



HONG KONG MONETARY AUTHORITY

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

6 February 2017



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

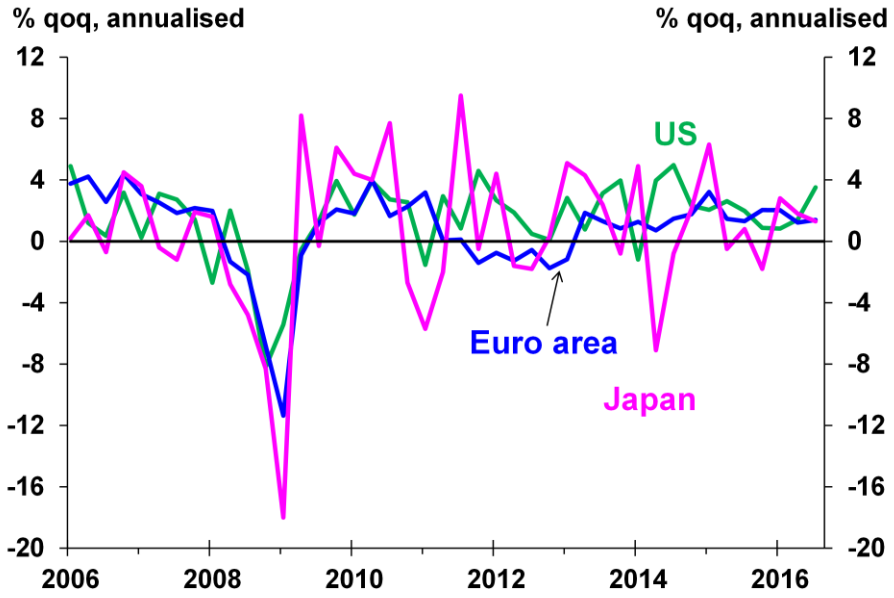
(% year-on-year)

	2015	2016 Estimates	2017 Forecasts
US	2.6	1.6	2.3
Euro area	1.9	1.6	1.4
Japan	1.2	0.9	1.1
Asia (ex-Japan)	5.9	5.7	5.6
Mainland China	6.9	6.7	6.4
Hong Kong	2.4	1.5	1.6

Sources: January Consensus Forecasts and Official Statistics



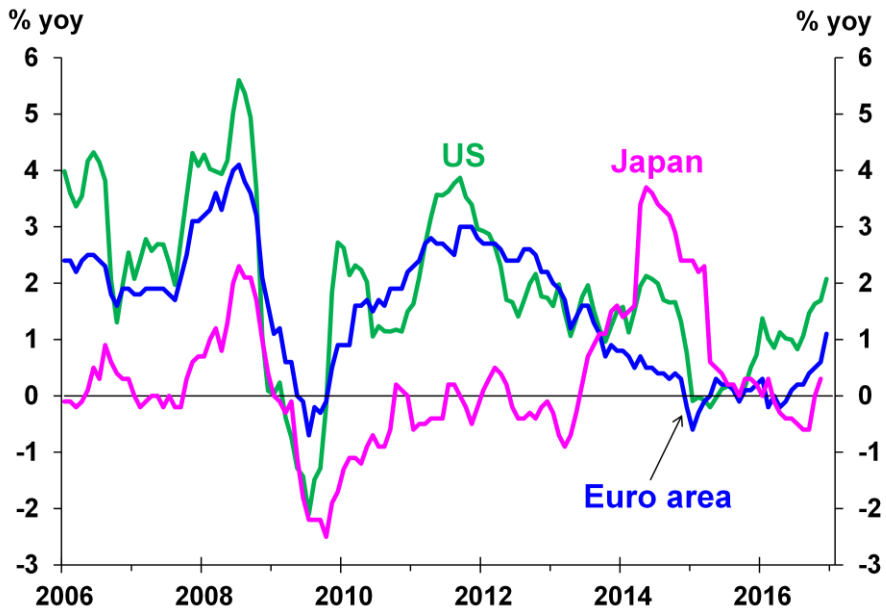
REAL GDP GROWTH IN MAJOR COUNTRIES



Source: Bloomberg



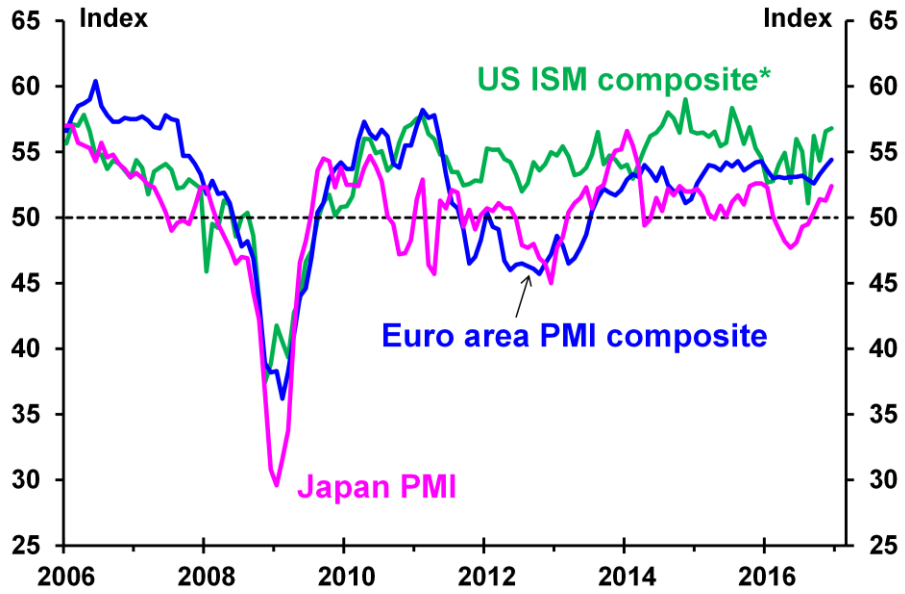
HEADLINE INFLATION IN MAJOR COUNTRIES



Sources: Bloomberg and CEIC



PURCHASING MANAGERS' INDEX IN MAJOR ECONOMIES

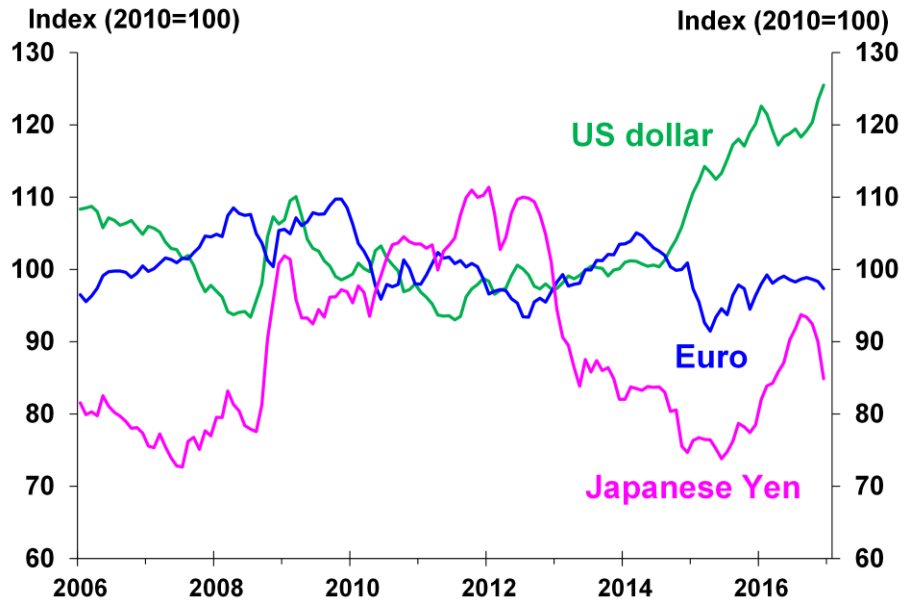


*Weighted average of the ISM manufacturing and non-manufacturing indices

Sources: Bloomberg and CEIC



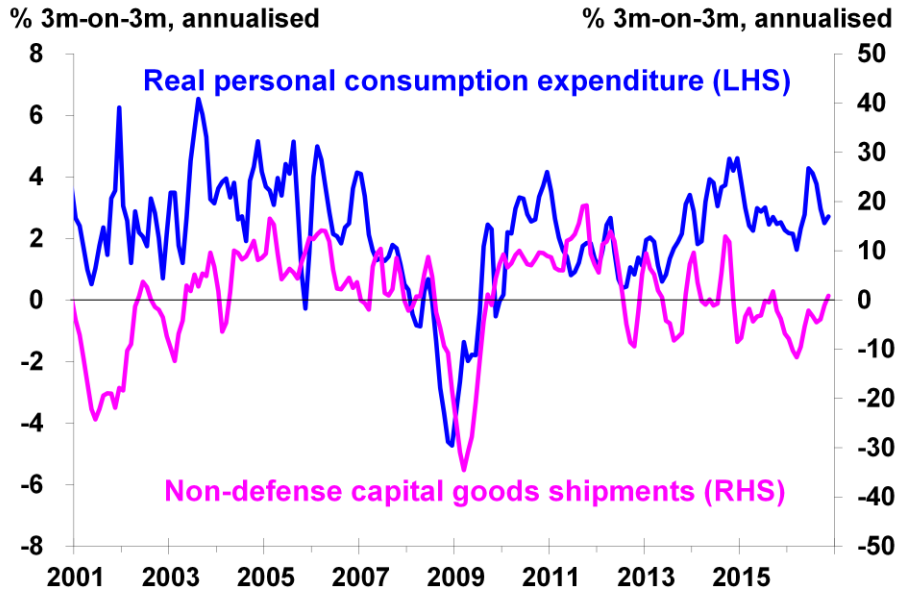
NOMINAL EFFECTIVE EXCHANGE RATE INDEX OF MAJOR CURRENCIES



Source: CEIC



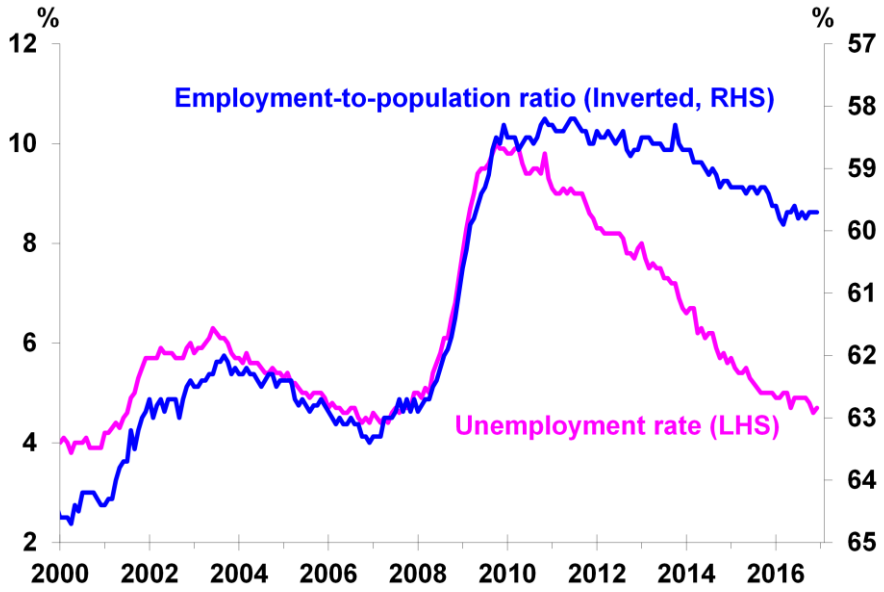
US: CONSUMPTION GROWTH & BUSINESS INVESTMENT ACTIVITY



Source: CEIC



US: LABOUR MARKET SITUATION



Source: CEIC



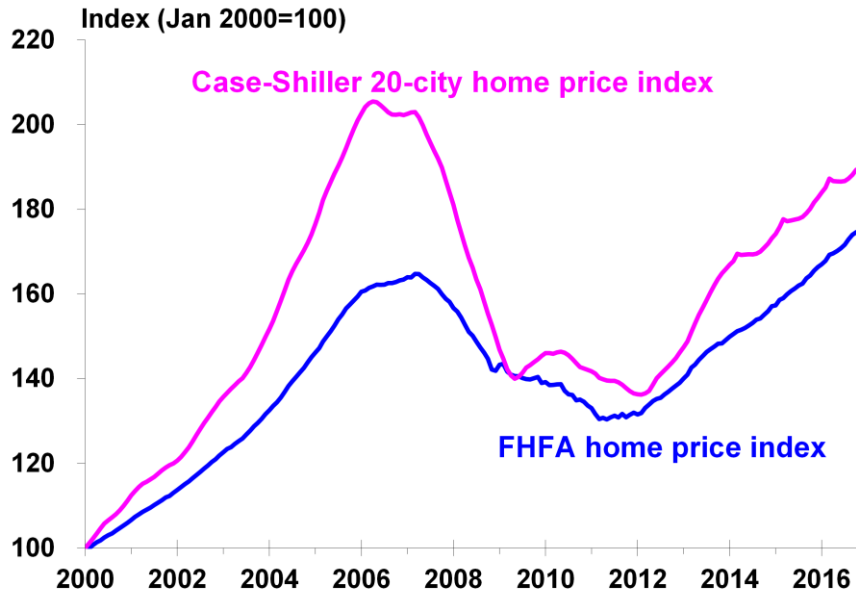
US: LABOUR FORCE PARTICIPATION



Source: CEIC



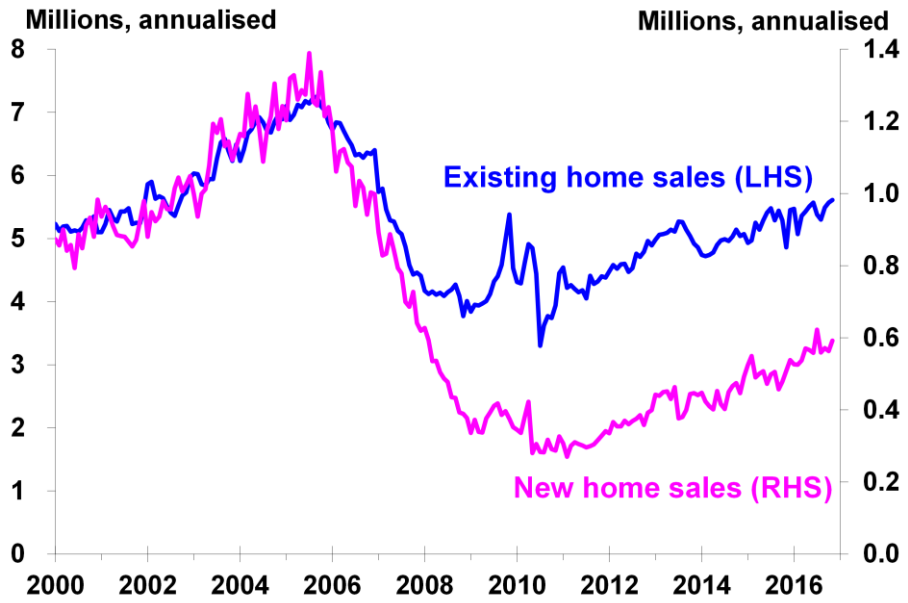
US: HOUSE PRICES



Sources: Standard & Poor's and CEIC



US: HOME SALES

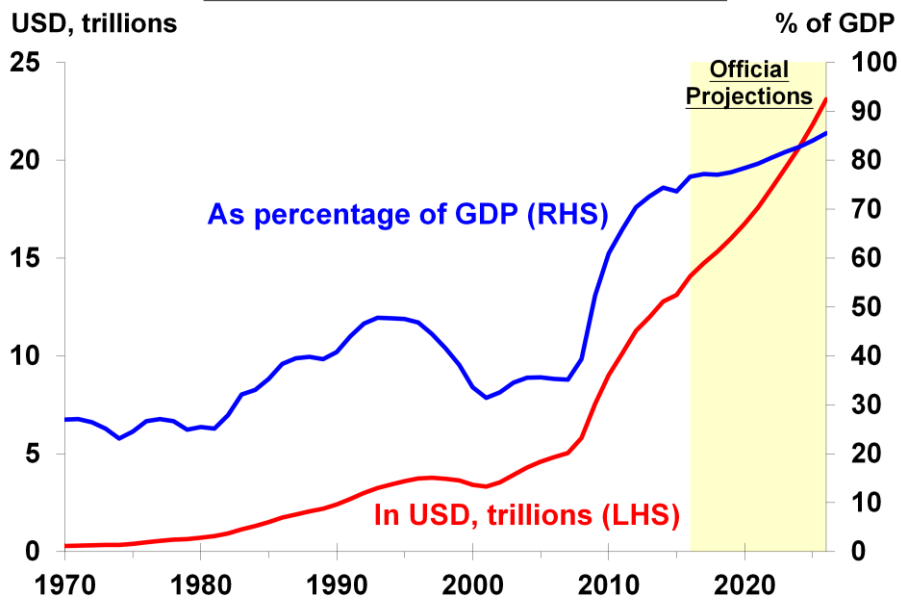


Source: CEIC



US: FEDERAL GOVERNMENT DEBT

US federal debt held by the public

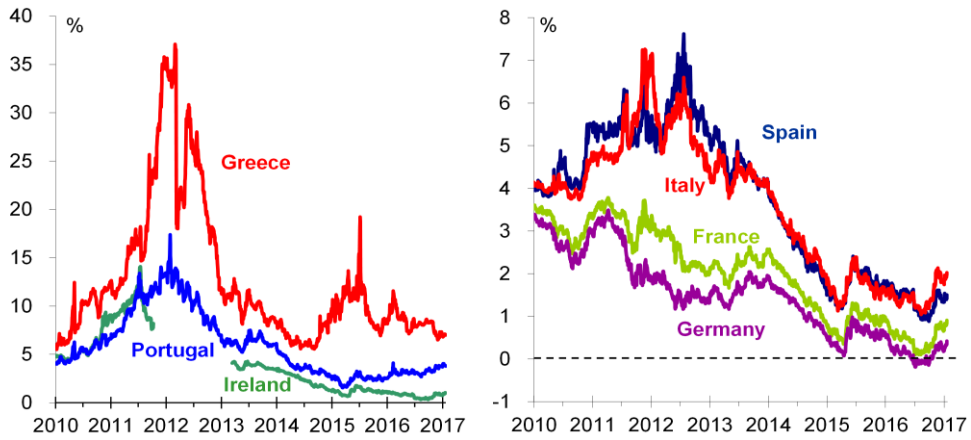


Source: Congressional Budget Office



EURO AREA: SOVEREIGN BOND YIELDS

10-year sovereign bond yield

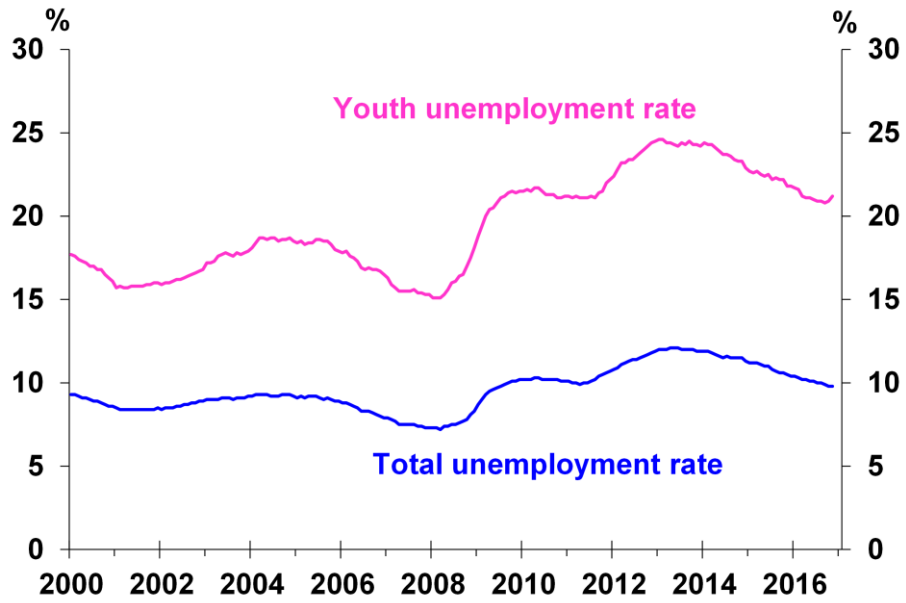


Note: 10-year Irish sovereign bond yield data is not available between 12 Oct 2011 and 14 Mar 2013

Source: Bloomberg



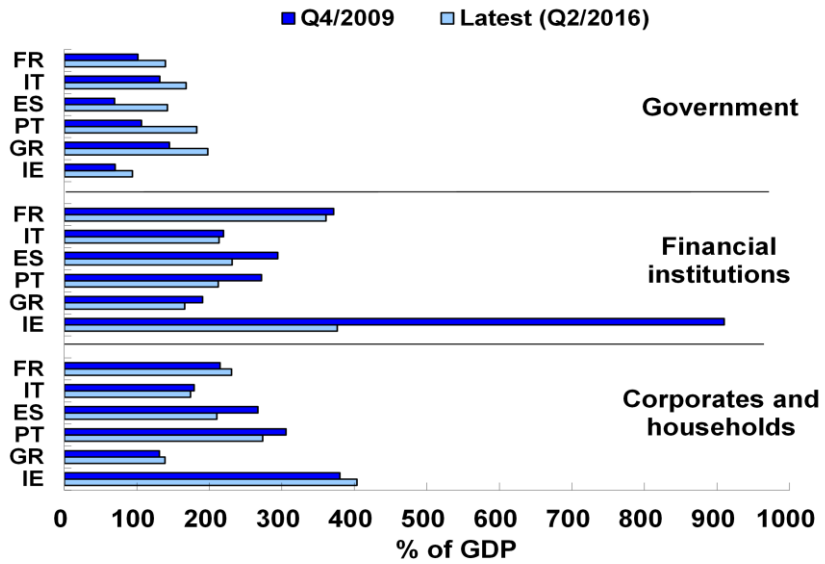
EURO AREA: UNEMPLOYMENT RATE



Source: Bloomberg



EURO AREA: OVERALL INDEBTEDNESS

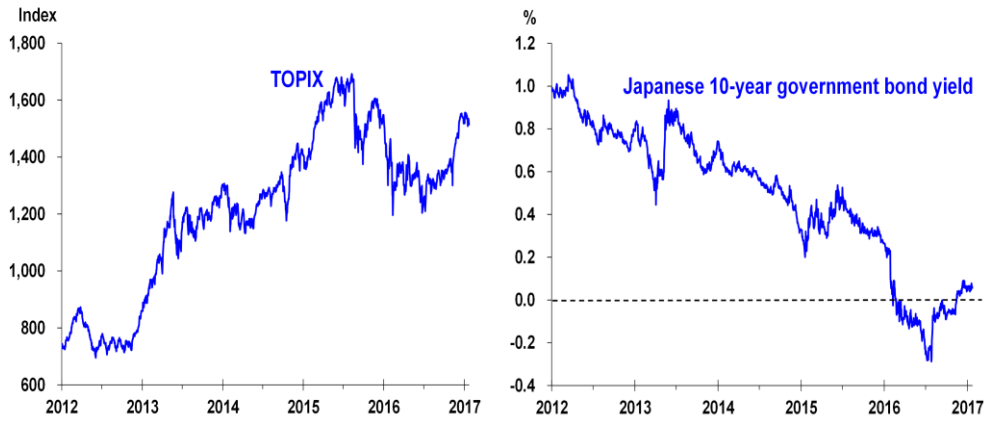


Source: European Central Bank

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



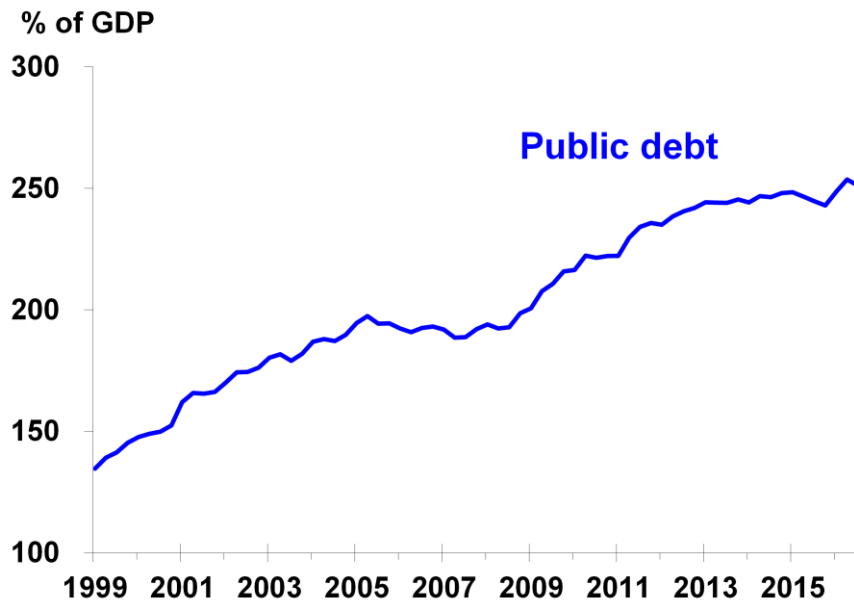
JAPAN: FINANCIAL MARKETS



Source: Bloomberg



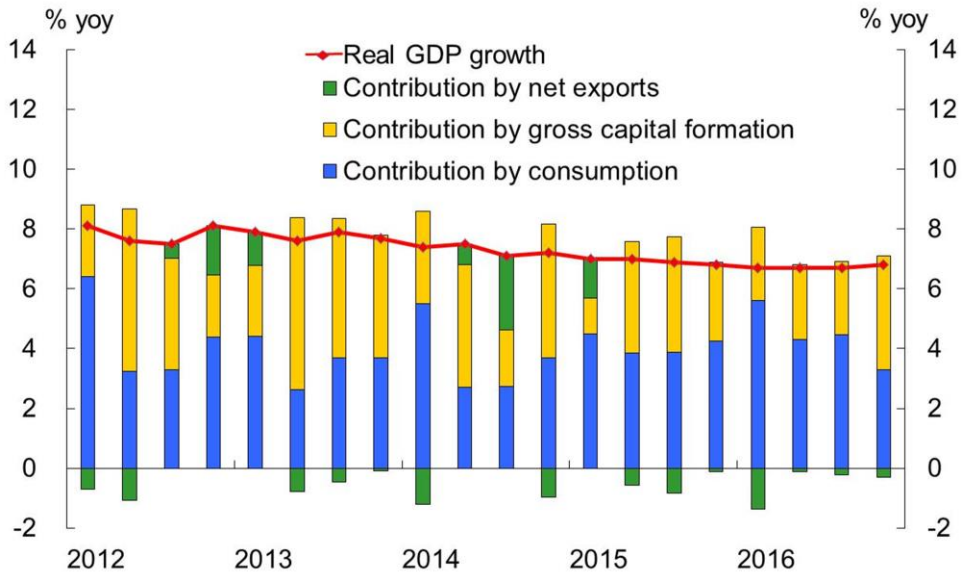
JAPAN: PUBLIC DEBT



Sources: Bank of Japan and CEIC



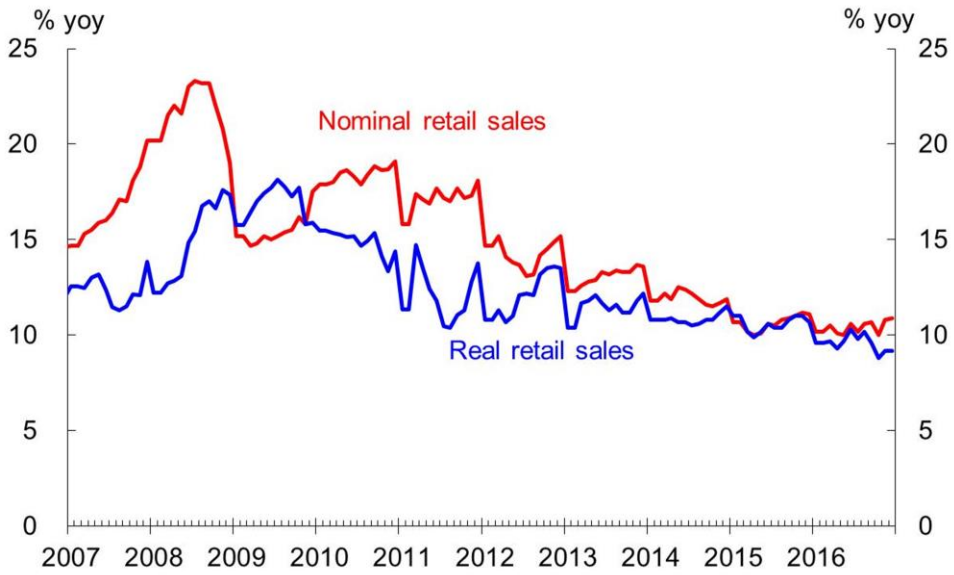
MAINLAND CHINA: REAL GDP GROWTH



Source: CEIC



MAINLAND CHINA: RETAIL SALES



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



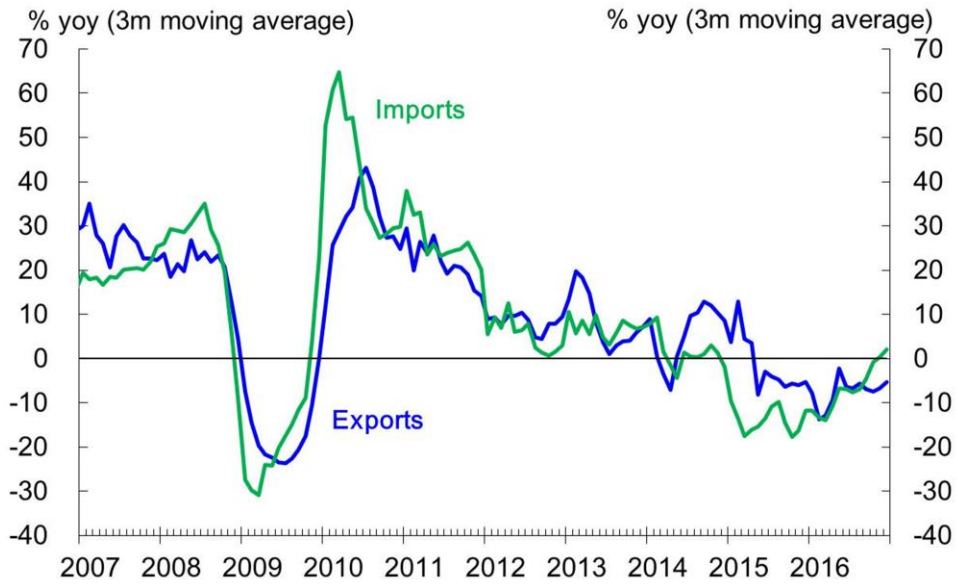
MAINLAND CHINA: FIXED ASSET INVESTMENT



Sources: CEIC and HKMA staff estimates



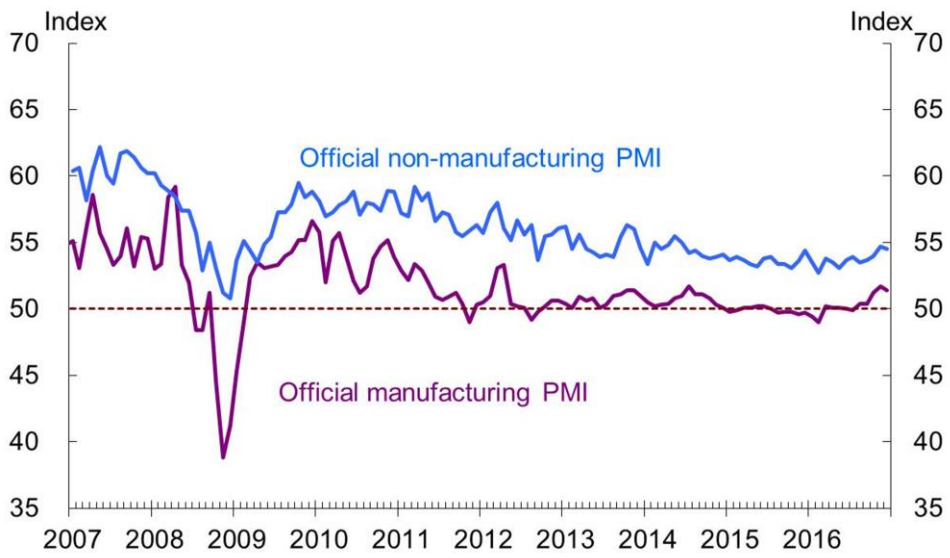
MAINLAND CHINA: IMPORT AND EXPORT GROWTH



Sources: CEIC and HKMA staff estimates



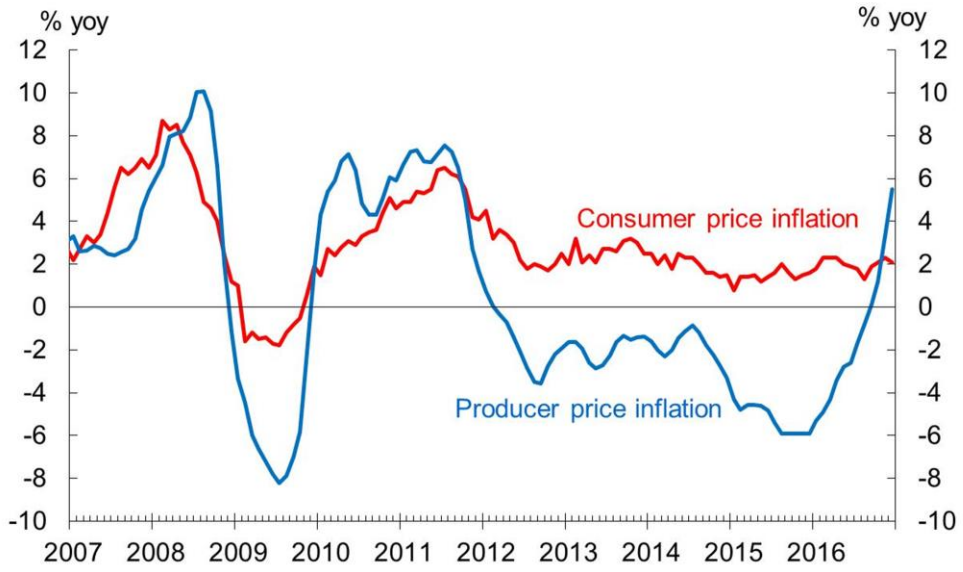
MAINLAND CHINA: PURCHASING MANAGERS' INDEX



Source: CEIC



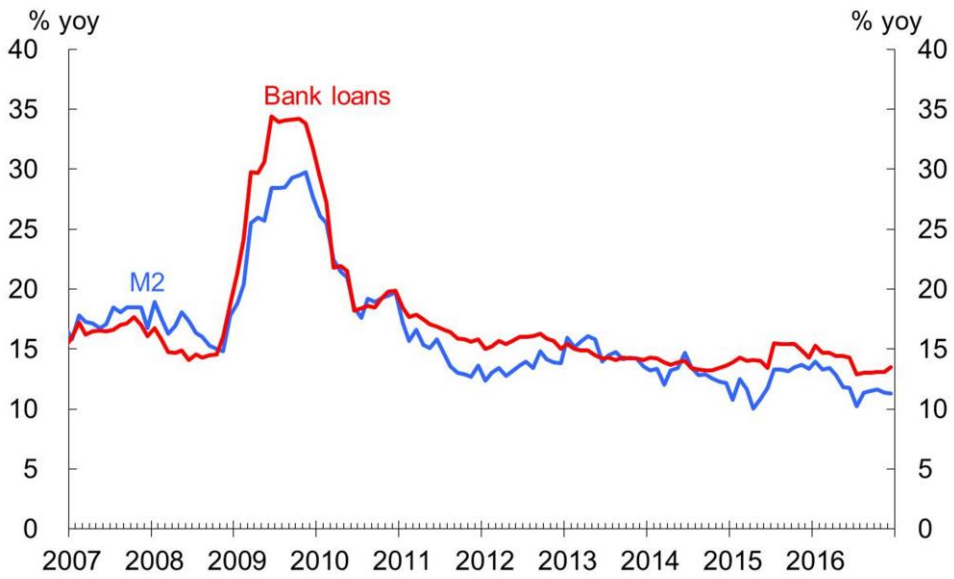
MAINLAND CHINA: INFLATION



Source: CEIC



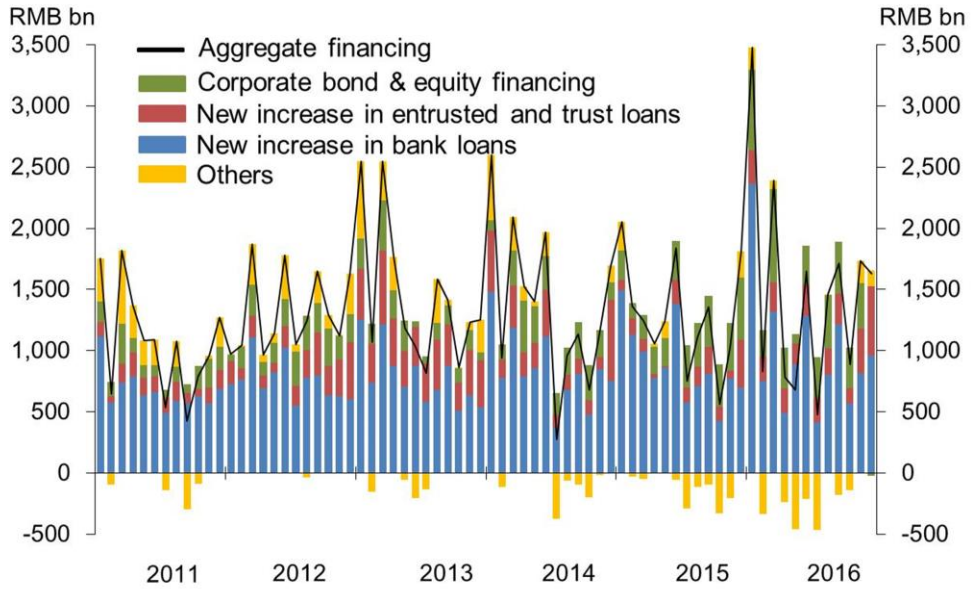
MAINLAND CHINA: MONEY AND LOAN GROWTH



Source: CEIC



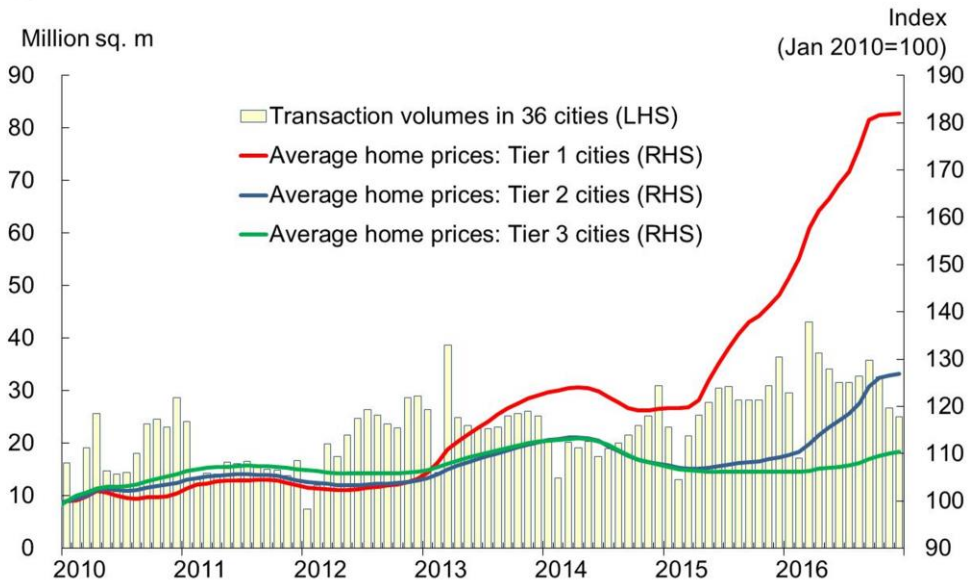
MAINLAND CHINA: AGGREGATE FINANCING FLOW



Source: CEIC



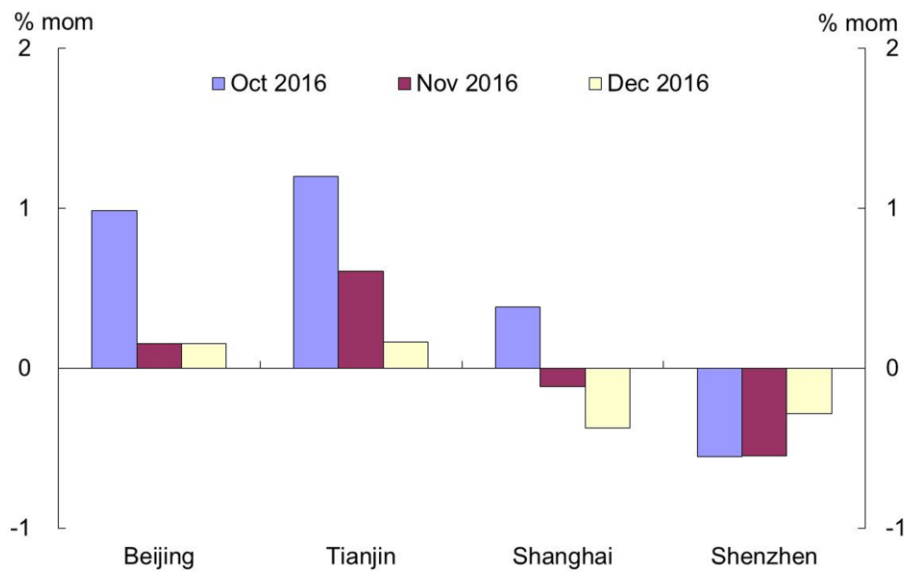
MAINLAND CHINA: PROPERTY PRICE AND TRANSACTION VOLUME



Sources: CEIC, WIND and HKMA staff estimates



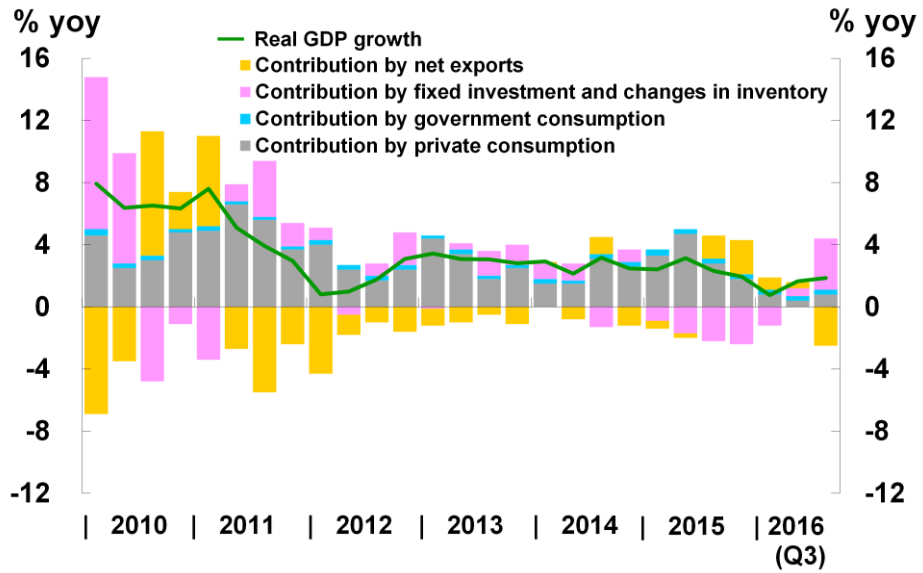
MAINLAND CHINA: HOUSING PRICE CHANGES IN MAJOR CITIES



Sources: CEIC, WIND and HKMA staff estimates



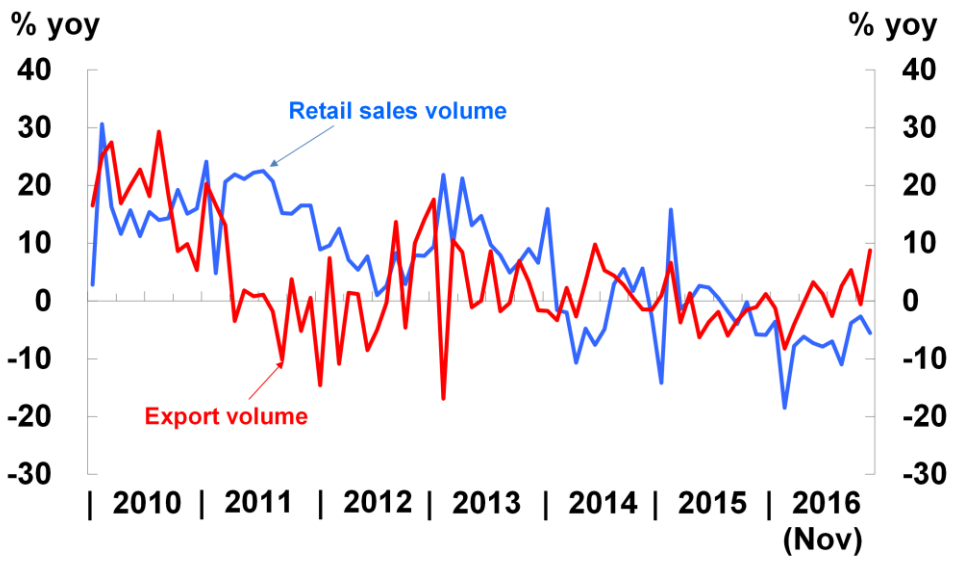
HONG KONG: REAL GDP GROWTH



Source: C&SD



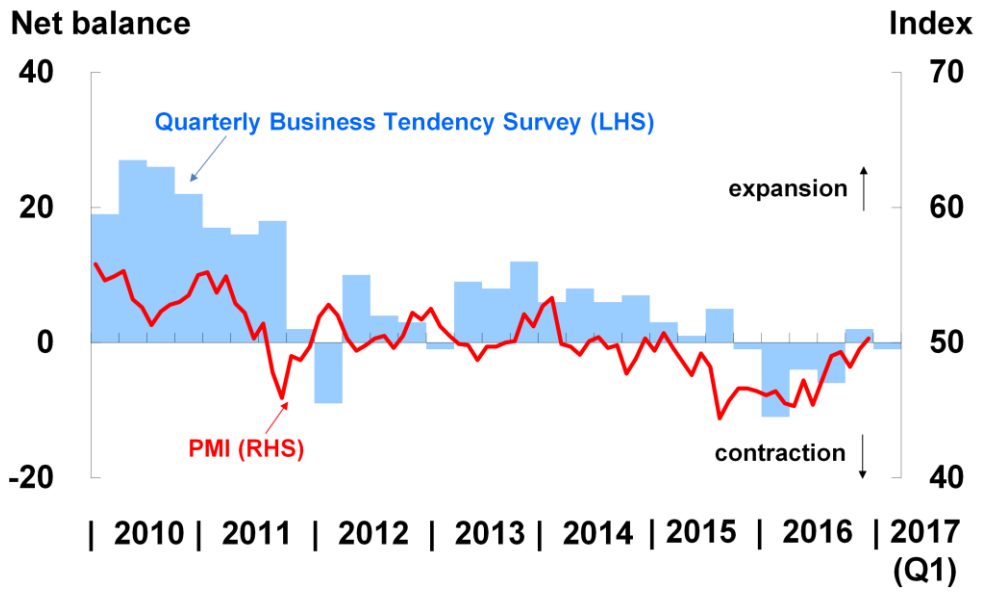
HONG KONG: ECONOMIC ACTIVITY



Source: C&SD



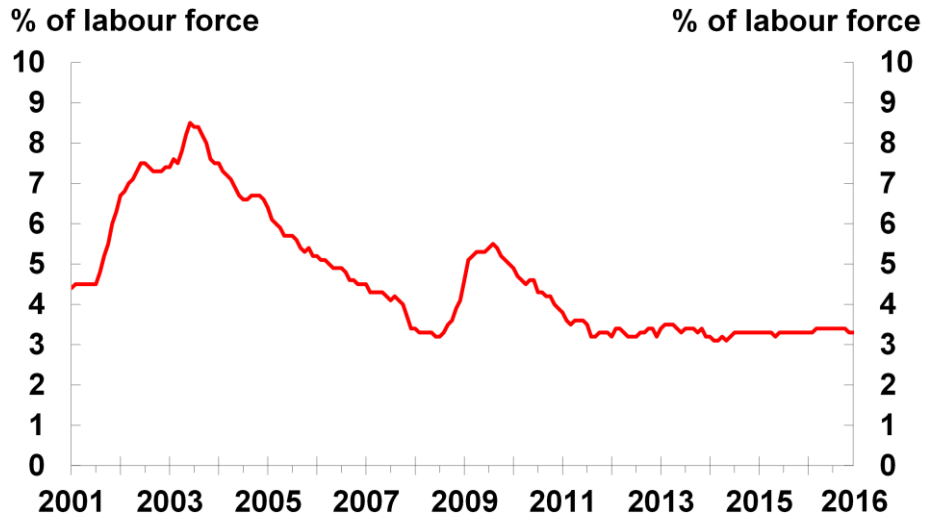
HONG KONG: BUSINESS OUTLOOK



Sources: C&SD and Markit Economics



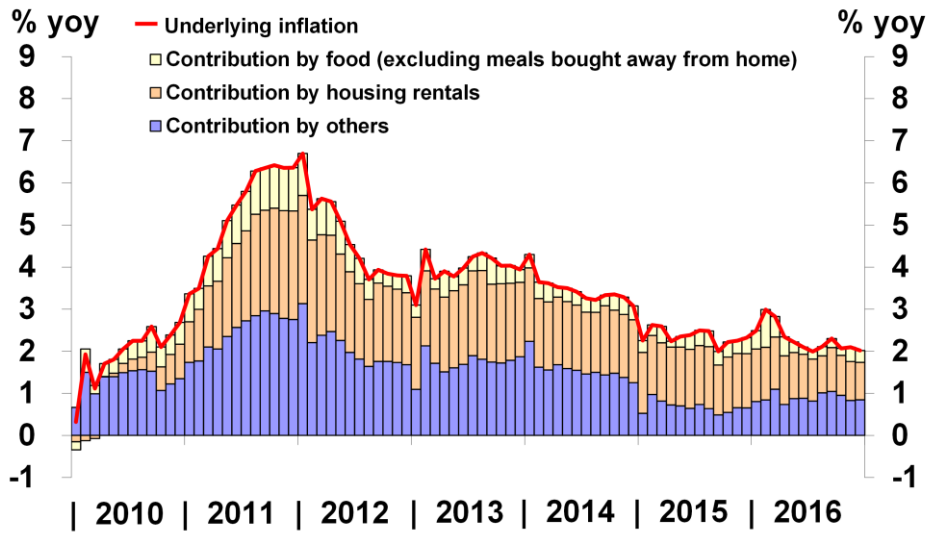
HONG KONG: UNEMPLOYMENT RATE



Source: C&SD



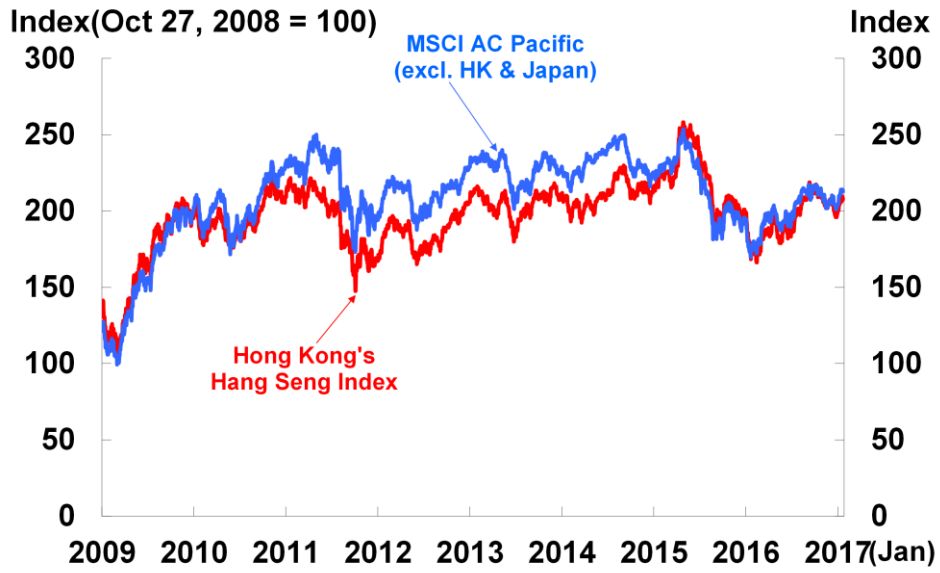
HONG KONG: INFLATION



Sources: C&SD and HKMA staff estimates



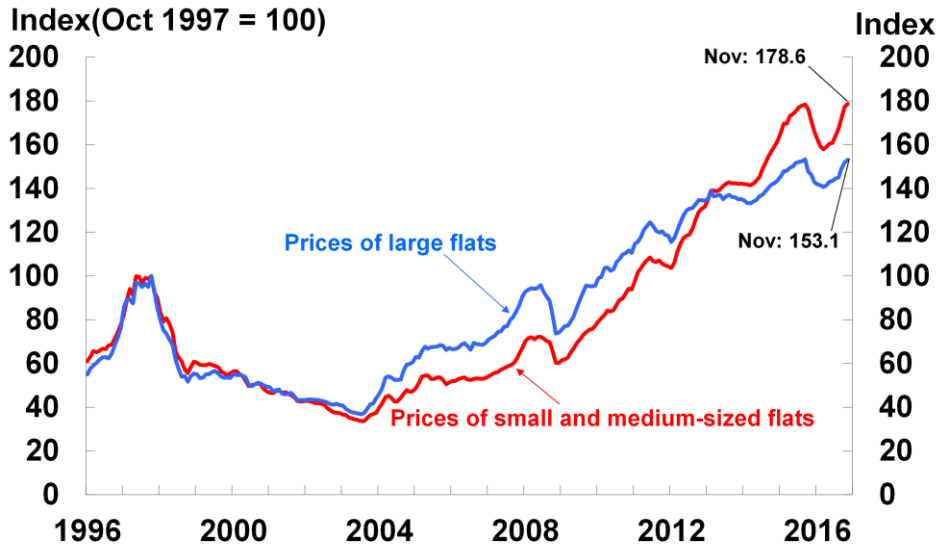
HONG KONG: EQUITY MARKET



Source: Bloomberg



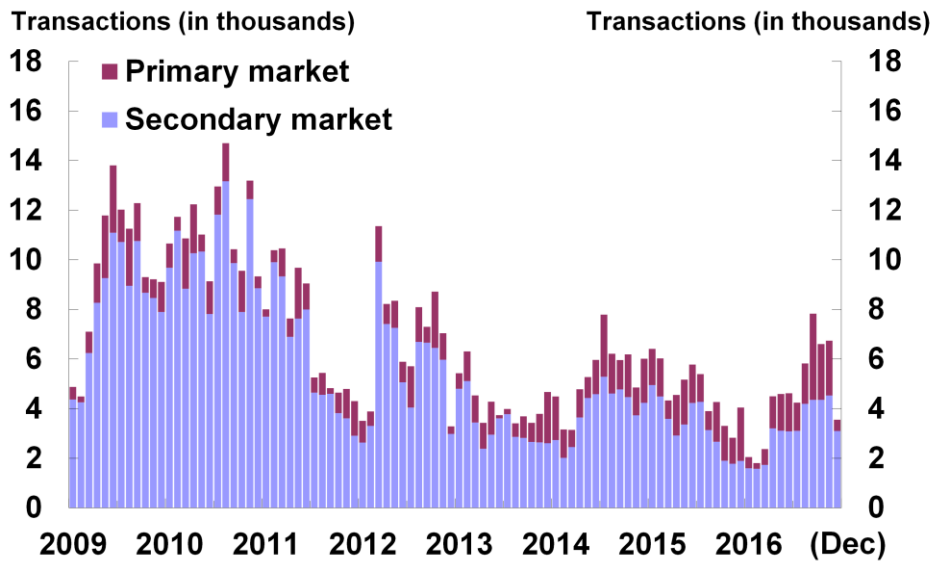
HONG KONG: RESIDENTIAL PROPERTY PRICES



Source: Rating and Valuation Department



HONG KONG: TRANSACTION VOLUME IN THE PRIMARY AND SECONDARY MARKETS



Source: The Land Registry



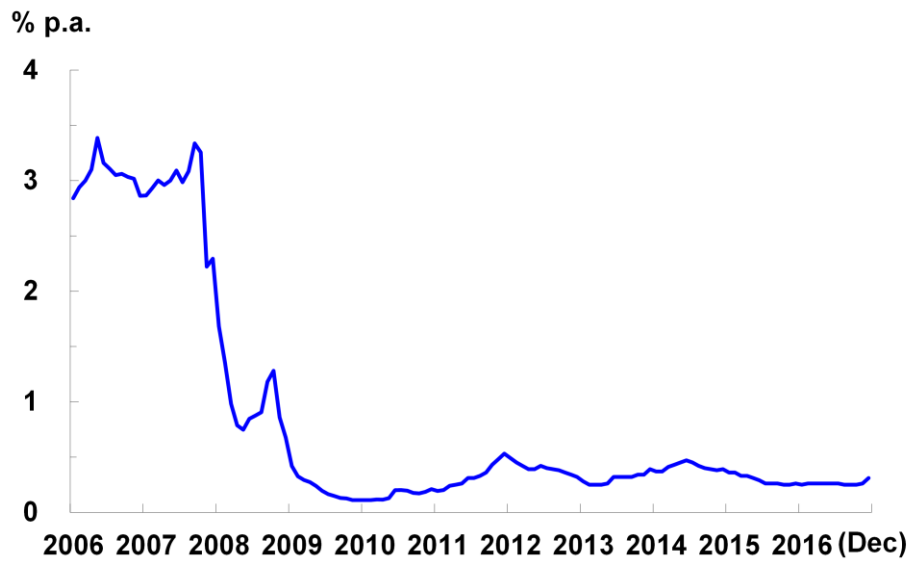
HONG KONG: NEW RESIDENTIAL MORTGAGE LOANS



Source: HKMA



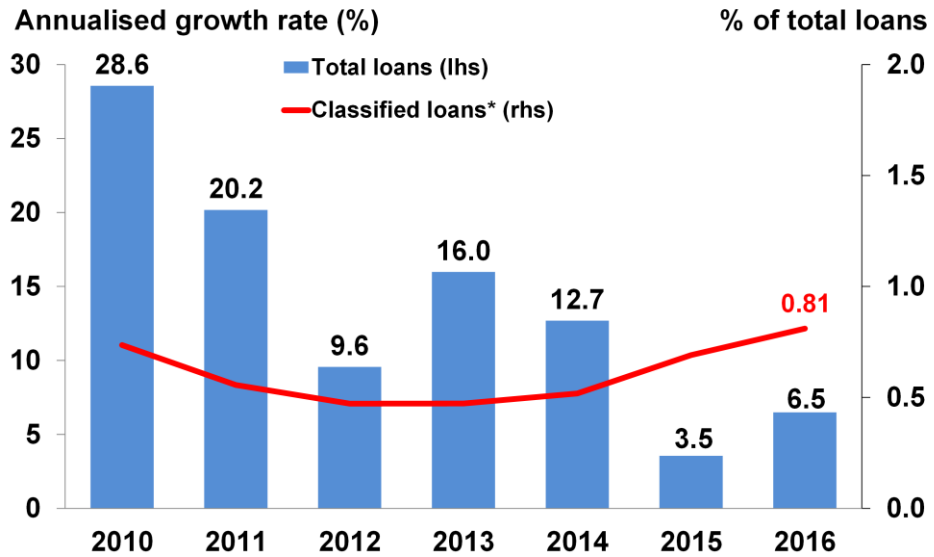
HONG KONG: COMPOSITE INTEREST RATE



Source: HKMA



HONG KONG: LOAN GROWTH AND ASSET QUALITY

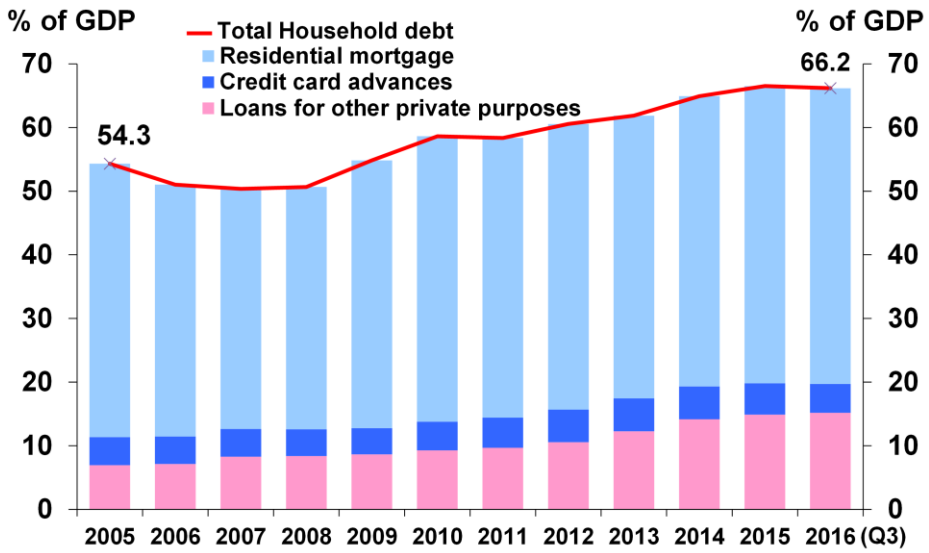


*The classified loan ratio is 2016 Q3 figure.

Source: HKMA



HONG KONG: HOUSEHOLD DEBT



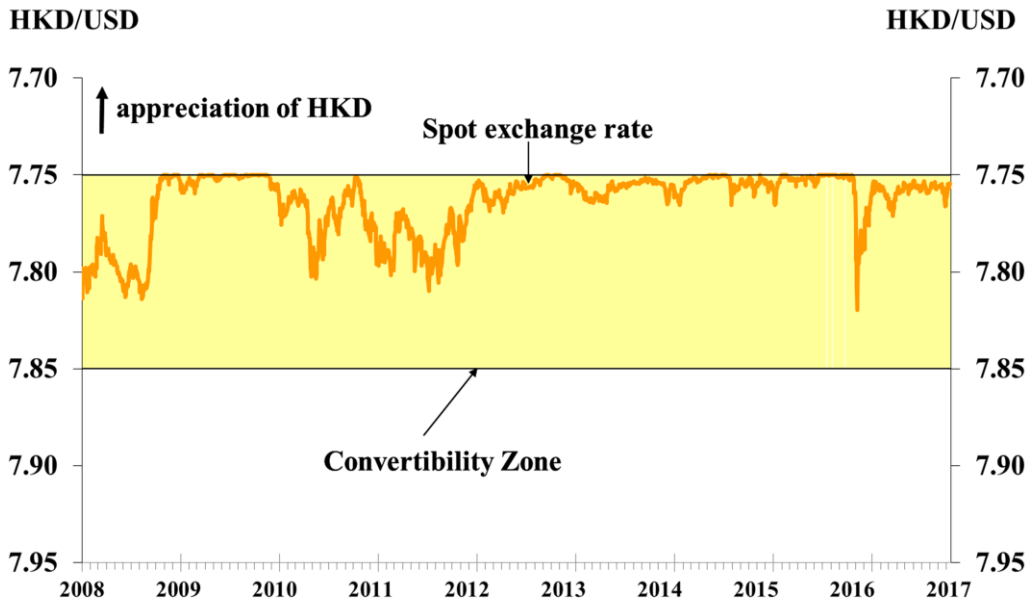
Source: HKMA



CURRENCY STABILITY



HONG KONG DOLLAR SPOT EXCHANGE RATE



43

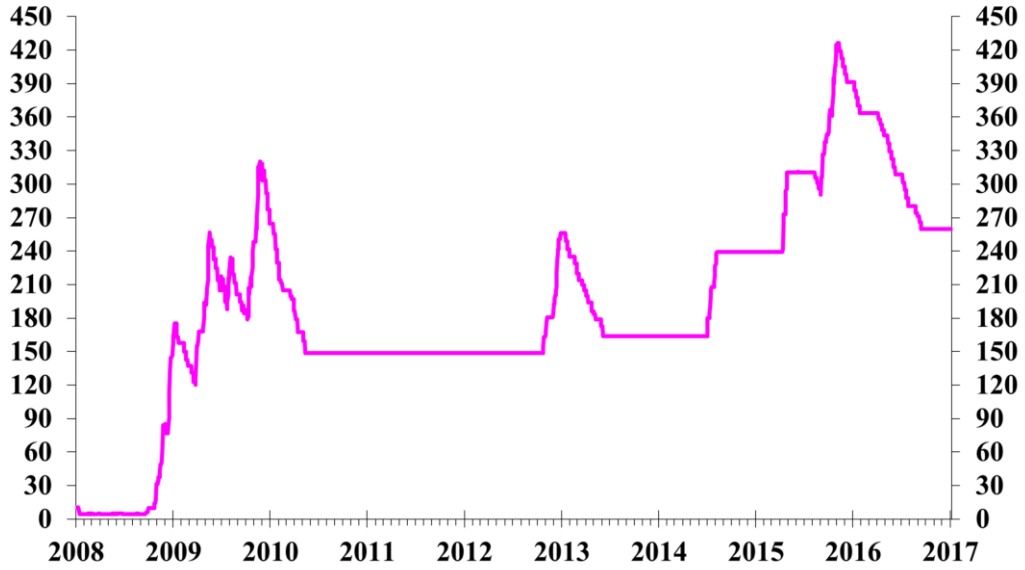
- The HK dollar exchange rate was broadly stable. Following the widely-anticipated rate hike by the Federal Open Market Committee (FOMC), the HK dollar exchange rate against the US dollar softened slightly, alongside a wider interest rate spread between the US dollar and the HK dollar (particularly in the very short-end). On the other hand, the general weakness in other Asian currencies added selling pressures on the HK dollar. The HK dollar eased from the pre-FOMC level of 7.7569 per US dollar to a recent low of 7.7663 on 19 December. Nonetheless, after the Christmas holidays, the HK dollar firmed up again on the year-end funding demand and improved investor sentiment. In early January this year, HK dollar exchange rate stayed at about 7.7550.



AGGREGATE BALANCE

HKD billion

HKD billion

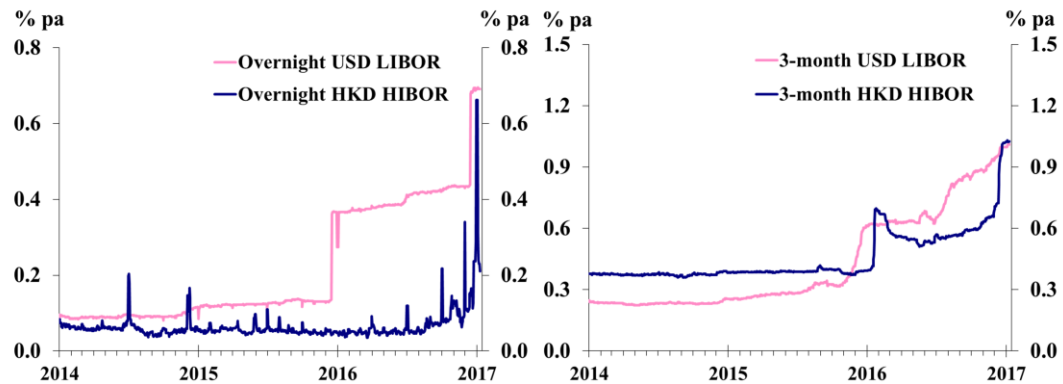


44

- The Aggregate Balance remained stable at levels close to HK\$260 billion in the past two months.



DOMESTIC INTEREST RATES



45

- The HK dollar interest rates increased, with interest rates at the longer end rising faster than those at the shorter end.
- The overnight HIBOR was broadly steady at 0.2% in early January, slightly higher than the 0.1% level before the FOMC meeting. The spike on the last trading day of December 2016 mainly reflected the year-end funding demand.
- The three-month HIBOR rose steadily from about 0.6% in early November 2016 to about 1.0% recently, catching up with its USD counterpart.



12-MONTH HONG KONG DOLLAR FORWARD POINTS



46

- The 12-month HK dollar forward points went steadily higher in November and December 2016 and turned from discounts to premiums, driven by the rise in HK dollar interbank interest rates. In early January 2017, as concerns about outflows from the region abated, the forward points moved back into the discount territory.

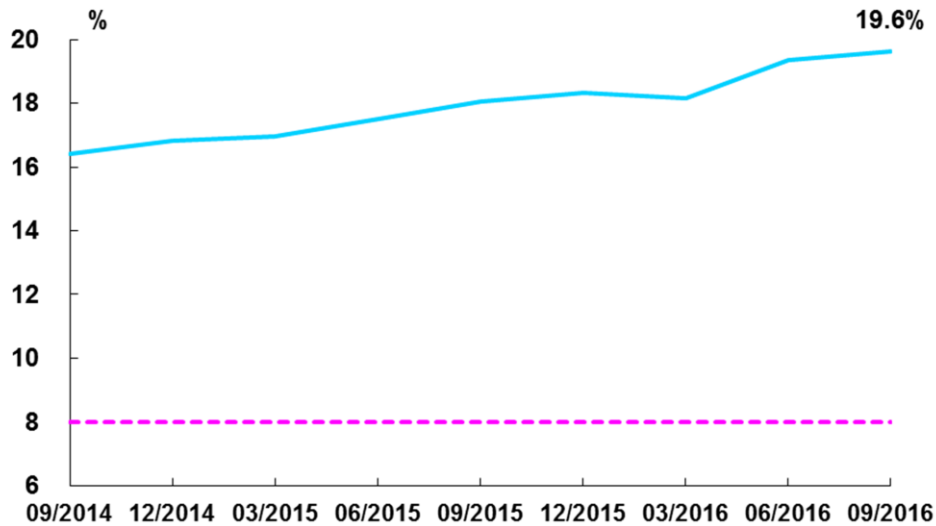


BANKING STABILITY



BANKING SECTOR PERFORMANCE

Locally incorporated authorized institutions (AIs)
continued to be well capitalised



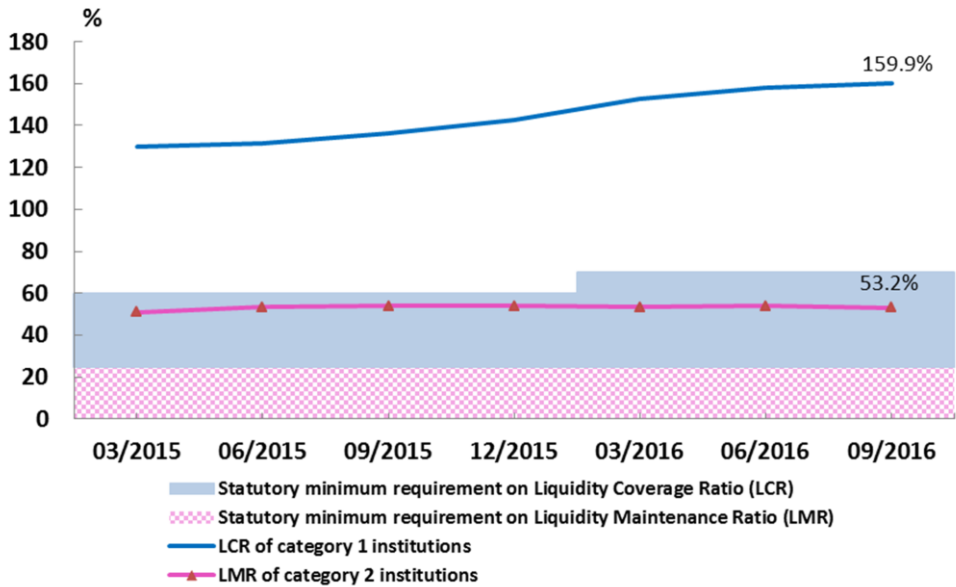
48

- The banking sector continued to be well capitalised. The consolidated capital adequacy ratio of locally incorporated AIs increased to 19.6% at end-September 2016 from 19.4% at end-June 2016, well above the international minimum requirement of 8%.



BANKING SECTOR PERFORMANCE

Liquidity position remained sound



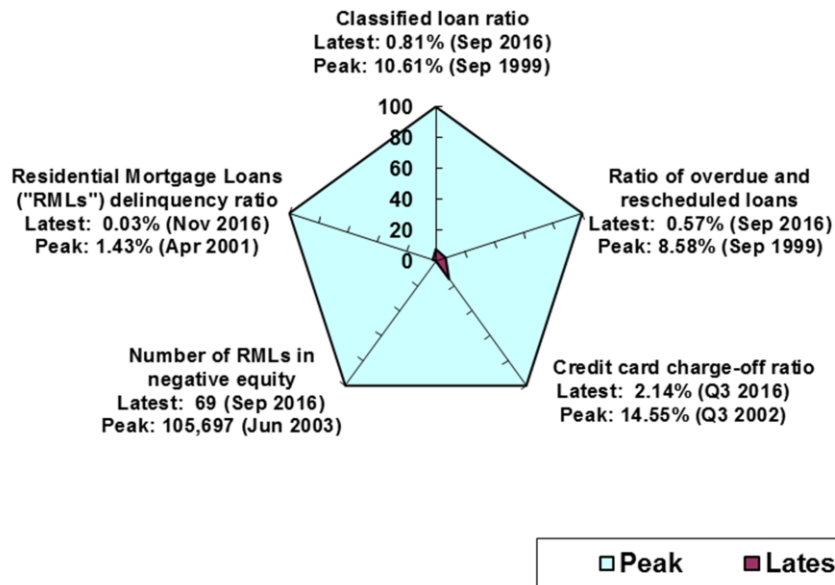
49

- In Q3 2016, the quarterly average Liquidity Coverage Ratio of category 1 institutions was 159.9%, well above the 70% statutory minimum requirement applicable for 2016. For category 2 institutions, their quarterly average Liquidity Maintenance Ratio was 53.2%, also well above the 25% statutory minimum requirement.



BANKING SECTOR PERFORMANCE

Asset quality remained healthy



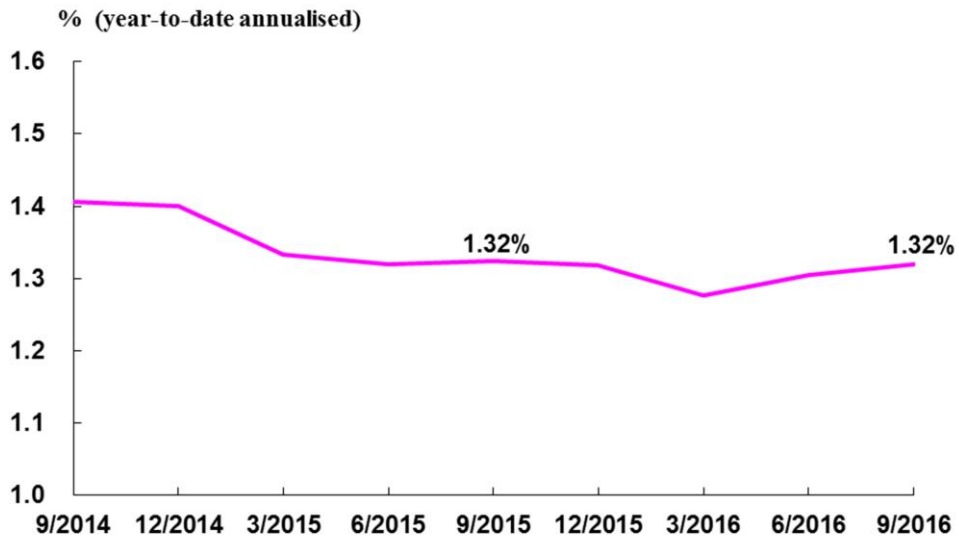
50

- The asset quality of the banking sector continued to hold up well. Retail banks' classified loan ratio edged up to 0.81% at end-September 2016 from 0.80% at end-June 2016, but remained well below the long-run historical average of 2.4% since 2000.



BANKING SECTOR PERFORMANCE

Net interest margin was steady



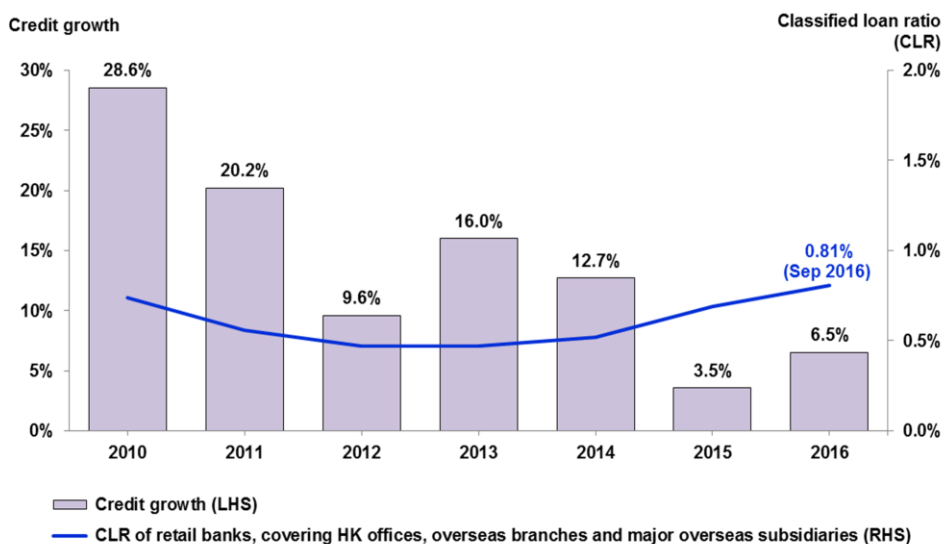
51

- The net interest margin of retail banks' Hong Kong offices was 1.32% in the first three quarters of 2016, which was broadly the same as that during the same period of 2015.



CREDIT GROWTH AND ASSET QUALITY

Credit grew moderately
with asset quality staying at healthy level

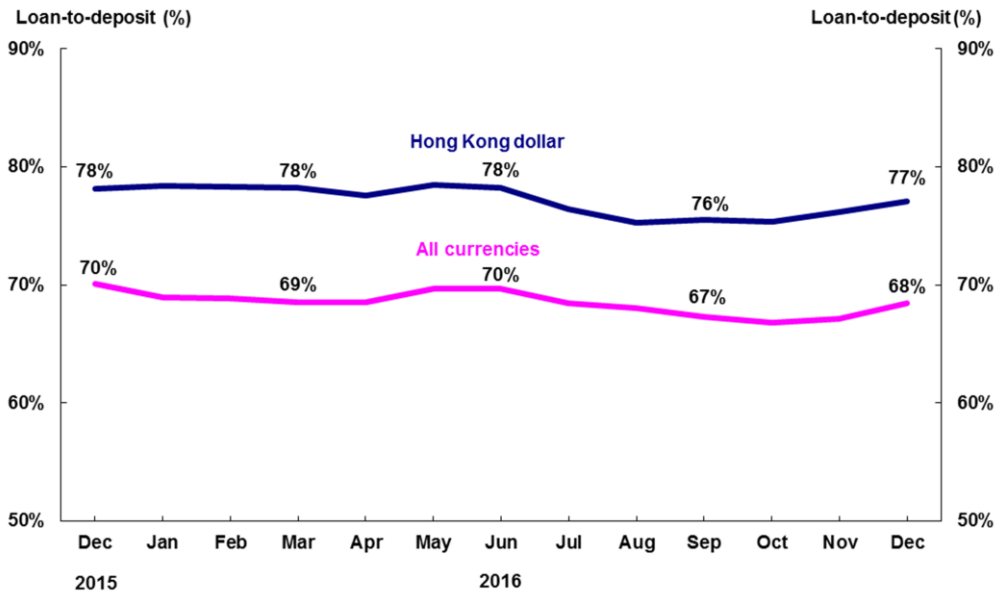


52

- Latest figures suggest that total loans increased moderately by 6.5% in 2016, slightly higher than the 3.5% growth recorded in 2015.
- The banking industry's asset quality deteriorated slightly. At end-September 2016, the classified loan ratio stood at 0.81%, still well below the long-run historical average of 2.40% since 2000.



LOAN-TO-DEPOSIT RATIOS WERE BROADLY STABLE



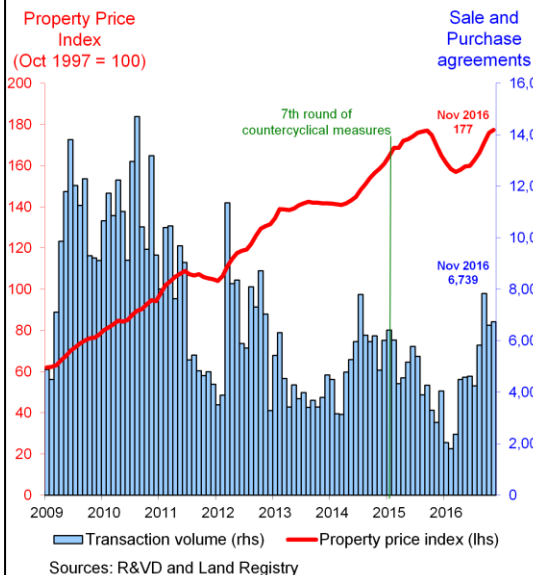
53

- Hong Kong-dollar loan-to-deposit ratio stood at 77% at end-December 2016, the same level as that at end-September 2016.
- All currencies loan-to-deposit ratio stood at 68% at end-December 2016, compared with 67% at end-September 2016.

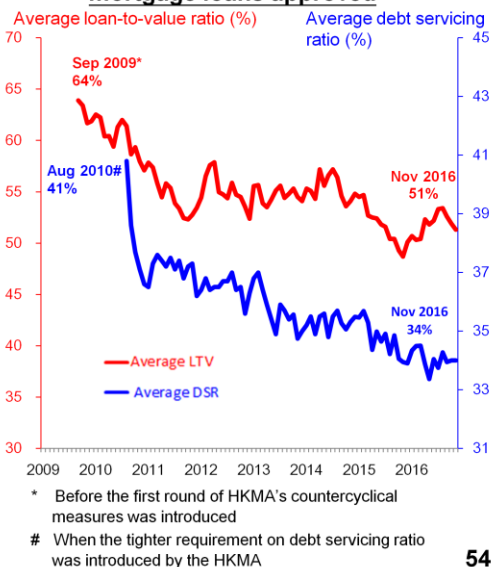


RISK MANAGEMENT OF PROPERTY MORTGAGE LOANS

**Residential property price index and
transaction volume**



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



54

Latest statistics for residential mortgage loans (“RMLs”)

	Monthly average in 2014	Monthly average in 2015	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016
Number of sale and purchase agreements	5,317	4,665	4,620	4,243	5,821	7,826	6,601	6,739
Number of new RML applications	10,481	9,626	9,844	10,281	13,300	13,536	14,323	14,204
Number of new RMLs approved	7,337	7,059	6,842	6,784	8,764	9,356	9,830	10,664

Latest statistics for residential property prices

Property price index		Period	Property price index
Rating and Valuation Department (10/1997=100)	Latest position	11/2016	177.3
	Recent Peak	11/2016	177.3
	Peak in 1997	10/1997	100.0
Centaline (6/7/1997=100)	Latest position	01/01/2017	144.7
	Recent Peak	13/09/2015	146.9
	Peak in 1997	19/10/1997	102.9



BASEL STANDARDS IMPLEMENTATION

- Amendment of Banking (Disclosure) Rules (BDR) – revised Basel Pillar 3 disclosure
- Amendment of Banking (Liquidity) Rules (BLR) – Net Stable Funding Ratio
- Amendments of Banking (Capital) Rules (BCR):
 - Securitisation framework
 - Leverage ratio
 - Counterparty credit risk exposure
- Amendment of Banking Ordinance (BO) – exposure limits

55

BDR amendment

- The Banking (Disclosure) (Amendment) Rules 2016 were submitted to the LegCo on 11 January for negative vetting and we are finalising the associated standard disclosure templates (prescribed by the Basel Committee) to be specified by the Monetary Authority (MA) under the amendment rules. The new requirements will enhance banks' prudential regulatory disclosures in terms of clarity, comprehensiveness, user relevance and comparability.

BLR amendment

- Following the implementation of the Basel III Liquidity Coverage Ratio in 2015, we will implement the second Basel III liquidity standard, namely, the Net Stable Funding Ratio (NSFR), from January 2018. We consulted the industry in the fourth quarter of 2016 and will amend the BLR to establish the NSFR. Our intention is to submit the amendment rules to the LegCo for negative vetting in the second half of this year.

BCR amendments

- On the capital side:
 - We intend to implement the Basel Committee's revised securitisation framework in 2018. This seeks to simplify the existing Basel II securitisation framework, reduce mechanistic reliance on external credit ratings and enhance risk sensitivity. The HKMA's proposed implementation approach was issued for industry consultation in January 2017.
 - The Basel III leverage ratio was designed as part of the Basel III framework to complement the risk-based capital ratios by acting as a backstop gross risk measure to prevent the build-up of excessive leverage within the banking system. Authorized institutions (AIs) have been reporting their leverage ratios to the HKMA since 2013 based on a standard computation methodology under a "testing minimum of 3%" and this is scheduled to become a binding minimum from 2018.

- We originally intended to adopt the Basel capital standards on banks' counterparty credit risk and equity investment in funds from January 2017, but we have postponed implementation tentatively for one year in light of the progress in implementation in other major markets, for instance, the US and European Union. We see a slight delay as beneficial from the perspective of cross-border coordination and maintenance of a level playing field.

BO amendment - Exposure limits

- We consulted the industry in March last year on the following two items (i) local implementation of the Basel Committee's new large exposures framework and (ii) updating of some of our local rules on exposure limits. We propose to amend the BO to incorporate a rule-making power enabling the MA to issue rules prescribing limits on Als' concentration risk as regards their exposures to single or linked counterparties.



HONG KONG RESOLUTION REGIME

- Financial Institutions (Resolution) Ordinance (FIRO) – Protected Arrangements Regulations (PARs)
- Code of Practice
- Resolution planning

56

- A consultation paper on the proposed PARs was published on 22 November 2016 for a two-month public consultation. The PARs, which will be subsidiary legislation under section 75 of FIRO, are intended to provide an appropriate degree of protection to certain financial arrangements such as those involving security, set-off/netting or clearing systems in resolution.
- The FIRO will come into operation on a date appointed by the Secretary for Financial Services and the Treasury, and the intention would be for the PARs to become effective at the same time.
- The HKMA continues to build up its operational capability to carry out resolution including developing local resolution planning requirements and contributing to group resolution planning for systemically important cross-border authorized institutions (AIs) with material operations in Hong Kong.
- To assist in informing the market, and guiding expectations on how the resolution authority will carry out its core functions, some key chapters of the Code of Practice (intended to be issued under section 196 of the FIRO) are being developed in relation to resolution planning and execution including the resolution planning information requirements for AIs.



BANK CONSUMER PROTECTION

- Further enhance supervisory collaboration with fellow regulators on selling of investment and insurance products
- Continue close communications with the banking industry including the Private Wealth Management Association in elucidating and clarifying regulatory standards and requirements on wealth management business conduct

57

- The HKMA has co-operated closely with other financial regulators in Hong Kong in providing guidance and supervising authorized institutions' (AIs) selling of investment products and insurance products. Our enhanced cooperation covered various issues involving financial groups or regulated entities with close business relationships across different sectors in the financial services industry to ensure more co-ordinated and effective supervisory work. The HKMA has also continued to collaborate with the Office of the Commissioner of Insurance on implementing, and reviewing after implementation, the new regulatory standards in respect of non-investment-linked long term insurance products.
- The HKMA has maintained close communications with the banking industry, including meetings with the management of AIs, joint workshop with the Private Wealth Management Association, and providing supervisory guidance to facilitate AIs' interpretation and implementation of regulatory requirements in respect of wealth management business conduct.



FINANCIAL INCLUSION

- The HKMA has been encouraging banks to address the needs for basic banking services by the grassroots during business development
- Apart from physical branches, banks provide basic banking services via other channels
 - Internet banking services (about 10 million personal internet accounts*)
 - ATMs (3,249*)
 - Mobile branches (2)
 - Video teller machines (39#)
- Regarding the recent suggestion of allowing senior citizens to withdraw cash at designated outlets without the need for making purchase, the HKMA has already requested the Hong Kong Association of Banks to conduct feasibility study of the proposal, which is at an initial exploratory stage

* End of 2015

Total 205 video teller machines in operation

58

- The HKMA attaches great importance to the accessibility of basic banking services to the general public, and has been encouraging the banking industry to put the spirit of financial inclusion into practice when developing their banking networks.
- Apart from physical branches, banks provide basic banking services via other channels, including internet banking services, ATMs, mobile branches, video teller machines, etc.
- Regarding a recent suggestion of exploring how, through cooperation arrangement, senior citizens may withdraw cash at over 2,500 outlets of 21 merchants without the need for making purchase, the HKMA has requested the Hong Kong Association of Banks to conduct feasibility study on the suggestion, which is still at an initial exploratory stage.



FINANCIAL INFRASTRUCTURE



FINANCIAL INFRASTRUCTURE

- Continue to maintain safety and efficiency of financial market infrastructure
- Continue the enhancements of the over-the-counter (OTC) derivatives trade repository (TR), which has been operating smoothly, to comply with the relevant requirements of local and international regulatory authorities

60

Operation of financial infrastructure

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

OTC derivatives trade repository

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



REGULATORY REGIME FOR STORED VALUE FACILITIES (SVF) AND RETAIL PAYMENT SYSTEMS (RPS)

- 13 SVF licenses have been granted so far. The licensees are promoting and/or enhancing their services, providing the public with more choices
- In addition to regular supervision of SVF licensees, the HKMA has stepped up publicity programme via various channels to remind the public of security and privacy issues when using SVFs
- The HKMA has commenced implementing the RPS regulatory regime by determining which RPS to be designated and developing an oversight approach for designated RPS

61

Implementation of the regulatory regime for SVF:

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

Public education programme:

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

Implementation of the regulatory regime for RPS:

- For the purpose of implementing the policies and regulatory regime for RPS under Payment Systems & Stored Value Facilities Ordinance (PSSVFO), the HKMA is maintaining close and frequent dialogues with operators of important RPS in Hong Kong, including credit card issuing institutions, and collecting their views.
- At end-2016, the HKMA formally commenced the designation process under the PSSVFO to determine which RPS are to be designated. The HKMA has also started developing an oversight approach to regulate designated RPS.



LATEST FINTECH INITIATIVES (1)

Research and Application

- Published first stage research on distributed ledger technology at end-2016
- Implemented the “Cybersecurity Fortification Initiative” for banks in December 2016, consisting of three pillars – the Cyber Resilience Assessment Framework, the Professional Development Programme and the Cyber Intelligence Sharing Platform

Fintech Supervisory Sandbox (FSS)

- So far, 8 cases of pilot trials of new fintech solutions had been conducted by 4 banks under the FSS

Fintech Innovation Hub (Hub)

- As of the end of 2016, over ten banks and stored value facility issuers have used or planned to use the Hub for proof-of-concept work or demonstrations of new technology 62



LATEST FINTECH INITIATIVES (2)

Industry Survey

- Circulated a survey in October 2016 to banks, fintech firms and stored value facility issuers to collect their views about the current fintech landscape and related regulatory issues

Fintech Career Accelerator Scheme

- Rolled out the scheme in December 2016 to nurture new fintech talents. 12 banks participated in the scheme to offer more than 100 internship positions for undergraduate and postgraduate students from ten tertiary education institutions to work for a period six months or one year.



ENHANCED COMPETENCY FRAMEWORK (ECF) FOR BANKING PRACTITIONERS

- Launched ECF core-level module on anti-money laundering and counter-terrorist financing (AML/CFT) and the ECF module on cybersecurity in December 2016 following industry consultations
- Introduced the relevant competency standards on AML/CFT and cybersecurity to help promote professional development and enlarge the pool of qualified AML/CFT and cybersecurity professionals
- To conduct industry consultations on ECF modules on retail wealth management and treasury management in the first half of 2017

64

- In order to support capacity building and talent development, the HKMA is collaborating with the banking industry and relevant professional bodies to develop the ECF for major functional areas which are central to the safety and soundness of banks, and where manpower and skill shortages are more apparent. This initiative can contribute to the sustainable growth of the industry and talent development in Hong Kong, which helps maintain the competitiveness of Hong Kong as an international financial centre.
- ECF core-level module of AML/CFT (targeting practitioners with less than three years of experience) and the ECF module on cybersecurity were launched in December 2016 following industry consultations. With the assistance of the banking industry, these ECF modules set out the professional standards and competency requirements for the two professional work streams in a systematic and transparent manner. This can help promote professional development, raise the level of competency and enlarge the pool of qualified AML/CFT and cybersecurity professionals.
- Industry consultations on the launch of ECF modules on retail wealth management and treasury management are scheduled for the first half of 2017.



CONSUMER EDUCATION PROGRAMME

- Thematic promotion was conducted to advocate responsible spending during festive season, and highlight issues to note when considering using loan products to settle tax payments
- A new TV programme was launched to further promote smart tips on using different digital financial services and credit cards, and reinforce responsible borrowing attitude

65

- Thematic promotion was conducted to advocate responsible spending during festive season, e.g. avoid over-spending by setting an appropriate level of credit limit, opting out the “over-the-limit” arrangement of credit cards, and don’t make “minimum payment” only when settling credit card bills, etc. Besides, members of the public are reminded of the issues to note if they need to consider using personal loans to settle tax payments, e.g. use “Annualised Percentage Rate” to compare the borrowing cost of different loan products, and understand the terms and conditions such as interest calculation method, repayment schedule, etc.
- A new TV programme presented in a humorous manner was launched to further promote smart tips on using different digital financial services (such as stored value facilities, e-cheque and e-banking services) and credit cards, and reinforce responsible borrowing attitude.



DEPOSIT PROTECTION SCHEME

- Aggregate amount of deposits covered by the Deposit Protection Scheme (DPS) grew by 14% to HK\$2,026 billion in 2016
- A modernisation plan has been formulated to enhance the resilience of overall IT systems for payouts
- To continue to enhance the understanding of the coverage and features of the DPS by the general public

66

- Aggregate amount of deposits covered by the DPS grew by 14% to HK\$2,026 billion in 2016, from HK\$1,784 billion in 2015.
- To further improve the operational effectiveness and efficiency of gross payouts, a review of the existing IT systems was conducted and a modernization plan has been formulated accordingly to enhance the overall system resilience.
- In order to ensure the effectiveness of the DPS in safeguarding depositors' confidence, the Hong Kong Deposit Protection Board continues its efforts in promoting the understanding of the coverage and features of the DPS by the general public.



COIN COLLECTION PROGRAMME

- The Coin Collection Programme runs until September 2018. Two Coin Carts collect coins from members of the public in 18 districts on a rotation basis and free of charge
- Starting from October 2014 to December 2016, the two Coin Carts had served 256,000 people, collecting 217 million coins with a total face value of HK\$263 million



GOVERNMENT BOND PROGRAMME

Institutional part

- Twelve issues totalling HK\$68.3 billion were outstanding as at end December 2016
- Two Islamic bonds totalling US\$2 billion were outstanding as at end December 2016

Retail part

- Three iBonds and one Silver Bond totalling HK\$33 billion were outstanding as at end December 2016



REGULATORY DEVELOPMENT OF THE OTC DERIVATIVES MARKET

- Amendment to the Securities and Futures Ordinance was enacted in 2014, providing for the regulatory regime for the over-the-counter (OTC) derivatives market
- The phase one rules for the reporting and related record keeping obligations took effect on 10 July 2015, while the clearing and record keeping obligations and designation of central counterparties under the regime became effective on 1 September 2016
- The second phase rules for the reporting obligations will commence on 1 July 2017



FINANCIAL BENCHMARK REFORM IN HONG KONG

- Having regard to local market conditions, Hong Kong has been reviewing the need and feasibility in reforming major interest rate and foreign exchange (FX) benchmarks along international recommendations promulgated to enhance the transparency and robustness of benchmarks that are widely used in the global financial markets
- Major reforms for FX benchmarks have been completed
- For interest rate benchmarks, the HKMA is analysing relevant transaction data to study reform feasibility, and will work with the industry to consult stakeholders on the proposed way forward

70

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

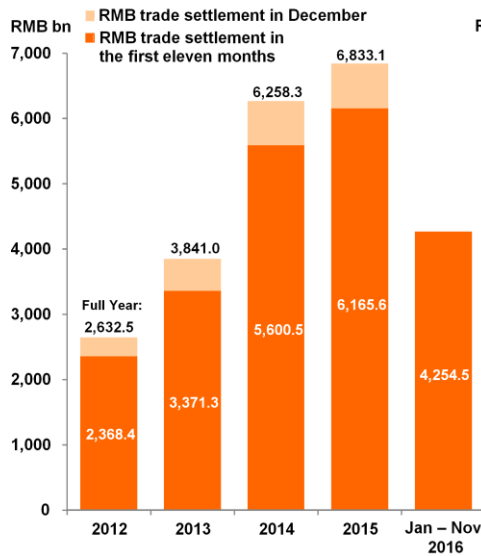


HONG KONG AS AN INTERNATIONAL FINANCIAL CENTRE

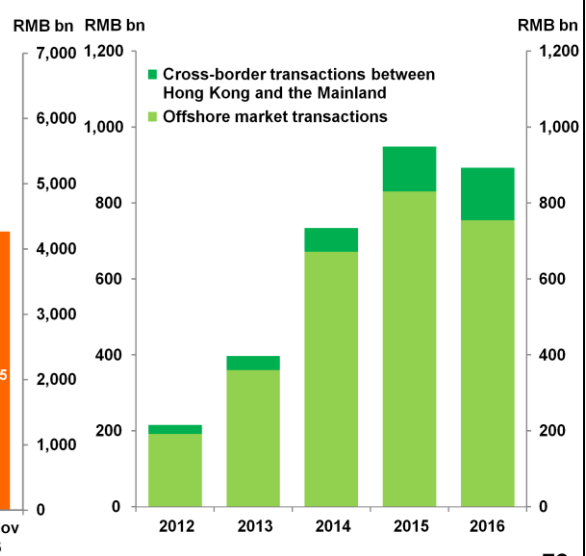


RMB TRADE SETTLEMENT AND PAYMENT

RMB trade settlement handled by banks in Hong Kong



Average daily turnover of Hong Kong RMB RTGS System

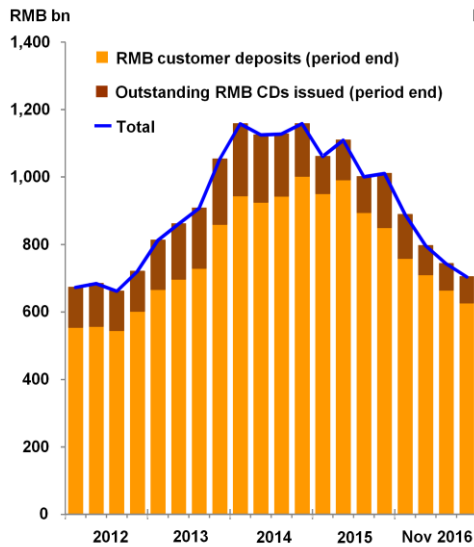


- In the first eleven months of 2016, RMB trade settlement handled by banks in Hong Kong amounted to RMB4,254.5 billion.
- In 2016, the daily average turnover of Hong Kong RMB Real Time Gross Settlement (RTGS) system stood at RMB863.6 billion.

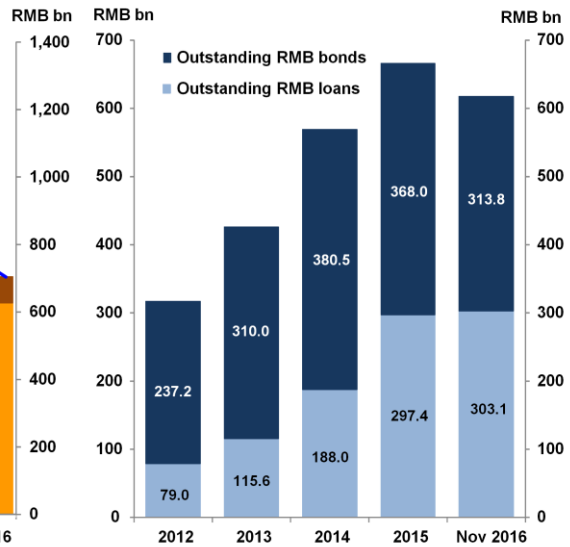


RMB LIQUIDITY POOL AND FINANCING ACTIVITIES

RMB customer deposits and certificates of deposit (CDs)



RMB financing activities



73

- At end-November 2016, RMB customer deposits and outstanding RMB certificates of deposit amounted to RMB627.6 billion and RMB76.4 billion respectively, totaling RMB704.0 billion.
- At end-November 2016, outstanding RMB loans amounted to RMB303.1 billion. Outstanding dim sum bonds amounted to RMB313.8 billion. In the first eleven months of 2016, dim sum bond issuance totalled RMB37.8 billion.



MAINTAINING RMB BUSINESS LINKS WITH OTHER JURISDICTIONS

	Nov 2016	2015	2014	2013
1) No. of participating banks of Hong Kong's RMB clearing platform	212	217	225	216
Of which:				
Branches and subsidiaries of overseas banks and overseas presence of Mainland banks	186	192	200	191
2) Amount due to overseas banks (RMB billion)	76.5	105.7	145.2	166.0
3) Amount due from overseas banks (RMB billion)	100.2	132.1	193.3	164.5

74

- The HKMA maintained ongoing dialogues with other offshore RMB centres and continued to strengthen our marketing efforts through active participation in industry events to promote Hong Kong's RMB business platform and our unique role as a springboard between the Mainland and the rest of the world.
- We conducted a roadshow in Frankfurt, Germany at the Hong Kong Trade Development Council's "Think, Asia, Think Hong Kong" campaign in September 2016 to promote the role of Hong Kong in supporting multinational companies to tap into the growing opportunities in Mainland China. We also spoke at an industry conference for overseas central bank representatives in July, the Treasury Markets Summit and the Hong Kong Institute of Bankers' Annual Banking Conference in September, on opportunities arising from RMB internationalisation and the Belt and Road Initiative.
- The private-sector led London-Hong Kong Financial Services Forum was held on 6-7 December 2016 in London. The Forum has expanded its scope to cover not only cooperation in RMB business but also in infrastructure financing, green finance, the Belt and Road Initiative, and fintech.



DEVELOPING HONG KONG AS A CTC HUB

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

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 global offshore renminbi business hub, capital formation, banking networks, etc., thereby reinforcing Hong Kong's status as an international financial centre and promoting the development of headquarters economy in Hong Kong.
- The HKMA has been working closely with the private sector and other Government agencies in organising various marketing activities to promote Hong Kong as a preferred regional destination for CTCs. To that end, we have outreached to about 400 corporations, financial institutions and industry associations by the end of 2016.



CONTINUED DEVELOPMENT AS AN INTERNATIONAL ASSET MANAGEMENT CENTRE

- The HKMA continues to promote Hong Kong's platform as an asset management centre
- The combined fund management business in Hong Kong reached US\$2.2 trillion at the end of 2015
- Continued increase in the number of licensed corporations and licensed individuals for asset management
- Close to 70 of the 100 largest global money managers have offices in Hong Kong
- Growing network of prominent asset owners, including the Abu Dhabi Investment Authority (ADIA) which opened office in Hong Kong in October 2016
- 22 private banks have opened for business in Hong Kong since 2009, bringing the total to 47 banks offering private wealth management services in Hong Kong at the end of 2016

76

- According to the Securities and Futures Commission (SFC)'s survey, 68.5% of the combined fund management business in Hong Kong was sourced from non-Hong Kong investors in 2015, attesting to the fact that Hong Kong is a preferred location for asset management business in the region.
- The number of licensed corporations for asset management increased from 680 in 2008 to 1,238 as of the third quarter of 2016.
- Close to 70 of the 100 largest global money managers (ranked by assets under management as of the end of 2015) have offices in Hong Kong, and over 60 of them are licensed by the SFC.
- Hong Kong is a hub for global asset owners. In October 2016, ADIA, one of the largest sovereign wealth funds in the world, has chosen Hong Kong to open its first office in Asia Pacific.
- Achieved leading positions as an asset management centre in Asia Pacific:
 1. Hong Kong is the second largest private equity hub in Asia. The total capital under management in private equity funds in Hong Kong reached US\$120 billion as of the second quarter of 2016.
 2. About 50% of RMB Qualified Foreign Institutional Investor managers, 60% of Qualified Foreign Institutional Investor managers, and close to 80% of Mainland fund management and securities firms with Qualified Domestic Institutional Investor licence have a presence in Hong Kong as of August 2016.
 3. Hong Kong is also the largest hub for hedge funds in Asia, with the number of funds increasing from 676 in 2012 to 778 as of end-September 2014.



INFRASTRUCTURE FINANCING FACILITATION OFFICE (IFFO)

- IFFO was launched in July 2016 with the mission to facilitate infrastructure investments and their financing by working with a cluster of key stakeholders
- The functions of IFFO are:
 1. providing a platform for information exchange and experience sharing;
 2. building capacity and knowledge on infrastructure investments and financing;
 3. promoting market and product development; and
 4. facilitating infrastructure investment and financing flows
- To date, over 60 organisations from Mainland China, Hong Kong and overseas have joined as partners. They include multilateral financial agencies and development banks, investors, asset managers, banks, insurance companies, infrastructure project developers and operators, professional service firms, etc.

77

- IFFO has been proactively working on different aspects since its launch on 4 July 2016.
- IFFO has participated in various overseas and local conferences and events to discuss infrastructure investment and financing. In the Asian Financial Forum in January 2017, IFFO organised a workshop, inviting leaders from various sectors to discuss the opportunities and challenges and Hong Kong's roles in infrastructure financing in Asia; as well as an event for representatives of emerging economies to promote their investment environment and infrastructure financing opportunities.
- IFFO hosted its first executive workshop co-organised by International Finance Corporation and Eastspring Investments in October 2016, with the theme of "Private Participation in Infrastructure Project Finance in Emerging Markets" and a business seminar in November 2016 featuring President Jin Liqun of the Asian Infrastructure Investment Bank (AIIB) to share AIIB's experience in project planning, operation and management to build capacity for the business sector.



DEVELOPMENT OF ISLAMIC FINANCE

- Following the success of the two sukuk issuances in 2014 and 2015, the Government will look for opportunities to launch the third sukuk when market conditions are conducive
- The HKMA will develop a detailed issuance plan having regard to market conditions
- The HKMA will also continue to share its previous sukuk issuance experiences with enterprises which have funding needs



INVESTMENT ENVIRONMENT AND PERFORMANCE OF THE EXCHANGE FUND

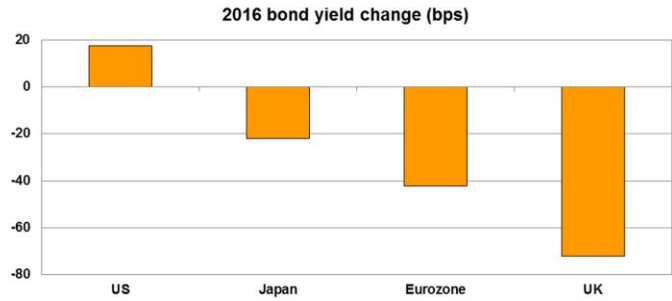
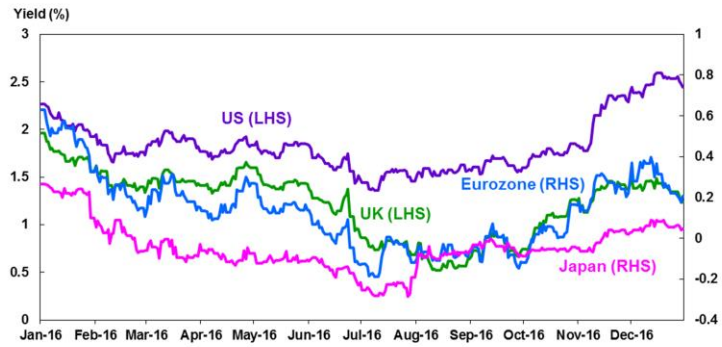


INVESTMENT ENVIRONMENT IN 2016

- **Interest rates:** Bond markets became the safe haven in the first three quarters of 2016 and performed quite well. However, in the fourth quarter, with the heightened expectations of US interest rate hikes, in particular after the US presidential election, the yields of US Treasuries rose. Yields of other major government bonds also rose in tandem, though by a smaller extent
- **Equities:** Global equities performed well in general in 2016, though with high volatility during the year. Market concerns over a hard landing of Mainland China's economy and a slowdown in global growth in January prompted Hong Kong and other major equity markets to fall sharply before stabilising in mid-February. The results of the Brexit referendum in June and the US presidential election in November took the market completely by surprise. But equity markets only experienced short-lived setbacks and quickly recovered lost ground
- **Exchange rates:** The US dollar appreciated against the renminbi and euro in 2016, recording substantial gains in the fourth quarter in particular on support from interest rate differentials



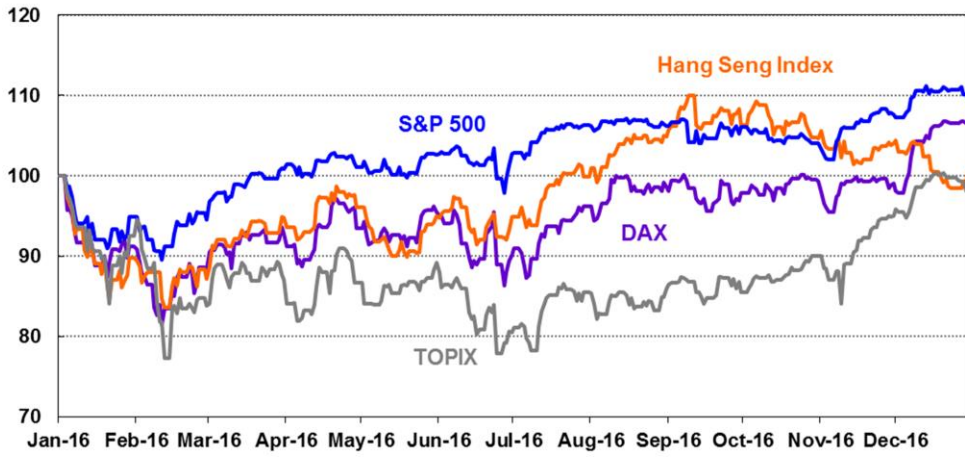
CHANGES IN 10-YEAR GOVERNMENT BOND YIELDS IN 2016





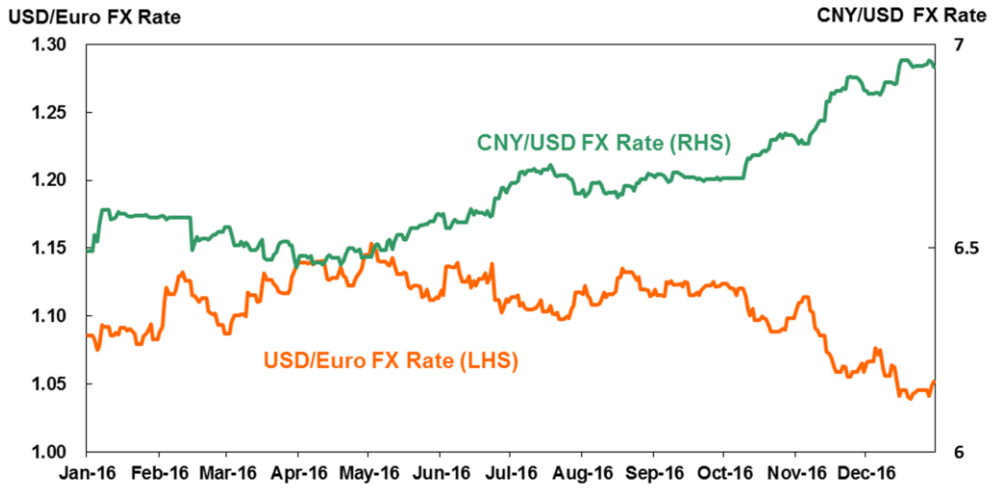
EQUITY MARKETS IN 2016

Normalized Index Level (2015 year-end = 100)





CURRENCY MARKETS IN 2016





INVESTMENT INCOME

	← 2016 →					2015	2014	2013	2012
	(unaudited)								
(HK\$ billion)	Full year	Q4	Q3	Q2	Q1	Full year	Full year	Full year	Full year
Hong Kong equities*	5.3	(8.0)	16.8	2.7	(6.2)	(5.0)	6.5	10.1	30.7
Other equities	28.3	14.6	18.5	5.1	(9.9)	7.1	33.7	71.8	42.8
Bonds	33.0	(17.7)	6.4	19.3	25.0	15.9	47.3	(19.1)	33.1
Other investments®	10.2	-	4.6	4.3	1.3	11.1	9.9	16.8	6.4
Foreign exchange#	(15.8)	(19.3)	0.8	(12.5)	15.2	(44.9)	(52.7)	1.6	(1.4)
Investment income/(loss)	61.0	(30.4)	47.1	18.9	25.4	(15.8)	44.7	81.2	111.6

* Excluding valuation changes of the Strategic Portfolio

® Including valuation changes of private equity and real estate investments held under the Long-Term Growth Portfolio (LTGP). (The above figures represent valuation changes up to the end of September 2016. Valuations of these investments from October to December are not yet available.)

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



INCOME AND EXPENDITURE

(HK\$ billion)	← 2016 →					2015
	(unaudited)					
	Full year	Q4	Q3	Q2	Q1	Full year
Investment income/(loss)	61.0	(30.4)	47.1	18.9	25.4	(15.8)
Other income	0.2	0.1	0.0	0.1	0.0	0.2
Interest and other expenses	<u>(6.4)</u>	<u>(1.9)</u>	<u>(1.6)</u>	<u>(1.7)</u>	<u>(1.2)</u>	<u>(4.8)</u>
Net income/(loss)	54.8	(32.2)	45.5	17.3	24.2	(20.4)
Fee payable to Fiscal Reserves**	(23.0)	(5.8)	(5.5)	(5.7)	(6.0)	(46.7)
Fee payable to HKSAR government funds and statutory bodies*	(9.6)	(2.5)	(2.4)	(2.4)	(2.3)	(14.7)

* The rate of fee payment is 3.3% for 2016 and 5.5% for 2015

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



EXCHANGE FUND ABRIDGED BALANCE SHEET

(HK\$ billion)	At 31 Dec 2016 (unaudited)	At 31 Dec 2015	Change
ASSETS			
Deposits	389.2	290.5	98.7
Debt securities	2,467.2	2,462.0	5.2
Hong Kong equities*	147.3	148.2	(0.9)
Other equities	436.9	392.4	44.5
Other assets#	189.3	129.8	59.5
Total assets	3,629.9	3,422.9	207.0
LIABILITIES AND FUND EQUITY			
Certificates of Indebtedness	405.3	357.9	47.4
Government-issued currency notes & coins in circulation	11.9	11.3	0.6
Balance of the banking system	259.6	391.3	(131.7)
Exchange Fund Bills and Notes issued	961.0	827.8	133.2
Placements by banks and other financial institutions	56.1	66.9	(10.8)
Placements by Fiscal Reserves®	914.6	833.5	81.1
Placements by HKSAR government funds and statutory bodies	302.5	280.9	21.6
Other liabilities	172.2	108.4	63.8
Total liabilities	3,083.2	2,878.0	205.2
Accumulated Surplus	546.7	544.9	1.8
Total liabilities and fund equity	3,629.9	3,422.9	207.0

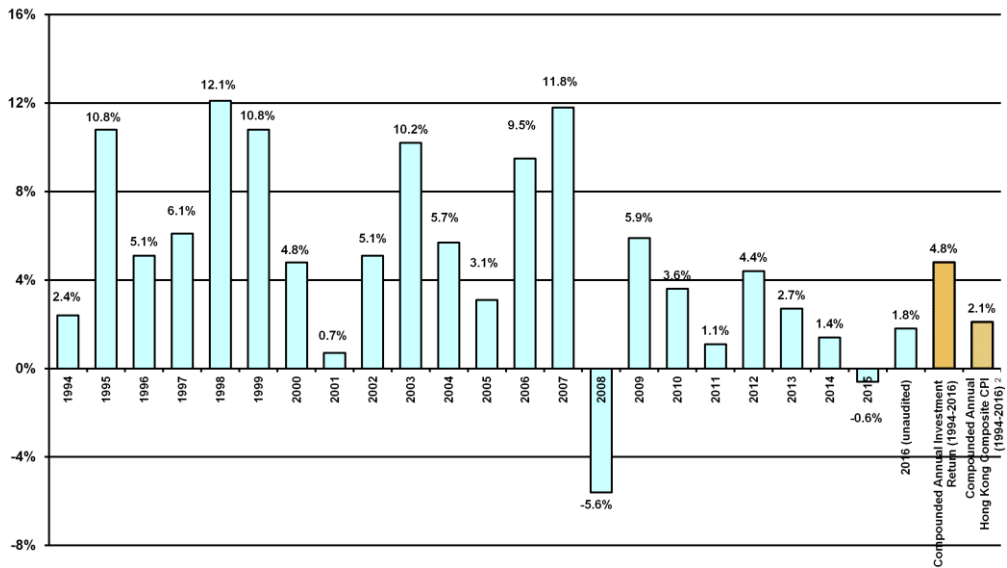
* Including shares of the Hong Kong Exchanges and Clearing Limited in the Strategic Portfolio

Including fund injection to Exchange Fund's investment holding subsidiaries at a carrying amount of HK\$118.8 billion at 31 Dec 2016 (HK\$96.0 billion at 31 Dec 2015)

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



INVESTMENT RETURN OF THE EXCHANGE FUND (1994-2016) ¹



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

² Composite CPI is calculated based on the 2014/2015-based series.



INVESTMENT DIVERSIFICATION

- Began to invest in alternative assets in 2009 under the Long-Term Growth Portfolio (LTGP). The progress of the LTGP in 2016 has been good. Positions at end-2016 and performance since inception are as follows:

As of end-2016 (unaudited)

Asset Classes	Market Value HK\$ billion	Annualised IRR (Since inception from 2009 till 2016)
Private Equity	112.0	} 10.9%
Real Estate	62.9	
Total	174.9	

Note: Outstanding investment commitments at the end of 2016 amounted to HK\$133.8 billion



HONG KONG MORTGAGE CORPORATION



MORTGAGE INSURANCE PROGRAMME (MIP)

- Since its launch in March 1999, the MIP has helped over 124,400 families attain home ownership
- In 2016, the total drawdown amount under the MIP was HK\$24.6 billion and the average loan size was HK\$3.4 million
- About 80% of drawn down loans were for secondary market properties



REVERSE MORTGAGE PROGRAMME (RMP)

- As at end of December 2016, 1,556 applications had been received:
 - Average age of borrowers: 69 years old
 - Average monthly payout: HK\$15,000
 - Payment terms: 10-year (29%), 15-year (16%), 20-year (13%), life (42%)
 - Average property value: HK\$5 million
 - Average property age: 30 years
- The extension of the RMP to cover subsidised sale flats in October 2016 has been well received by the market

91

- Since inception in mid-October 2016, the extension of the RMP to cover subsidised sale flats has been well received by the market. Up to end-December 2016, over 110 applications had been received.



SME FINANCING GUARANTEE SCHEME (SFGS)

- The market responded positively to the promotion and communication effort of the HKMC on the SFGS in 2016
- Continuous effort has been made by the HKMC to further enhance the operation of the SFGS
- As at end-December 2016, 11,438 applications had been approved, involving a total loan amount of around HK\$45.6 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	24% and 76% (in terms of no. of applications approved)	Average loan interest rate and average guarantee fee rate	4.81% p.a. 0.53% p.a.
Enterprises with less than 50 employees	91%	Benefitted enterprises and the related no. of employees	7,054 enterprises and 180,723 employees

92

- According to past experience, the number of applications of the SFGS would tend to drop after the middle of the year, but the number picked up in the third and fourth quarters of 2016, with significant growth being recorded by those banks (including a major bank) that have enhanced their focus on SME business. The HKMC completed a total of 94 claim cases in 2016 (73 of which were completed in the last two quarters), representing an increase of 52% from 62 cases in 2015.
- For example, the HKMC enhanced the system in December 2016 to allow banks to upload supporting documents for claims in advance to enhance claim processing efficiency. In January 2017, the HKMC simplified part of the claim procedures to reduce the scope of information required, and advanced the timing of the notification of claim decision to banks. Continuous effort will be made by the HKMC to identify possibilities for further enhancing claim processing efficiency.
- Industry types of approved applications for 80% loan guarantee products:

Manufacturing sector – **23.5%**

- Textiles and clothing 4.5%
- Electronics 2.1%
- Plastics 1.9%
- Printing and publishing 1.7%

Non-manufacturing sector – **76.5%**

- Trading 45.9%
- Wholesale and retail 9.0%
- Construction 3.0%
- Engineering 2.9%



MICROFINANCE SCHEME

- Launched in June 2012, trial period up to 2018 and maximum aggregate loan amount up to HK\$200 million
- As at end-December 2016, the Scheme had received 402 formal loan applications. Out of the vetted applications, 183 had been approved with the total loan amount close to HK\$46 million. The approval rate was around 48%
- For the approved applications, the average loan size was about HK\$250,000 and the average loan tenor was 4.6 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	114 cases (47%)
– Retail	68 cases (28%)
– Wholesale	36 cases (15%)
– Manufacturing	17 cases (7%)
– IT related	8 cases (3%)

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



PREMIUM LOAN INSURANCE SCHEME (PLIS)

- PLIS was launched in September 2015 to provide owners of subsidised housing properties aged 50 or above with an additional financing option to settle land premium payment
- After settling premium payment, borrowers will have greater flexibility in letting or selling their properties in the open market
- The scheme can help release some under-utilised flats and promote the market circulation of subsidised housing properties
- As at end-December 2016, over 2,400 enquiries and 11 applications had been received