 formal loan applications. Out of the vetted applications, 179 have been approved with the total loan amount of HK\$45 million. The approval rate is around 48%
- For the approved applications, the average loan size was about HK\$251,000 and the average loan tenor was 4.6 years

95

 Industry types for the approved start-up loans and self-employment loans (excluding 2 self-enhancement loans):

Some approved applications are classified as more than one of these industry types.

Retail 68 cases (29%)
Services 111 cases (46%)
Wholesale 36 cases (15%)
IT related 8 cases (3%)
Manufacturing 16 cases (7%)

* Component percentages in the table above may not add up to 100% due to rounding.



PREMIUM LOAN INSURANCE SCHEME (PLIS)

- PLIS was launched in September 2015 to provide owners of subsidised housing properties who are aged 50 or above with an additional financing option to settle land premium payment
- After settling premium payment, borrowers will have greater flexibility in letting or selling their properties in the open market
- The scheme can help release some under-utilised flats and promote the market circulation of subsidised housing properties
- As at end-September 2016, over 2,200 enquiries and 11 applications have been received