



HONG KONG MONETARY AUTHORITY

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

5 February 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

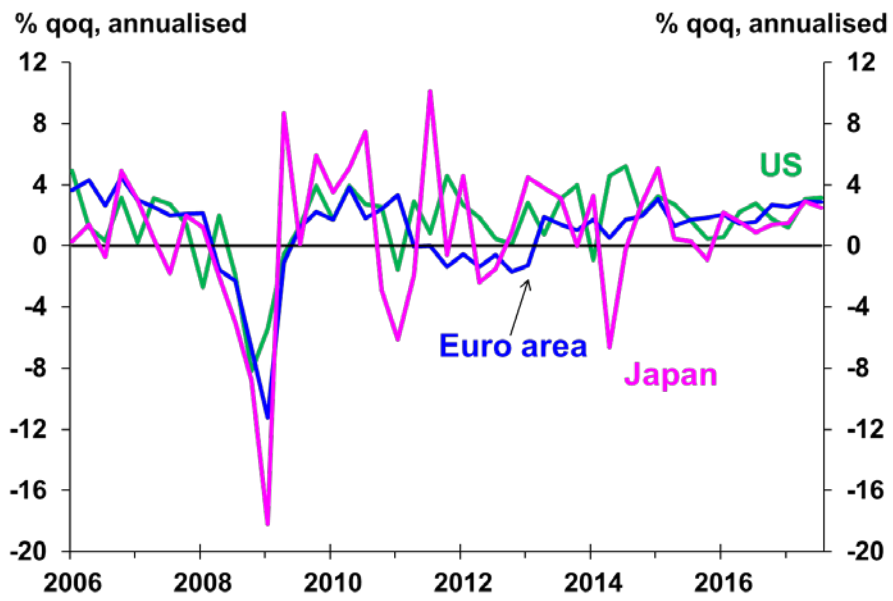
(% year-on-year)

	2016	2017 Forecasts	2018 Forecasts
US	1.5	2.3	2.7
Euro area	1.8	2.3	2.2
Japan	0.9	1.8	1.4
Asia (ex-Japan)	5.8	5.9	5.8
Mainland China	6.7	6.8	6.5
Hong Kong	2.0	3.7	2.8

Sources: January Consensus Forecasts and Official Statistics



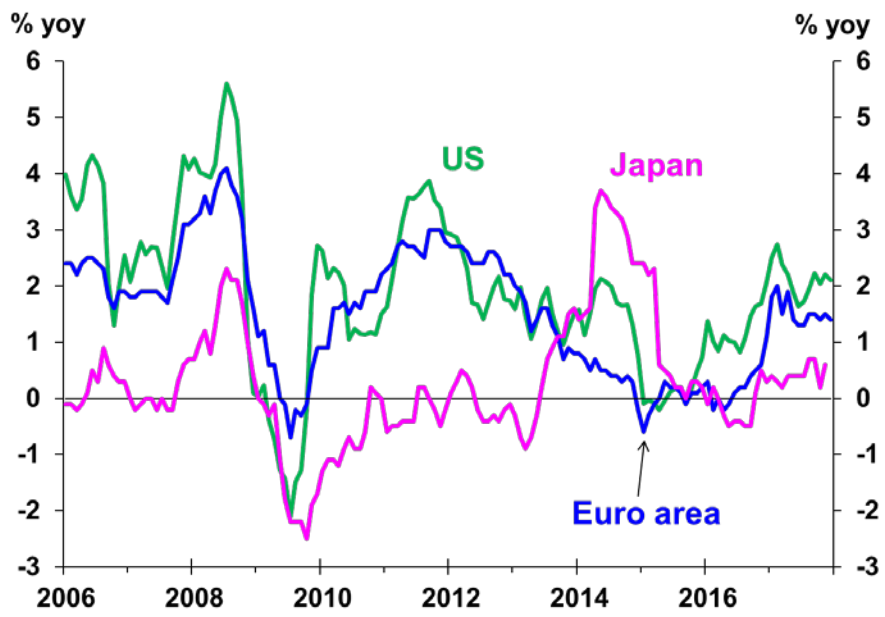
REAL GDP GROWTH IN MAJOR COUNTRIES



Source: Bloomberg and CEIC



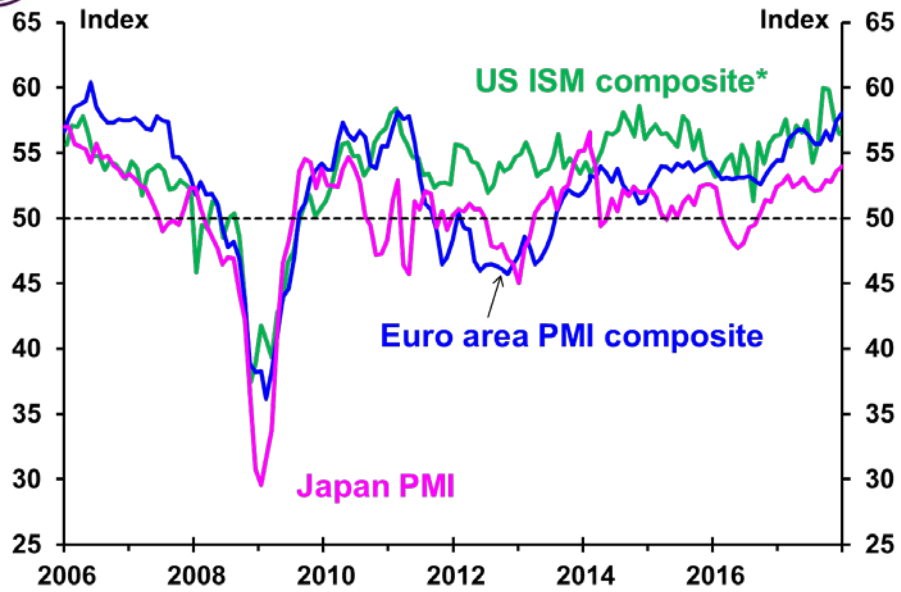
HEADLINE INFLATION IN MAJOR COUNTRIES



Sources: Bloomberg and CEIC



PURCHASING MANAGERS' INDEX IN MAJOR ECONOMIES

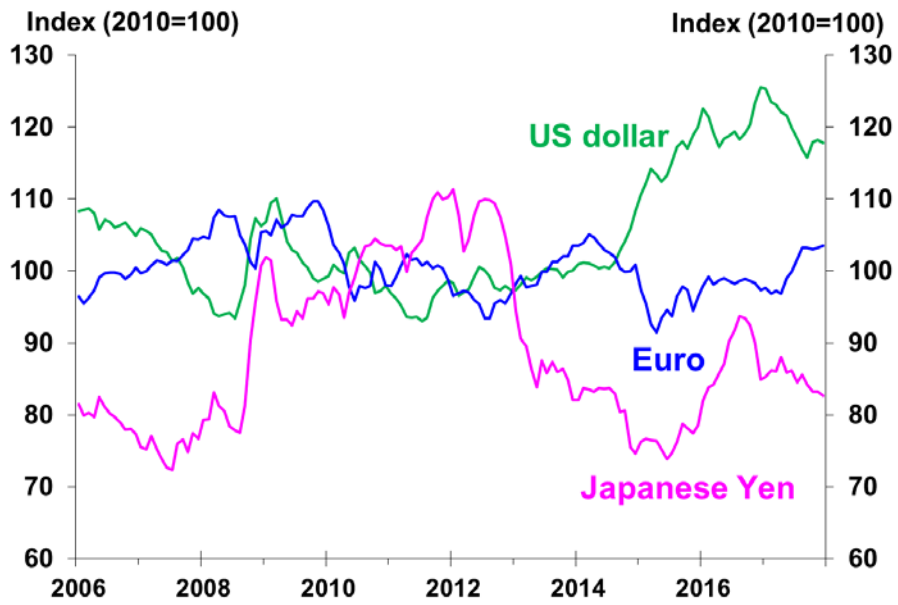


*Weighted average of the ISM manufacturing and non-manufacturing indices

Sources: Bloomberg and CEIC



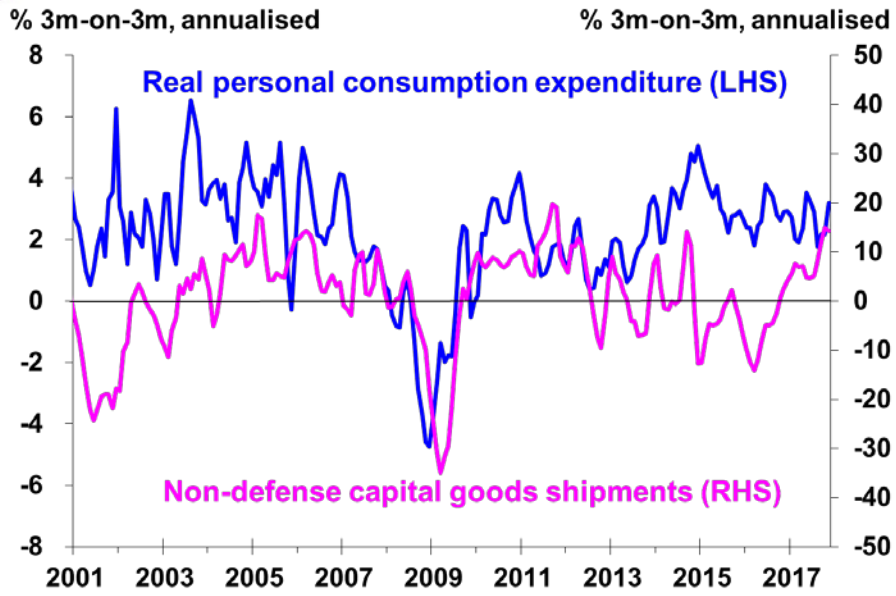
NOMINAL EFFECTIVE EXCHANGE RATE INDEX OF MAJOR CURRENCIES



Source: CEIC



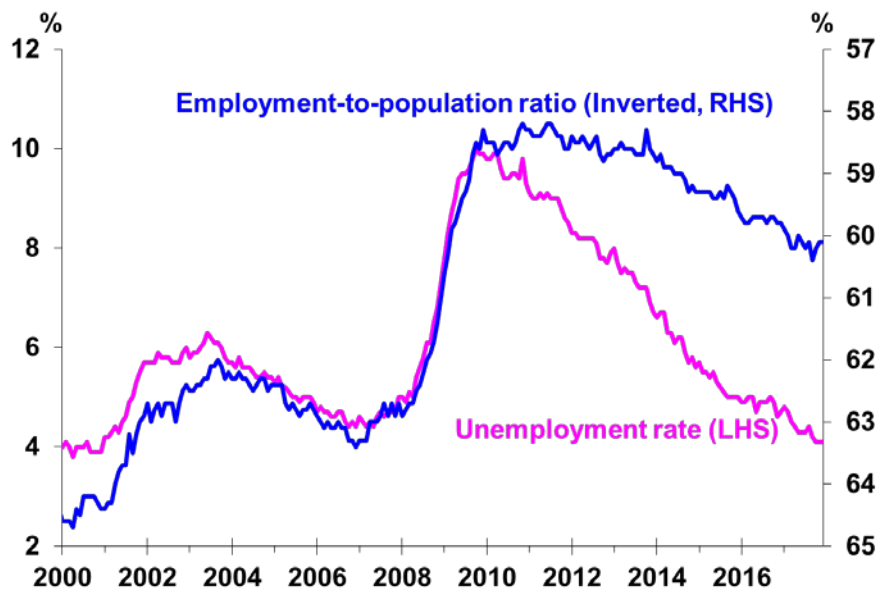
US: CONSUMPTION GROWTH & BUSINESS INVESTMENT ACTIVITY



Source: CEIC



US: LABOUR MARKET SITUATION



Source: CEIC



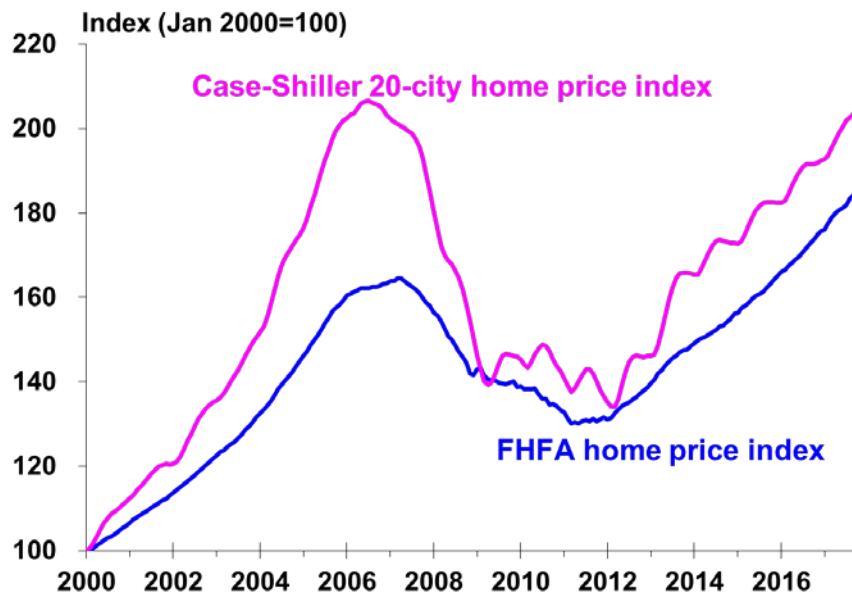
US: LABOUR FORCE PARTICIPATION



Source: CEIC



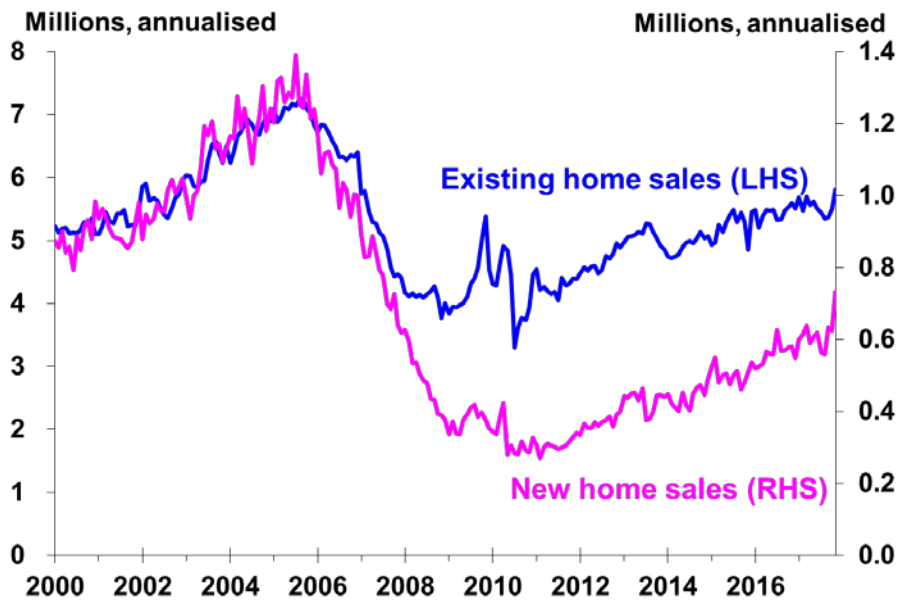
US: HOUSE PRICES



Sources: CEIC and Datastream



US: HOME SALES

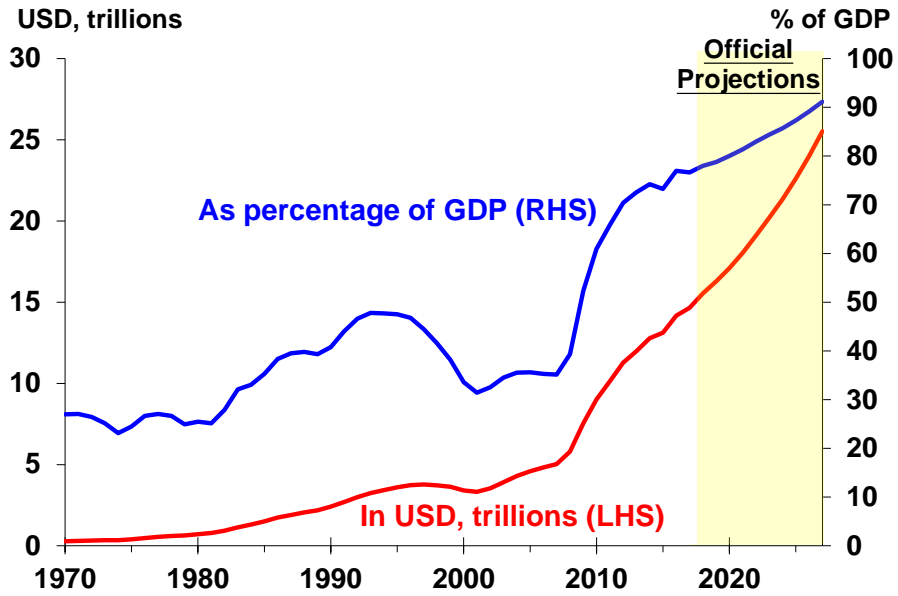


Source: CEIC



US: FEDERAL GOVERNMENT DEBT

US federal debt held by the public

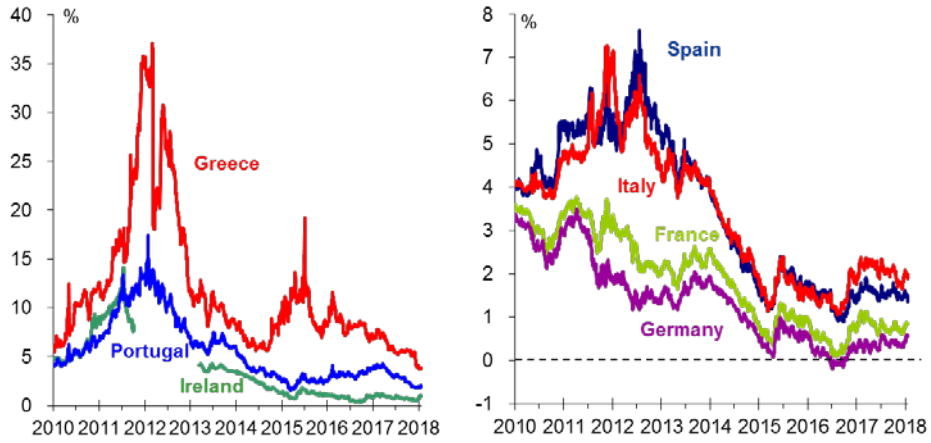


Source: Congressional Budget Office



EURO AREA: SOVEREIGN BOND YIELDS

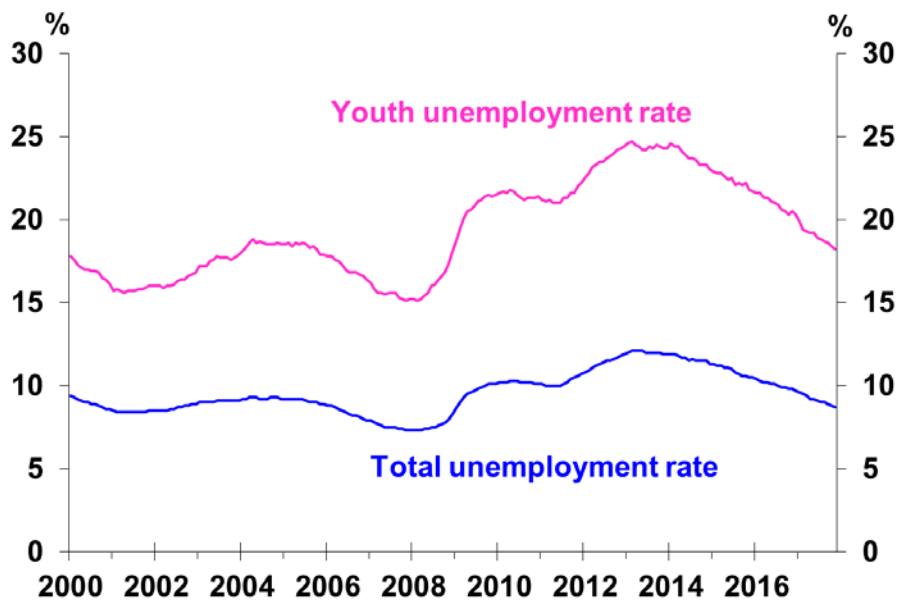
10-year sovereign bond yield



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



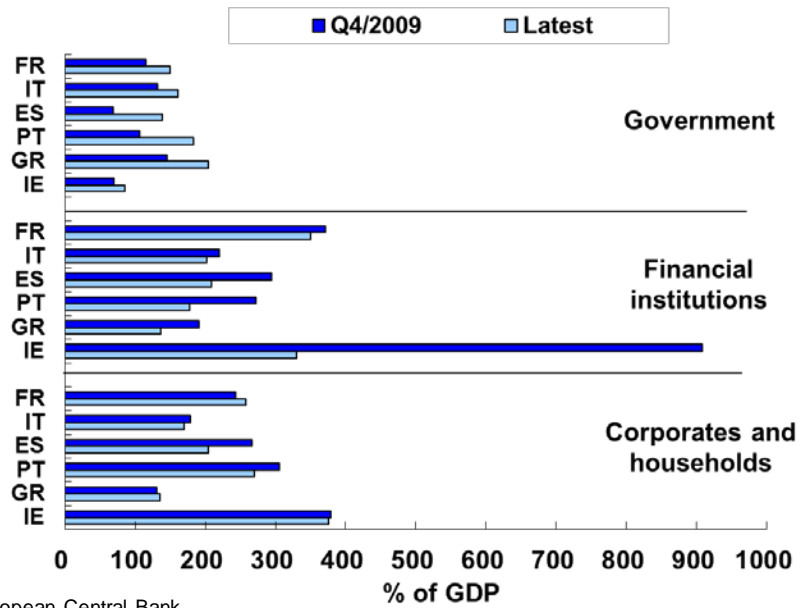
EURO AREA: UNEMPLOYMENT RATE



Source: Bloomberg



EURO AREA: OVERALL INDEBTEDNESS



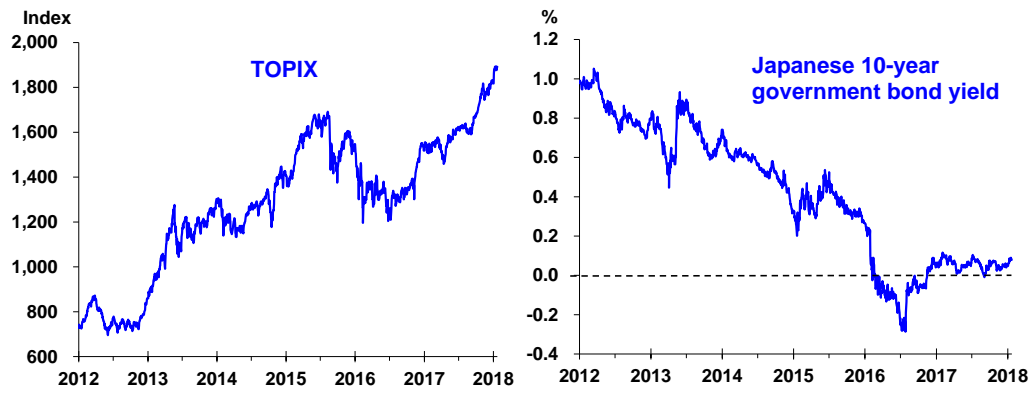
Source: European Central Bank

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

The latest figures for financial institutions are up to Q3/2017 whilst the rest are up to Q2/2017



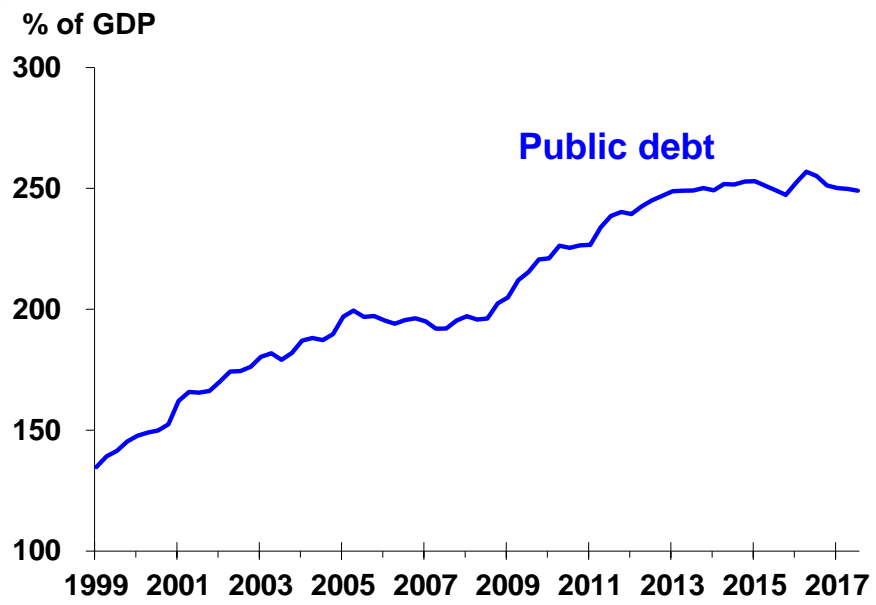
JAPAN: FINANCIAL MARKETS



Source: Bloomberg



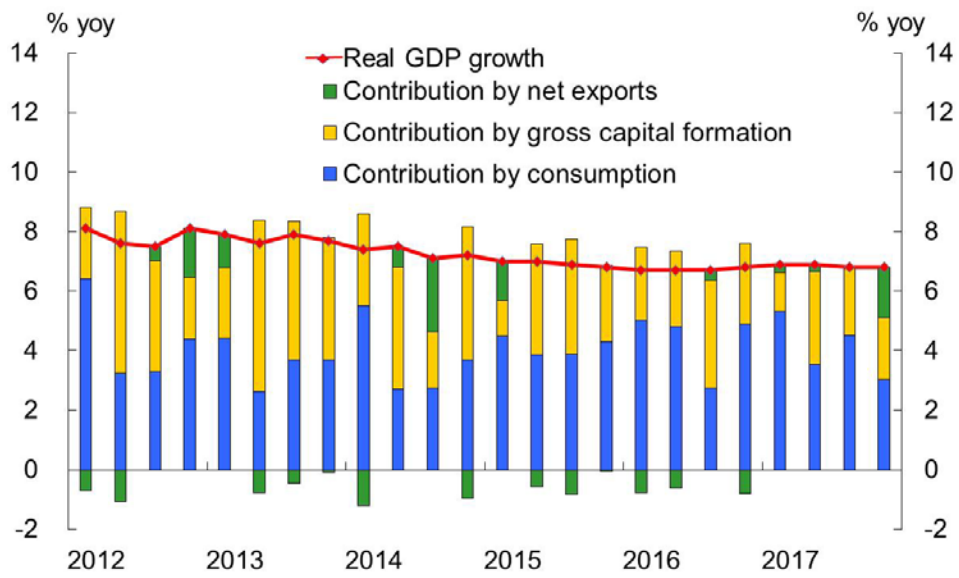
JAPAN: PUBLIC DEBT



Sources: Bank of Japan and CEIC



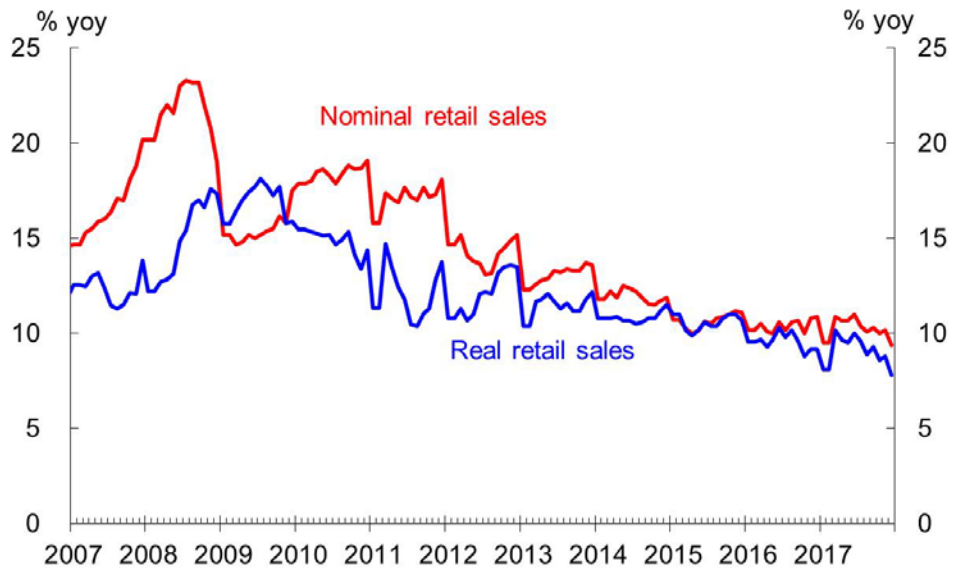
MAINLAND CHINA: REAL GDP GROWTH



Source: CEIC



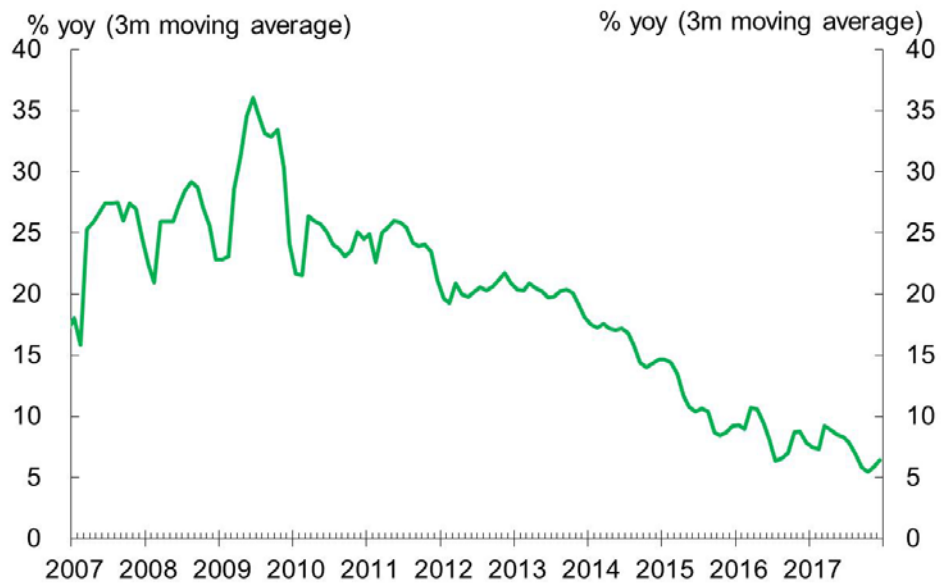
MAINLAND CHINA: RETAIL SALES



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



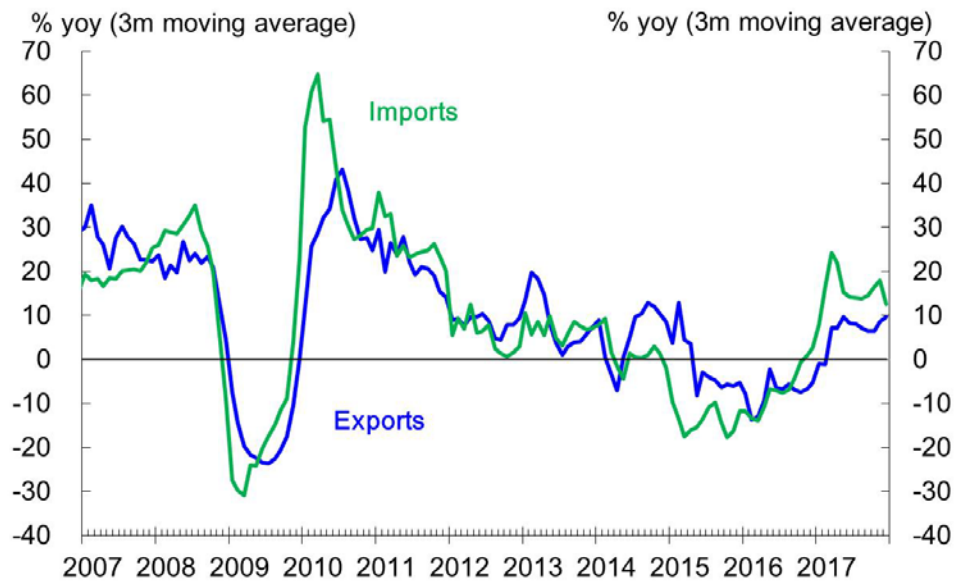
MAINLAND CHINA: FIXED ASSET INVESTMENT



Sources: CEIC and HKMA staff estimates



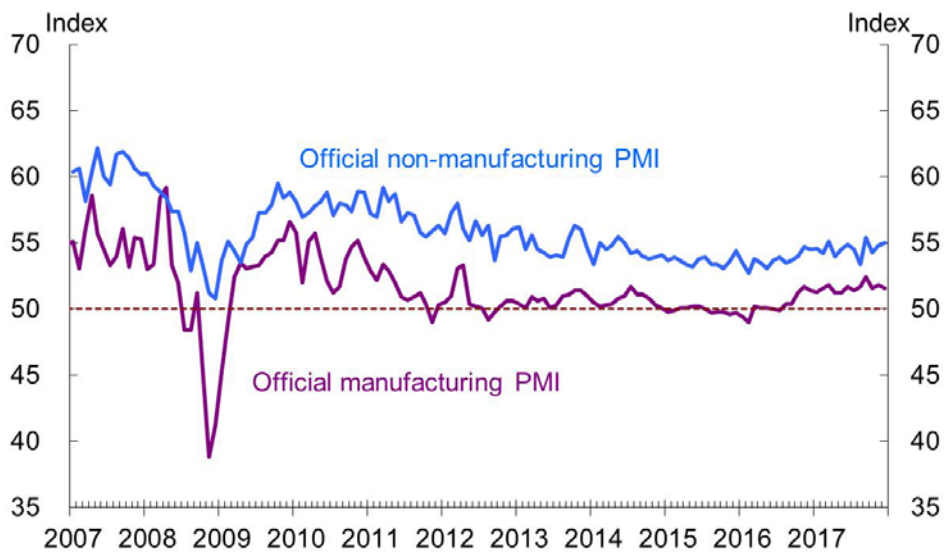
MAINLAND CHINA: IMPORT AND EXPORT GROWTH



Sources: CEIC and HKMA staff estimates



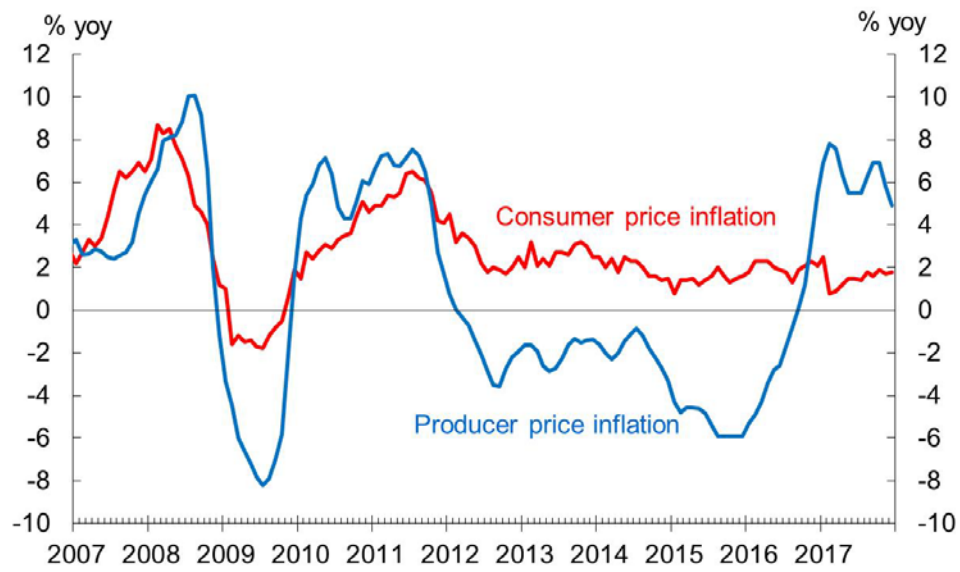
MAINLAND CHINA: PURCHASING MANAGERS' INDEX



Source: CEIC



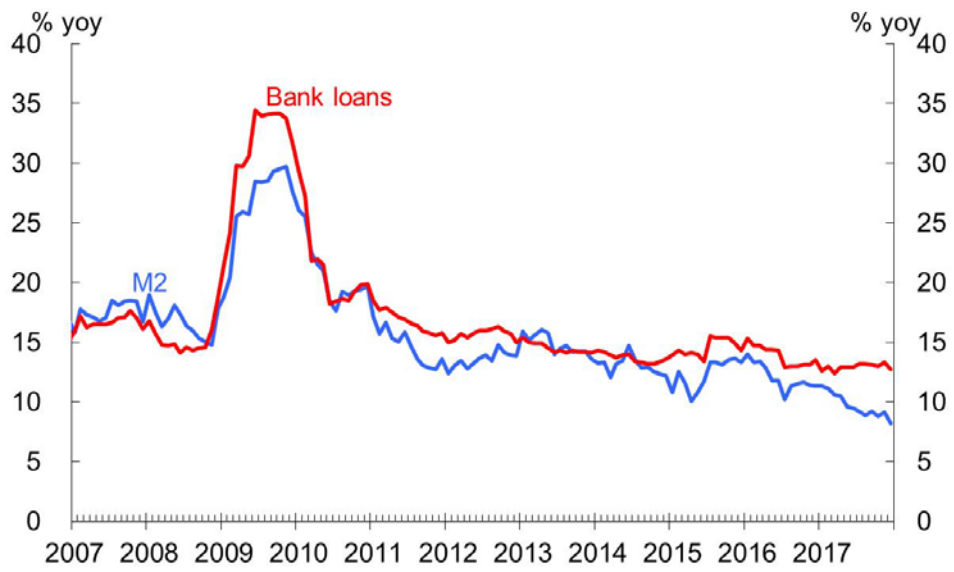
MAINLAND CHINA: INFLATION



Source: CEIC



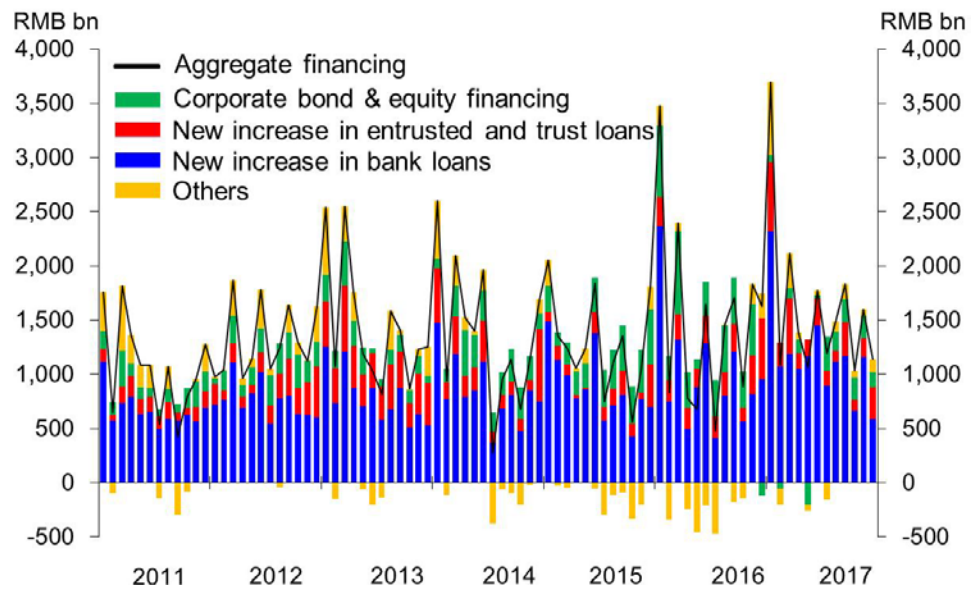
MAINLAND CHINA: MONEY AND LOAN GROWTH



Source: CEIC



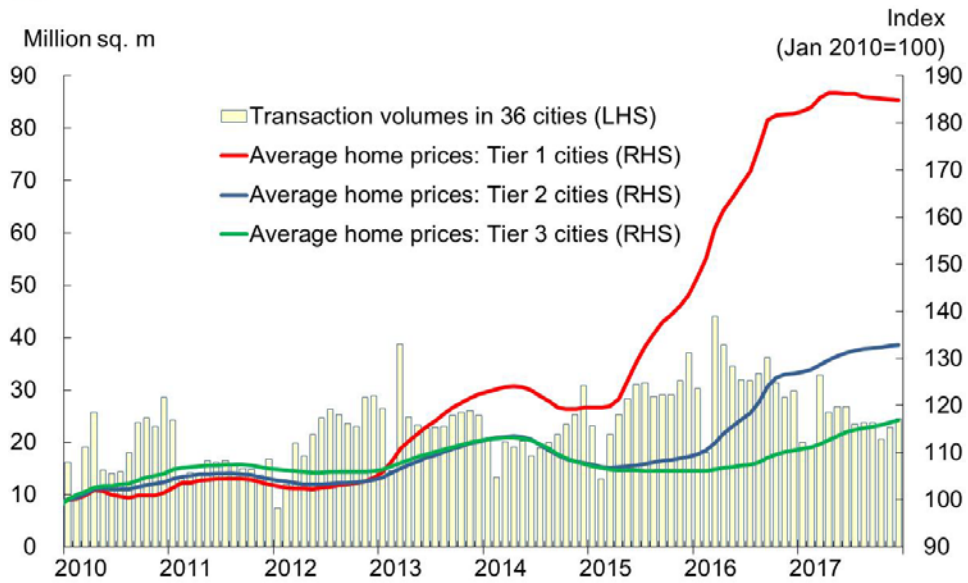
MAINLAND CHINA: AGGREGATE FINANCING FLOW



Source: CEIC



MAINLAND CHINA: PROPERTY PRICE AND TRANSACTION VOLUME



Sources: CEIC, WIND and HKMA staff estimates



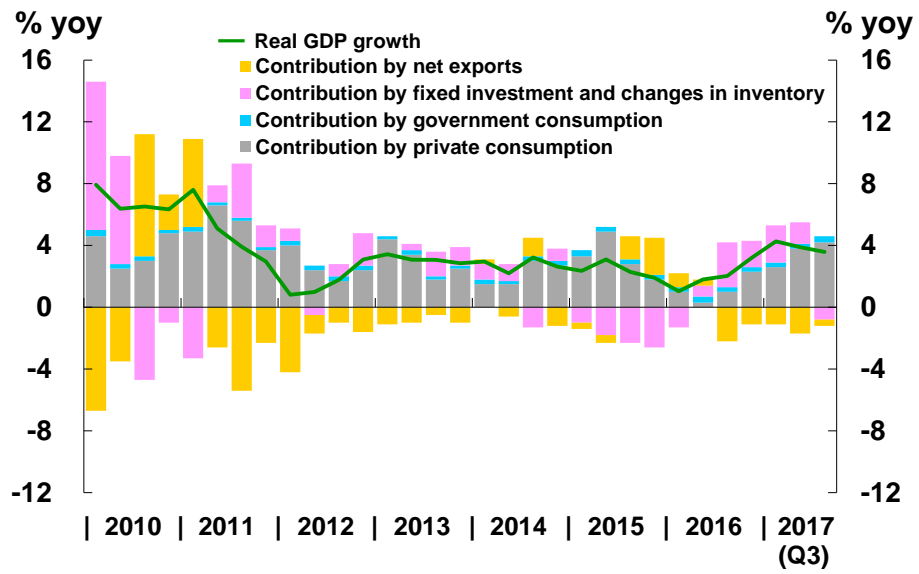
MAINLAND CHINA: HOUSING PRICE CHANGES IN MAJOR CITIES



Sources: CEIC, WIND and HKMA staff estimates



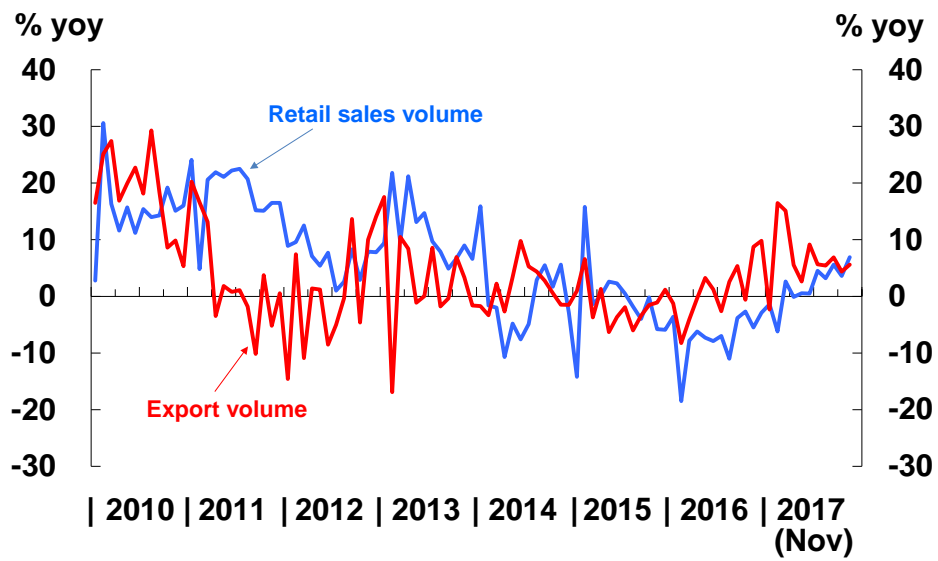
HONG KONG: REAL GDP GROWTH



Source: C&SD



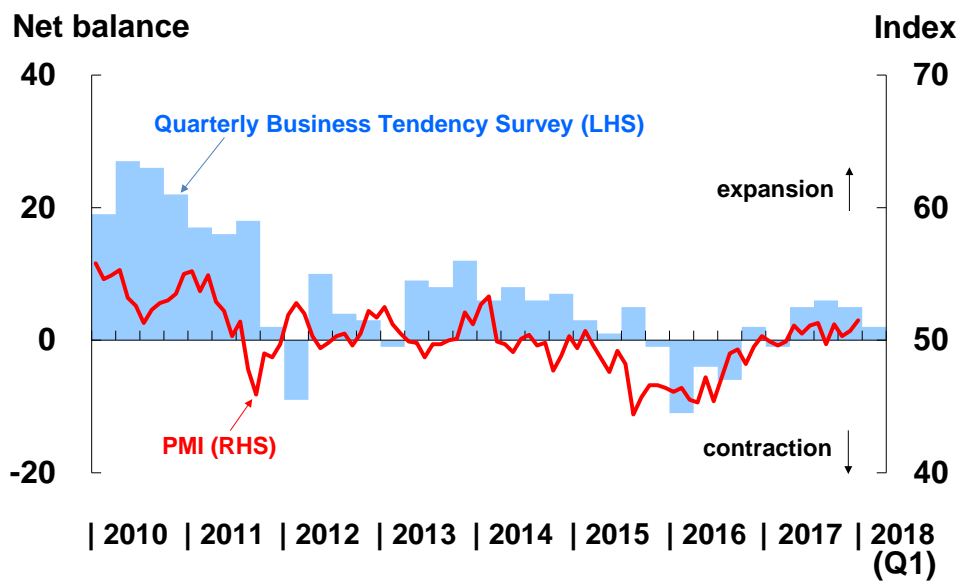
HONG KONG: ECONOMIC ACTIVITY



Source: C&SD



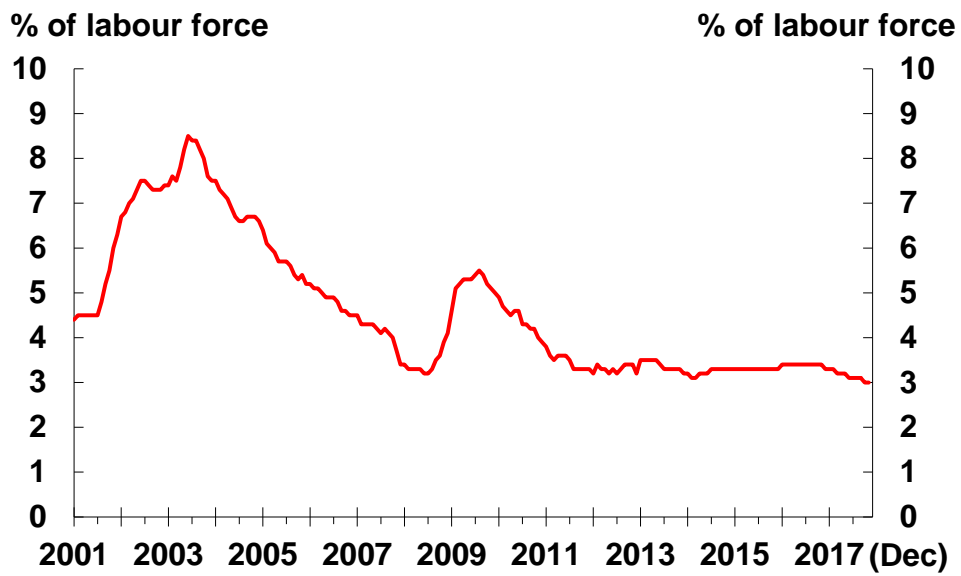
HONG KONG: BUSINESS OUTLOOK



Sources: C&SD and Markit Economics



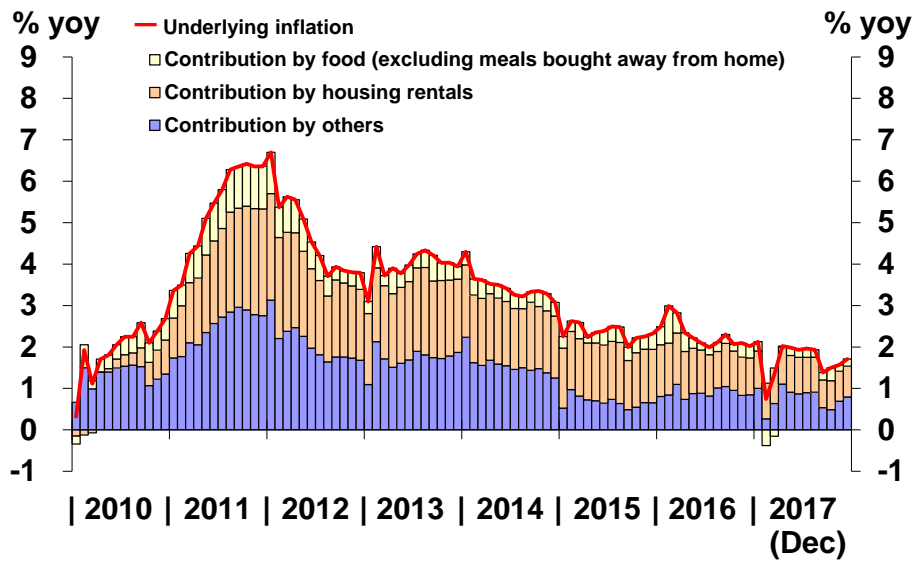
HONG KONG: UNEMPLOYMENT RATE



Source: C&SD



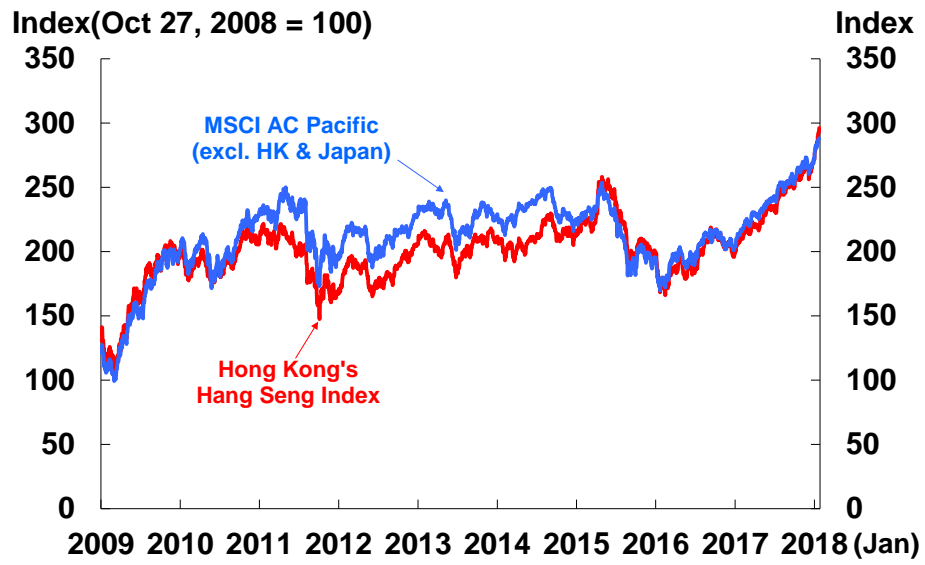
HONG KONG: INFLATION



Sources: C&SD and HKMA staff estimates



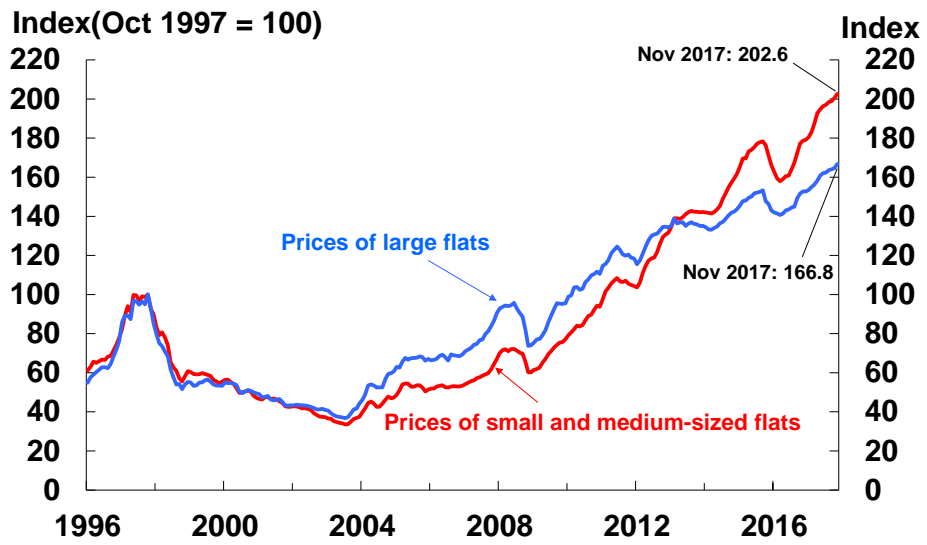
HONG KONG: EQUITY MARKET



Source: Bloomberg



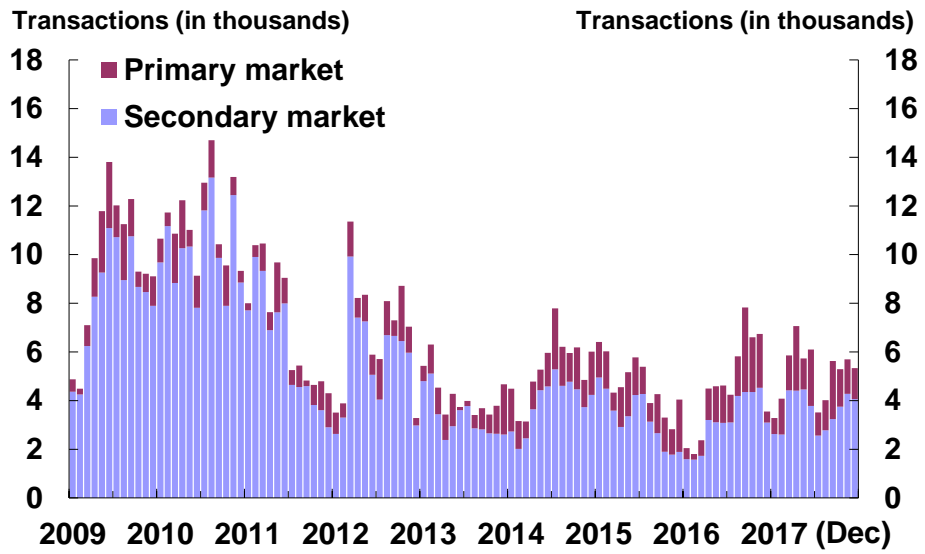
HONG KONG: RESIDENTIAL PROPERTY PRICES



Source: Rating and Valuation Department



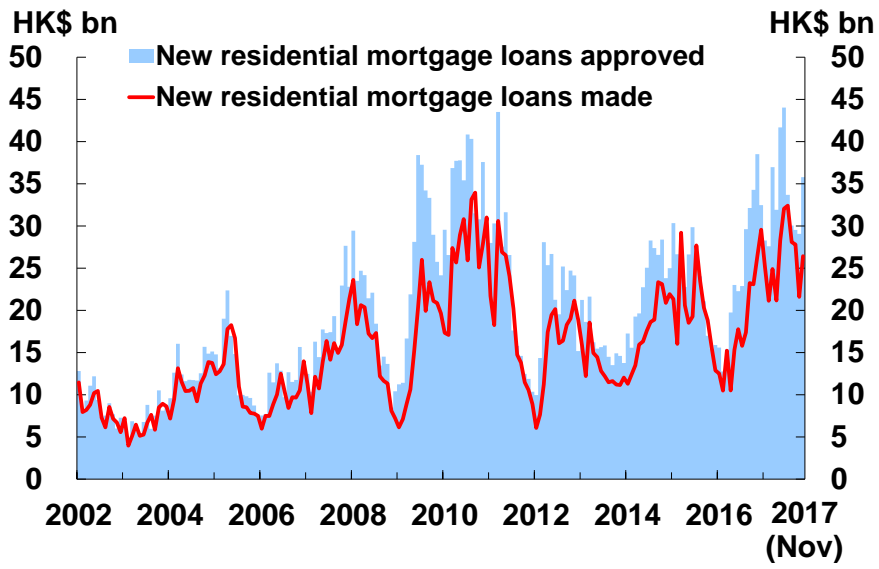
HONG KONG: TRANSACTION VOLUME IN THE PRIMARY AND SECONDARY MARKETS



Source: The Land Registry



HONG KONG: NEW RESIDENTIAL MORTGAGE LOANS

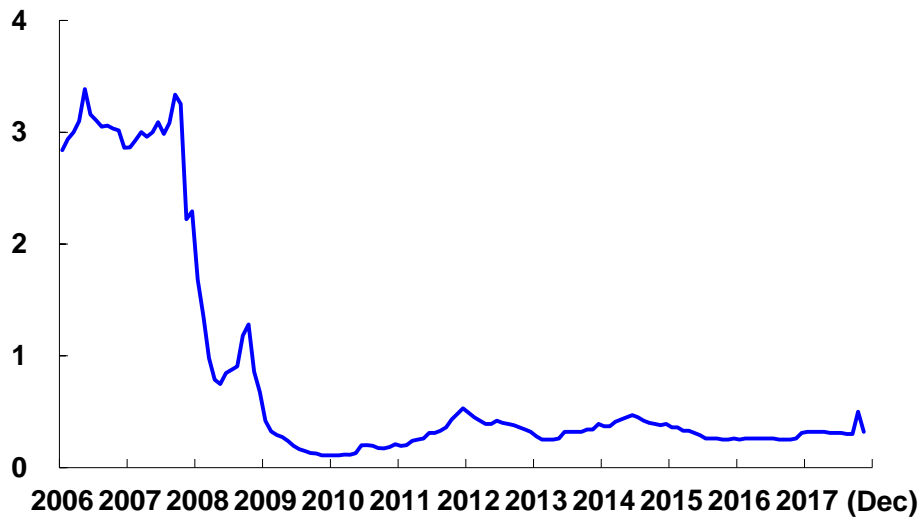


Source: HKMA



HONG KONG: COMPOSITE INTEREST RATE

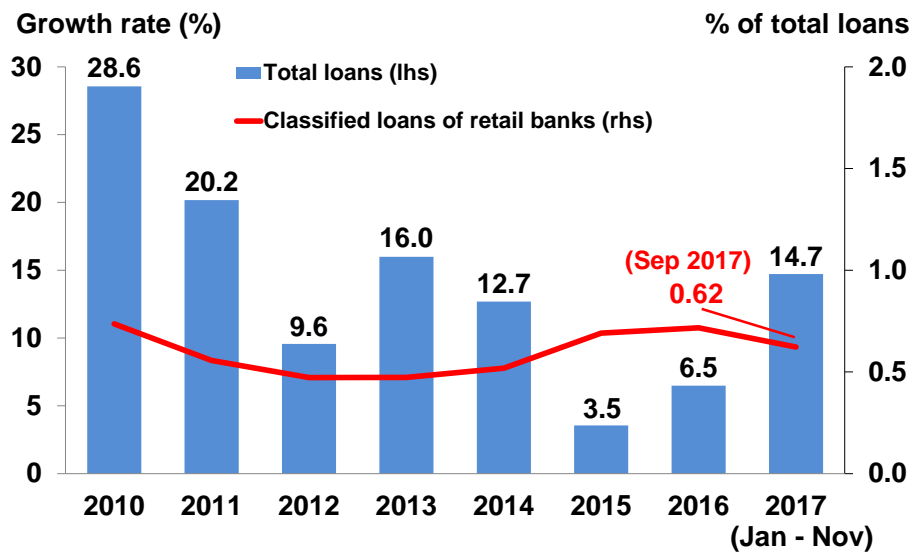
% p.a.



Source: HKMA



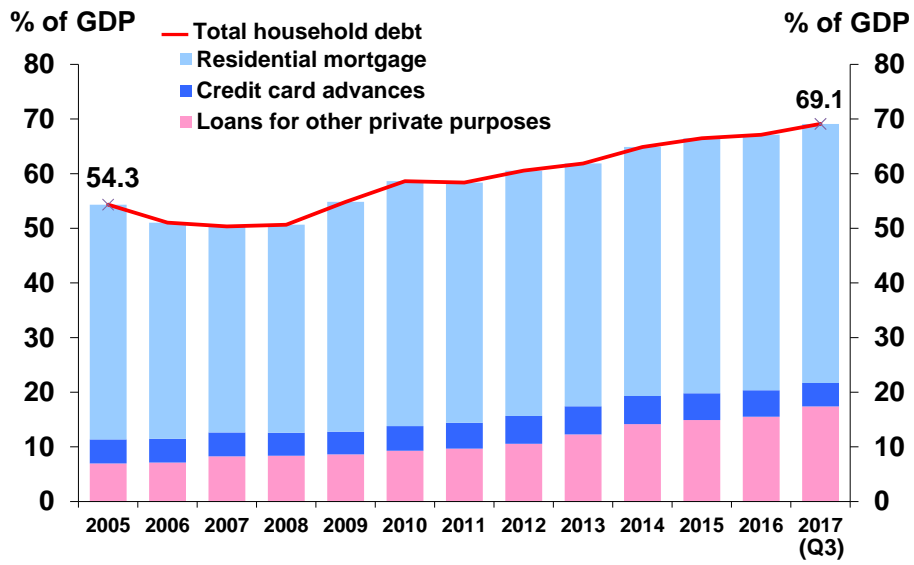
HONG KONG: LOAN GROWTH AND ASSET QUALITY



Source: HKMA



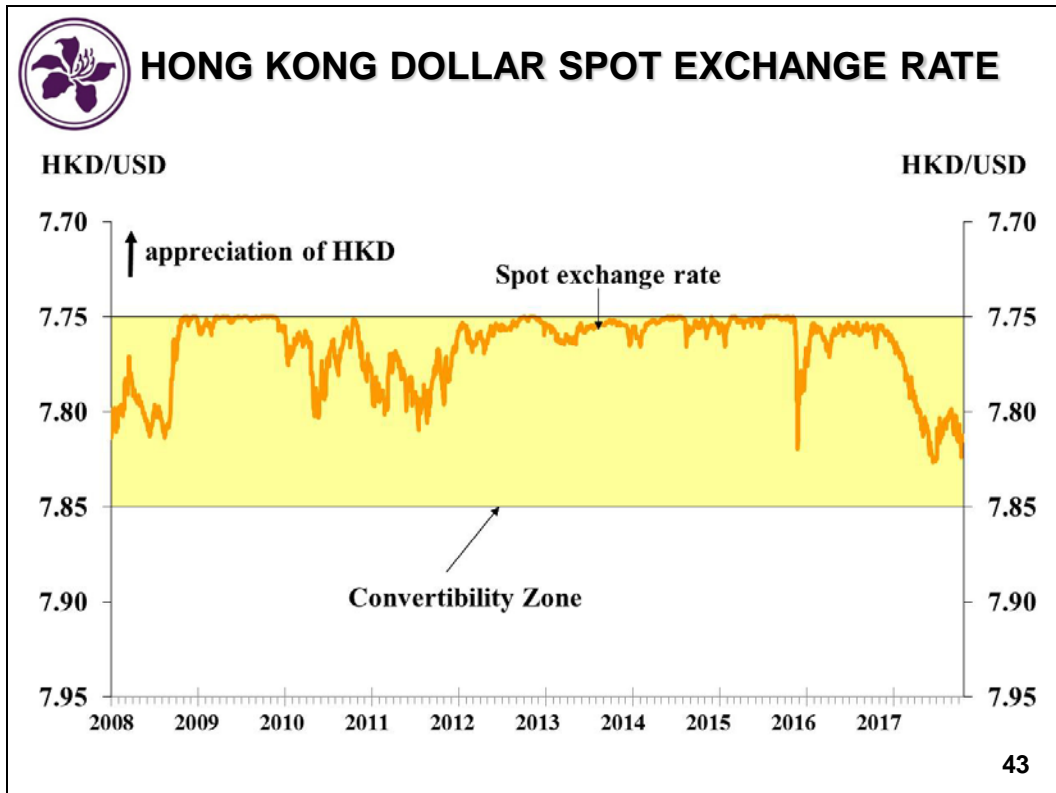
HONG KONG: HOUSEHOLD DEBT



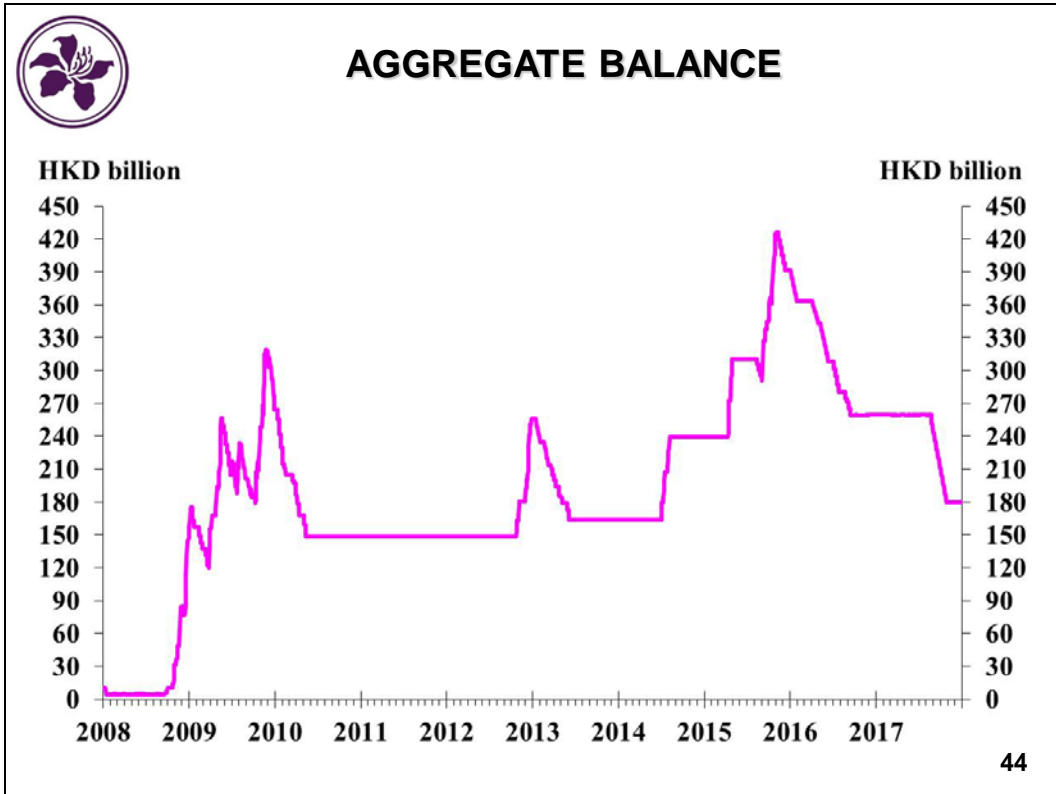
Source: HKMA



CURRENCY STABILITY



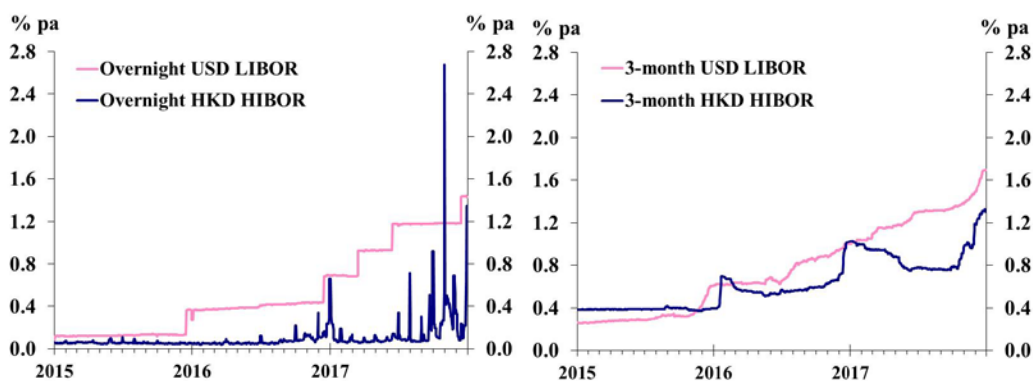
- Having strengthened to around 7.80 per US dollar in early November, the Hong Kong dollar spot exchange rate eased again and closed the year of 2017 at 7.8137.
- The easing of the Hong Kong dollar was partly attributable to a pick-up in interest carry trade activities amid improvements in Hong Kong dollar liquidity conditions, and an increase in commercial demand for the US dollar ahead of year end.



- The Aggregate Balance has remained steady at about HK\$180 billion since late October 2017.



DOMESTIC INTEREST RATES



45

- Several popular initial public offerings had attracted exceptionally large subscriptions during the fourth quarter of 2017, and locked up sizable amount of funds. The overnight Hong Kong dollar interbank interest rates (HIBOR) went up briefly as a result. Notwithstanding this, the Hong Kong dollar interbank market continued to function in an orderly manner.
- The three-month HIBOR increased alongside its US dollar counterpart. The increase was also a result of banks' more cautious stance in liquidity management ahead of year end.



- The 12-month Hong Kong dollar forward points, having surged to -245 pips in late November, eased and closed the year at around -450 pips.

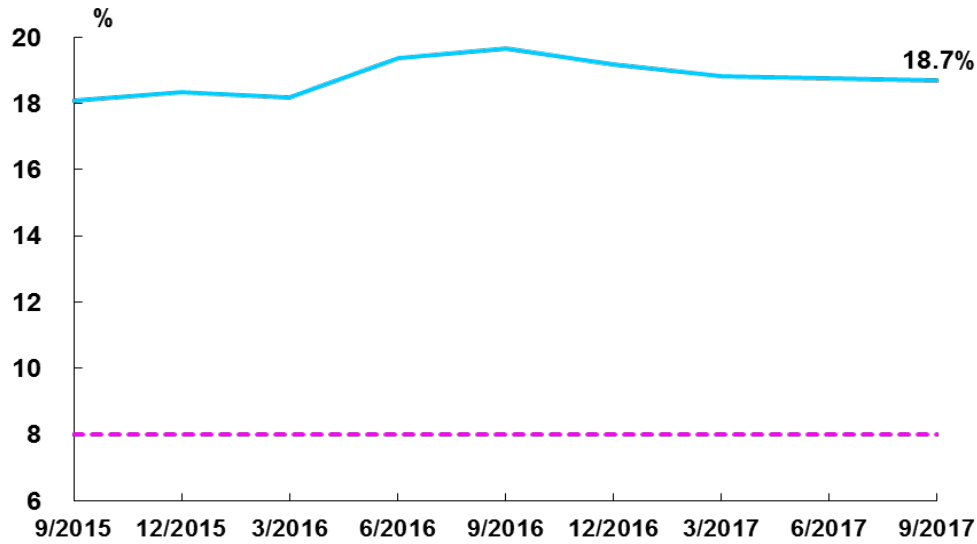


BANKING STABILITY



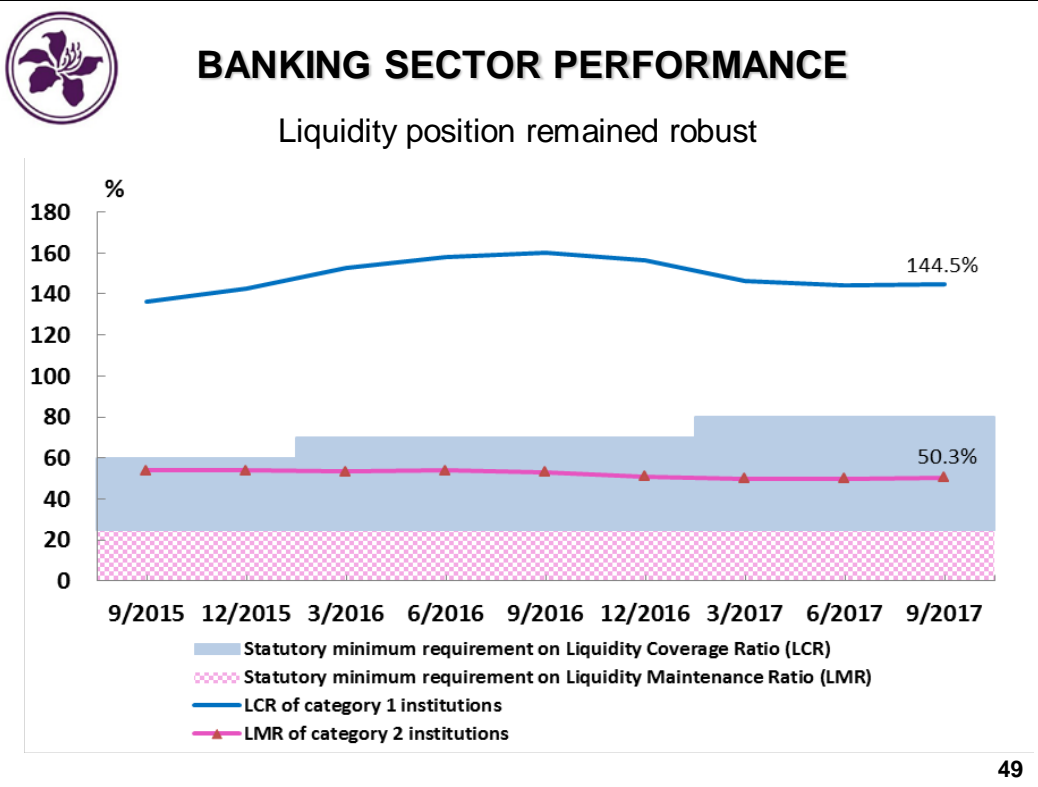
BANKING SECTOR PERFORMANCE

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



48

- The banking sector continued to be well capitalised. The consolidated capital adequacy ratio of locally incorporated AIs remained strong at 18.7% at end-September 2017, well above the international minimum requirement of 8%.

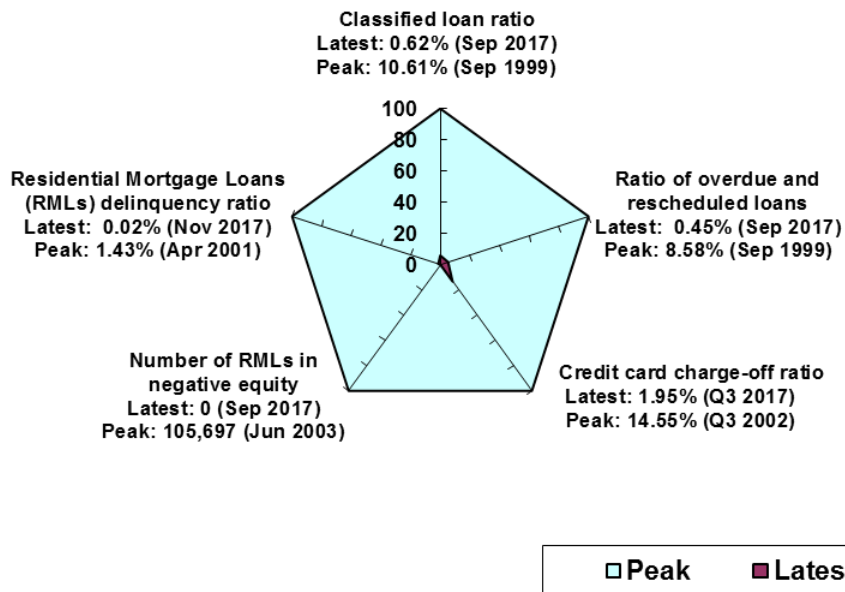


- In the third quarter of 2017, the quarterly average Liquidity Coverage Ratio of category 1 institutions was 144.5%, well above the 80% statutory minimum requirement applicable for 2017. For category 2 institutions, their quarterly average Liquidity Maintenance Ratio was 50.3%, also well above the 25% statutory minimum requirement.



BANKING SECTOR PERFORMANCE

Asset quality stayed healthy



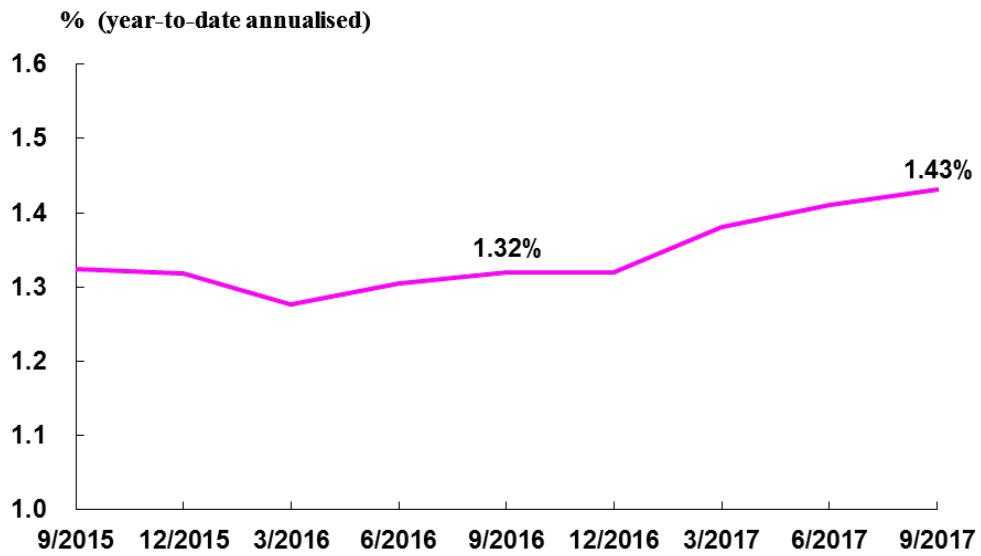
50

- The asset quality of retail banks continued to improve. Their classified loan ratio fell to 0.62% at end-September 2017 from 0.68% a quarter earlier, well below the long-run historical average of 2.3% since 2000. Similarly, the classified loan ratio of the whole banking sector edged down to 0.79% at end-September 2017 from 0.83% a quarter ago.



BANKING SECTOR PERFORMANCE

Net interest margin widened further



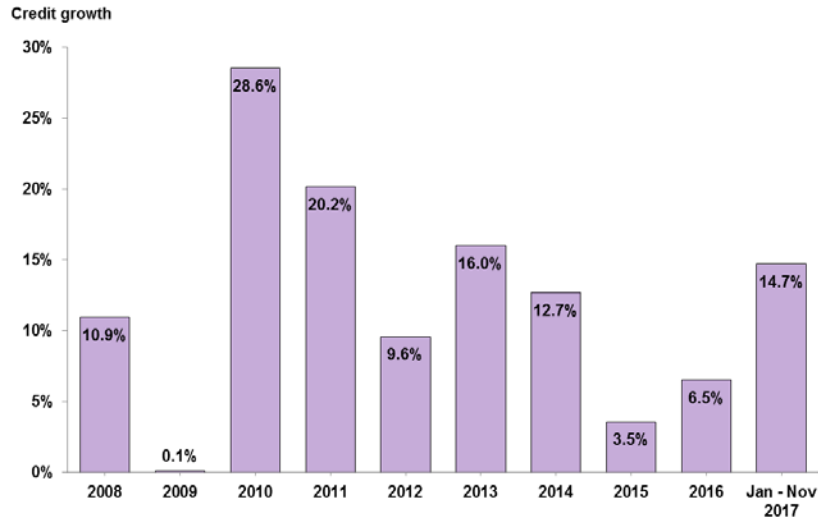
51

- The net interest margin of retail banks' Hong Kong offices widened to 1.43% in the first three quarters of 2017 from 1.32% in the same period last year.



BANKING SECTOR PERFORMANCE

Credit growth accelerated



Source: HKMA

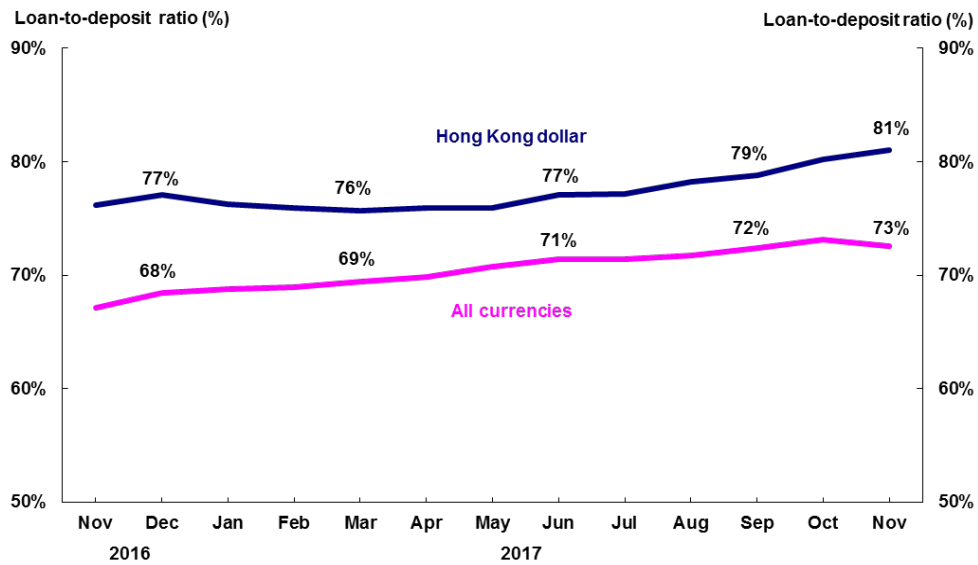
52

- As compared to the end of 2016, total loans of the Hong Kong banking sector grew by 14.7% to HK\$9.2 trillion at end-November 2017. The loans grew at a faster pace in the first half of 2017, reaching 10.2%. The growth rate moderated to 4.1% in July – November 2017.



BANKING SECTOR PERFORMANCE

Loan-to-deposit ratios continued to rise

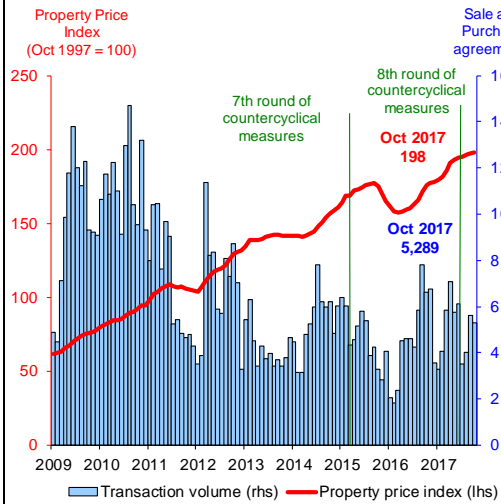


- Hong Kong-dollar loan-to-deposit ratio increased to 81% at end-November 2017 from 79% at end-September 2017. Similarly, all currencies loan-to-deposit ratio increased to 73% from 72% during the same period.



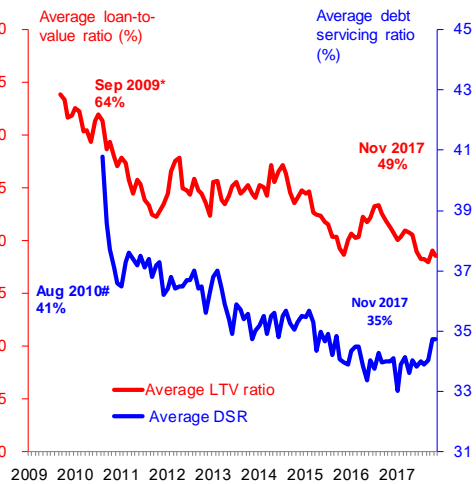
RISK MANAGEMENT OF PROPERTY MORTGAGE LOANS

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

54

Latest statistics for residential mortgage loans (RMLs)

	Monthly average in 2015	Monthly average in 2016	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017
Number of sale and purchase agreements	4,665	4,558	6,100	3,515	4,014	5,629	5,289	5,694
Number of new RML applications	9,626	10,294	14,654	9,090	10,908	11,376	11,280	12,265
Number of new RMLs approved	7,059	7,290	11,459	8,878	7,997	7,726	7,841	9,323

Latest statistics for residential property prices

Property price index		Period	Property price index
Rating and Valuation Department (10/1997=100)	Latest position	10/2017	198.0
	Recent Peak	10/2017	198.0
	Peak in 1997	10/1997	100.0
Centaline (6/7/1997=100)	Latest position	10/12/2017	164.5
	Recent Peak	10/12/2017	164.5
	Peak in 1997	19/10/1997	102.9



INTERNATIONAL STANDARDS IMPLEMENTATION

- Banking (Amendment) Bill 2017
 - Large exposures rules
- Banking (Disclosure) (Amendment) Rules 2018
- Banking (Capital) (Amendment) Rules 2018
- Banking (Specification of Multilateral Development Bank) (Amendment) Notice 2018

55

On implementing international regulatory standards, the HKMA's priorities for 2018 that will involve legislative amendments include:

- Banking (Amendment) Bill 2017 – which serves two main purposes: (i) to provide the Monetary Authority with a rule-making power to implement the new framework on large exposures by the Basel Committee on Banking Supervision (BCBS) which is scheduled to take effect from 1 January 2019, and to make rules to replace certain outdated large exposure provisions under the Banking Ordinance so as to keep pace with market developments; and (ii) to formalise the recovery planning requirements to fully align with the standards set by the Financial Stability Board.
 - Large exposures rules – upon the passage of the Banking (Amendment) Bill 2017, we aim to submit to the Legislative Council (LegCo) new rules to replace the obsolete equity exposure provision (section 87) in the second quarter of 2018, and other new rules to implement the new BCBS large exposures framework later in the year.
- Banking (Disclosure) (Amendment) Rules 2018 – which will incorporate into local legislation the BCBS's second phase of the revised disclosure requirements (the first phase has been implemented in Hong Kong from 31 March 2017) to enhance the comparability and user relevance of banks' disclosures. Having regard to the Basel timeline, we aim at submitting the draft Rules to LegCo in the second quarter of 2018 so that the Rules will take effect from 30 June 2018. Second phase mainly covers disclosure requirements under Basel III and those associated with other related policy

reforms (such as total loss-absorbing capacity (TLAC) for resolution purposes).

- Banking (Capital) (Amendment) Rules 2018 – which will implement the Basel standard on capital treatment of banks’ holdings of “TLAC” instruments. According to the Basel timeline, the standard will take effect from 1 January 2019 (i.e. same as the Loss-Absorbing Capacity Rules to be made under Financial Institutions (Resolution) Ordinance) and we plan to submit the draft Rules to LegCo in the early part of the fourth quarter of 2018.
- Banking (Specification of Multilateral Development Bank) (Amendment) Notice 2018 – which, pursuant to the decision by the BCBS in October 2017, the Asian Infrastructure Investment Bank will be included as a Multilateral Development Bank for preferential capital and liquidity treatments. We also aim to tender our submission to LegCo within 2018.



ANTI-MONEY LAUNDERING AND COUNTER-TERRORIST FINANCING

- Anti-Money Laundering and Counter-Terrorist Financing (Financial Institutions) (Amendment) Bill 2017
 - Fine-tune some customer due diligence requirements for financial institutions in the light of technological development

56

- The Anti-Money Laundering and Counter-Terrorist Financing (Financial Institutions) (Amendment) Bill 2017 was introduced into the Legislative Council (LegCo) on 28 June 2017. While the main objective of the Bill is to expand the anti-money laundering and counter-terrorist financing regime to cover certain non-financial sectors (i.e. solicitors, accountants, real estate agents, and trust or company service providers), a number of existing requirements applicable to banks will also be amended in order to help streamline the customer due diligence processes. For example, flexibility will be introduced to measures permitted to be taken by financial institutions to verify customer's identity, in the light of technological development.
- LegCo passed the Bill on 24 January 2018 and the proposed amendments will come into effect on 1 March 2018.



HONG KONG RESOLUTION REGIME

- Developing subsidiary legislation under the Financial Institutions (Resolution) Ordinance (FIRO) as well as other relevant legislation to implement resolution regime
 - Loss-absorbing capacity (LAC) rules for authorized institutions (AIs) under the FIRO, and related Inland Revenue Ordinance (IRO) amendment bill to clarify tax treatment of LAC instruments
 - Public consultation was launched in January 2018

57

- The current key legislative priority is the development of rules to be made by the Monetary Authority as a resolution authority under the FIRO to set LAC requirements for AIs (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. A joint public consultation covering both legislative proposals was launched in January 2018. Our intention is to introduce the LAC rules and the IRO amendment bill into the Legislative Council around mid-2018.



SMART BANKING

Fintech Supervisory Sandbox 2.0 – Upgraded with three new features

- Fintech Supervisory Chatroom
- Direct access to the Chatroom by tech firms
- Linked up with the sandboxes of the Securities and Futures Commission (SFC) and the Insurance Authority (IA) to provide a single point of entry for trials of cross-sector fintech products

Introduction of Virtual Banking

- To review the guideline on authorization of virtual banks

Banking Made Easy

- To reduce regulatory frictions and improve customer experience in using digital banking services

58

Fintech Supervisory Sandbox 2.0

- The HKMA Sandbox has been upgraded to FSS 2.0 with the following three new features:
 - 1) A Fintech Supervisory Chatroom was set up in November 2017 to provide feedback to banks and tech firms at an early stage of their fintech projects;
 - 2) Tech firms can have direct access to the Chatroom to seek HKMA's feedback without going through a bank; and
 - 3) The sandboxes of the HKMA, the SFC and the IA were linked up in September 2017 to provide a single point of entry for pilot trials of cross-sector fintech products.

Introduction of Virtual Banking

- With the rapid development of fintech in recent years, overseas experiences have shown that it is commercially feasible and technically viable for virtual banks without any physical branch to operate.
- As virtual banks would be conducive to fintech development and would enhance customer experience and financial inclusion, the HKMA announced in September 2017 that it would review the Guideline on Authorization of Virtual Banks in order to facilitate the introduction of virtual banking.

Banking Made Easy

- A Banking Made Easy Task Force was set up by the HKMA in October 2017. The Task Force is working with the banking industry to identify and streamline those regulatory requirements that may hinder technological innovations, with the aim of further improving customer experience in using fintech and digital banking services.
- The current focus of the Task Force is on remote customer onboarding and account maintenance, online finance and online wealth management.



FINANCIAL INCLUSION

Banking services delivery channels and information

- More physical branches for underserved areas
- Cash withdrawal service by the elderly without the need to make purchases
- Working with the banking industry on practical guideline on barrier-free banking services
- Access to information on banking services by ethnic minorities in their own languages

Bank account opening and maintenance

- Conducting 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 industry, business community and relevant stakeholders

59

- The HKMA has been following up and coordinating with retail banks to further enhance the coverage of banking networks in remote areas and public housing estates. Positive responses were received from banks. Eight banks have earlier indicated their plans to set up a total of ten branches and three mobile branches in 2017 and 2018. As of the end of 2017, six branches have already started operations in Tin Shui Wai North, Sha Tin and Kwai Chung respectively, and three additional mobile branches have also been put into service for 15 public housing estates.
- Upon the encouragement by the HKMA, the Hong Kong Association of Banks (HKAB) actively studied the suggestion of cash withdrawal service by the elderly at convenience stores without the need to make purchases. The pilot scheme will be launched in March 2018, providing cash withdrawal service to the elderly at 34 convenience stores in remote areas such as Cheung Chau, Lantau Island and Tin Shui Wai via EPS service without the need to make purchases.
- The HKAB, the HKMA and the Equal Opportunities Commission jointly published in December 2017 information on banking services in seven languages commonly used by ethnic minority community. This helps enhance the transparency of information so that the ethnic minority customers can better understand their rights and responsibilities when using banking services.
- The HKMA has commenced a mystery shopping programme relating to banks' account opening processes at the end of 2017 to assess the effectiveness of measures adopted by banks in enhancing customer experience. The HKMA is also conducting a new round of thematic reviews to identify good practices and issues of concern for sharing with the industry.



BANKING CONSUMER AND INVESTOR PROTECTION

- Conducted joint thematic reviews with the Securities and Futures Commission (SFC) on managing conflicts of interest in financial groups
- Consulted the banking industry regarding the enhanced disclosure requirements to increase transparency and address the potential conflicts of interest in the sale of investment products
- Working with the Insurance Authority (IA) to implement the new statutory regime for regulating insurance intermediaries

60

- Conflicts of interest are one of the major regulatory focuses for both the HKMA and the SFC. Last year, the HKMA and the SFC conducted a joint thematic review on the sale of in-house products by intermediaries within the same financial group to assess the effectiveness of the group's management of conflicts of interest. The HKMA and the SFC jointly issued a circular in November last year to share with the industry some key observations and good practices identified from the joint review.
- The HKMA has consulted the banking industry regarding enhanced disclosure requirements with a view to increasing transparency to investors and addressing the issue of conflicts of interest in the sale of structured products not regulated by the Securities and Futures Ordinance. The HKMA issued a circular in January 2018 to remind banks to continue to apply consistently high standards and act in best interests of their customers in the sale of investment products.
- The HKMA is working with the newly established 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.



ENHANCED COMPETENCY FRAMEWORK (ECF) FOR BANKING PRACTITIONERS

- Launched two ECF modules on retail wealth management and treasury management for enhancing capacity building and talent development
- Preparing for the launch of the ECF professional level module on anti-money laundering and counter-financing of terrorism

61

- With the support from the banking industry and relevant professional bodies, the HKMA launched two ECF modules on retail wealth management and treasury management at the beginning of 2018 for enhancing capacity building and talent development in these work streams. With these new ECF modules, banking practitioners can develop their professional competence in a more structured manner.
- The HKMA has also formed a working group with the banking industry to develop the professional level module on anti-money laundering/counter-financing of terrorism for more experienced practitioners. The module is being finalised and scheduled to be launched in the second quarter of 2018.



CONSUMER EDUCATION PROGRAMME

- Launched educational videos on online & mobile payment, and peer-to-peer (P2P) funds transfer via smartphone
- Launched a thematic campaign on personal loans
- Conducted a seasonal promotion campaign to publicise smart tips on using different banking and financial services during the festive season



Promotion materials of the new educational videos

62

- The HKMA launched new educational videos to convey smart tips on using online & mobile payment, and P2P funds transfer via smartphone in a light-hearted and humorous manner. Video telecasting and promotion were arranged on popular websites and smartphone apps, public transport, cinemas, out-of-home TV panels, print media and radio stations.
- The HKMA launched a thematic campaign to promote proper understanding of personal loans. It aimed at reminding the public to carefully assess their borrowing needs and product suitability before getting a loan for tax payment. Messages were disseminated through feature articles in newspapers and audio clips on radio stations.
- The HKMA also conducted a seasonal promotion campaign to publicise smart tips on using different banking and financial services during the festive season. It comprised an online game and associated publicity in web and mobile platform, as well as print media and radio stations.



DEPOSIT PROTECTION SCHEME (DPS)

- Completed the first round of triennial independent assessment to ensure fast and accurate submission of information by banks for payout
- Developing a new application system to further enhance payout efficiency
- Launching the second phase of publicity campaign and community education activities to sustain public awareness of the DPS and appreciation of its value

63

- To ensure the quality and timeliness of information provided for payout when the DPS is triggered, all banks are required to appoint independent auditors to conduct regular assessment. The first round of triennial review was completed and the second round will start in 2018. According to the first-round review results, the compliance level of banks is generally satisfactory. Information sessions with over 400 participants from the banking and audit industry were held in 2017 to further enhance their awareness of the requirements.
- The Hong Kong Deposit Protection Board commenced a payout system modernisation project in 2017. The project will continue in 2018 to develop a new application system to further enhance payout efficiency. The project is expected to be completed by the end of 2018.
- To sustain public awareness of the DPS and appreciation of its value, the second phase of publicity campaign is being launched in the first quarter of 2018 including outdoor and digital media advertising events, and free TV and radio advertisement support from the Government. In addition, community outreach initiatives such as bun-making classes and elderly home-visits were conducted.



FINANCIAL INFRASTRUCTURE



FINANCIAL INFRASTRUCTURE

- Continue to maintain safety and efficiency of financial market infrastructure
- Promote Bond Connect to overseas investors
- Ensure smooth operation of Bond Connect
- Continue the enhancements of the over-the-counter derivatives trade repository (TR) according to the relevant local and international standards

65

Bond Connect

- Since the launch of Bond Connect on 3 July 2017, related settlement operations performed by the Central Moneymarkets Unit has been smooth.
- The HKMA has also participated in roadshows to major financial centres in 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

To be launched in September 2018

- Full connectivity among banks and Stored Value Facilities (SVFs)
- Payment and settlement on a real-time basis
- 24x7 operation
- Multi-currency: Covering Hong Kong dollar and renminbi
- Support mobile numbers or email addresses for receiving payments
- Covering both individuals and corporations
- A single common QR code standard to be implemented for accepting different payment schemes

66

Faster Payment System

- Upon its commencement of service in September 2018, the system will cover real-time credit transfer, real-time direct debit, addressing service (which allows a payer to use the payee's bank account proxy, including mobile number and email address, to make a payment) and electronic direct debit authorisation (which enables users of SVF to link their bank accounts with the SVF accounts for conducting e-commerce transactions or SVF account top-up).

QR Code Standard

- A working group on common QR code standard, which comprises major credit card scheme operators, banks, SVF licensees and merchant acquirers, has been established. The work on technical standard specification is near completion and the working group will continue to discuss the operational arrangements.
- 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.



LATEST FINTECH INITIATIVES

Open Application Programming Interface (Open API)

- Consulting the industry on Open API framework to help banks stay competitive and launch innovative products

Further strengthening cross-border cooperation

- Co-organising a fintech award with the Office of Financial Development Service, the People's Government of Shenzhen Municipality (OFDS)
- Entered into co-operation agreements on fintech with overseas regulatory authorities: Monetary Authority of Singapore (MAS), the Dubai Financial Services Authority and the Swiss Financial Market Supervisory Authority
- Entered into a memorandum of understanding with the MAS to jointly develop the Global Trade Connectivity Network (GTCN) for trade finance information exchange

67

Open Application Programming Interface

- Open API allows banks' internal data and system to be accessed by third-parties so that product comparison and integrated views of financial position may be offered by third-party apps or websites to customers.
- The HKMA started an industry consultation on the proposed Open API framework on 11 January 2018, with a view to implementing Open API in the banking industry by the end of 2018.

Cross-border Cooperation

- The HKMA and the OFDS co-organised the Shenzhen-Hong Kong Fintech Award to recognise and reward outstanding financial institutions for developing innovative fintech products and collaborative fintech projects between the two cities. Total cash prizes amount to about HK\$7 million. Application closed on 30 November 2017 and the adjudication process is currently underway.
- The HKMA signed a fintech co-operation agreement with the MAS in October 2017. As the first collaboration initiative, the HKMA and MAS have committed to developing a Distributed Ledger Technology (DLT) interface (the GTCN), an information highway connecting the domestic trade finance platforms of the two places (i.e. the Hong Kong Trade Finance Platform (HKTFP), a project being taken forward by seven banks in Hong Kong, and Singapore's National Trade Platform). The GTCN would digitalise trade and trade finance processes, facilitating cross-border trade and trade finance to be conducted in a safe and efficient manner and at a lower cost. Other jurisdictions may join this open platform so that it can be expanded regionally and globally. The HKTFP and the GTCN are expected to be launched in the third quarter of 2018 and the first quarter of 2019 respectively.



REGULATORY REGIME FOR STORED VALUE FACILITIES (SVFs) AND RETAIL PAYMENT SYSTEMS (RPSs)

- SVF licensees are actively expanding service and customer reach. In the third quarter of 2017, the total number of SVF accounts in use was 44.85 million, representing a 3.2% increase from the previous quarter. The total number of SVF transactions in the quarter was around 1.4 billion and the total transaction value was HK\$34.5 billion, representing an increase of 3.9% and 8.5% respectively from the previous quarter
- The HKMA continued to oversee the four designated RPSs in accordance with the Payment Systems and Stored Value Facilities Ordinance



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

- Following the enactment of the Securities and Futures Ordinance 2014 which provides for the regulatory regime for the OTC derivatives market, we continue to develop concrete regulatory requirements covering different aspects
- The second phase rules for the reporting and related record keeping obligations came into effect on 1 July 2017
- As of end-December 2017, the Hong Kong Trade Repository contained 1.04 million outstanding trades on standard OTC derivatives products, with a total notional value of US\$29.6 trillion



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

70

- In July 2013, the FSB established the OSSG, which comprises senior officials from central banks and regulatory agencies, to focus on FSB's work regarding interest rate benchmarks. OSSG recommendations include: (1) strengthening reference rates based on unsecured bank funding costs by underpinning them to the greatest extent possible with transaction data; and (2) developing alternative reference rates.

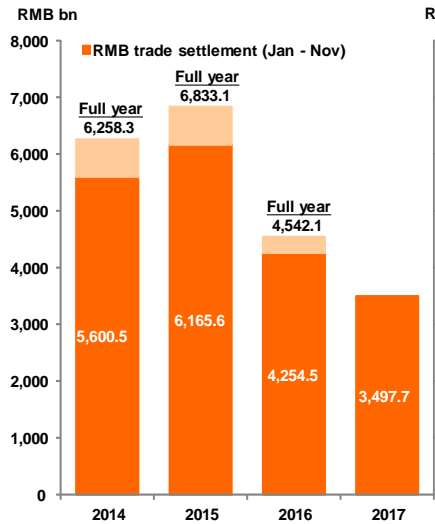


HONG KONG AS AN INTERNATIONAL FINANCIAL CENTRE

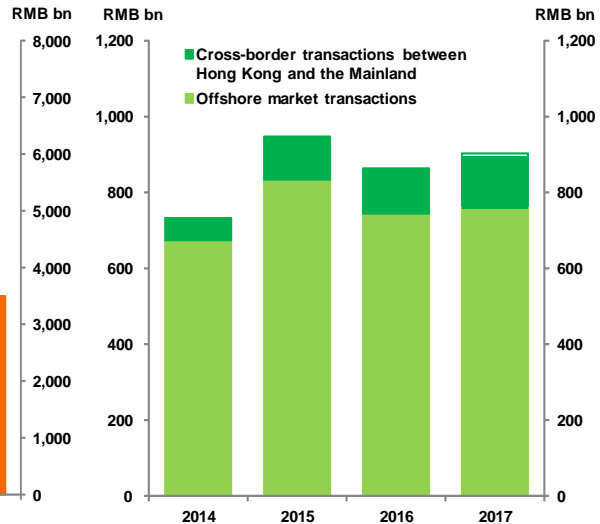


RMB TRADE SETTLEMENT AND PAYMENT

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



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

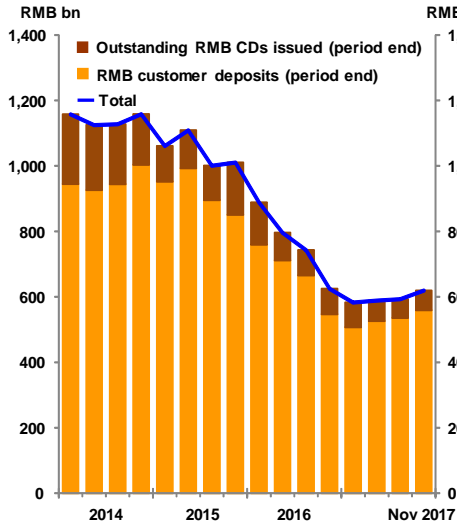


- In the first eleven months of 2017, RMB trade settlement handled by banks in Hong Kong totalled RMB3,497.7 billion.
- In 2017, the average daily turnover of Hong Kong RMB Real Time Gross Settlement (RTGS) system stood at RMB903.6 billion.

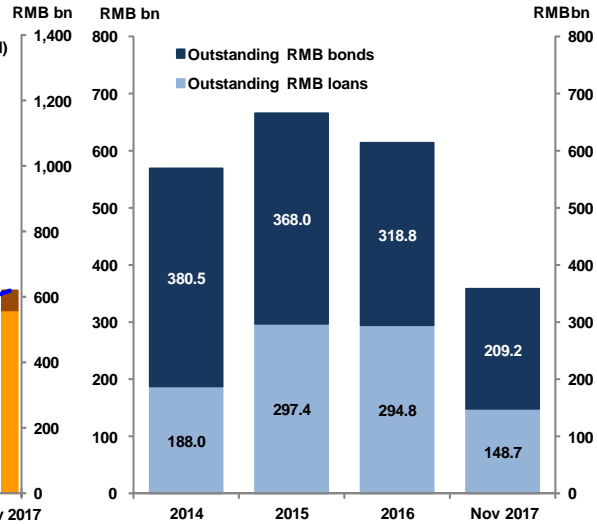


RMB LIQUIDITY POOL AND FINANCING ACTIVITIES

RMB customer deposits and certificates of deposit (CDs)



RMB financing activities



73

- At end-November 2017, RMB customer deposits and outstanding RMB certificates of deposit amounted to RMB559.2 billion and RMB60.2 billion respectively, totalling RMB619.4 billion.
- At end-November 2017, outstanding RMB loans amounted to RMB148.7 billion. Outstanding dim sum bonds amounted to RMB209.2 billion. The dim sum bond issuance totalled RMB12.6 billion for the first eleven months of 2017.



MAINTAINING RMB BUSINESS LINKS WITH OTHER JURISDICTIONS

	Nov 2017	2016	2015	2014
1 No. of participating banks of Hong Kong's RMB clearing platform	204	210	217	225
Of which:				
Branches and subsidiaries of overseas banks and overseas presence of Mainland banks	179	184	192	200
2 Amount due to overseas banks (RMB billion)	91.9	69.0	105.7	145.2
3 Amount due from overseas banks (RMB billion)	131.9	91.6	132.1	193.3

74

- The HKMA maintained ongoing dialogues with other offshore RMB centres and continued 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 Mainland China and the rest of the world.
- The HKMA signed a Memorandum of Understanding (MOU) on Cooperation in the Area of Financial Markets with the Swiss Federal Department of Finance on 23 January 2018 in Bern, Switzerland with a view to promoting financial sector development in the two jurisdictions and capturing the opportunities arising from, among others, the further progress of RMB internationalisation and opening up of the financial markets in Mainland China.
- Facilitated by the HKMA and the UK HM Treasury, the seventh private sector-led Hong Kong-London Financial Services Forum convened on 18 December 2017 in Hong Kong. This Forum covered areas including offshore RMB business, the Belt and Road Initiative, infrastructure financing, green finance, and fintech. On the occasion of the Forum, Hong Kong and London announced that the City of London has joined as a partner of the Infrastructure Financing Facilitation Office. Both sides also agreed to further explore the digitisation of trade finance.



DEVELOPING HONG KONG AS A CORPORATE TREASURY CENTRE (CTC) HUB

- Attracting multinational and Mainland enterprises to set up their CTCs in Hong Kong will bring more banking, financing and risk management activities to Hong Kong, deepen our capital markets and provide impetus to the development of headquarters economy in Hong Kong
- The HKMA has been actively engaging the industry to promote Hong Kong's CTC platform
- After launching the tax measures in June 2016, we have reached out to around 300 corporates, more than 40 of which are actively considering setting up or have set up their CTC operations in Hong Kong

75

- Developing Hong Kong into a regional hub for CTCs has been one of the important areas of work of the HKMA in recent years. With their vast global business networks, some multinational corporations 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 largest global offshore RMB 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.



DEVELOPING AN ONSHORE PRIVATE EQUITY (PE) FUND PLATFORM

- At present, PE fund activities in Hong Kong are robust. The total capital under management by PE funds in Hong Kong reached US\$126 billion as of end-June 2017
- PE funds active in Hong Kong generally exist in the form of offshore limited partnerships (LPs), because the legal framework for LPs was legislated before the PE fund industry emerged, and its stipulations do not cater for PE fund operations. Relevant tax treatments in Hong Kong also pale in comparison with some other jurisdictions
- As initiated by the HKMA, the Financial Services and the Treasury Bureau has set up a taskforce to review the legal framework and associated tax treatment of Hong Kong's onshore PE fund platform with a view to attracting more PE funds to set up locally

76

- The Financial Secretary indicated in September 2017 that in order to enhance the competitiveness of Hong Kong in developing its fund industry, the Government would comprehensively review the tax incentives applicable to different fund regimes, including the feasibility of introducing a limited partnership platform for PE funds.
- The HKMA fully supports the Administration in taking the above initiative forward. We are reviewing the PE fund platform in Hong Kong. The review covers the limited partnership legal framework and tax treatments for PE funds, with a view to attracting more PE funds to set up onshore.



INFRASTRUCTURE FINANCING FACILITATION OFFICE (IFFO)

- The number of IFFO partners have grown to 87
- Leveraging on the network of the IFFO platform, the China Development Bank (CDB) issued its first Belt and Road bond in Hong Kong in December 2017
- The HKMA will participate in a seminar on Belt and Road co-organised by the HKSAR Government in February, to explore collaboration opportunities with Mainland state-owned enterprises under the Belt and Road Initiative

77

- IFFO has been proactively working on different aspects since its launch on 4 July 2016. As of January 2018, IFFO has organised and participated in over 20 large-scale conferences, seminars and workshops on infrastructure investment and financing, and the number of IFFO partners has grown from 41 at inception to 87.
- CDB issued a US\$350 million five-year Belt and Road bond in Hong Kong via private placement on 20 December 2017 to support the development of Belt and Road related projects.
- The HKSAR Government and The Belt & Road General Chamber of Commerce will jointly organise a seminar in Beijing in February to discuss how Mainland state-owned enterprises can make use of Hong Kong's international platform and leverage on Hong Kong's unparalleled strengths in financial and professional services, in order to explore more collaboration opportunities under the Belt and Road Initiative.



PROMOTING GREEN FINANCE

- The international green finance market has developed rapidly in recent years. In the Mainland in particular, rising income and growing environmental awareness are driving the investment in green and renewables. Mainland China was the world's largest green bond market in terms of issuance in 2017
- The Chief Executive has identified green finance as a major development area in her 2017 Policy Address. The HKMA has been taking steps to promote green finance in Hong Kong, including:
 - Working with the HKSAR Government to study the issuance of a Government green bond
 - A large-scale international conference on green bond to be held in 2018 to promote Hong Kong's international profile on green finance



INVESTMENT ENVIRONMENT AND PERFORMANCE OF THE EXCHANGE FUND

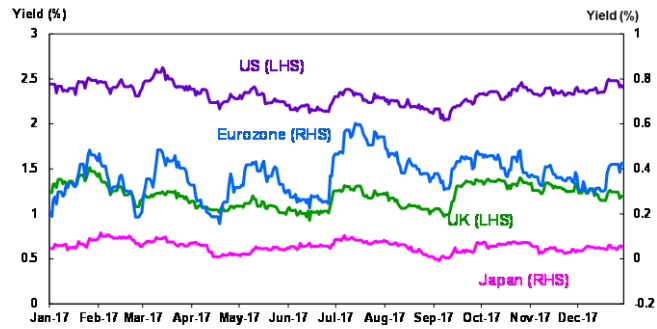


INVESTMENT ENVIRONMENT IN Q1-Q4 2017

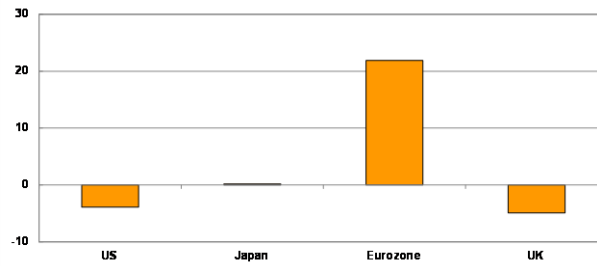
- **Interest rates:** Major 10-Year government bond yields ended 2017 with no substantial changes, except for German Bunds which rose by 22 basis points amid Euro Area's solid economic growth and market expectation of the European Central Bank's policy tightening
- **Equity markets:** Major equity markets performed well in 2017, on the back of stable economic growth in major economies like the US and Euro Area, stronger corporate earnings and market expectation of slow and gradual policy tightening of major central banks. The Hang Seng Index rose by 36%, outperforming other major equity indices
- **Exchange rates:** With the reviving European and Japanese economic growth, as well as market expectation of diminishing monetary policy divergence between the US and other major economies, the US dollar weakened against other major currencies in 2017



CHANGES IN 10-YEAR GOVERNMENT BOND YIELDS IN Q1-Q4 2017



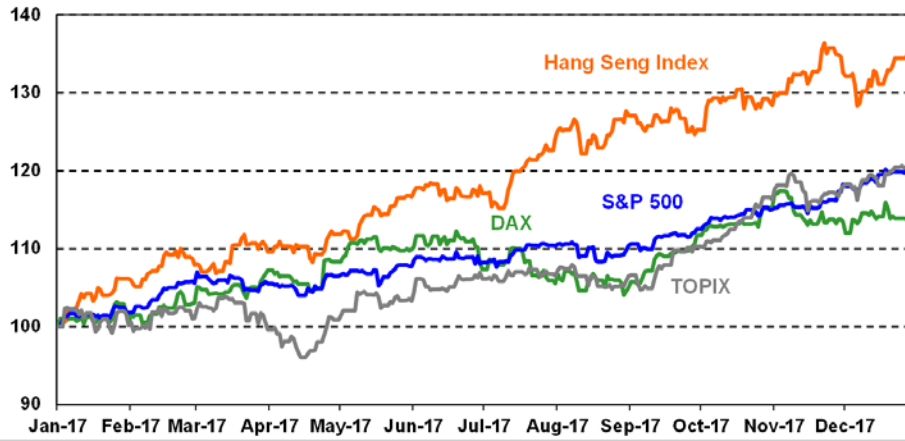
2017Q1-Q4 bond yield change (bps)





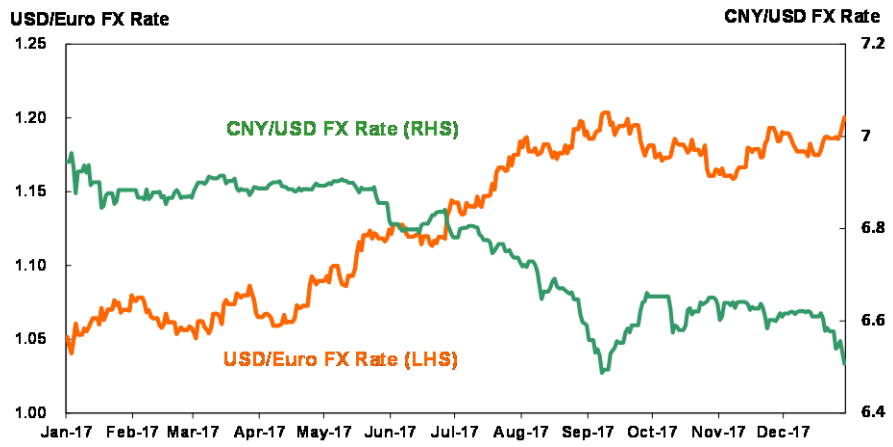
EQUITY MARKETS IN Q1-Q4 2017

Normalised Index Level (2016 year-end = 100)





CURRENCY MARKETS IN Q1-Q4 2017





INVESTMENT INCOME

(HK\$ billion)	2017			2016	2015	2014	2013
	(unaudited)						
	Full year	2H	1H				
Hong Kong equities*	58.3	30.5	27.8	5.3	(5.0)	6.5	10.1
Other equities	80.2	40.1	40.1	28.6	7.1	33.7	71.8
Bonds	34.3	17.8	16.5	33.1	15.9	47.3	(19.1)
Foreign exchange#	53.5	19.2	34.3	(15.8)	(44.9)	(52.7)	1.6
Other investments@	25.7	8.2	17.5	16.9	11.1	9.9	16.8
Investment income/(loss)	252.0	115.8	136.2	68.1	(15.8)	44.7	81.2

* 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 (LTGP). (The above figures represent valuation changes up to the end of September 2017. Valuations of these investments from October to December are not yet available.)



INCOME AND EXPENDITURE

(HK\$ billion)	2017			2016
	Full year	2H	1H	Full year
Investment income	252.0	115.8	136.2	68.1
Other income	0.2	0.1	0.1	0.2
Interest and other expenses	<u>(9.8)</u>	<u>(4.8)</u>	<u>(5.0)</u>	<u>(6.4)</u>
Net income	242.4	111.1	131.3	61.9
Fee payment to Fiscal Reserves*#	(23.5)	(12.1)	(11.4)	(33.1)
Fee payment to HKSAR government funds and statutory bodies*	(8.6)	(4.3)	(4.3)	(9.6)

* The rate of fee payment is 2.8% for 2017 and 3.3% for 2016.

This does not include the 2017 fee payment to the Future Fund because such amount will only be disclosed when the composite rate for 2017 is available (For 2016, the composite rate was 4.5% and fee payable to the Future Fund was HK\$10.1 billion).



EXCHANGE FUND ABRIDGED BALANCE SHEET

(HK\$ billion)	At 31 Dec 2017	At 31 Dec 2016	Change
ASSETS	(unaudited)		
Deposits	346.4	386.7	(40.3)
Debt securities	2,762.2	2,466.1	296.1
Hong Kong equities*	204.2	147.3	56.9
Other equities	510.4	429.3	81.1
Other assets#	<u>200.3</u>	<u>189.3</u>	<u>11.0</u>
Total assets	<u>4,023.5</u>	<u>3,618.7</u>	<u>404.8</u>
LIABILITIES AND FUND EQUITY			
Certificates of Indebtedness	456.7	405.4	51.3
Government-issued currency notes & coins in circulation	12.2	11.9	0.3
Balance of the banking system	179.8	259.6	(79.8)
Exchange Fund Bills and Notes issued	1,045.8	961.0	84.8
Placements by banks and other financial institutions	59.3	56.1	3.2
Placements by Fiscal Reserves®	1,073.8	914.6	159.2
Placements by HKSAR government funds and statutory bodies	305.1	302.5	2.6
Other liabilities	<u>175.9</u>	<u>161.1</u>	<u>14.8</u>
Total liabilities	3,308.6	3,072.2	236.4
Accumulated Surplus	<u>714.9</u>	<u>546.5</u>	<u>168.4</u>
Total liabilities and fund equity	<u>4,023.5</u>	<u>3,618.7</u>	<u>404.8</u>

* 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\$135.2 billion at 31 Dec 2017 (HK\$118.8 billion at 31 Dec 2016)

® Including placements by the Future Fund of HK\$224.5 billion



INVESTMENT RETURN OF THE EXCHANGE FUND (1994-2017)¹



¹ Investment return calculation excludes the holdings in the Strategic Portfolio.

² The return includes the performance of LTGP up to the end of September 2017. The audited full year return will be disclosed in the annual report of 2017 to be released later this year.

³ Composite CPI is calculated based on the 2014/2015-based series.



INVESTMENT DIVERSIFICATION

- Investment in alternative assets began in 2009 under the Long-Term Growth Portfolio (LTGP). The progress of the LTGP in 2017 has been good. Positions at end of September 2017 and performance since inception are as follows:

As of end-September 2017 (unaudited)

Asset Classes	Market Value HK\$ billion	Annualised IRR (Since inception from 2009 till end- September 2017)
Private Equity	141.1	13.5%
Real Estate	73.4	
Total	214.5	

Note: Outstanding investment commitments at the end of 2017 amounted to HK\$162.7 billion



HONG KONG MORTGAGE CORPORATION



MORTGAGE INSURANCE PROGRAMME (MIP)

- Since its launch in March 1999, the MIP has helped over 133,200 families attain home ownership
- In 2017, the total number of loans drawdown and aggregate loan amount under the MIP were 8,829 cases and HK\$32.3 billion respectively, as compared to 7,145 cases and HK\$24.6 billion in 2016
- About 86% of drawn down loans were for secondary market properties



REVERSE MORTGAGE PROGRAMME (RMP)

- As at end-December 2017, 2,317 applications had been received:
 - Average age of borrowers: 69 years old
 - Average monthly payout: HK\$15,000
 - Payment terms: 10-year (27%), 15-year (17%), 20-year (13%), life (43%)
 - Average property value: HK\$5.1 million
 - Average property age: 30 years

- In 2017, the number of RMP drawdown cases increased by 88% year-on-year



SME FINANCING GUARANTEE SCHEME (SFGS)

- SMEs and banks responded positively to the promotion and communication effort of the HKMC on the SFGS
- The number of applications received in 2017 increased by 80% year-on-year
- As at end-December 2017, 12,844 applications had been approved, involving a total loan amount of around HK\$51.2 billion. Key data of the approved applications are as follows:

Average guarantee period	4.6 years	Average loan size	HK\$3.99 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	4.84% p.a. 0.49% p.a.
Enterprises with less than 50 employees	91%	Benefitted enterprises and the related no. of employees	7,607 enterprises and 193,583 employees

92

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

Manufacturing sector –	22.4%
– Textiles and clothing	4.3%
– Electronics	2.1%
– Plastics	1.8%
– Printing and publishing	1.6%
Non-manufacturing sector –	77.6%
– Trading	45.9%
– Wholesale and retail	9.3%
– Construction	3.1%
– Engineering	3.1%



MICROFINANCE SCHEME

- Launched in June 2012, trial period up to 2018 and maximum aggregate loan amount up to HK\$200 million
- As at end-December 2017, the Scheme had received 432 formal loan applications. Out of the vetted applications, 200 had been approved with a total loan amount of about HK\$49.7 million. The approval rate was 49%
- For the approved applications, the average loan size was about HK\$249,000 and the average loan tenor was 4.5 years

93

- 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.

- Services	127 cases (47%)
- Retail	72 cases (27%)
- Wholesale	39 cases (15%)
- Manufacturing	21 cases (8%)
- IT related	8 cases (3%)



PREMIUM LOAN INSURANCE SCHEME (PLIS)

- PLIS was launched in September 2015 to provide subsidised housing owners aged 50 or above with an additional financing option to settle land premium payment
- After settling land premium payment, borrowers will have greater flexibility in letting or selling their properties in the open market
- The scheme can help release under-utilised flats and promote market circulation of subsidised housing properties
- As at end-December 2017, over 2,900 enquiries and 11 applications had been received



LIFE ANNUITY SCHEME (LAS)

- The HKMC's Board announced in June 2017 that the LAS was tentatively scheduled to be launched by mid-2018
- The LAS aims at providing an additional financial planning option to the elderly citizens. The design of the scheme is based on three important principles:
 - Simple and easy to understand and attractive to annuitants
 - Relevant risks prudently managed by the insurer
 - Conform with commercial principles and financially viable and sustainable
- The amount offered for subscription will be subject to a quota, tentatively up to HK\$10 billion for the first batch, with actual amount subject to market conditions and prudent risk management principles



TENTATIVE KEY DESIGN FEATURES OF LIFE ANNUITY SCHEME (LAS)*

- The LAS aims to provide immediate lifetime guaranteed fixed monthly payouts to annuitants aged 65 or above
- The cap and floor of the premium amount are tentatively set at HK\$1 million and HK\$50,000 respectively
- Based on an internal rate of return of 4%, at the entry age of 65 and for HK\$1 million of premium, male and female annuitants will receive fixed monthly payout of about HK\$5,800 and HK\$5,300 respectively
- The HKMC is now proceeding full steam ahead with the application for the necessary regulatory authorisation and developing the sales and distribution arrangements with a view to launching the LAS around mid-2018

*Subject to authorisation by the insurance industry regulatory authority