



**HONG KONG MONETARY AUTHORITY**

**Briefing to the Legislative Council  
Panel on Financial Affairs**

**5 November 2018**



## 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



# **FINANCIAL AND ECONOMIC ENVIRONMENT**



## GLOBAL ECONOMIC GROWTH FORECASTS

### Real GDP Growth

(% year-on-year)

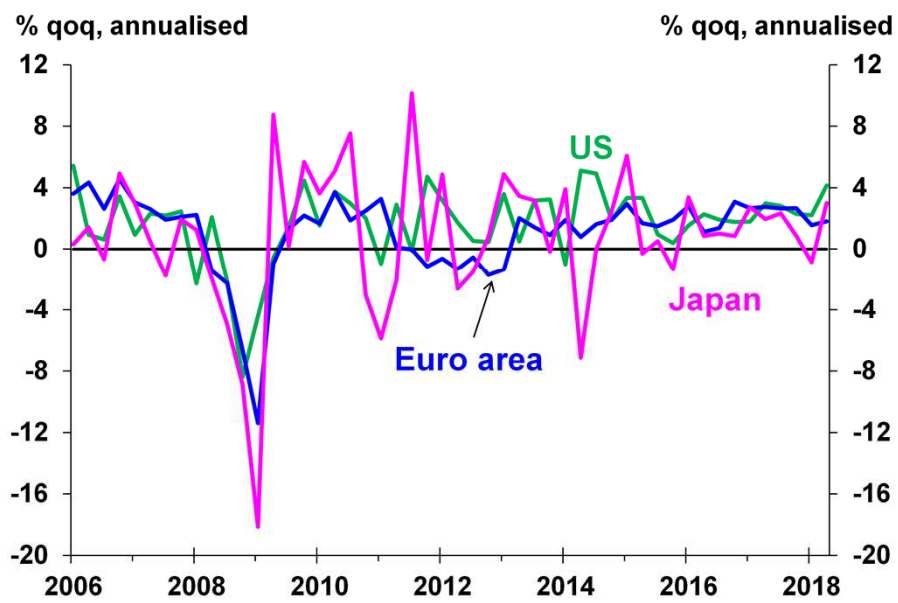
	2017	2018 Forecasts	2019 Forecasts
<b>US</b>	2.2	2.9	2.6
<b>Euro area</b>	2.5	2.0	1.8
<b>Japan</b>	1.7	1.1	1.2
<b>Asia (ex-Japan)</b>	6.0	5.9	5.6
<b>Mainland China</b>	6.9	6.6	6.3
<b>Hong Kong</b>	3.8	3.6	2.7

Sources: October Consensus Forecasts and Official Statistics





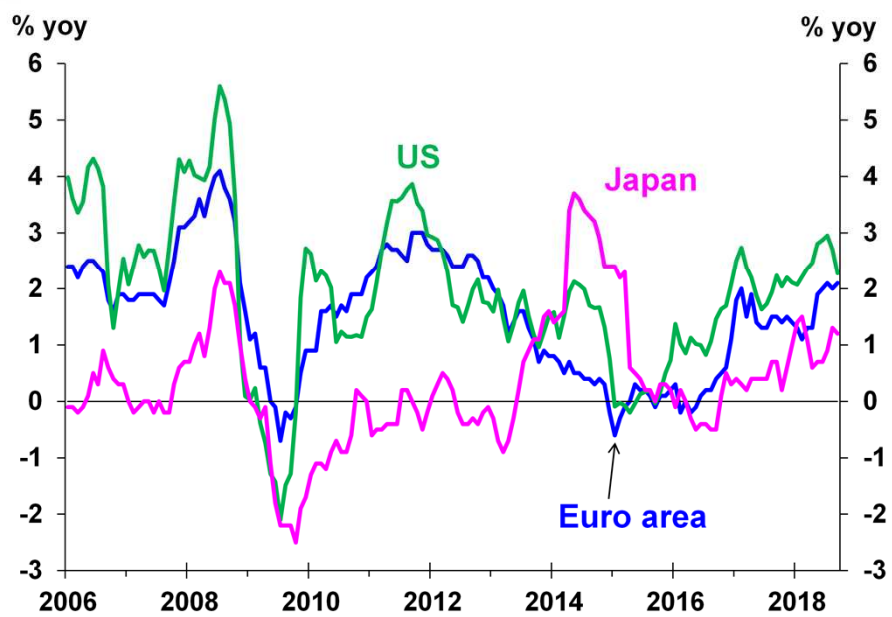
## REAL GDP GROWTH IN MAJOR COUNTRIES



Source: CEIC



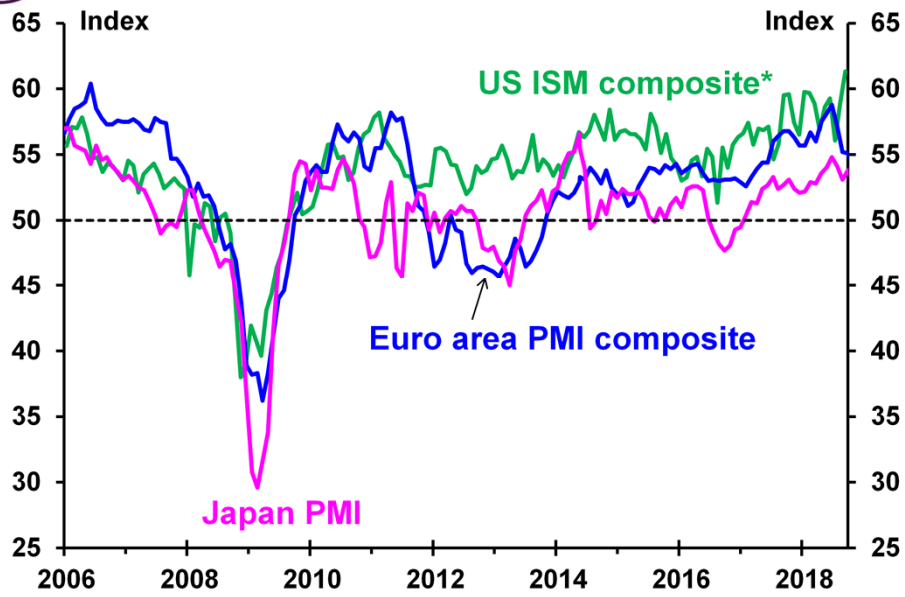
## HEADLINE INFLATION IN MAJOR COUNTRIES



Source: CEIC



## PURCHASING MANAGERS' INDEX IN MAJOR ECONOMIES

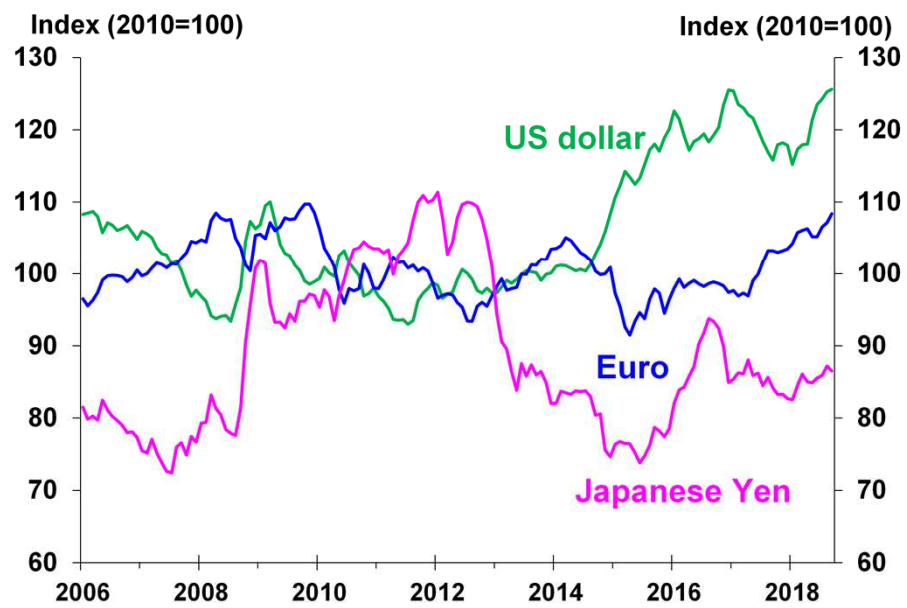


\*Weighted average of the ISM manufacturing and non-manufacturing indices

Sources: Bloomberg and CEIC



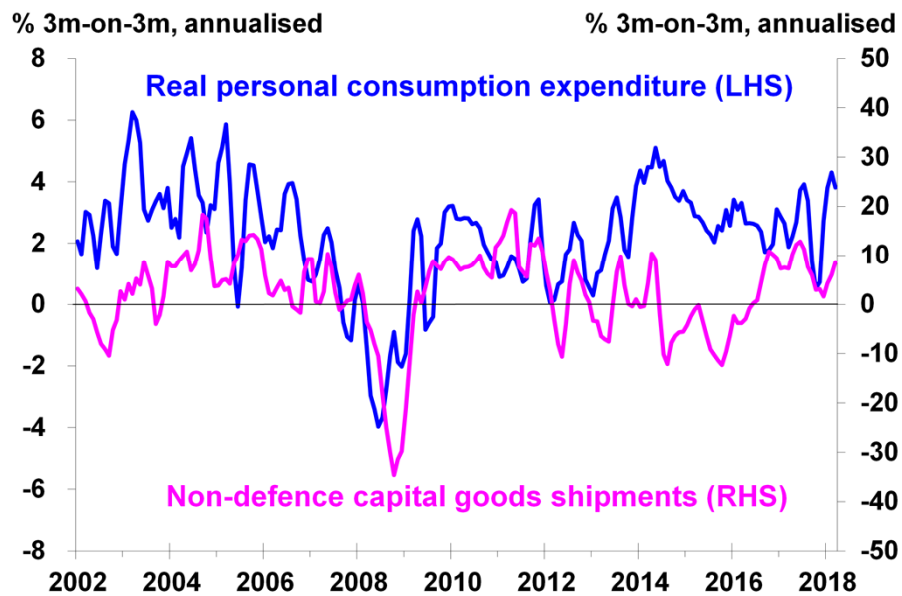
## NOMINAL EFFECTIVE EXCHANGE RATE INDEX OF MAJOR CURRENCIES



Source: CEIC



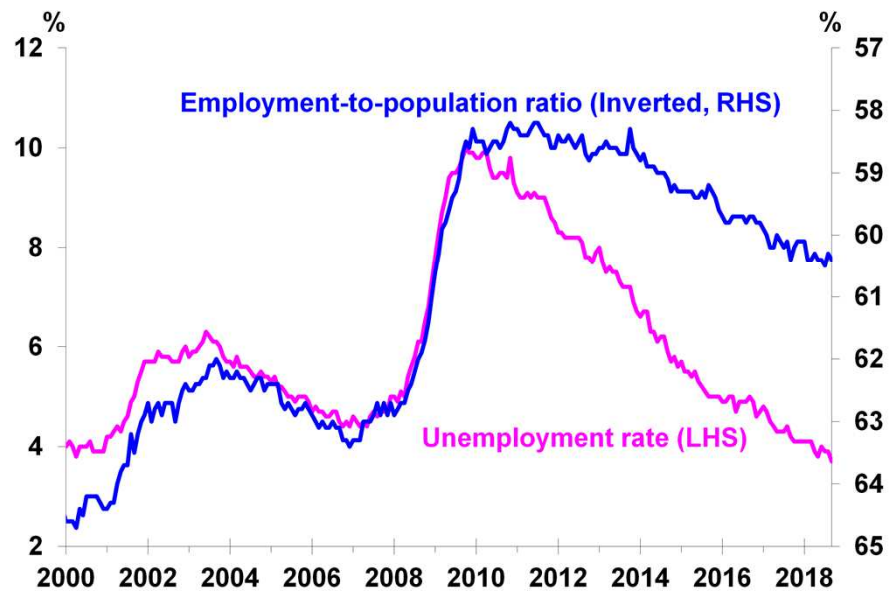
## US: CONSUMPTION GROWTH & BUSINESS INVESTMENT ACTIVITY



Source: CEIC



## US: LABOUR MARKET SITUATION



Source: CEIC



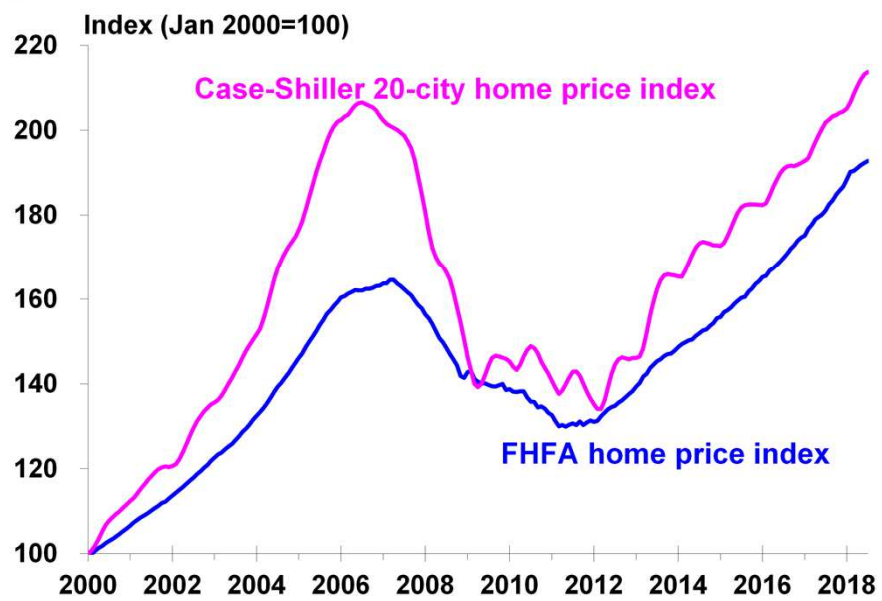
## US: LABOUR FORCE PARTICIPATION



Source: CEIC



## US: HOME PRICES

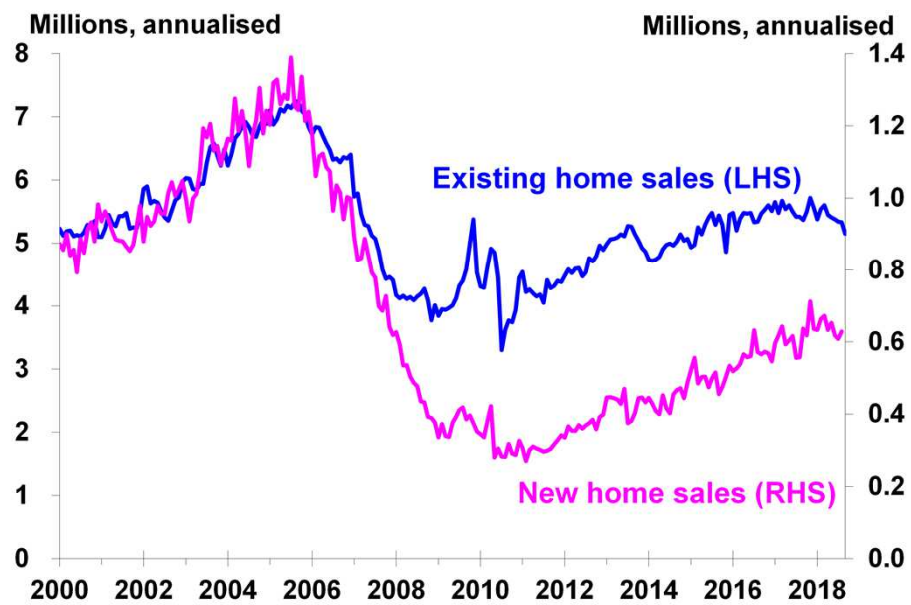


Sources: CEIC and Datastream





## US: HOME SALES

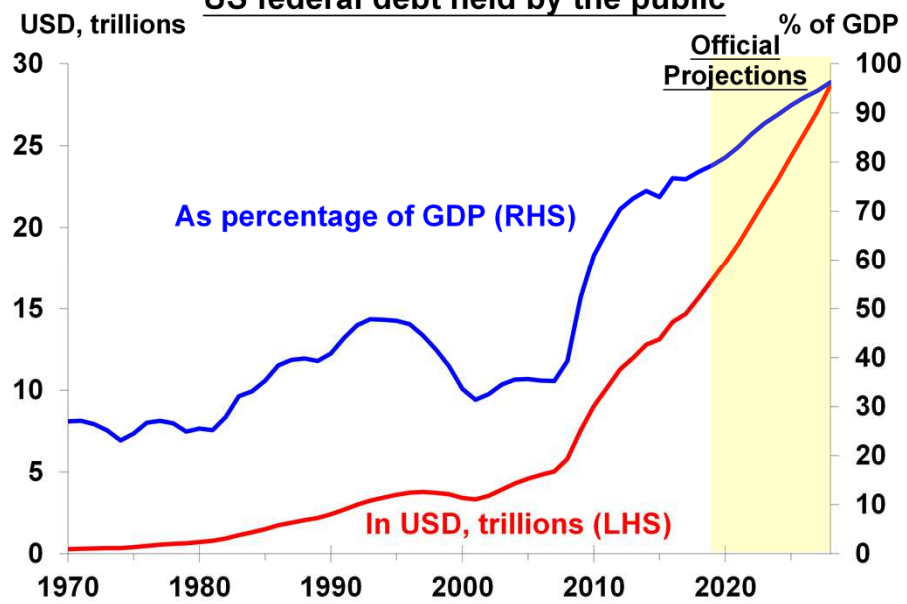


Source: CEIC



## US: FEDERAL GOVERNMENT DEBT

### US federal debt held by the public

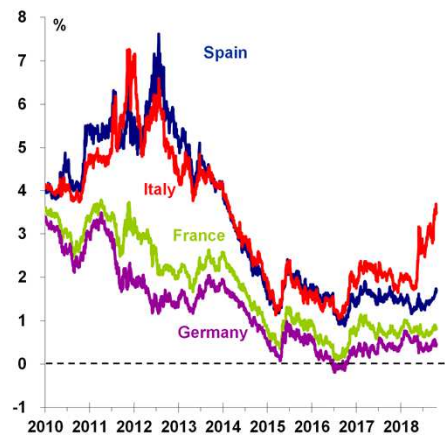
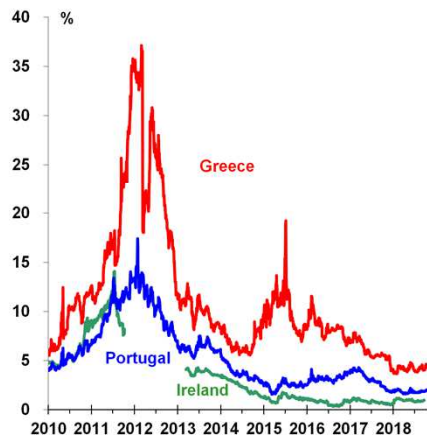


Sources: CEIC and Congressional Budget Office



## EURO AREA: SOVEREIGN BOND YIELDS

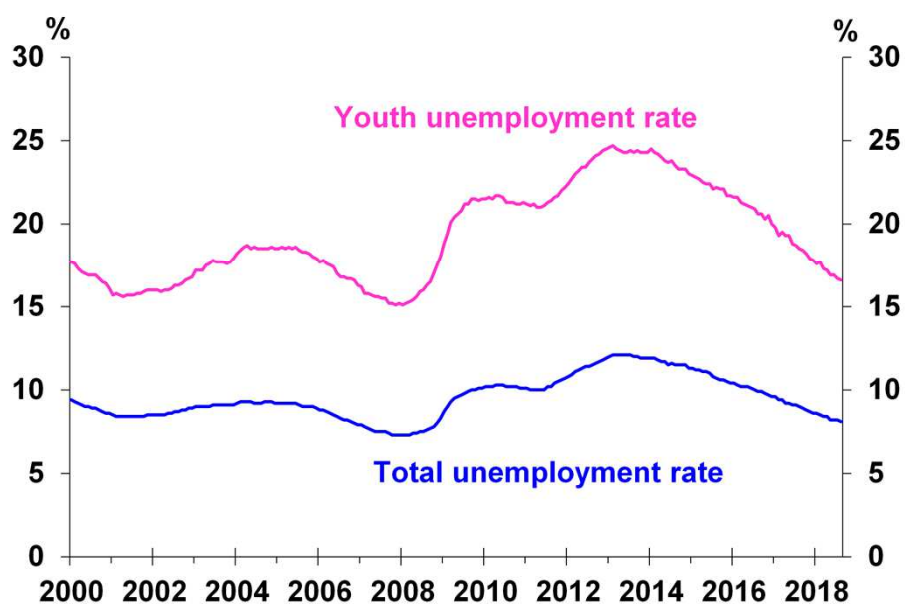
### 10-year sovereign bond yield



Note: 10-year Irish sovereign bond yield data is not available between 12 October 2011 and 14 March 2013  
Source: Bloomberg



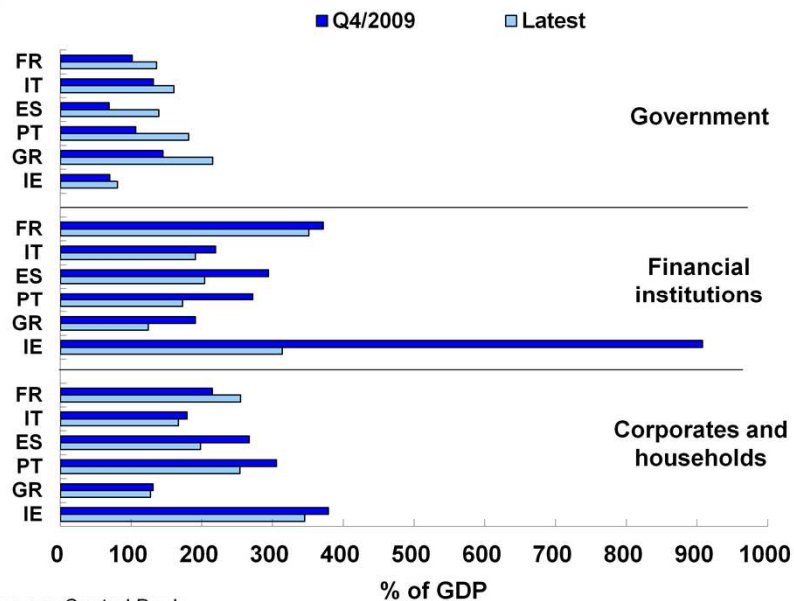
## EURO AREA: UNEMPLOYMENT RATE



Source: Bloomberg



## EURO AREA: OVERALL INDEBTEDNESS



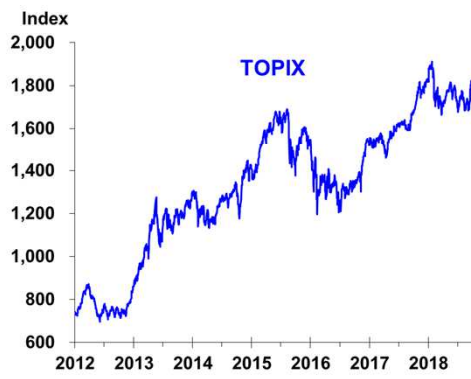
Source: European Central Bank

Note: FR – France, IT – Italy, ES – Spain, PT – Portugal, GR – Greece, IE – Ireland

The latest figures for government are up to Q1/2018 whilst the rest are up to Q2/2018



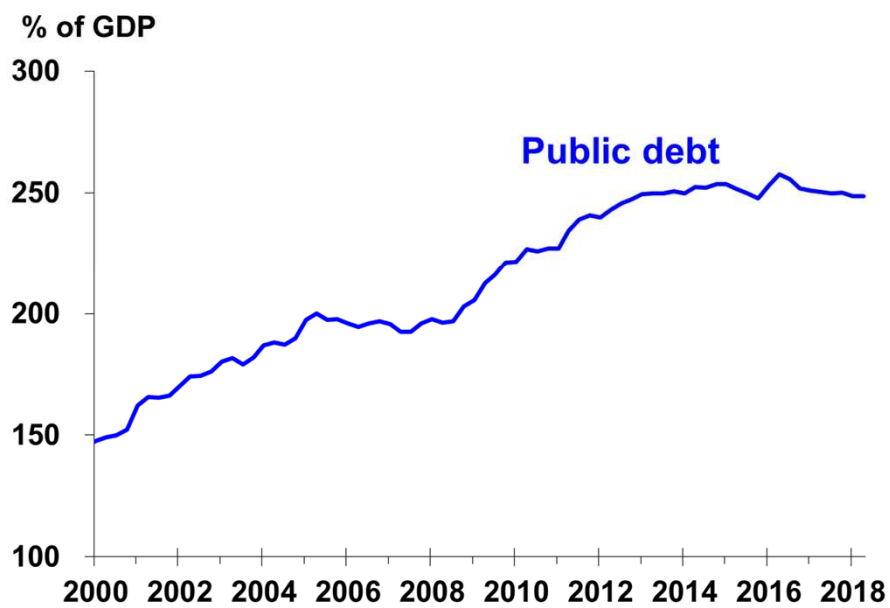
## JAPAN: FINANCIAL MARKETS



Source: Bloomberg



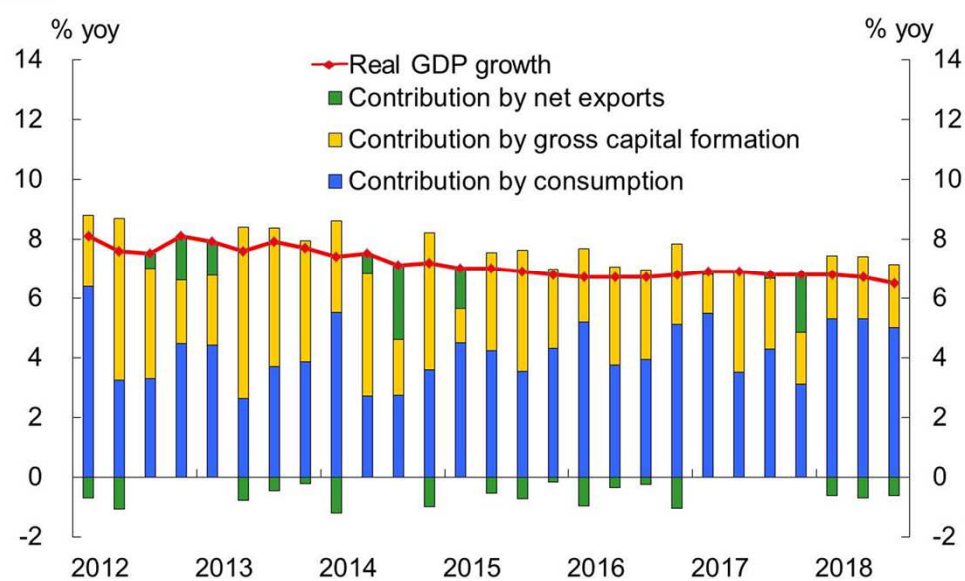
## JAPAN: PUBLIC DEBT



Sources: Bank of Japan and CEIC



## MAINLAND CHINA: REAL GDP GROWTH



Source: CEIC





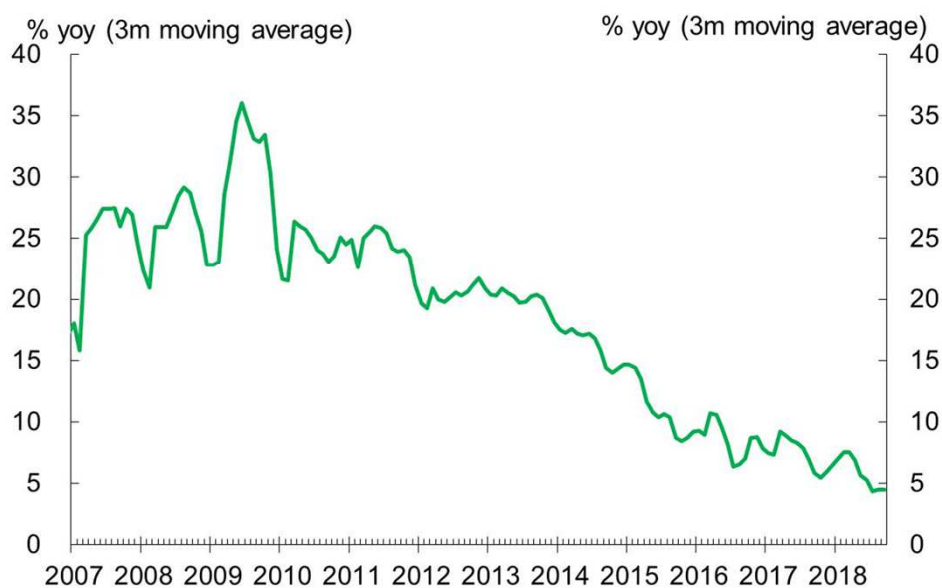
## MAINLAND CHINA: RETAIL SALES



Note: January and February figures are the average annual growth rate for the first two months of the year  
Sources: WIND and HKMA staff estimates



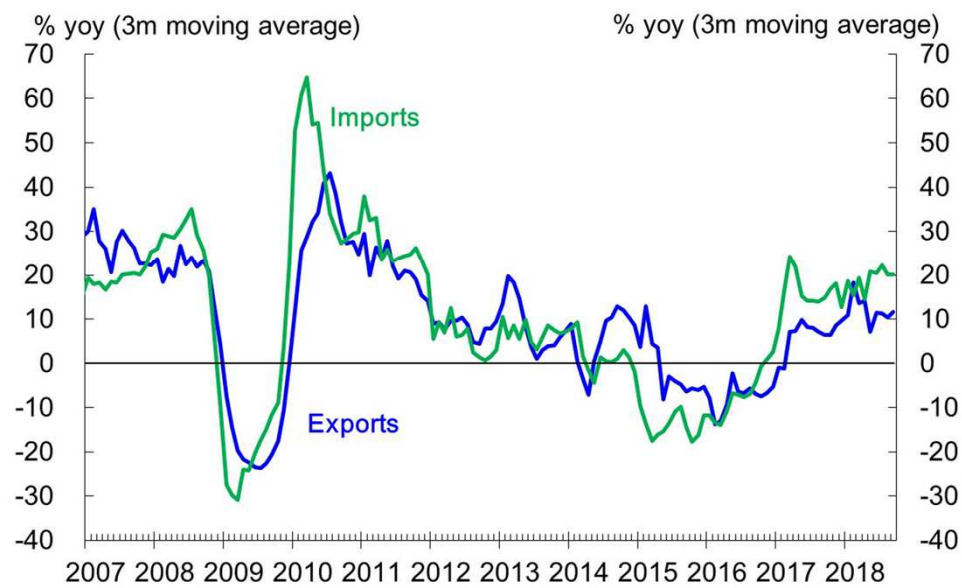
## MAINLAND CHINA: FIXED ASSET INVESTMENT



Sources: CEIC and HKMA staff estimates



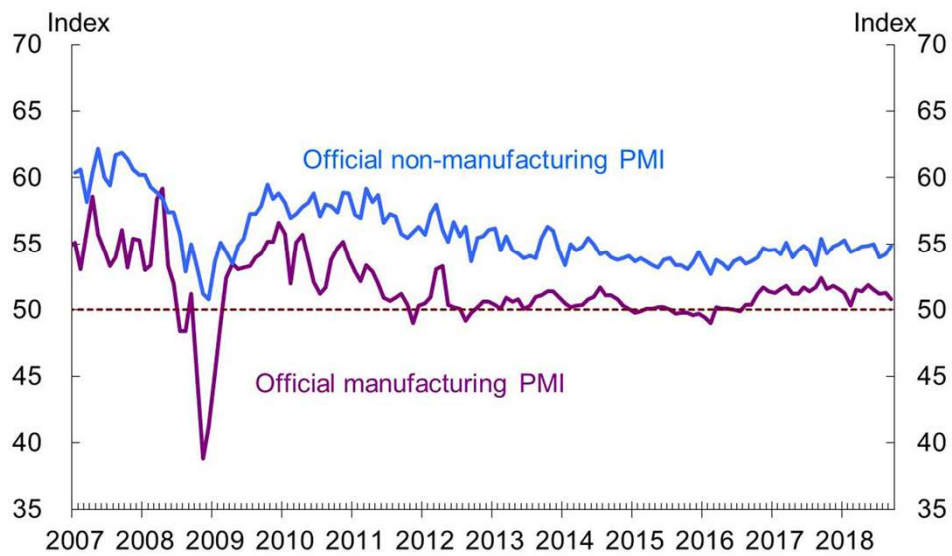
## MAINLAND CHINA: IMPORT AND EXPORT GROWTH



Sources: CEIC and HKMA staff estimates



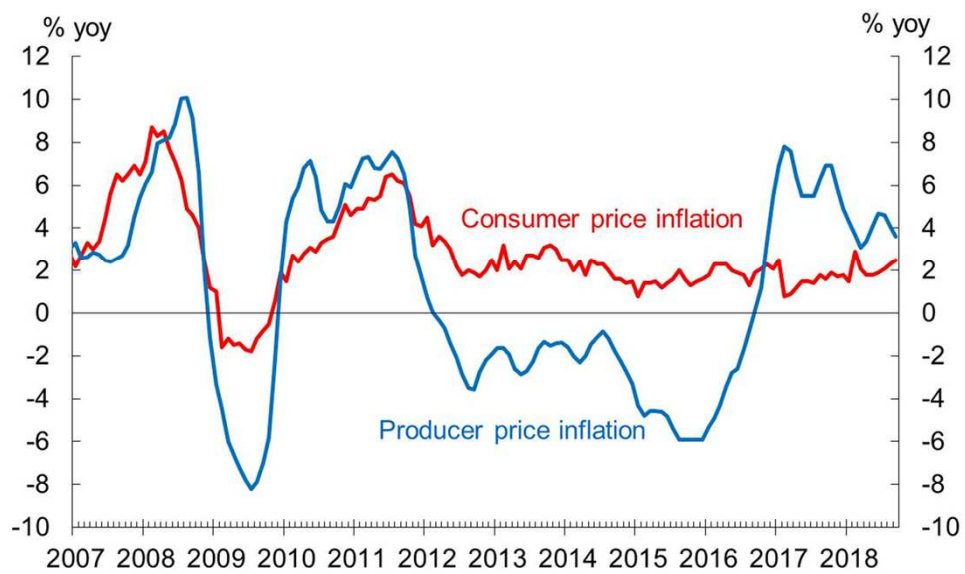
## MAINLAND CHINA: PURCHASING MANAGERS' INDEX



Source: CEIC



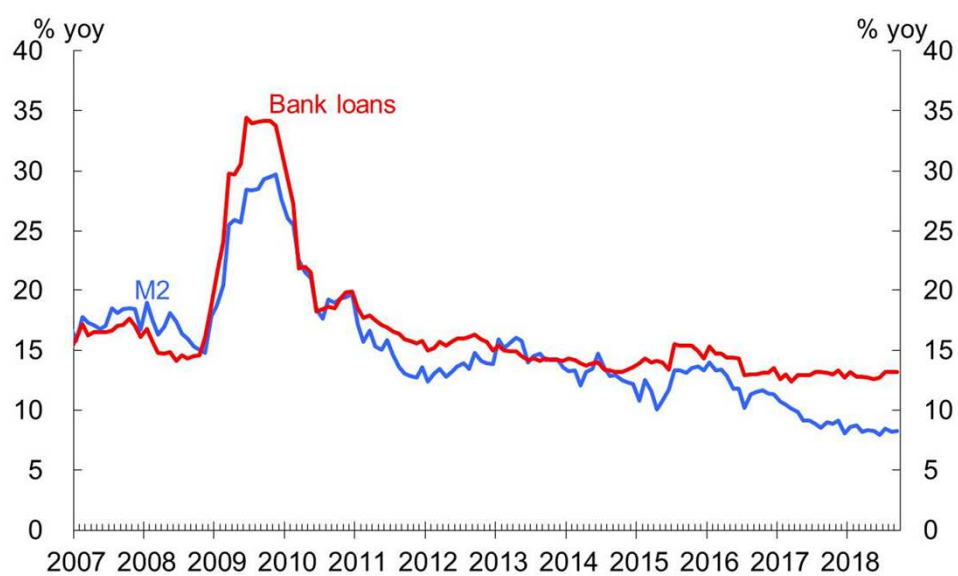
## MAINLAND CHINA: INFLATION



Source: CEIC



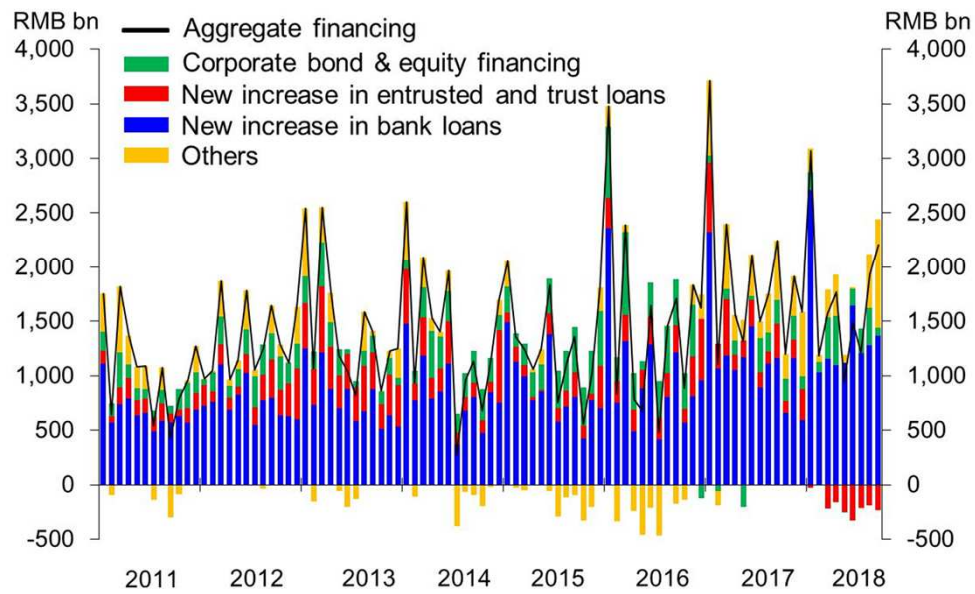
## MAINLAND CHINA: MONEY AND LOAN GROWTH



Source: CEIC



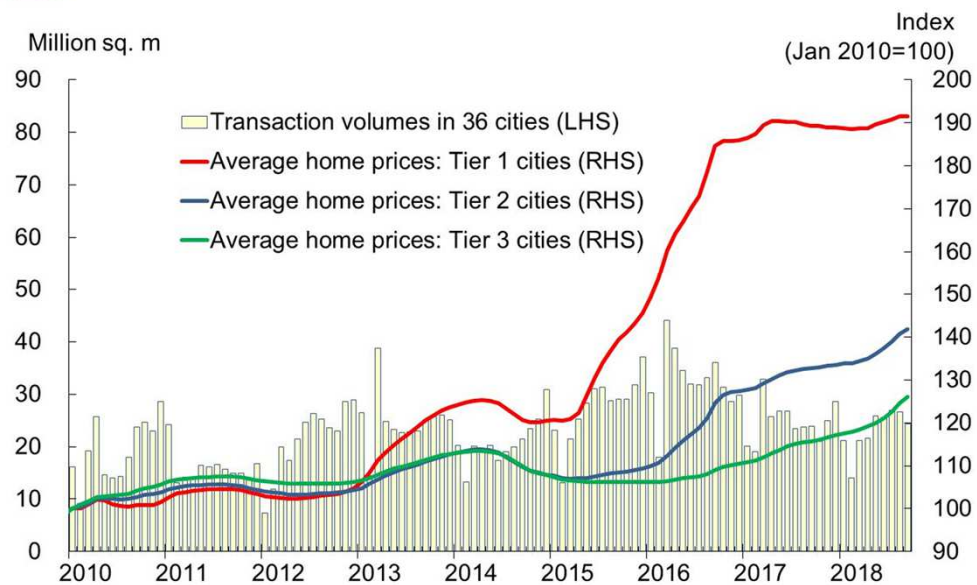
## MAINLAND CHINA: AGGREGATE FINANCING FLOW



Source: CEIC



## MAINLAND CHINA: PROPERTY PRICE AND TRANSACTION VOLUME

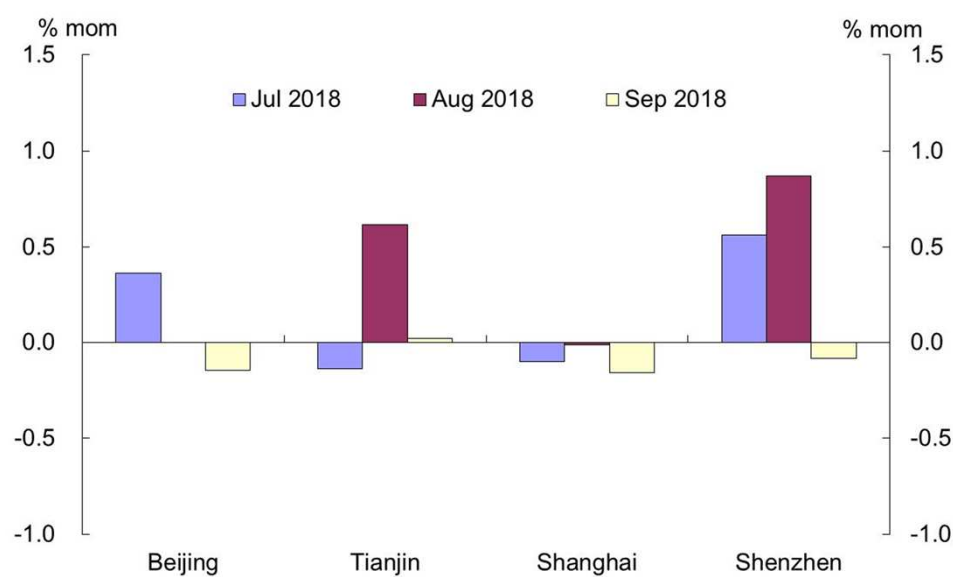


Sources: CEIC, WIND and HKMA staff estimates





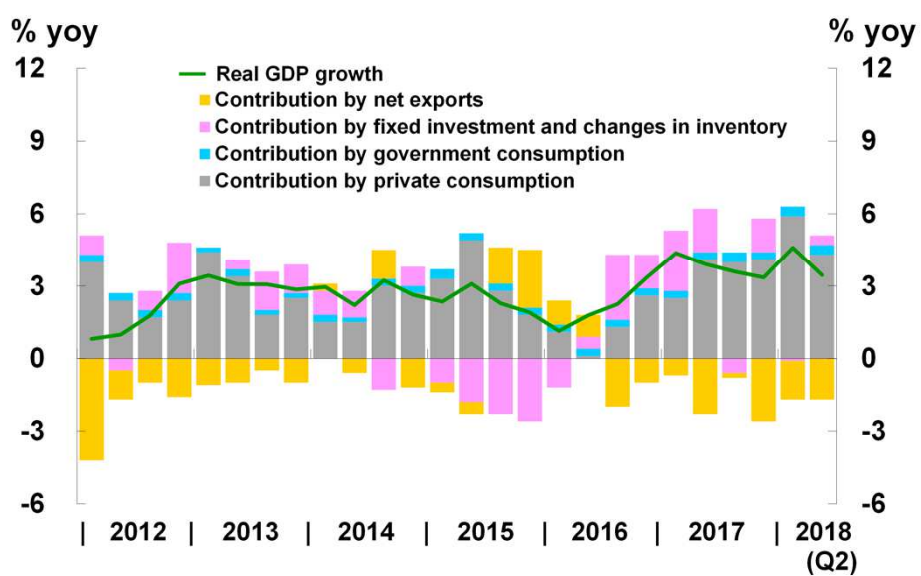
## MAINLAND CHINA: HOUSING PRICE CHANGES IN MAJOR CITIES



Sources: CEIC, WIND and HKMA staff estimates



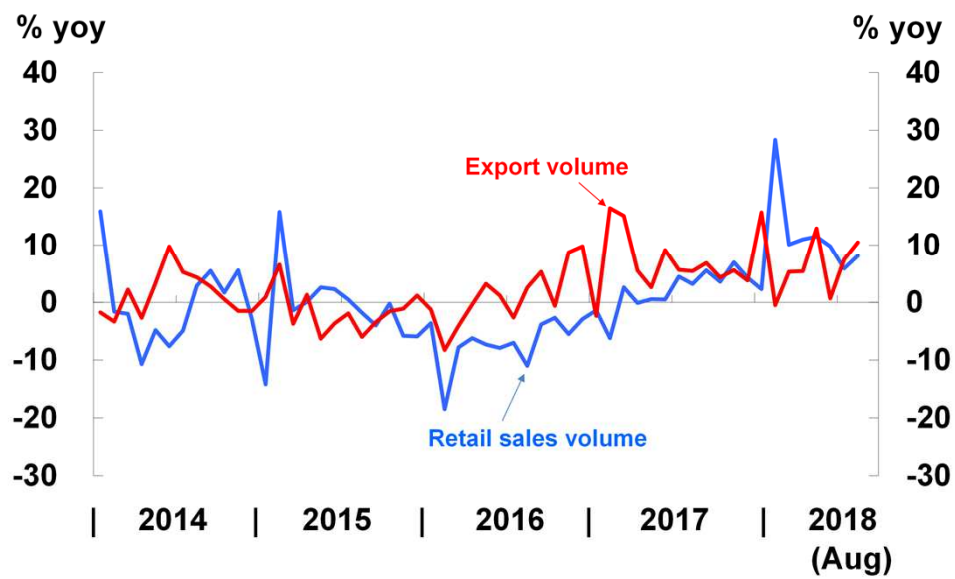
## HONG KONG: REAL GDP GROWTH



Source: C&SD



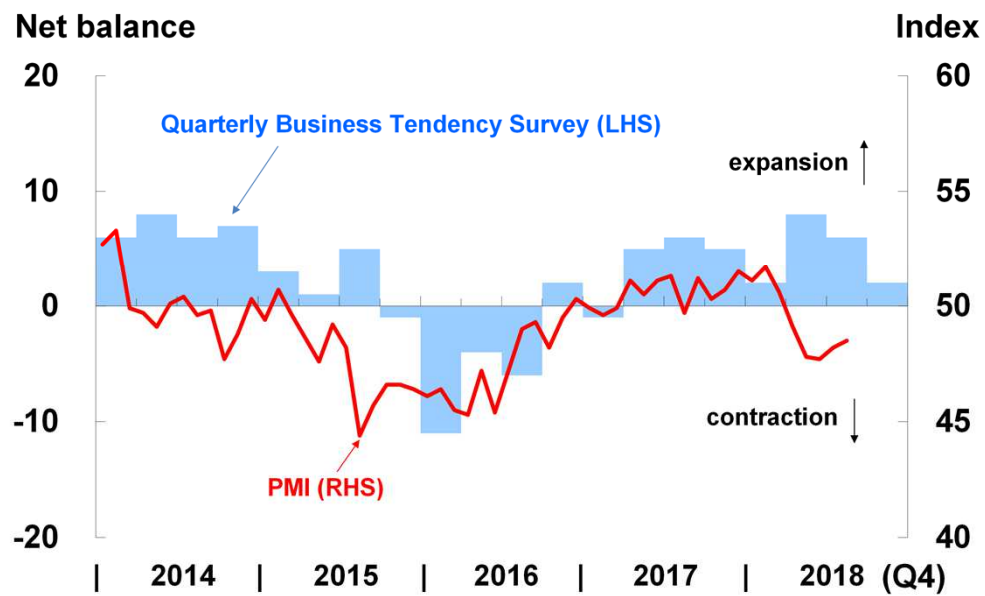
## HONG KONG: ECONOMIC ACTIVITY



Source: C&SD



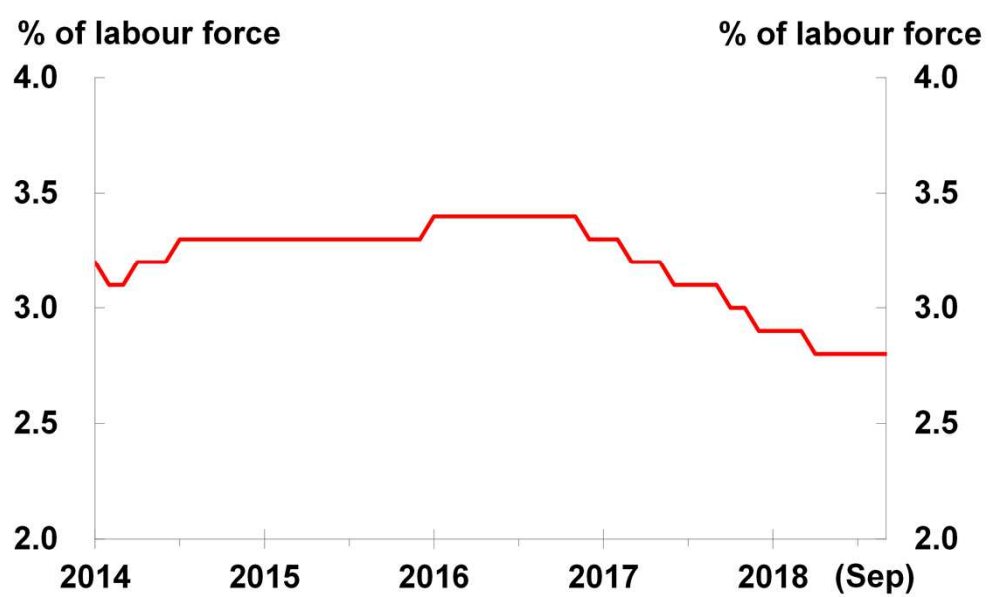
## HONG KONG: BUSINESS OUTLOOK



Sources: C&SD and Markit Economics



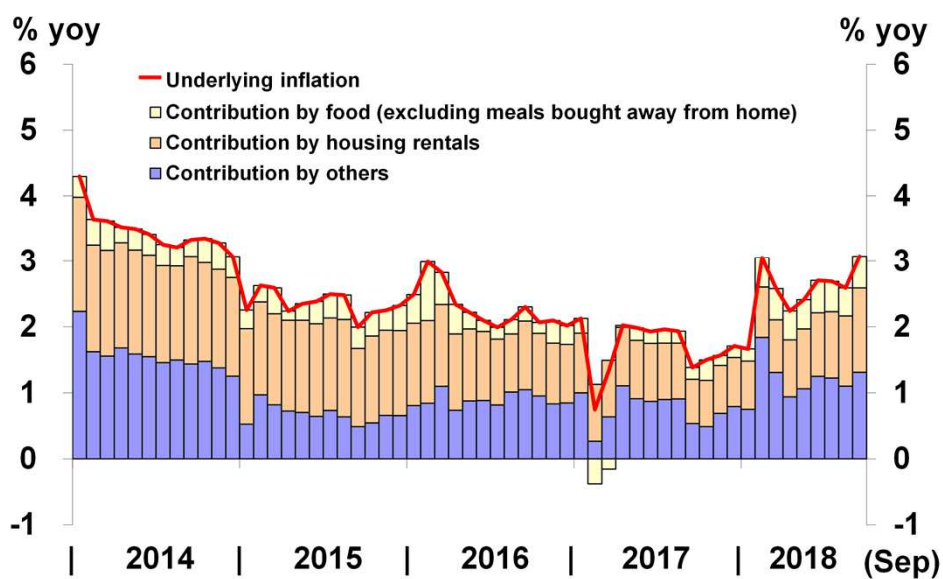
## HONG KONG: UNEMPLOYMENT RATE



Source: C&SD



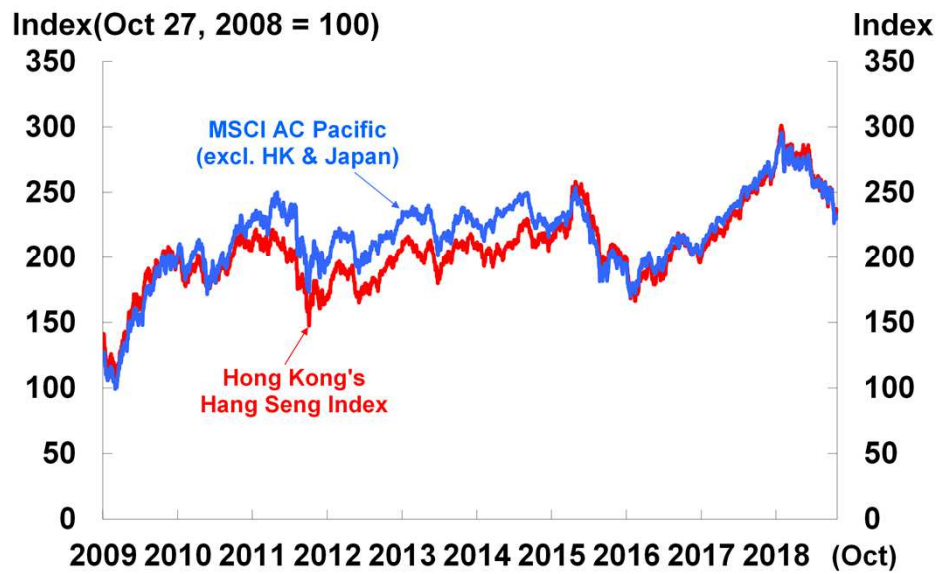
## HONG KONG: INFLATION



Sources: C&SD and HKMA staff estimates



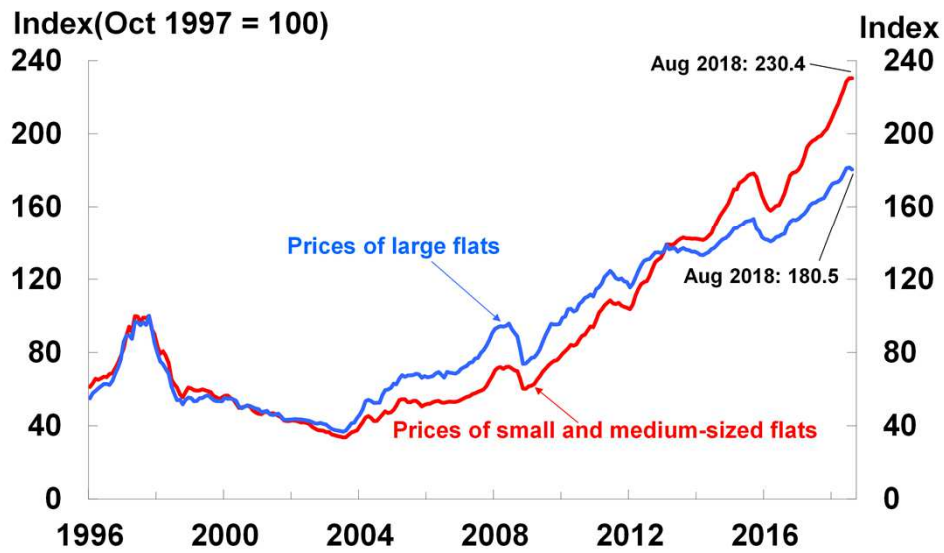
## HONG KONG: EQUITY MARKET



Source: Bloomberg



## HONG KONG: RESIDENTIAL PROPERTY PRICES

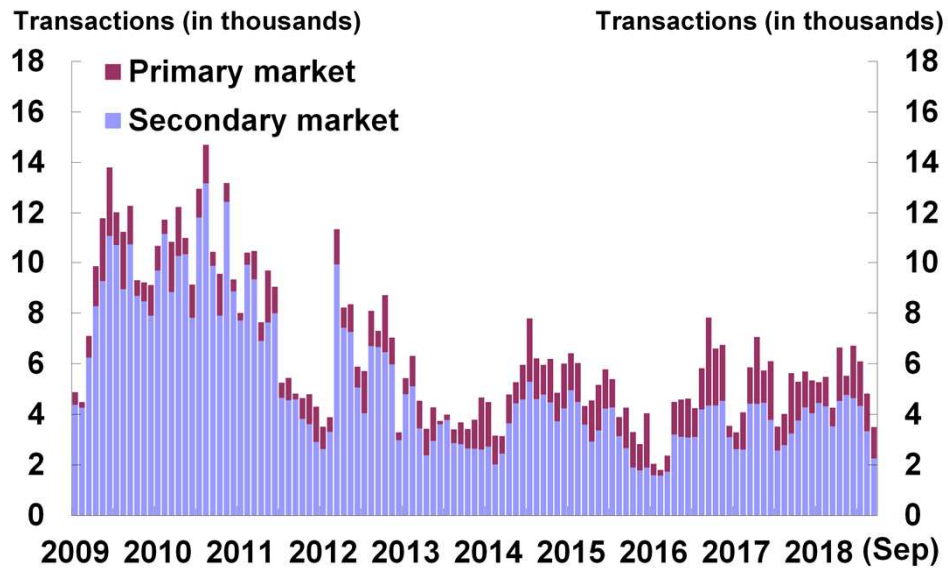


Source: Rating and Valuation Department





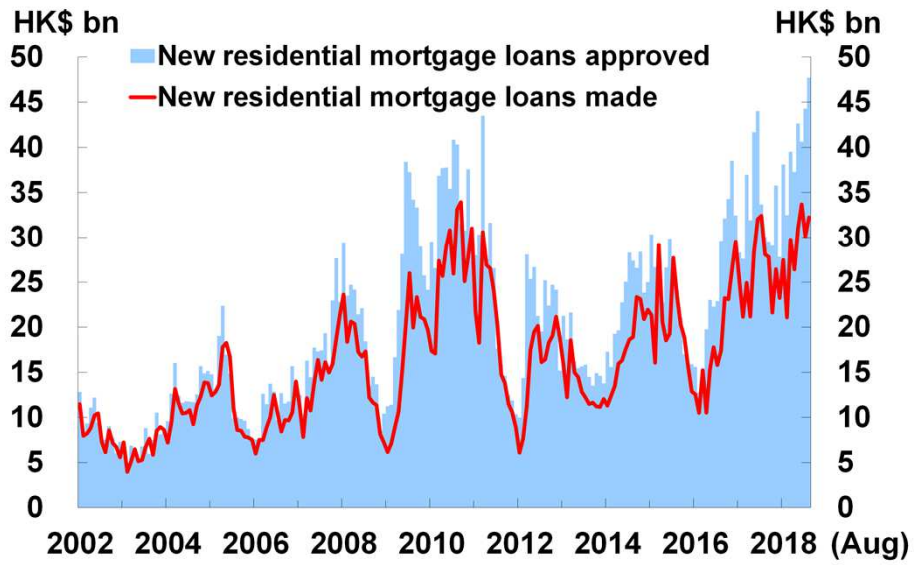
## HONG KONG: TRANSACTION VOLUME IN THE PRIMARY AND SECONDARY MARKETS



Source: The Land Registry



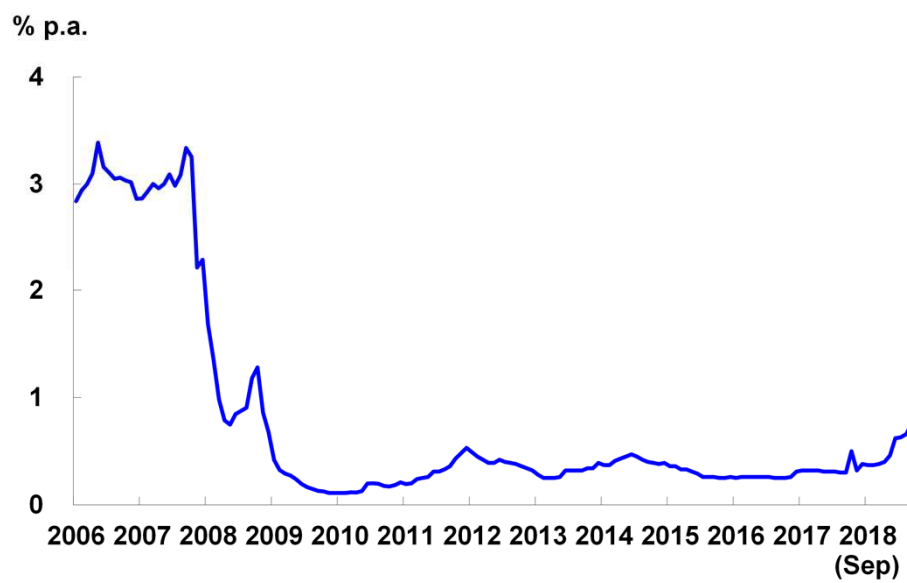
## HONG KONG: NEW RESIDENTIAL MORTGAGE LOANS



Source: HKMA



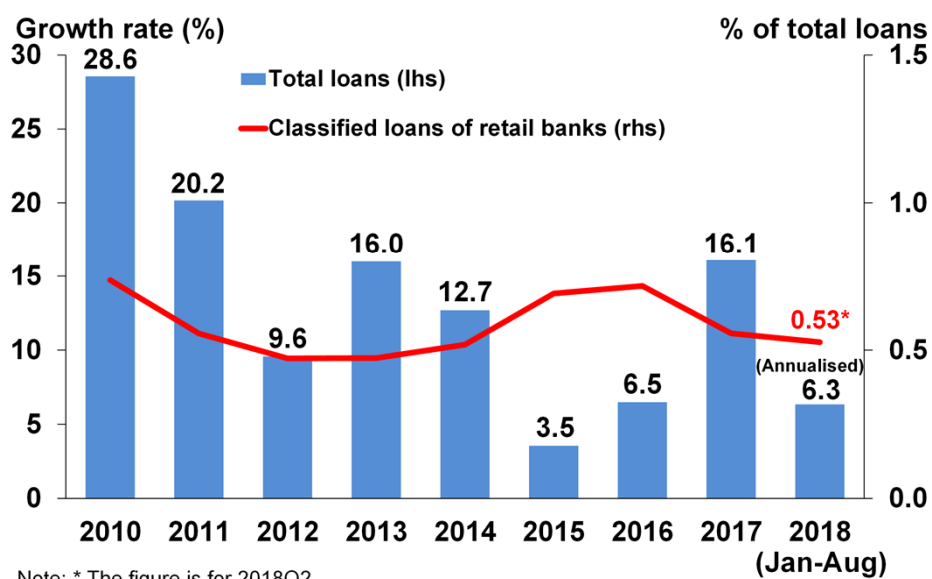
## HONG KONG: COMPOSITE INTEREST RATE



Source: HKMA



## HONG KONG: LOAN GROWTH AND ASSET QUALITY

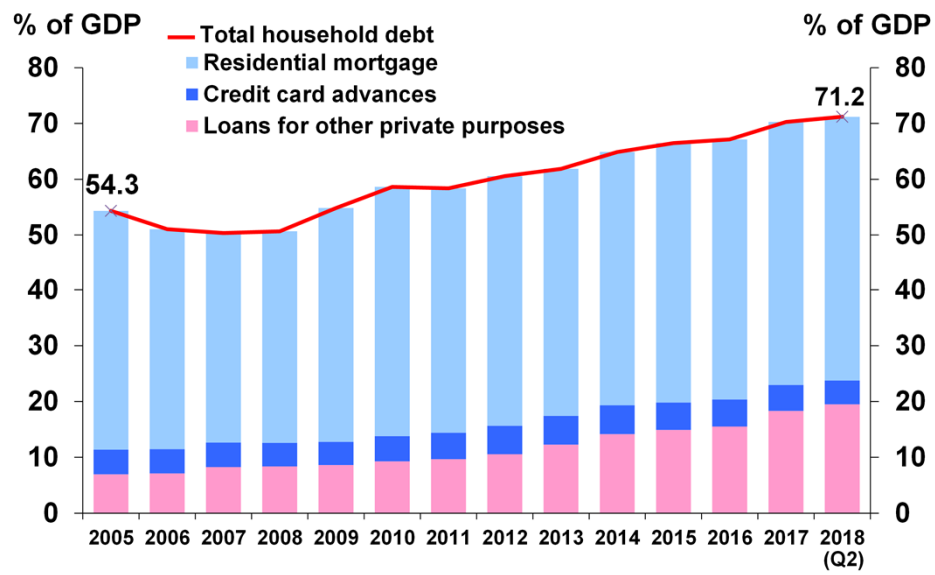


Note: \* The figure is for 2018Q2.

Source: HKMA



## HONG KONG: HOUSEHOLD DEBT



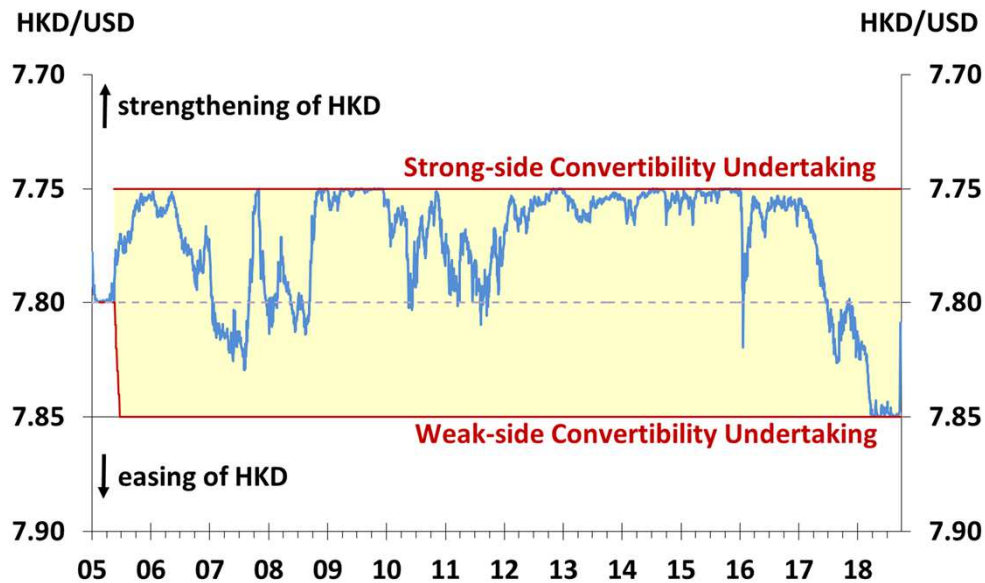
Source: HKMA



# **CURRENCY STABILITY**

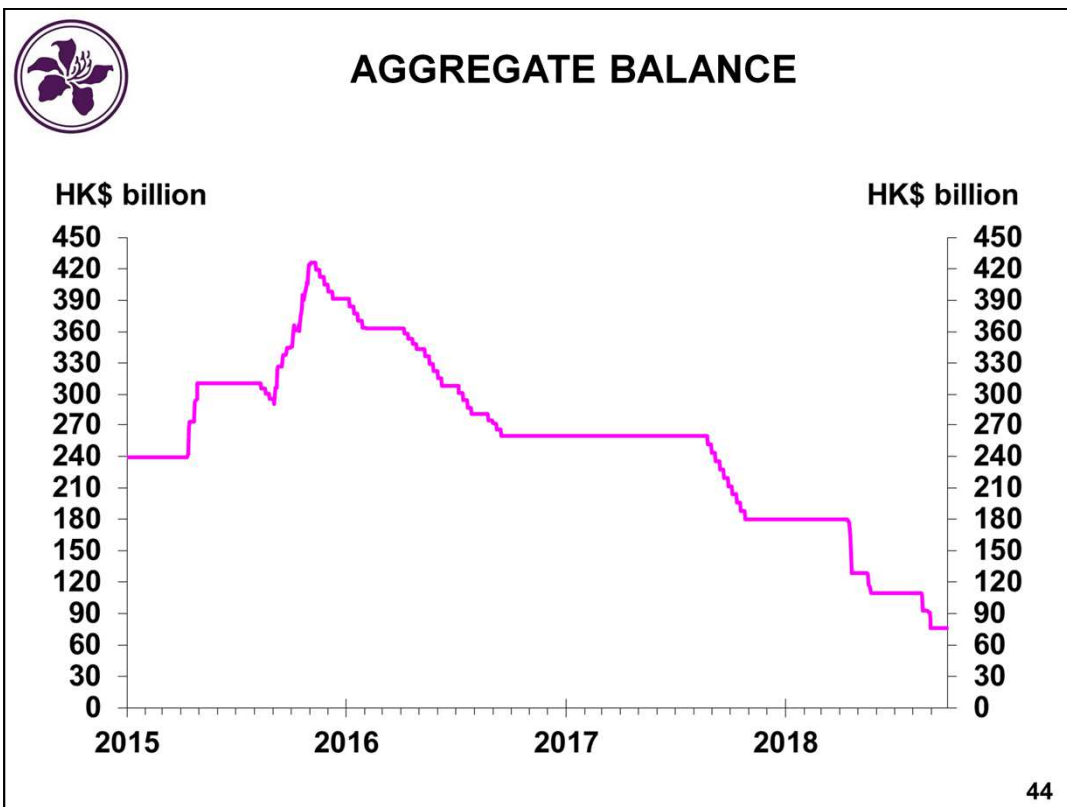


## HONG KONG DOLLAR SPOT EXCHANGE RATE



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- HKD spot exchange rate mostly stayed near HK\$7.85 to US\$1 during May to mid-September. Following the first triggering in April, the weak-side Convertibility Undertaking was repeatedly triggered in May and August as a result of carry trades and repatriation of funds raised in large Initial Public Offerings. The HKMA bought HKD and sold USD at 7.85 to maintain HKD stability in accordance with the Linked Exchange Rate System. HKD exchange rate strengthened by over 400 pips on 21 September, and the market generally viewed the elevated interbank interest rates as a major contributing factor. The HKD exchange rate moved at the level of 7.80 to 7.84 afterwards.

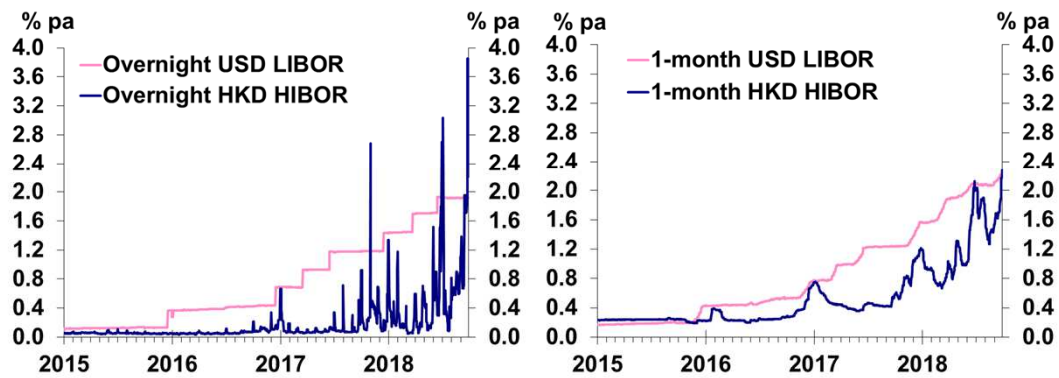


- The HKMA purchased a total of HK\$52.1 billion in May and August under the weak-side Convertibility Undertaking. The Aggregate Balance of the banking system stood at about HK\$76 billion afterwards.





## DOMESTIC INTEREST RATES



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- As HKD liquidity shrank, Hong Kong Interbank Offered Rates (HIBORs) moved up to levels closer to the USD interest rates. Short-term HIBOR occasionally shot up because of increases in HKD funding demand due to factors such as half-year end and large Initial Public Offerings.



- The 12-month HKD forward discount largely tracked the movements of interest rate spreads between HKD and USD.

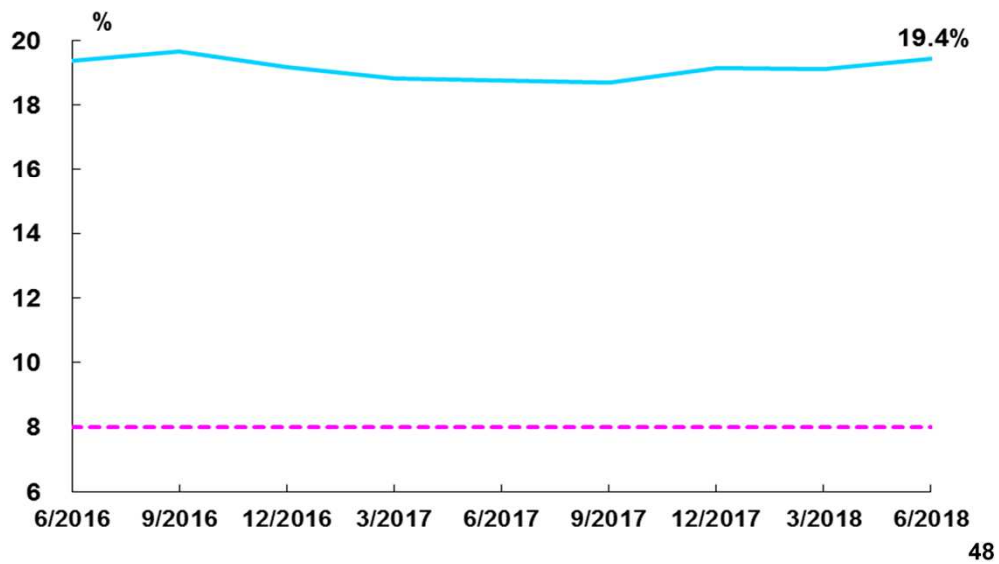


# **BANKING STABILITY**



## BANKING SECTOR PERFORMANCE

Capital position of locally incorporated authorized institutions (AIs) remained strong

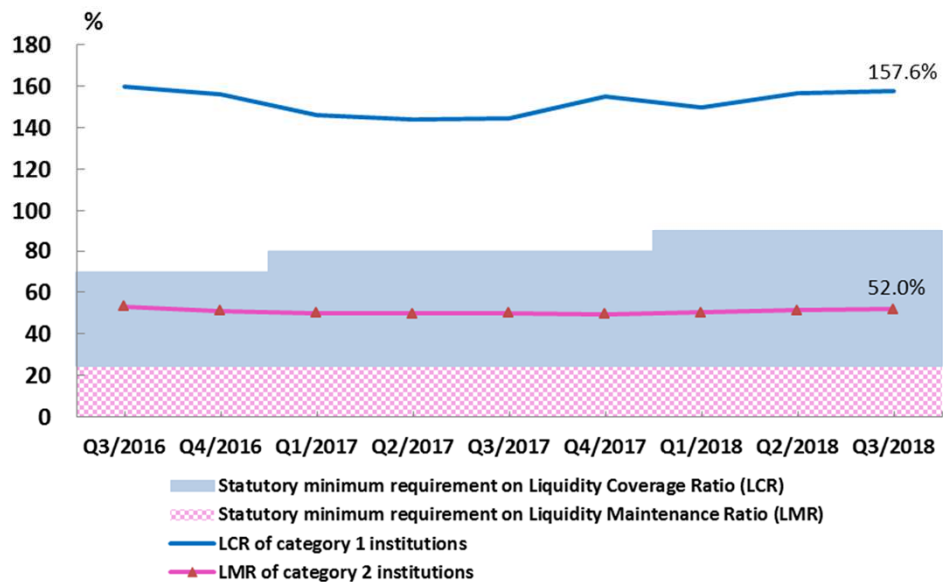


- The banking sector continued to be well capitalised. The consolidated capital adequacy ratio of locally incorporated AIs stood at 19.4% at end-June 2018, well above the international minimum requirement of 8%.



## BANKING SECTOR PERFORMANCE

Liquidity position remained robust



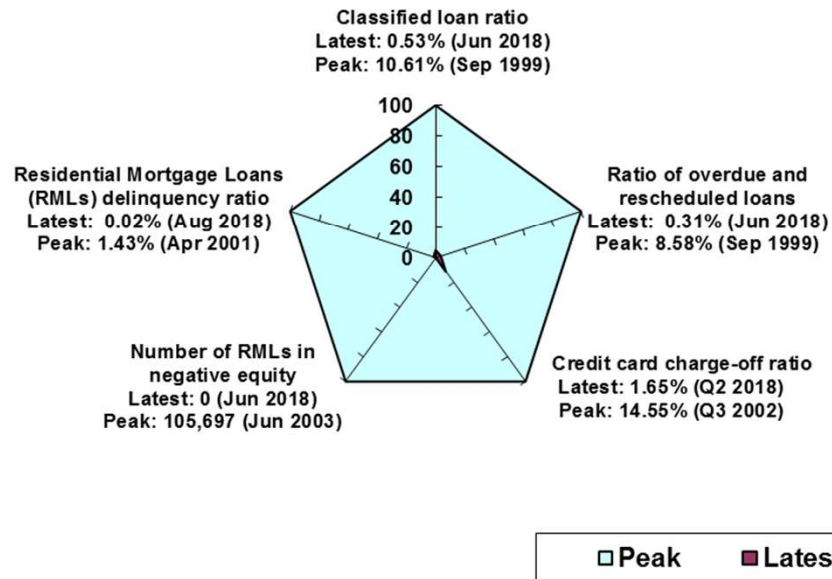
49

- In the third quarter of 2018, the quarterly average LCR of category 1 institutions was 157.6%, well above the 90% statutory minimum requirement applicable for 2018. For category 2 institutions, their quarterly average LMR was 52.0%, also well above the 25% statutory minimum requirement.



## BANKING SECTOR PERFORMANCE

Asset quality stayed healthy



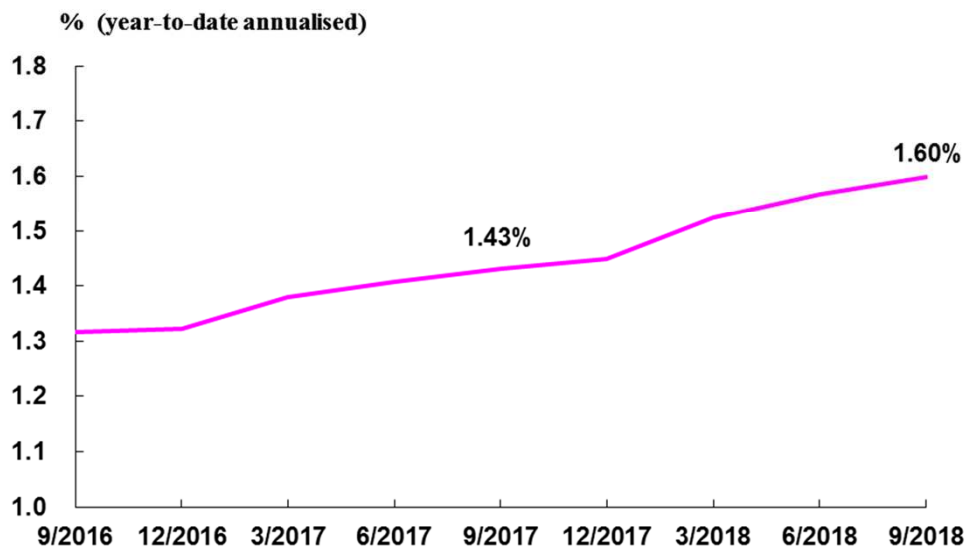
50

- The asset quality of retail banks stayed healthy. Their classified loan ratio edged down to 0.53% at end-June 2018 from 0.55% a quarter earlier, well below the long-run historical average of 2.2% since 2000. Similarly, the classified loan ratio of the banking sector decreased to 0.61% from 0.65% during the same period.



## BANKING SECTOR PERFORMANCE

Net interest margin widened further



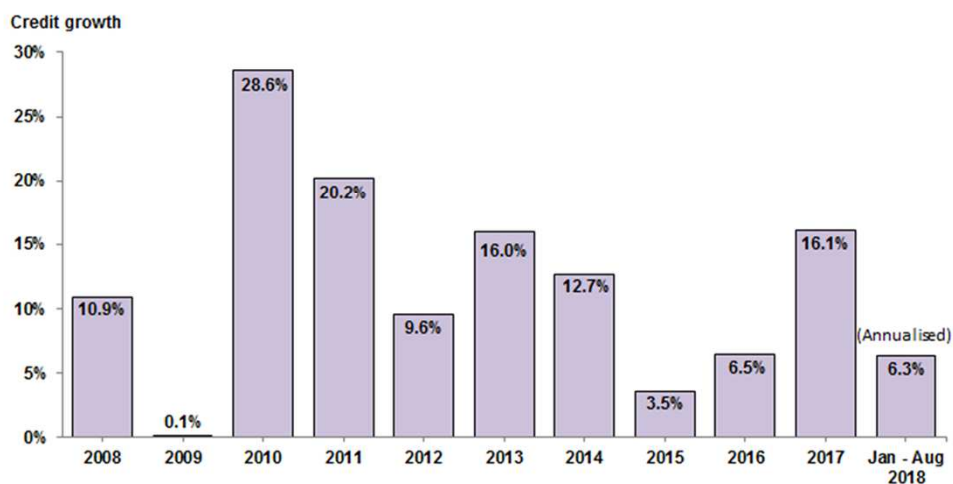
51

- The net interest margin of retail banks' Hong Kong offices widened further to 1.60% in the first three quarters of 2018 from 1.43% in the same period last year.



## BANKING SECTOR PERFORMANCE

Credit growth moderated



Source: HKMA

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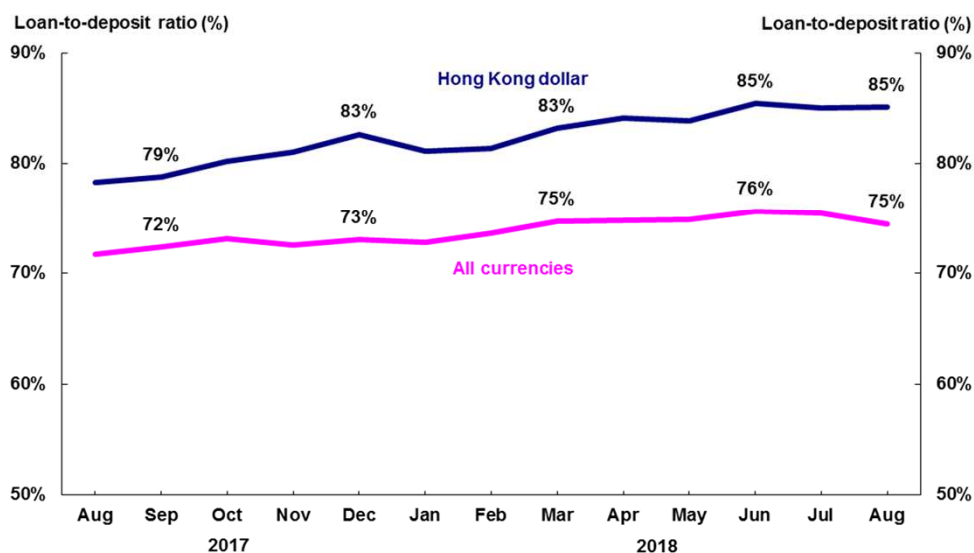
- Credit growth moderated. Total loans grew by 4.2% in the first 8 months of 2018, or 6.3% on an annualised basis, as compared to a growth of 16.1% in 2017.
- The slowdown in credit growth was mainly due to a reduction in loan demand, given the uncertain global economic and trade environment.





## BANKING SECTOR PERFORMANCE

Loan-to-deposit ratios remained largely stable



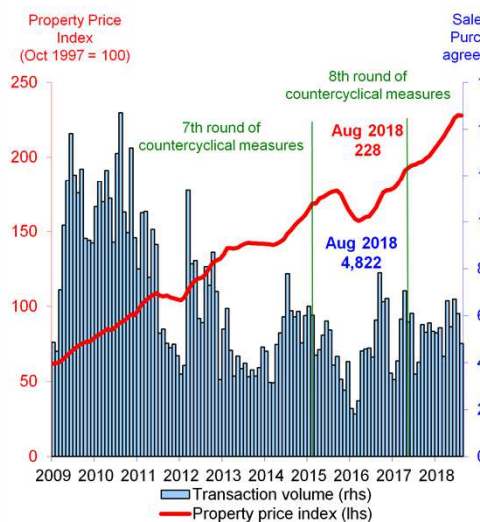
53

- Hong Kong-dollar loan-to-deposit ratio stood at 85% at end-August 2018, same as that at end-June 2018.
- All currencies loan-to-deposit ratio edged down to 75% at end-August 2018 from 76% at end-June 2018.



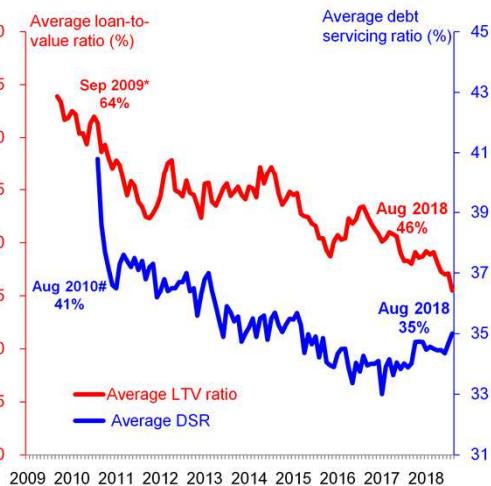
## RISK MANAGEMENT OF PROPERTY MORTGAGE LOANS

**Residential property price index and  
transaction volume**



Sources: R&VD and Land Registry

**Average loan-to-value ratio and  
debt servicing ratio for new residential  
mortgage loans approved**



\* Before the first round of HKMA's countercyclical measures was introduced

# When the tighter requirement on debt servicing ratio was introduced by the HKMA

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### Latest statistics on residential mortgage loans (RMLs)

	Monthly average in 2016	Monthly average in 2017	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018
Number of sale and purchase agreements	4,558	5,133	4,263	6,646	5,522	6,713	6,091	4,822
Number of new RML applications	10,294	11,947	13,716	14,898	14,491	14,579	14,217	17,963
Number of new RMLs approved	7,290	8,699	9,734	9,260	10,673	9,951	10,716	11,690

### Latest statistics on residential property prices

Property price index		Period	Property price index
Rating and Valuation Department (10/1997=100)	Latest position	8/2018	227.8
	Recent peak	7/2018	228.0
	Peak in 1997	10/1997	100.0
Centaline (6/7/1997=100)	Latest position	7/10/2018	185.3
	Recent peak	12/8/2018	188.6
	Peak in 1997	19/10/1997	102.9



## INTERNATIONAL STANDARDS IMPLEMENTATION

- Banking (Exposure Limit) Rules 2018
- Banking (Capital) (Amendment) Rules 2018
- Banking (Disclosure) (Amendment) (No.2) Rules 2018

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Three sets of rules to be made by the Monetary Authority under the Banking Ordinance to implement international regulatory standards are scheduled to be gazetted on 16 November and tabled at Legislative Council for negative vetting on 21 November. They are respectively:

- Banking (Exposure Limit) Rules 2018 (provisional title) – to implement the new large exposures framework of the Basel Committee on Banking Supervision (BCBS). The target effective date of the Rules is 1 July 2019.
- Banking (Capital) (Amendment) Rules 2018 – mainly to incorporate:
  - a. The BCBS standard on the regulatory capital treatment of banks' holdings of instruments issued by other banks to meet the total loss-absorbing capacity requirements for resolution purposes;
  - b. The capital treatment to address concentration risk in sovereign exposure (as part of the BCBS large exposure framework); and
  - c. The “internal assessment approach” of the BCBS revised securitisation framework as a possible alternative for risk-weighting certain securitisation exposures (arising from asset-backed commercial paper programmes).

Except for item b that will take effect concurrently with the large exposure framework, the Rules are targeted to take effect in January 2019.

- Banking (Disclosure) (Amendment) (No.2) Rules 2018 – to incorporate a minor consequential adjustment to an existing provision resulting from the implementation of the large exposure framework. (Note: An earlier set of Banking (Disclosure) (Amendment) Rules took effect on 30 June 2018 to implement the 2<sup>nd</sup> revised disclosure package issued by the Basel Committee in March 2017).



## RESOLUTION REGIME

- The rules on loss-absorbing capacity (LAC) requirements was introduced into Legislative Council (LegCo) on 24 October, and the Inland Revenue Ordinance (IRO) LAC Amendment Bill will be introduced on 31 October
- The draft of Financial Institutions (Resolution) Ordinance (FIRO) code of practice chapter providing further guidance on the LAC Rules was issued for consultation on 19 October

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- The current legislative priority on resolution is the development of rules in accordance to the FIRO to set LAC requirements for authorized institutions (including implementing the Financial Stability Board standard on total LAC).
- To clarify the uncertainties of tax treatment of LAC instruments arising from their loss-absorbing characteristics, the IRO is proposed to be amended to afford debt-like profits tax treatment for the instruments, and exempt transfers of the instruments from stamp duty.
- The consultation conclusion on LAC Rules and the IRO LAC Amendment Bill was published on 25 July. On the same day the drafts of these two pieces of legislation were issued for industry consultation, and the consultation was closed on 5 September.
- The LAC Rules was introduced into the LegCo on 24 October, and IRO Amendment Bill will be introduced on 31 October. Subject to the LegCo negative vetting, it is expected that the LAC Rules will commence operation around end-2018.
- A draft of a FIRO code of practice chapter providing further guidance on the LAC Rules was issued on 19 October for consultation and to inform LegCo discussions.
- On other subsidiary legislation required to operationalise FIRO, the HKMA plans to consult on policy proposals for imposing contractual requirements under sections 90 and 92 of FIRO regarding stays on early termination rights of financial contract in the near future (around end-2018 or early-2019).



## FINANCIAL INCLUSION

### **Banking services delivery channels**

- More physical branches for underserved areas
- Cash withdrawal service by the elderly without the need to make purchase

### **Bank account opening and maintenance**

- Mystery shopping programme and thematic reviews
- Exploring the use of new technology to enhance efficiency of customer due diligence process
- On-going communication with the banking industry, business community and relevant stakeholders

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- Encouraged by the HKMA, the Hong Kong Association of Banks (HKAB) introduced a pilot scheme in March 2018 for the elderly to withdraw cash at convenience stores without the need to make purchases. Since July 2018, the scheme has been expanded to over 330 convenience stores, further enhancing the elderly's access to cash withdrawal service across Hong Kong.
- The Anti-Money Laundering and Counter-Terrorist Financing (Financial Institutions) (Amendment) Ordinance 2018 became effective on 1 March 2018, allowing greater flexibility for banks to remotely process accounts opening and update customers' information. The HKMA has also been maintaining close dialogues with banks and fintech companies on their initiatives through the Fintech Supervisory Sandbox and Chatroom. Meanwhile, we are working with HKAB to explore how technology, including a know-your-customer utility, can potentially be used to enhance efficiency to customer due diligence processes and customer experience.
- The HKMA continued to work closely with and engage the banking industry and the business community on issues concerning opening and maintenance of bank accounts. We will, having regard to the feedback collected, explore with the banks any further improvement measures, including providing relevant contact details of retail banks and points to note in relation to account opening.



## **BANKING CONSUMER AND INVESTOR PROTECTION**

- Cooperated with Insurance Authority (IA) to further simplify the selling process of certain life insurance products sold through digital distribution channel
- Introduced additional customer protection requirements for retail banks in selling annuity insurance products
- Working with IA to implement the new statutory regime for regulating insurance intermediaries
- Consulted the banking industry on streamlining and refining investor protection measures

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- The HKMA co-operated with IA and issued a circular on 25 May 2018 to exempt two types of life insurance products with considerable savings elements from financial needs analysis, provided that they are sold on digital platform with no recommendation. Meanwhile, the HKMA also expanded the scope of life insurance products that are eligible for the simplified suitability assessment approach to a few refundable or yearly renewable insurance policies, e.g. those providing disability or long term care cover. The above new arrangements took effect on 1 June 2018.
- In view of the increasing popularity of annuity insurance products and their unique features, the HKMA issued a circular on 6 June 2018 to require authorized institutions to put in place additional customer protection measures when selling annuity insurance products at retail level (including audio recording the selling process and prohibition of selling and marketing activities at teller counters in bank branches).
- The HKMA continued to work with IA to prepare for the implementation of the statutory regime under the new Insurance Ordinance for regulating insurance intermediaries, including a collaboration framework for inspection and investigation of insurance intermediary activities of authorized institutions.
- The HKMA provided guidance to the banking industry in August 2018 on online distribution and advisory platforms for structured investment products not regulated by Securities and Futures Ordinance. The guidance sets out the application of the suitability requirement under a risk-based approach, and streamlines the arrangement for transactions in standardised structured deposits under lower risk circumstances.

- With a view to improving customer experience while providing appropriate investor protection, the HKMA developed and consulted the banking industry on proposals for streamlining and refining the investor protection measures in respect of sale of investment, insurance and MPF products. The HKMA is considering the comments received.
- The HKMA is conducting a mystery shopping programme to test check banks' selling practices in respect of investment and insurance products.



## **ENHANCED COMPETENCY FRAMEWORK (ECF) FOR BANKING PRACTITIONERS**

- Conducting industry consultation of the ECF module on credit risk management
- To develop the ECF module on risk management and compliance and consult the industry

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- With the support from the banking industry and relevant professional bodies, the HKMA conducted a soft consultation with some seasoned practitioners for the ECF on credit risk management in mid-2018. Based on the feedback, the competency standards and qualification requirements were revised to better tailor to the needs of the industry. The formal consultation was launched in October 2018. Following the completion of the formal industry consultation, the ECF module is expected to be launched in the first quarter of 2019.
- The HKMA will continue to collaborate with the relevant parties to develop the ECF on risk management and compliance. The HKMA will consult the industry in due course.





## CONSUMER EDUCATION PROGRAMME

- Rolled out a thematic campaign on Faster Payment System (FPS)
- Arranged sustaining publicity to reinforce public precaution against phishing emails purportedly from banks
- Conducted talks on smart use of credit cards at tertiary institutions



•Poster of the FPS Campaign



•Static and animated dummy phishing emails to demystify common tricks behind

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- The HKMA rolled out a new thematic campaign on the FPS to raise the public's awareness and highlight the key features and benefits of the FPS.
- Sustaining publicity was arranged to reinforce public's precaution against phishing emails purportedly from banks. This included the deployment of a static and an animated dummy phishing email to help demystify the common tricks behind.
- Talks on smart use of credit cards were also arranged as part of orientation activities for students of tertiary institutions.



## DEPOSIT PROTECTION SCHEME (DPS)

- Completed development of the new payout system application to streamline the payout operation
- Produced a year-round educational radio programme in partnership with Radio Television Hong Kong and launched a social media campaign depicting Hong Kong people's saving behaviour and money management practices to promote the public's understanding of the DPS

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- The payout system modernisation project of the Hong Kong Deposit Protection Board is making good progress. The new payout system application is developed with an aim to streamline operational workflow and enhance information security. System testing is underway.
- To promote the public's understanding of the DPS, a year-round educational radio programme in the format of infotainments and short dramas have been produced and broadcast in partnership with Radio Television Hong Kong since April 2018. Besides, a campaign featuring street interviews on Hong Kong people's saving behaviour and money management practices was launched on the DPS Facebook page to raise social media users' awareness of deposit protection.



## ACADEMY OF FINANCE (AoF)

- The Financial Secretary endorsed the recommendation made by the HKMA based on the advice of an Experts Group to establish an AoF by revamping the Hong Kong Institute for Monetary Research (HKIMR)
- Main functions:
  - as a centre of excellence for promoting financial leadership development
  - monetary and financial research, especially applied research in cross-sectoral areas
- A Preparatory Committee (PC) has been formed to launch the AoF around mid-2019

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- The Financial Secretary endorsed the recommendation made by the HKMA based on the advice of an Experts Group comprising Messrs Anthony Neoh, Carlson Tong, Moses Cheng and David Eldon to establish an AoF. Noting that the existing HKIMR, which was established in 1999, is already well-established and performing some of the AoF's functions, the Experts Group recommends that the HKIMR be revamped and expanded to undertake the new initiatives, leveraging on the HKIMR's existing infrastructure and reputation in the research field.
- The AoF aims to fill the existing gap and would serve:
  - (i) as a centre of excellence for promoting financial leadership development through promoting the global and inter-disciplinary perspectives of top notch talents in the industry; and
  - (ii) as a centre for monetary and financial research, especially applied research in cross-sectoral areas.
- The PC has been formed to work on the implementation details and to launch the AoF around mid-2019. The PC comprises representatives from all the financial regulators in Hong Kong, the Financial Services Development Council, the University Grants Committee, and the HKIMR, as well as members of the Experts Group.



# **FINANCIAL INFRASTRUCTURE**



## FINANCIAL INFRASTRUCTURE

- Financial infrastructure remains safe and efficient
- Operation of Bond Connect has been smooth; actively promote Bond Connect to overseas investors
- Further refine the over-the-counter derivatives trade repository (TR) according to the relevant local and international standards

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### **Bond Connect**

- Since the launch of Bond Connect on 3 July 2017, related settlement operations performed by the Central Moneymarkets Unit has been smooth. With the Delivery-versus-Payment (DvP) settlement fully implemented in August 2018, the HKMA has been maintaining close communication with the People's Bank of China and relevant Mainland institutions to explore enhancements to Northbound Trading.
- The HKMA has participated in roadshows in major financial centres including Asia, Europe and North America to actively promote Bond Connect to overseas investors.

### **Over-the-counter derivatives trade repository**

- Since the reporting function of the TR was launched in July 2013, reporting by banks to the TR has been smooth.



## FASTER PAYMENT SYSTEM (FPS)

- Registration of mobile phone number or email address started from 17 September 2018 and full launch on 30 September
- A unique retail payment system in the world:  
Round-the-clock, simple and convenient, robust and secure, supports Hong Kong dollar and renminbi, and enables full connectivity among banks and Stored Value Facilities (SVFs)
- Over 1.4 million registrations and over 1.2 million transactions totalling over HK\$23.7 billion as of 22 October
- The first in the world mobile application for converting multiple QR codes into a single QR code launched on 17 September

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### Faster Payment System

- Starting from 17 September, the public can make use of the internet banking or mobile app of participating banks and SVFs to register their mobile phone number or email address with the FPS as an account proxy for receiving funds. Starting from 30 September, the public can make transfers or receive funds using the FPS.
- Currently, a total of 21 banks (including most retail banks) and 10 SVFs in Hong Kong have participated in the system to provide FPS services for their customers.
- FPS has received a total of over 1.4 million registrations, including 1,040,000 in mobile phone numbers, 235,000 in email addresses, and 209,000 in FPS ID as of 22 October. FPS ID means a unique random number generated by FPS to be associated with the account of a customer of a FPS participant for receiving payments.
- FPS has processed over 1.2 million transactions with transaction amount totalling over HK\$23.7 billion and RMB460 million as of 22 October.
- The Payment Systems and Stored Value Facilities Ordinance provides statutory backing to the finality of settlement for transactions made through the HKD FPS and RMB FPS by protecting the settlement finality from insolvency laws or any other laws.

**QR Code Standard**

- A common QR code standard enables a merchant to use a single QR code to accept QR code payment solutions from multiple payment service providers. Consumers would find it more convenient in making QR code payments.
- A working group, which comprises major credit card scheme operators, banks, SVF licensees and merchant acquirers, finalised the technical specification for common QR code standard at the end of December 2017.
- A free mobile application tool, namely “Hong Kong Common QR Code” (HKQR), was released on 17 September 2018, which can be used for converting multiple QR codes from different payment service providers into a single, combined QR code.



## LATEST FINTECH INITIATIVES

### **Open Application Programming Interface (Open API) for the Hong Kong banking sector**

- Framework published in July 2018
- Phases I and II to be implemented by end January and October 2019 respectively

### **Distributed Ledger Technology (DLT)-based trade finance platform**

- Launched eTradeConnect in September 2018
- Exploring opportunities to facilitate eTradeConnect's connection with other regions

### **Fintech Career Accelerator Scheme (FCAS) 2.0**

- Over 200 students benefited from the four programmes under FCAS

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### **Open API Framework (Framework) for the Hong Kong banking sector**

- Focuses initially on the retail banking operation because it covers the services offered to the largest group of customers and provides abundant Open API use cases to enable integration of banking services into the daily lives of the public.
- Open API will be implemented in four phases progressively with an increasing level of risks and data sensitivity:
  - Phase I — Product information (by the end of January 2019)
  - Phase II — Customer acquisition (by the end of October 2019)
  - Phase III — Account information (to be set out before July 2019)
  - Phase IV — Transactions (to be set out before July 2019)

### **eTradeConnect**

- eTradeConnect, formerly called Hong Kong Trade Finance Platform, is a DLT-based trade finance platform launched on 27 September 2018 by seven local banks.

### **Fintech Career Accelerator Scheme 2.0**

- The four programmes under FCAS 2.0 target young talents at various stages of career development. Progress of all four programmes is on track:
  - (i) Entrepreneurship summer boot camp – 51 students from six universities completed the Cyberport University Partnership Programme and attended the summer boot camp.
  - (ii) Shenzhen summer internship programme – 50 Hong Kong students completed their six-week internship with eight renowned firms in Shenzhen.
  - (iii) Gap year full-time placement programme – In 2018/2019, 483 applicants submitted a total of over 4,000 applications under the scheme to different banks and the HKMA. After rounds of interviews, 111 applicants accepted internship offers.
  - (iv) Full-time graduate programme – Hong Kong Cyberport Management Company and Hong Kong Science and Technology Parks Corporation have each nominated ten interns to the programme. The HKMA and the Applied Science and Technology Research Institute provided regulatory updates and technical training respectively to these graduates.





## **STORED VALUE FACILITIES (SVF) AND RETAIL PAYMENT SYSTEMS (PRS)**

- Usage of SVF continued to grow in Q2 2018:
  - Accounts in use: 51.81 million (+5.7% from Q1, +19.2% year-on-year)
  - Total transaction number: 1.5 billion (+5.6% from Q1, +10.2% year-on-year)
  - Total transaction value: HK\$41.0 billion (+5.2% from Q1, +29.0% year-on-year)
- A SVF licensee has recently extended its e-wallet usage to the Mainland
- Designated JETCO and EPSCO as RPS in August 2018



## **REGULATORY DEVELOPMENT OF THE OVER-THE-COUNTER (OTC) DERIVATIVES MARKET**

- Continued to develop specific regulatory requirements covering different aspects
- Issued a consultation conclusion paper with the Securities and Futures Commission (SFC) on further enhancements to the OTC derivatives regulatory regime in Hong Kong in June 2018
- As of end-September 2018, the HK Trade Repository logged 2.48 million total outstanding OTC derivatives trades which covered five asset classes under mandatory reporting requirements, i.e. foreign exchange, interest rate, equity, credit and commodity derivatives

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### **Further enhancement to the OTC Derivatives Regulatory Regime**

- Following the enactment of the Securities and Futures (Amendment) Ordinance 2014, which provides for the regulatory regime for the OTC derivatives market, we continue to develop specific regulatory requirements covering different aspects.
- The second phase rules for the reporting and related record keeping obligations came into effect on 1 July 2017.
- A joint consultation conclusion paper with SFC, summarising the new requirements on the use of Legal Entity Identifier for reporting obligations, an expanded clearing obligation and the trading determination process, was published in June 2018.



## HONG KONG FINANCIAL BENCHMARK

- Participating in the Financial Stability Board (FSB) Official Sector Steering Group (OSSG) and liaising with other OSSG members on reforming interest rate benchmarks of major currencies
- Working with the Treasury Markets Association (TMA) to strengthen TMA-administered interest rate benchmarks
- Enhancing Hong Kong's financial benchmark regime according to international standards

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- In July 2013, the FSB established the OSSG, which comprises senior officials from central banks and regulatory agencies, to focus on work regarding interest rate benchmarks. OSSG recommendations include: (1) calculating interest reference rates from transacted prices to the extent possible; and (2) developing alternative reference rates.



## CURRENCY

- Launch of a new series of banknotes in phases starting from the last quarter of 2018 by three note-issuing banks (NIBs)
- Maintain the Coin Collection Programme until September 2020

## GOVERNMENT BOND PROGRAMME

- To issue the third batch of Silver Bond targeting Hong Kong residents aged 65 or above by the end of 2018

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### **New Series Banknotes**

- Announced in July 2018 the issuance of a new series of Hong Kong banknotes by the three NIBs. Consistent with the current series, the new series will consist of five denominations. It is the first time that the thematic subjects on the reverse side of the NIBs' new series banknotes are standardised for each denomination to facilitate easy recognition by the public.
- The HK\$1,000 and HK\$500 notes will be put into circulation in the last quarter of 2018 and early 2019 respectively, and the lower denominations of HK\$100, HK\$50 and HK\$20 will be ready for issue in batches between 2019 and 2020.

### **Coin Collection Programme**

- Two Coin Carts collect coins from members of the public in 18 districts on a rotational basis.
- 486,000 people were served and 404 million coins with a total face value of HK\$556 million were collected between October 2014 and mid-September 2018.

### **Government Bond Programme**

Institutional part – outstanding as at end September 2018:

- Twelve Government bonds totalling HK\$80.6 billion
- Three Islamic bonds totalling US\$3 billion

Retail part:

- One iBond and two Silver Bonds totalling HK\$15.8 billion were outstanding as at end September 2018

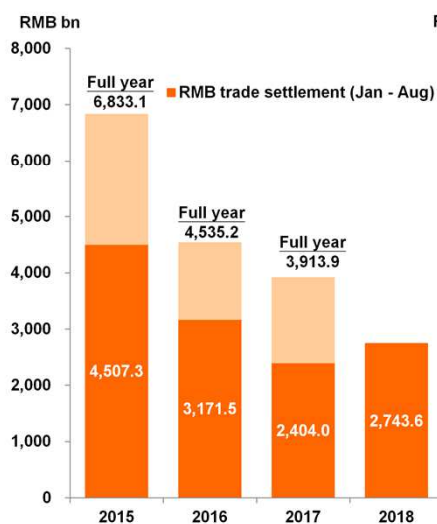


# **HONG KONG AS AN INTERNATIONAL FINANCIAL CENTRE**

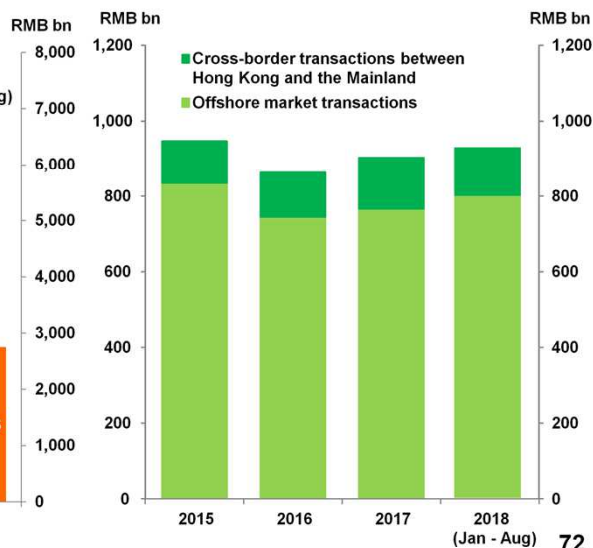


## RMB TRADE SETTLEMENT AND PAYMENT

**RMB trade settlement  
handled by banks in Hong Kong**



**Average daily turnover of Hong Kong  
RMB RTGS System**

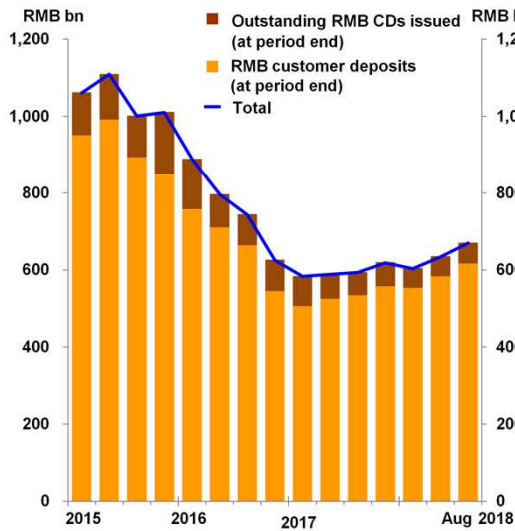


- In the first eight months of 2018, RMB trade settlement handled by banks in Hong Kong totalled RMB 2,743.6 billion.
- In the first eight months of 2018, the average daily turnover of Hong Kong RMB Real Time Gross Settlement (RTGS) system stood at RMB958.6 billion.

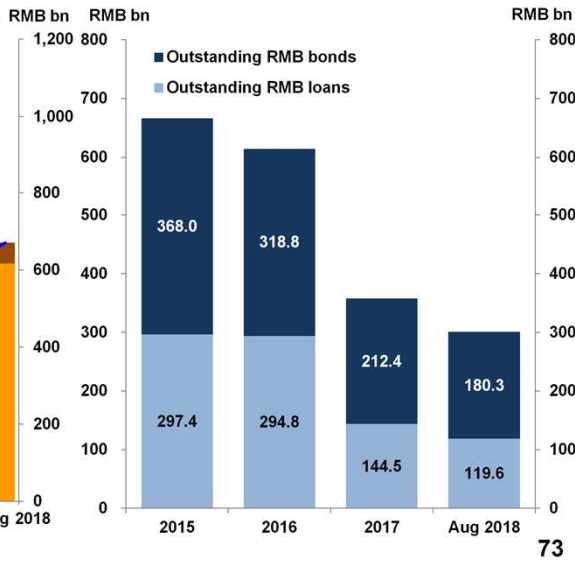


## RMB LIQUIDITY POOL AND FINANCING ACTIVITIES

### RMB customer deposits and certificates of deposit (CDs)



### RMB financing activities



- At end-August 2018, RMB customer deposits and outstanding RMB CDs amounted to RMB618 billion and RMB51.7 billion respectively, totalling RMB669.7 billion.
- At end-August 2018, outstanding RMB loans amounted to RMB119.6 billion. Outstanding dim sum bonds amounted to RMB180.3 billion. Dim sum bond issuance totalled RMB24.3 billion for the first eight months of 2018.



## MAINTAINING RMB BUSINESS LINKS WITH OTHER JURISDICTIONS

	Aug 2018	2017	2016	2015
1 No. of participating banks of Hong Kong's RMB clearing platform	202	203	210	217
Of which:				
Branches and subsidiaries of overseas banks and overseas presence of Mainland banks	175	178	184	192
2 Amount due to overseas banks (RMB billion)	108.2	95.4	69.0	105.7
3 Amount due from overseas banks (RMB billion)	137.1	131.3	91.6	132.1

- The HKMA maintained and deepened ongoing collaborative dialogues with other offshore RMB centres, including Australia, London, Paris and Switzerland, and continued our marketing efforts through participation in industry events to promote Hong Kong's RMB business platform and our unique role as a springboard between Mainland China and the rest of the world.





## **PILOT BOND GRANT SCHEME (PBGS)**

- The PBGS has come into operation since 10 May 2018. Usage of the Scheme has been encouraging
- The HKMA will continue to work with the industry to encourage more corporates to tap into the Hong Kong bond market



## PROMOTING GREEN FINANCE

- In the first half of 2018, there were at least 15 green bonds issued in Hong Kong with issuance size totalling some US\$8 billion. Issuers included multilateral development banks, and corporates and financial institutions from Hong Kong, the Mainland and overseas
- The HKMA has been taking steps to promote green finance in Hong Kong, including:
  - Carrying out early preparatory work in relation to the inaugural Government Green Bond issuance, with a view to arranging issuance as soon as possible after the completion of the legislative process
  - Co-hosted the Green and Social Bond Principles Conference with the International Capital Market Association and a joint seminar with the Research Bureau of the People's Bank of China in June 2018



# **INVESTMENT ENVIRONMENT AND PERFORMANCE OF THE EXCHANGE FUND**

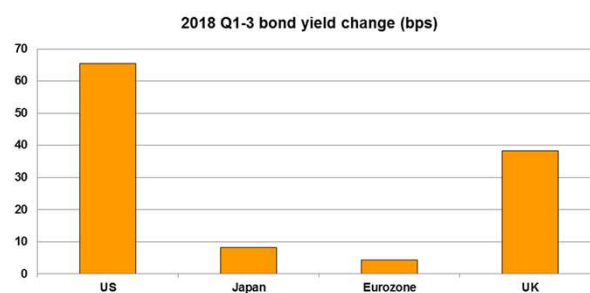
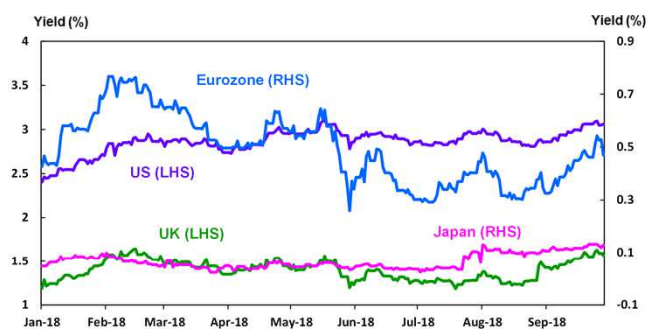


## INVESTMENT ENVIRONMENT IN Q3 2018

- **Interest rates:** 10-year Treasury yield traded in a tight range in July and August as haven demand for US Treasuries offset the rising pressure associated with solid economic growth in the US. However the yield spiked up through the 3% level in mid-September on the back of continued monetary tightening by the US Fed
- **Equity markets:** US equities performed well in the quarter, supported by the US tax reform and expected future growth in corporate earnings. Major US equity indices rose to the high levels recorded at the beginning of the year. Other markets lagged behind substantially, with emerging market equity markets suffering the most. The Hang Seng Index had fallen since the beginning of the quarter before rebounding somewhat in mid-September
- **Exchange rates:** The US dollar strengthened against major currencies in the quarter



## CHANGES IN 10-YEAR GOVERNMENT BOND YIELDS IN Q1-Q3 2018





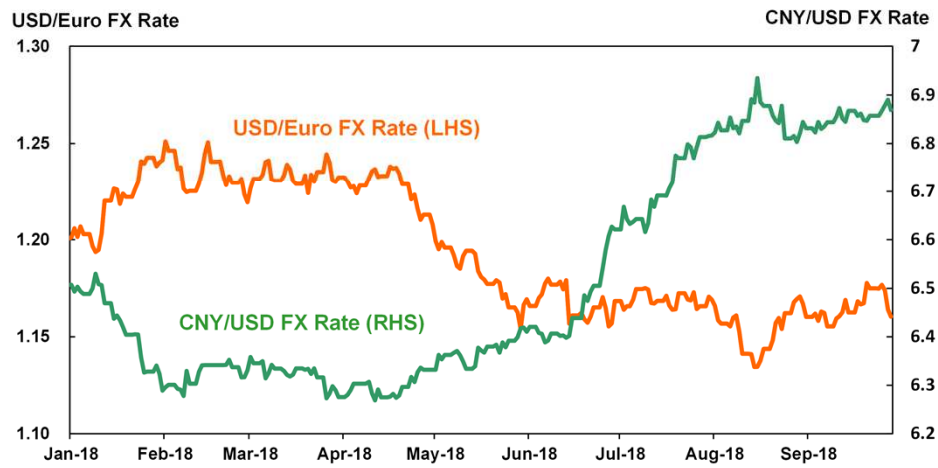
## EQUITY MARKETS IN Q1-Q3 2018

Normalised Index Level (2017 year-end = 100)





## CURRENCY MARKETS IN Q1-Q3 2018





## INVESTMENT INCOME

	← 2018 →		2017	2016
	(unaudited)			
(HK\$ billion)	Jan - Sep	Q3	Full Year	Full Year
<b>Bonds</b>			<b>34.4</b>	<b>33.1</b>
<b>Hong Kong equities*</b>			<b>58.3</b>	<b>5.3</b>
<b>Other equities</b>			<b>80.4</b>	<b>28.6</b>
<b>Foreign exchange#</b>			<b>53.5</b>	<b>(15.8)</b>
<b>Other investments@</b>			<b>37.4</b>	<b>16.9</b>
<b>Investment income</b>			<b>264.0</b>	<b>68.1</b>

\* Excluding valuation changes of the Strategic Portfolio.

# This is primarily the effect of translating foreign currency assets into Hong Kong dollar after deducting the portion for currency hedging.

@ Including valuation changes of private equity and real estate investments held under the Long-Term Growth Portfolio. This figure represents valuation changes up to the end of June 2018. Valuations of these investments from July to September are not yet available.





## INCOME AND EXPENDITURE

	I ← 2018 → I		2017	2016
	(unaudited)			
(HK\$ billion)	Jan - Sep	Q3	Full year	Full year
<b>Investment income</b>			<b>264.0</b>	<b>68.1</b>
Other income			0.2	0.2
Interest and other expenses			<u>(9.9)</u>	<u>(6.4)</u>
Net income/(loss)			254.3	61.9
Fee payment to Fiscal Reserves*#			(46.2)	(33.1)
Fee payment to HKSAR government funds and statutory bodies*			(8.6)	(9.6)

\* The rate of fee payment is 4.6% for 2018, 2.8% for 2017 and 3.3% for 2016.

# This does not include the 2018 fee payment to the Future Fund because such amount will only be disclosed when the composite rate for 2018 is available.

(The composite rate was 9.6% for 2017 and 4.5% for 2016. Fee payable to the Future Fund was HK\$22.7 billion for 2017 and HK\$10.1 billion for 2016.)



# EXCHANGE FUND ABRIDGED BALANCE SHEET

(HK\$ billion)

At 30 Sep 2018  
(Unaudited)

At 31 Dec 2017

At 31 Dec 2016

## ASSETS

Deposits	346.9	386.7
Debt securities	2,761.6	2,466.1
Hong Kong equities*	204.2	147.3
Other equities	507.5	429.3
Other assets <sup>#</sup>	195.1	189.3
<b>Total assets</b>	<b>4,015.3</b>	<b>3,618.7</b>
	=====	=====

## LIABILITIES AND EQUITY

Certificates of Indebtedness	456.7	405.4
Government-issued currency notes & coins in circulation	12.2	11.9
Balance of the banking system	179.8	259.6
Exchange Fund Bills and Notes issued	1,045.8	961.0
Placements by banks and other financial institutions	59.4	56.1
Placements by Fiscal Reserves <sup>@</sup>	1,073.8	914.6
Placements by HKSAR government funds and statutory bodies	305.1	302.5
Placements by subsidiaries	-	-
Other liabilities	169.4	161.1
<b>Total liabilities</b>	<b>3,302.2</b>	<b>3,072.2</b>
Accumulated Surplus	713.1	546.5
Revaluation Reserve	-	-
<b>Total equity</b>	<b>713.1</b>	<b>546.5</b>
<b>Total liabilities and equity</b>	<b>4,015.3</b>	<b>3,618.7</b>
	=====	=====

\* Hong Kong equities include shares of the Hong Kong Exchanges and Clearing Limited in the Strategic Portfolio.

<sup>#</sup> Including fund injection to Exchange Fund's investment holding subsidiaries at a carrying amount of HK\$135.2 billion at 31 Dec 2017 and HK\$118.8 billion at 31 Dec 2016.

<sup>@</sup> Including placements by the Future Fund of HK\$224.5 billion.



## 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*#	68.1	(23.3)	47.1	18.9	25.4
2017*#	264.0	66.0	61.8	71.3	64.9
2018*# (unaudited)	N/A	N/A		0.1	35.0

\* Excluding valuation changes of the Strategic Portfolio

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



## INFRASTRUCTURE INVESTMENT (1)

- **Exchange Fund (EF)'s Long-Term Growth Portfolio (LTGP):**
  - Invests primarily in private equity and real estate, and started to invest in infrastructure in recent years
  - Since-inception annualised internal rate of return at 13.7% as of end-2017
  - Total market value amounted to HK\$235.6 billion, or about 5.9% of the EF's total assets as at end-2017
- **Infrastructure Investment:**
  - Generates relatively stable cash flows with low loss ratios
  - Returns less affected by economic cycles and with lower correlation with those of traditional assets
  - Enhances resilience to adverse economic shocks and reduces volatility of the overall return

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- The EF started investing in private equity and real estate (commonly known as “alternative assets”) under the LTGP in 2009 with the aim to diversify its portfolio, spread the investment risks associated with “traditional assets” (primarily bonds and equities), and enhance long-term return. To further diversify the asset classes, the EF has started to invest in infrastructure projects under the LTGP in recent years.
- To ensure that the EF has sufficient liquidity to maintain monetary and financial stability, the market value of the LTGP was capped at one-third of the Accumulated Surplus of the EF when the portfolio was first established. Subsequently, as part of the Future Fund is placed with the LTGP, the total amount of capital available for investment under the LTGP has increased correspondingly. At the end of 2017, the total market value of investments under the LTGP reached HK\$235.6 billion, or about 5.9% of the EF's total assets.
- Infrastructure generates relatively stable cash flows with low loss ratios. As infrastructure is essential to economic development and people's livelihood, its returns are less affected by economic cycles and have lower correlation with those of traditional assets. The inclusion of infrastructure investment in the portfolio will serve as a hedge, enhancing resilience to adverse economic shocks and reducing volatility of the overall return. Because of these attractive attributes, many medium- and long-term institutional investors, such as sovereign wealth funds, pension funds and insurance companies, have been increasing their allocation to infrastructure in recent years. These investors, like the EF, all seek to achieve stable long-term returns.



## INFRASTRUCTURE INVESTMENT (2)

- **Risk management measures :**
  - Stay prudent as always and adopt risk management measures to assess, mitigate and contain potential risks
  - Allocate only a small portion of the LTGP to infrastructure and ensure a diversified portfolio to avoid undue concentration
  - Before committing to an investment, conduct rigorous due diligence, engage external advisors to verify, perform stress testing, implement risk mitigation measures, etc., to ensure commercial viability of investment projects
  - Partner with reputable and experienced institutional investors and asset managers
  - Stringent post-investment monitoring on all invested projects
  - Ensure each project (irrespective of its location or business partnership) goes through the established mechanism and processes that underpin our robust, professional and objective due diligence and risk management

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When investing in infrastructure projects, we have been very prudent and implement various risk management measures that are commensurate with the projects concerned in order to assess, mitigate and contain the associated risks. These include:

- i. **Appropriate allocation** – The EF's total infrastructure investments (including commitments) amounts to about US\$2.2 billion currently, accounting for only a small portion of the LTGP;
- ii. **Diversified portfolio** – We seek to build a diversified portfolio of infrastructure investment across different regions, sectors, capital structures and partners to avoid undue concentration;
- iii. **Due diligence** – Before committing to an investment, we must conduct rigorous due diligence, including assessing carefully its financial conditions, growth potential, exit mechanism, risks and other factors, to ensure that the project is commercially viable. Priority is accorded to jurisdictions with proper governance and environmental protection framework;
- iv. **Selection of partners** – We seek to partner with reputable and experienced institutional investors and asset managers to capitalise on their broad and deep expertise. We will also ensure that our partners have good integrity and governance standards and are trust-worthy long-term partners of the EF;
- v. **External advisors** – We engage external advisors to provide independent and professional opinions on tax, legal, regulatory, and environmental issues;

- vi. **Stress testing** – We perform stress testing on projects' financial assumptions and models to ensure the projects remain resilient amid unfavourable market conditions;
- vii. **Risk mitigation** – We assess if appropriate risk mitigation measures should be adopted for the projects. At the negotiation stage of legal documentation, we will also secure the requisite governance rights in the projects, including their funding arrangements, operating budget, investment and operation strategies, senior personnel appointments, etc., and ensure we have the participation rights in devising asset disposal plans;
- viii. **Reference checks** – We conduct reference checks with peer investors as external validation of individual partners' capability and project viability;
- ix. **Post-investment monitoring** – After investment, we will maintain regular contact with our partners and closely monitor the progress of the projects to identify any potential issues at an early stage;
- x. **Stringent gate-keeping** – We will strictly adhere to the above requirements and processes when selecting the projects. We will turn down a project if it fails any of the above requirements, no matter how promising the returns could be.



# **HONG KONG MORTGAGE CORPORATION**



## **MORTGAGE INSURANCE PROGRAMME (MIP)**

- Since its launch in March 1999, the MIP has helped over 140,000 families attain home ownership
- In the first nine months of 2018, the total number of loans drawdown and aggregate loan amount under the MIP were 6,955 cases and HK\$26.9 billion respectively, as compared to 6,483 cases and HK\$23.7 billion in the corresponding period last year
- About 91% of drawn down loans were for secondary market properties





## REVERSE MORTGAGE PROGRAMME

- As at end-September 2018, 2,866 applications had been received:
  - Average age of borrowers: 69 years old
  - Average monthly payout: HK\$15,000
  - Payment terms: 10-year (26.1%), 15-year (15.8%), 20-year (12.4%), life (45.7%)
  - Average property value: HK\$5.2 million
  - Average property age: 30 years

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- Note: Figures in percentage for individual items may not add up to 100% due to rounding.



## SME FINANCING GUARANTEE SCHEME (SFGS)

- SMEs and banks responded positively to the promotion and communication effort on the SFGS
- As at end-September 2018, 14,111 applications had been approved, involving a total loan amount of around HK\$56.6 billion. Key data of the approved applications are as follows:

Average guarantee period	4.6 years	Average loan size	HK\$4.01 million
Proportion of application from manufacturing and non-manufacturing industries	22% and 78% (in terms of no. of applications approved)	Average loan interest rate and average guarantee fee rate	4.88% p.a. 0.49% p.a.
Enterprises with less than 50 employees	91%	Benefitted enterprises and the related no. of employees	8,149 enterprises and 206,190 employees

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

Manufacturing sector –	<b>21.5%</b>
– Textiles and clothing	4.0%
– Electronics	2.0%
– Plastics	1.7%
– Printing and publishing	1.6%

Non-manufacturing sector –	<b>78.5%</b>
– Trading	45.7%
– Wholesale and retail	9.4%
– Engineering	3.3%
– Construction	3.3%



## LIFE ANNUITY SCHEME

- The first tranche of the HKMC Annuity Plan (the Plan) recorded 9,410 registrations of subscription intention. The total subscription amount and the average subscription amount stood at around HK\$4.94 billion and HK\$525,000 respectively. All of the applicants were fully allotted
- Compared with the entire local annuities market size of HK\$7.7 billion in 2017, it is a good start to record the above total subscription amount for the first tranche of the Plan. There is a certain demand for life annuities by retirees
- Life annuities are different from fixed deposits and other investment or financial products. It takes time to establish public awareness and for the public to accept it. The HKMC Annuity Limited will continue to carry out the promotional work, in order to increase the awareness of the public about life annuities
- After the distribution of this tranche of the Plan, we will plan and announce the future distribution arrangements, which may include a continuous sales arrangement to operate the Plan on an ongoing basis