

# **AMRO Annual Consultation Report**

## **Hong Kong, China - 2017**

**ASEAN+3 Macroeconomic Research Office (AMRO)**

April 2018

### Acknowledgements

1. This Annual Consultation Report on Hong Kong, China has been prepared in accordance with the functions of AMRO to monitor, assess and report to its members on their macroeconomic status and financial soundness and to identify the relevant risks and vulnerabilities, and assist them, if requested, in the timely formulation of policy recommendation to mitigate such risks (Article 3(a) and (b) of AMRO Agreement).
2. This Report is drafted on the basis of the Annual Consultation Visit of AMRO to Hong Kong, China from 11 to 15 September 2017 (Article 5 (b) of AMRO Agreement). The Mission team was headed by Dr Chaipat Poonpatpibul, Group Head and Lead Economist. Members includes Mr Yoichi Kadogawa, Specialist; Dr Li Wenlong, Senior Economist; Dr Jerry Huang, Economist, and Mr Edmond Choo Chiang Yong, Research Analyst. AMRO Director Dr Junhong Chang and Chief Economist Dr Hoe Ee Khor also participated in key policy meetings with the authorities. This AMRO Annual Consultation Report on Hong Kong, China for 2017 was reviewed by Ms Chuin Hwei Ng, Group Head and Lead Specialist, and Dr Simon Liu, Economist. It was prepared by Dr Chaipat Poonpatpibul and Mr Yoichi Kadogawa; and approved by Dr Hoe Ee Khor.
3. The analysis in this Report is based on information available up to 31 December 2017.
4. By making any designation of or reference to a particular territory or geographical area, or by using the term “member” or “country” in this Report, AMRO does not intend to make any judgements as to the legal or other status of any territory or area.
5. On behalf of AMRO, the Mission team wishes to thank the Hong Kong Monetary Authority (HKMA) and public agencies for their comments on this Report, as well as the HKMA’s excellent meeting arrangements and hospitality during our visit.

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## Executive Summary

AMRO's **2016 Annual Consultation Report** emphasized that external headwinds remained and the main growth drivers were fragile, although the economy started to regain momentum. **Since the later part of 2016**, growth has strengthened due to an upturn in external demands and robust private consumption. Monetary and financial conditions have been accommodative, while the banking system has remained sound. Risks to growth have receded in the near term as global and China's economic growth continues to gain traction. However, policy normalization by major central banks will eventually increase domestic financing costs. A significant correction in the property market is a major domestic risk. On the policy side, the current macro-prudential and demand management measures should be maintained. Fiscal policy should focus on structural issues including housing supply shortage, and support long-term sustainable growth.

1. **Real GDP growth rate in Hong Kong, China<sup>1</sup> for 2017 is estimated at 3.6 percent, up from 2.0 percent last year, on account of improved external conditions and robust domestic demand.** The recent strong growth has caused the output gap to turn positive according to our estimation. On the external front, merchandise exports have staged a strong recovery since the later part of 2016. On the domestic front, private consumption has continued to strengthen, backed by favourable labor market conditions. Growth is expected to moderate to 3.0 percent in 2018, broadly in line with growth potential, reflecting tighter financial market conditions and a slight moderation in China's growth. Nonetheless, resilient domestic private consumption will continue to provide support to the economy.
2. **Inflationary pressures are expected to remain contained with headline inflation at 1.5 and 2.0 percent in 2017 and 2018.** The low headline inflation in 2017 was resulted from modest inflation in major import partners, the strong HKD nominal effective exchange rate (NEER) during the latter part of 2016, as well as the lagged effects of softening housing rental market in 2016. Moving forward, inflationary pressures will likely increase slightly due to steady nominal wage growth, rising housing rent, and HKD NEER depreciation since early 2017.
3. **Overall monetary and financial conditions continue to be accommodative, while the banking system remains sound and well-capitalised.** Despite several interest rate hikes by the U.S. Federal Reserve, HKD interest rates have remained low, reflecting the ample liquidity conditions in the domestic money market. The widening spreads between USD Libor and Hibor caused the HKD to ease towards the weak-side convertibility undertaking rate of 7.85 HKD/USD, but it moved back to around 7.80 HKD/USD (i.e., the center of the 7.75-7.85 band) in recent months before it weakened again in December. Credit growth has recovered strongly, and asset quality of banks has gradually improved.
4. **In the residential property market, there have been some signs of stabilization since the introduction of another round of demand-side management measure in November 2016 and macroprudential measures for property mortgage loans in May 2017.** House prices continued to rise due to strong underlying demand supported by prolonged low interest rate environment and tight housing supply, leading to worsening

<sup>1</sup> For brevity, "Hong Kong, China" is referred to as "Hong Kong" in the text.

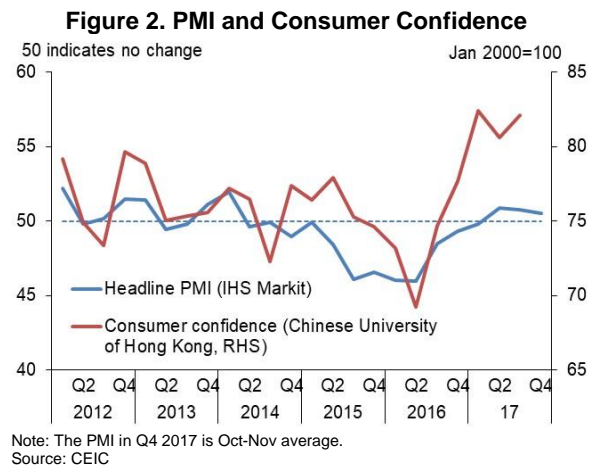
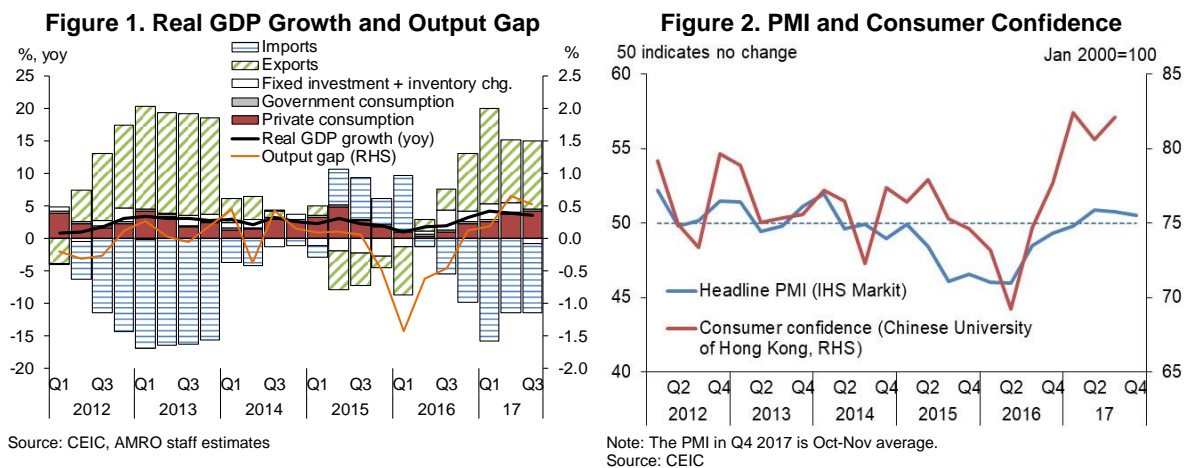
housing affordability. However, the transaction volume has declined and the monthly increase in property prices has eased.

5. **Risks to growth have receded in the near term, due partly to the improved outlook for China's economy.** The risk of a hard landing, as well as large capital outflows in China, has diminished, reflected by the better-than-expected growth in 2017, together with the stabilization of the RMB. Moving forward, policy uncertainty by the U.S. administration, including protectionism, is likely to continue.
6. **Major central banks' monetary policy normalization will likely result in higher domestic financing costs.** Reflecting the moderation in inflationary pressures in the U.S., risks of a faster-than-expected interest rate hikes by the U.S. Federal Reserve have receded to some extent. Nevertheless, policy normalization of major central banks is likely to proceed, leading to a tighter global financial condition. Consequently, HKD interest rates will increase with the Linked Exchange Rate System (LERS). Should tail risks including a sudden shift in market sentiment and large capital outflows materialize, the HKD interest rates could also shift higher. In addition, the U.S. tax reform may lift inflation expectations, leading to a faster interest rate hike.
7. **Domestic risks mainly stem from the buoyant property market.** There could be a risk of significant correction in the residential property market should the HKD interest rates increase sharply. Given that household debt is at historically high levels and mortgage loans are predominantly in floating interest rates, private consumption could be significantly affected by negative wealth effects from higher debt servicing burdens and decline in house prices. Building and construction activities will also be significantly affected. As a result, bank asset quality could deteriorate given the sizable exposures to property developers and mortgage borrowers. However, macro-prudential and other supervisory measures have help enhanced banking sector resilience against risks associated with the property market.
8. **The current macro-prudential and demand-side management measures on the property market should be maintained, with continued vigilance on household borrowing and bank lending practice.** The tightening measures announced by HKMA in May 2017, targeting lending to both property developers and households are welcomed. These measures are expected to curtail risks emanating from circumvention of banking regulations by property developers and from excessive borrowing by households. The authorities should remain vigilant and continue to monitor the property market closely.
9. **Given that the output gap has turned positive and fiscal reserves are ample, the government should deploy fiscal measures to address structural issues and to support longer-term growth.** The focus should be on tackling aging population, including through supporting health care spending and retirement benefits, increasing housing supply to meet the needs of the population, especially the low-income group, and alleviating the impact on growth from a shrinking labor force. It is important to enhance tax incentives for growth-driving sectors and increasing expenditure on quality education to raise labor productivity. From this viewpoint, the Chief Executive's policy priorities in these areas announced in October 2017, are encouraging.

## A. Recent Developments and Outlook

### A.1 Growth and Inflation

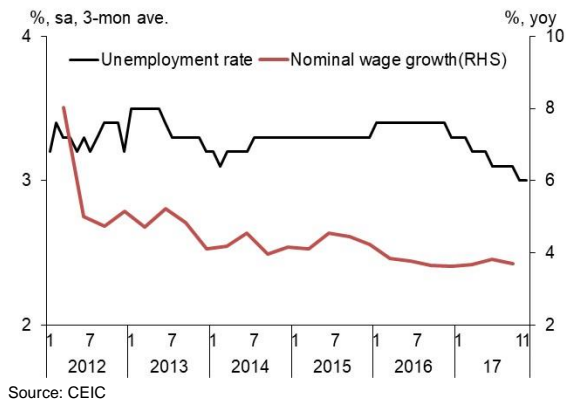
**1. GDP growth has shown a strong recovery buttressed by improved external and domestic conditions.** Real GDP grew robustly by 4.1 percent on a yoy basis in H1 2017 (Figure 1). The growth in the third quarter at 3.6 percent yoy affirms that the recovery since Q2 2016 has remained solid. External demand continued to be robust, supported by benign global economic conditions. Meanwhile, domestic demand witnessed a resilient recovery, led by strong growth in private consumption in 2017 amid favourable wage and employment conditions as well as an uptick in consumer sentiment (Figure 2). Gross Fixed Capital Formation (GFCF) also recovered amid solid building and construction activities, notwithstanding a slight decline of 1.7 percent in Q3. On the back of the recent strong growth, the output gap has closed, and turned positive according to our estimates.



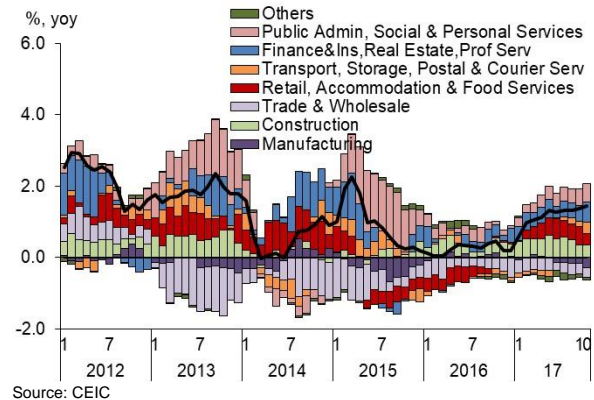
- 2. The growth momentum is likely to remain solid in the near-term.** Real GDP growth in 2017 is estimated at 3.6 percent, up from 2.0 percent last year, as a result of the continued recovery. In 2018, however, it is expected to moderate to 3.0 percent, broadly in line with the growth potential, reflecting tighter global and domestic financial market conditions as well as a slight moderation in China's growth. Nonetheless, the recent depreciation of the HKD REER could help alleviate the impact of external headwinds to some extent. More importantly, resilient domestic private consumption will continue to provide support to the economy.
- 3. Labor market conditions remained favourable.** The unemployment rate has edged down from 3.4 percent as of late 2016 to 3.0 percent over the period in September-November 2017, on the back of a strong economic recovery (Figure 3). Employment sectors that had been affected by weak tourism and consumption activity, such as retail, accommodation and food services, showed an upturn (Figure 4). On the other hand, employment in manufacturing as well as trade and wholesale services continued to

decline, albeit moderately, partly because Hong Kong’s economic structure is upgrading towards the financial and other professional service sectors.

**Figure 3. Unemployment Rate and Nominal Wage Growth**

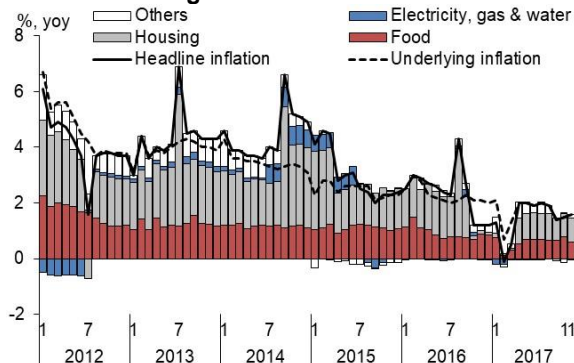


**Figure 4. Employment Growth**

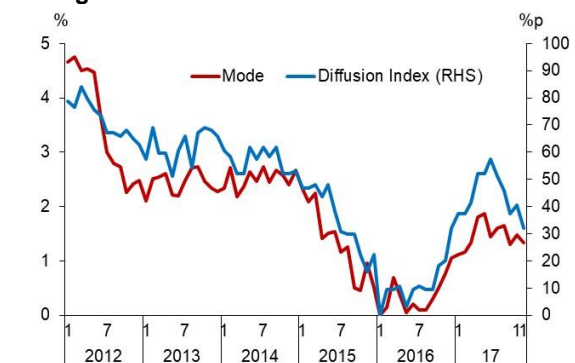


**4. Inflationary pressures are expected to remain contained with headline inflation expected at 1.5 percent in 2017 and projected at 2.0 percent in 2018.** Underlying inflation, excluding the effects of the government’s one-off relief measures, was 1.7 percent on average in the first three quarters of 2017, compared with 2.4 percent in the same period a year ago (Figure 5). Low inflation in 2017 has been due primary to the pass-through effects of the HKD NEER appreciation that occurred in the latter part of 2016, and the lagged effects of softening housing rental market in 2016.<sup>2</sup> The disinflationary environments of major import partners have also kept Hong Kong’s inflationary pressures in check. Nevertheless, there are some signs of an upturn in trend inflation, in line with improving economic conditions (Figure 6). Moving forward, inflationary pressures will likely increase slightly due to a steady nominal wage growth, higher housing rents, and a depreciation in the HKD NEER since early 2017.

**Figure 5. CCPI Inflation**



**Figure 6. Selected Indices of Trend Inflation**



Note 1: Headline inflation in February 2017 fell by 0.1 percent, as the timing of the Lunar New Year (end January in 2017 as opposed to February in 2016) resulted in lower food prices and package tour charges (included in “Others”).  
 2: Underlying inflation excludes the effects of one-off relief measures by the government.  
 Source: CEIC

Note 1: Mode is simply calculated as the 50th percentile point of the distribution of the yoy percent changes of 94 commodity/service items composing CCPI.  
 2: The Diffusion index is calculated by subtracting the ratio of decreasing items (number of items whose yoy percent changes are below zero/number of all items composing CCPI) from the ratio of increasing items.  
 Source: CEIC, AMRO staff estimates

<sup>2</sup> Please refer to “C.2 Trend Inflation” in the AMRO Annual Consultation Report, Hong Kong, China – 2016” for analysis of main drivers of Hong Kong’s inflation as well as indices of trend inflation.

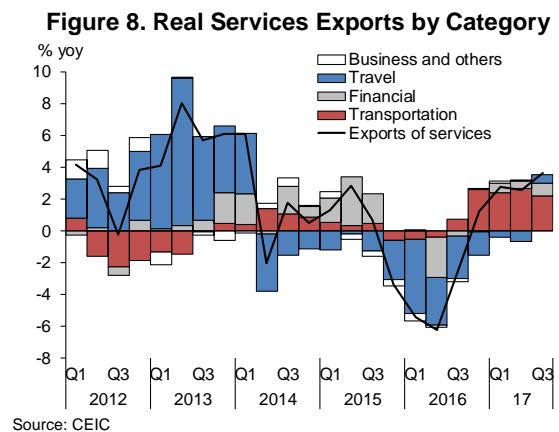
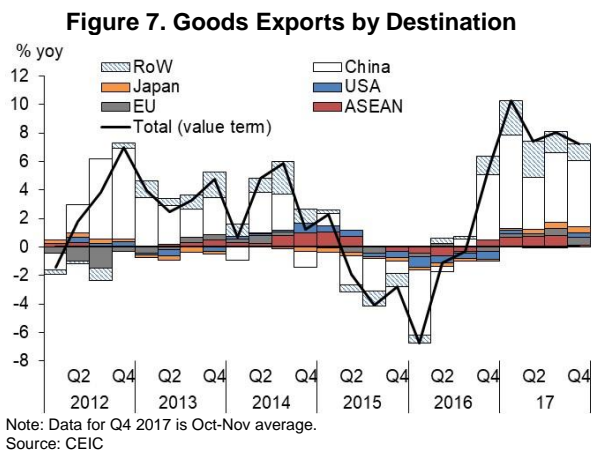


**Authorities' Views**

*The authorities expect the economic recovery to continue with moderate inflationary pressures. In the November round of economic projections, the government estimated real GDP growth to come in at 3.7 percent in 2017, higher than the mid-point of the range forecast of 3-4 percent announced in the August round. Favorable external conditions and resilient domestic demand are expected to continue to support the economy in the near term. On the inflation front, the government's estimates for underlying and headline CCPI for 2017 were revised downwards slightly to 1.7 percent and 1.5 percent, respectively, from the August round's projections of 1.8 percent and 1.6 percent. The official projections for growth and inflation in 2018 will be announced in the 2018-19 Budget in February 2018.*

**A.2 External Sector**

**5. Both goods and services exports from Hong Kong are benefiting from a benign global economic recovery.** Goods exports<sup>3</sup> to China, which account for more than half of Hong Kong's total goods exports, turned positive in Q3 2016 (Figure 7). Since then, exports to other countries/regions have regained momentum, leading to a more broad-based recovery in terms of export destinations. The recovery in global trade and cargo flows has provided positive spillover effects on Hong Kong's services exports, as illustrated by a steady recovery in transportation services (Figure 8). Meanwhile, exports of travel services registered a growth of 1.8 percent in Q3 2017, the first positive growth after Q1 2014, as visitor arrivals from China picked up on account of phasing out of negative impacts from the renminbi appreciation against the Hong Kong dollar and the one-trip-per-week policy effect.

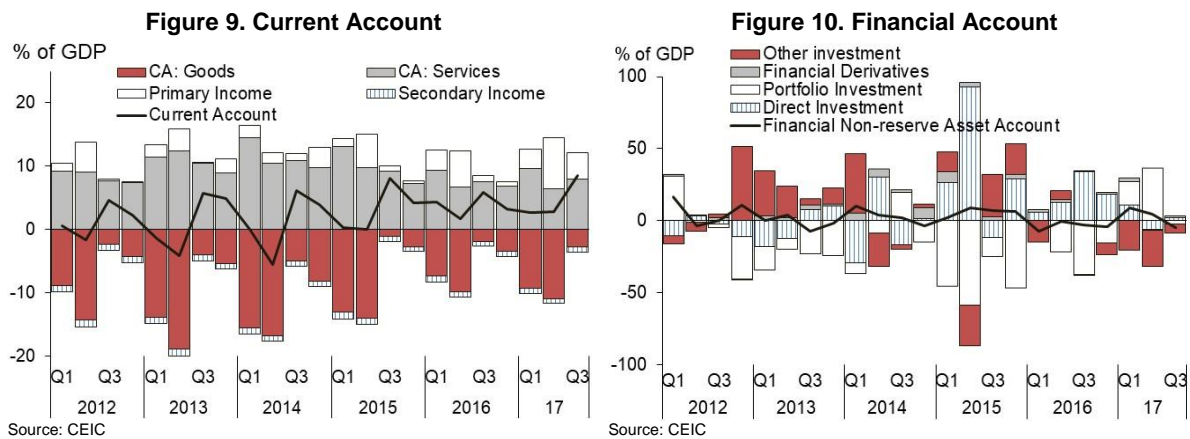


**6. The overall external position remained strong.** The current account surplus in Q3 2017 came in at 8.5 percent of GDP, marking 13 consecutive quarters of surpluses (Figure 9). Despite some seasonal disruptions, the goods trade deficit narrowed amid a strong

<sup>3</sup> Exports in this report generally refer to total exports which include re-exports unless otherwise specified.



recovery in goods exports, even as imports increased on account of robust private consumption and stabilizing visitor arrivals. The services trade surplus remained solid despite sub-par tourist spending, due to the recovery in trade and cargo flows as well as in cross-border financial activities. These, alongside with the rise in the primary income surplus, helped offset the goods trade deficit. On the other hand, the financial account (excluding reserve assets) remained volatile (Figure 10). Portfolio investments recorded a net inflow in H1 2017 amid improved market sentiment, but other investments experienced outflows due partly to the stagnant offshore RMB deposit business. Meanwhile, the net international investment position remained strong at 3.9 times of GDP as of Q3 2017.



### A.3 Monetary and Financial Conditions and Asset Markets

#### 7. Despite ongoing monetary policy normalization across major central banks, Hong Kong's monetary and financial conditions remained accommodative.

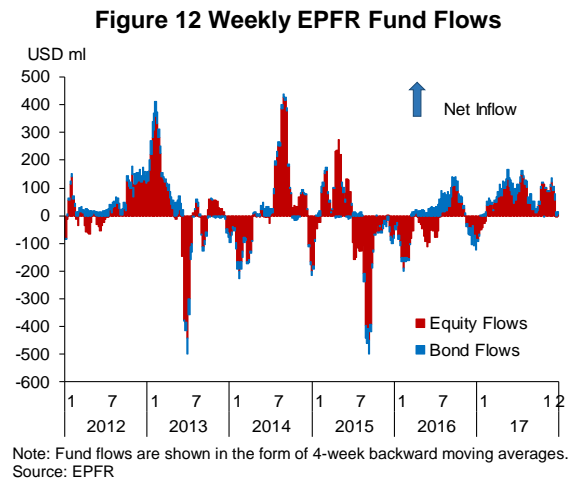
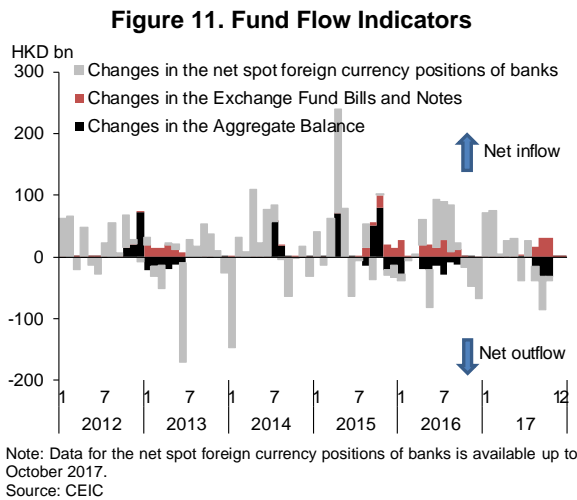
Market concerns over faster-than-expected interest rate hikes by major central banks have calmed down somewhat amid modest below-target inflation. Additionally, China's robust growth performance in 2017 has helped anchor investor sentiment and mitigate the risk of large capital outflows from economies in the region. The improvement in global market conditions have benefitted Hong Kong's financial markets and has contributed to higher equity and property prices, still low interest rates, and a generally stable, albeit with some two-way movements, HKD spot exchange rate.

#### 8. Capital inflows to both equity and bonds have continued.

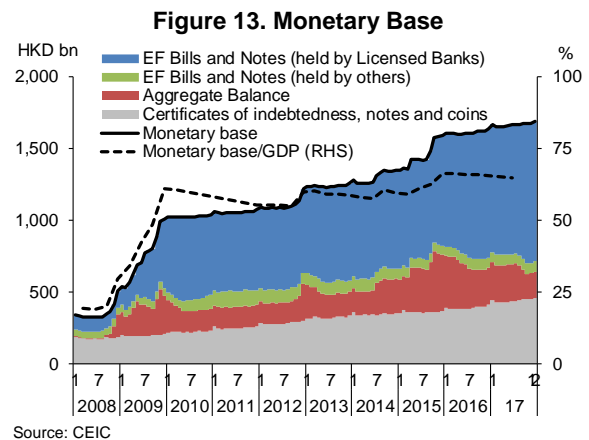
The Aggregate Balance<sup>4</sup> declined between August and October 2017 as a result of higher Exchange Fund Bills and Notes (EF bills) issuance to meet the demand from banks for liquidity management instruments (Figure 11). On the other hand, the net spot foreign currency position turned

<sup>4</sup> Under the Linked Exchange Rate System, the HKMA commits to selling HKD to licensed banks for USD on an unlimited basis at the fixed exchange rate of 7.75 HKD for 1 USD, i.e., the strong-side convertibility undertaking. This means that capital inflow pressures that eventually lead to the triggering of the strong-side convertibility undertaking would be reflected through increases in the balances of banks' clearing accounts maintained with the HKMA, the sum being the Aggregate Balance. However, if the inflow pressure does not lead to the triggering of the strong-side convertibility undertaking, the Aggregate Balance is kept unchanged. The Aggregate Balance may also change for reasons such as issuances of additional Exchange Fund Bills and Notes, as described below.

positive in early 2017 from negative in late 2016 when concerns over China’s capital outflows and renminbi depreciation heightened by the market turbulence in the wake of Trump’s election win. This suggests that net capital inflows have been observed in the non-bank private sector. By type of assets, weekly market survey data shows sustained inflows to both the equity and bond markets since early 2017 amid improved market sentiment, although heightened geopolitical tensions intermittently broke the flows (Figure 12).



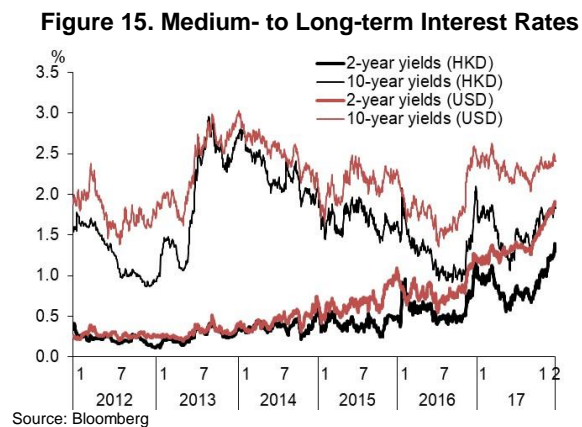
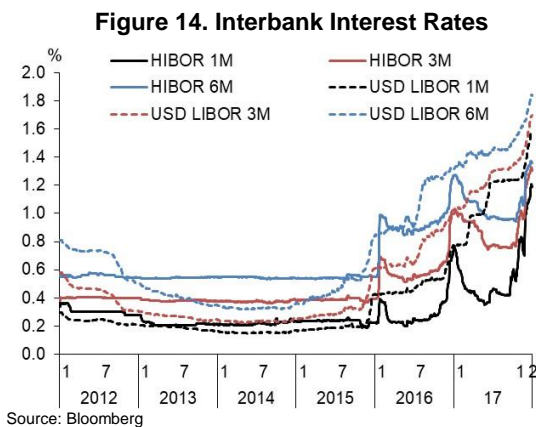
**9. Domestic liquidity conditions remained accommodative.** The monetary base has continued to grow and is now four-times larger than it was before the GFC. The monetary base-to-GDP ratio, on the other hand, has declined moderately in recent quarters due to higher nominal GDP growth rates (Figure 13). Anecdotal information



suggests that both push and pull factors are responsible for the expansion in HKD liquidity caused by large capital inflows. Push factors include prolonged low interest rate policies and quantitative easing (QE) by major central banks, and pull factors include Hong Kong’s prominent position as an international financial center (IFC) with its competitive financial and other professional services, as well as its unique position as a gateway to China. These factors seem to have attracted money into Hong Kong (See Selected Issue A). The outlook for the monetary base remains uncertain, but pull factors are expected to remain solid even if push factors may fade away gradually.

**10. Short-term interbank interest rates rose in the fourth quarter of 2017.** Since the onset of the U.S. Federal Reserve’s interest rate up-cycle in December 2015, Hong Kong’s

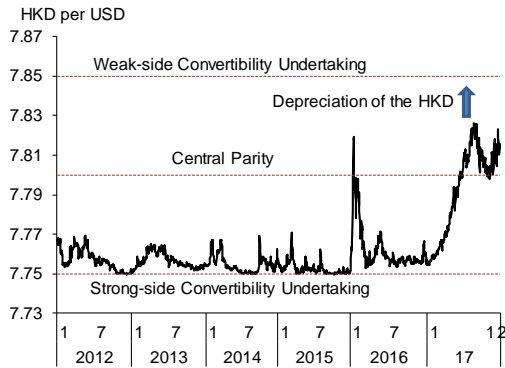
ample liquidity had kept HKD interbank interest rates lower than USD interest rates. After the U.S. presidential election in November 2016, the interest rate differentials between the USD Libor and Hibor narrowed rapidly due mainly to expectations of faster-than-expected Fed rate hikes and concerns over capital outflows from emerging Asia, including Hong Kong (Figure 14). The differentials widened again in H1 2017, as concerns over capital outflows calmed down amid lower inflation in the U.S. and an improved regional growth outlook underpinned by China. However, since September, the Hibor (especially at the short-end of maturities) increased and the differentials have narrowed. The narrowing of differentials happened amid additional issuances of EF bills (which took place between August and October 2017), several well-received initial public offerings, and banks' cautious stance on liquidity management ahead of month-end and year-end. Despite such narrowing of differentials, the Libor-Hibor differentials remain. Differentials with respect to longer-term interest rates have also gradually widened in recent years (Figure 15). This implies that there is further room for Hong Kong's interest rates to increase going forward, although it will depend largely on the external economic outlook—especially in the U.S. and China—as well as the domestic liquidity conditions (see Box).



**11. Under the LERS, the HKD spot exchange rate eased towards a 10-year low as Libor-Hibor gaps widened, but appreciated thereafter to around HKD7.80 against the USD (Figure 16).** The HKD/USD had generally been near the strong-side convertibility undertaking (CU) rate of HKD7.75 to one USD since late 2008, reflecting the Hong Kong dollar appreciation pressures driven by significant capital inflows. The inflows led to the HKMA conducting a series of strong-side CU market operations in accordance with the LERS, i.e., USD purchasing and HKD selling operations. However, in early 2017, the HKD/USD started to depart from the strong-side CU rate due to arbitrage opportunities from the widening in interest rate differentials between the HKD and USD, and closed at a 10-year low of 7.8265 on August 22, 2017. Since then, the HKD/USD has appreciated towards 7.80 (i.e., the center of the band) as interest rate differentials have narrowed before it depreciated again in December. The weak-side CU was not triggered in 2017.

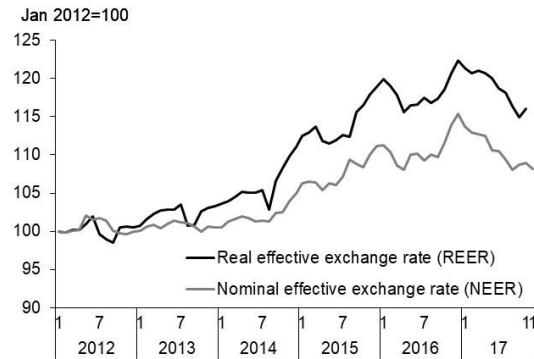
Although there were more two-way market movements in the HKD/USD in 2017 than in the past several years, the movements in the HKD/USD were within the narrow range of the CU rates (i.e., HKD7.75 and HKD7.85 per USD) and were broadly caused by interest rate differentials. In that sense, the LERS has functioned as intended and the credibility of the currency board system remains intact. Meanwhile, the Hong Kong dollar has also depreciated in terms of effective exchange rate since Q1 2017, due to the depreciation in the U.S. dollar against major currencies and the stabilization in the renminbi (Figure 17).

**Figure 16. HKD/ USD Spot Exchange Rate**



Source: Bloomberg

**Figure 17. Effective Exchange Rate**



Note: Data for REER is available up to October 2017.  
Source: CEIC

**12. Hong Kong’s stock prices have risen further in tandem with rallies in other emerging Asia markets, backed by improved market sentiment and stronger corporate earnings, while volatility remained low (Figure 18).** Domestic equity prices plunged in late 2016 due mainly to massive capital outflows from Emerging Asia as well as the correction in property developers’ equity prices after the announcement of an increase in the ad valorem stamp duty in November 2016. However, the plunge was short-lived, and stock prices regained their upward momentum amid improving market sentiments and stronger corporate earnings. The price-to-earnings ratio (PER) of the Hong Kong Hang Seng Index (HSI) stood at around 15 in Q3 2017, well below the historical high of around 24 in Q4 2007, implying that the recent rally is, by and large, underpinned by corporate earnings. Equity inflows via the Shanghai-Hong Kong Stock Connect have continued, while the new Shenzhen-Hong Kong Stock Connect has broadly seen net outflows due partly to expectations of higher capital gains for technological companies in Shenzhen (Figure 19). Meanwhile, in June 2017, MSCI announced that 222 China A-shares would be included in its Emerging Market Index from June 2018 onwards, but market reaction was muted as those shares represent less than one percent of the index’s weight.

Figure 18. Stock Market Indices

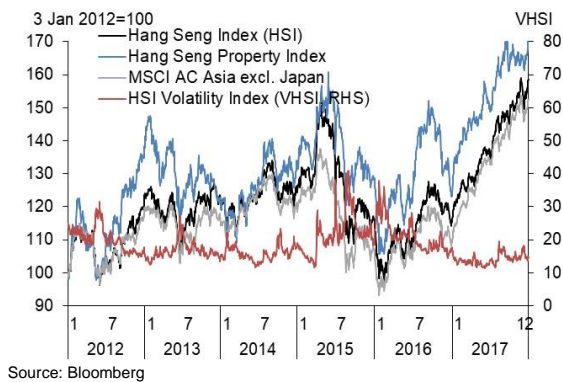
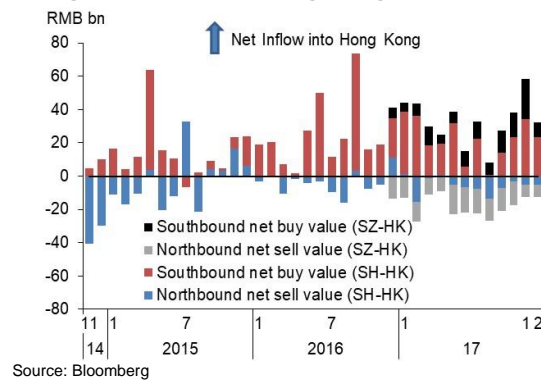


Figure 19. Capital Flows via the Shanghai-Hong Kong and Shenzhen-Hong Kong Stock Connects



**13. The residential property market is still buoyant due to strong underlying demand supported by prolonged low interest rate conditions and tight housing supply, although there were some signs of stabilization in H2 2017 (Figure 20).** The government increased the ad valorem stamp duty for residential property transactions to a flat rate of 15.0 percent in early November 2016, from a progressive scale of 1.5-8.5 percent, depending on housing prices.<sup>5</sup> Secondary market transactions were immediately dampened following this policy move. However, the secondary market regained momentum quite soon after amid improved market sentiment and fierce competition amongst banks for mortgage lending. Anecdotal information suggests that property developers have continued with their aggressive promotional schemes and have been offering top-up loans for purchases that are financed by banks on the 50-60 percent Loan-to-Value (LTV) cap. This might have spurred market buoyancy to some extent despite the small size of such loans.<sup>6</sup> In light of such practices, the HKMA in May 2017 tightened measures on banks' exposures to property developers and mortgage loans.<sup>7</sup> Since then, the transaction volume in the residential property market has declined to an average of 4,774 transactions per month between June and November, down 15.3 percent from 5,636 transactions per month between January and May.<sup>8</sup> The month-on-month increase in housing prices has also decelerated to a June-November average of 0.7 percent, from a January-May average of 1.7 percent.

**14. The non-residential property market has also recovered due to improved macroeconomic conditions (Figure 21).** Office property prices have increased by 10.1 percent in Q1-Q3 2017 amid strong demand from Chinese enterprises, while factory-space

<sup>5</sup> The increased stamp duty measures applies specifically to Hong Kong permanent resident buyers who own one or more than one residential properties, while the progressive scale stamp duty continues to apply for the first time home buyers.

<sup>6</sup> According to anecdotal information, the share of mortgage loans offered by finance companies owned by property developers was below 5.0 percent of total mortgage loans provided by banks in FY2016, but has been growing rapidly at a growth rate of almost 20.0 percent yoy. Meanwhile, according to the statistics collected by HKMA, total mortgage loans provided by property developers was HKD27.6 billion on December 2016, which is around 2% of total mortgage loans by banks (For details, please refer to "Risk management for lending to property developers" issued by the HKMA on May 12, 2017).

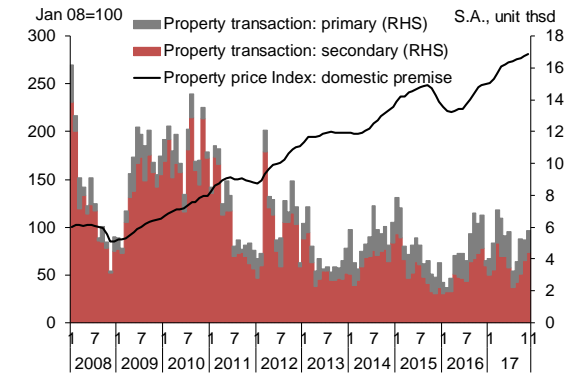
<sup>7</sup> These include imposing additional risk weights applicable to a bank's exposure to property developers that offer mortgage loans with high LTV ratios, and tighter maximum LTV caps and DSR limits on a banks' mortgage loans.

<sup>8</sup> Figures are AMRO estimates and are on a seasonally adjusted basis.



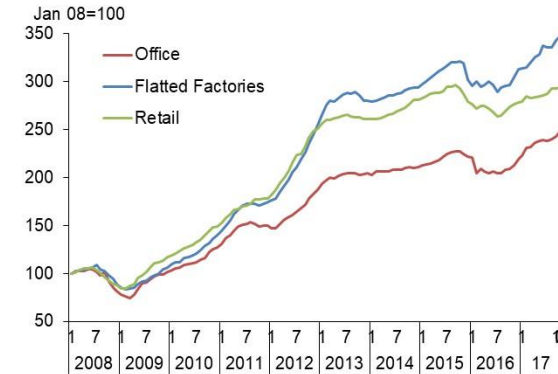
prices increased by 9.3 percent in the same period, supported by private sector re-development plans. On the other hand, the prices of retail premises grew at a relatively slower pace of 4.8 percent, possibly due to stabilizing but still moderate tourism demand.

**Figure 20. Residential Property Price and Transactions**



Note: Data on transaction volumes are seasonally adjusted.  
Source: CEIC, AMRO staff estimates

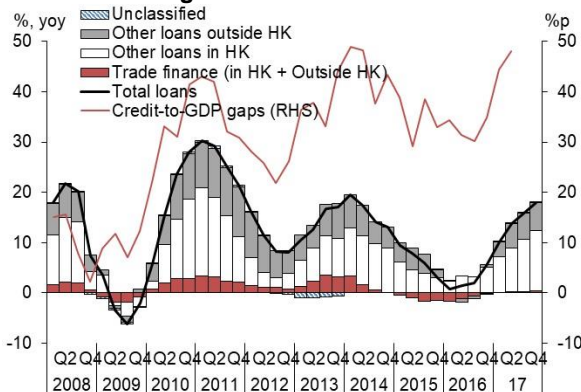
**Figure 21. Non-Residential Property Prices**



Source: CEIC

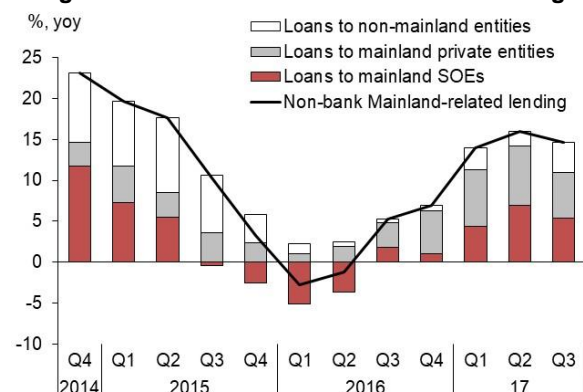
**15. Total loan growth is recovering strongly in tandem with upturns in both domestic and external demand amid a low interest rate environment (Figure 22).** The recovery is now broad-based as loans for trade finance as well as for wholesale and retail trade, the two sectors for which loan growth was negative in 2016, have now stabilized. The household, property and financial sectors are the major sectors leading the recovery in domestic loans. Non-bank mainland-related lending (MRL) also shows double-digit recovery across all borrower types, supported by robust economic activities in China and the receded concerns over the depreciation of the renminbi (Figure 23).

**Figure 22. Loan Growth**



Note 1: Data on total loans in Q4 2017 is October-November average.  
2: The credit-to-GDP gap is BIS's estimate and captures the credit from all sectors to the private-non-financial sector. Q3 2017 number is AMRO estimates.  
Source: BIS, CEIC, AMRO staff estimates

**Figure 23. Non-bank Mainland-related Lending**



Source: CEIC

**A.4 Fiscal Position**

**16. The government's fiscal surplus came in at 4.5 percent of GDP in FY2016/17, marking its 13th consecutive year of surplus, while fiscal reserves stood at a level equivalent to two years of government expenditure (Table 1).** On the revenue front, the economic recovery towards the end of FY2016/17 contributed to an increase in



operating revenue, which includes direct tax and stamp duty. In addition, capital revenue was boosted by an increase in government land sales and modification of existing leases. On the expenditure front, operating expenditure grew in line with recent trends while capital expenditure increased at a relatively higher pace as a number of projects were at their construction peak and several new projects were started.

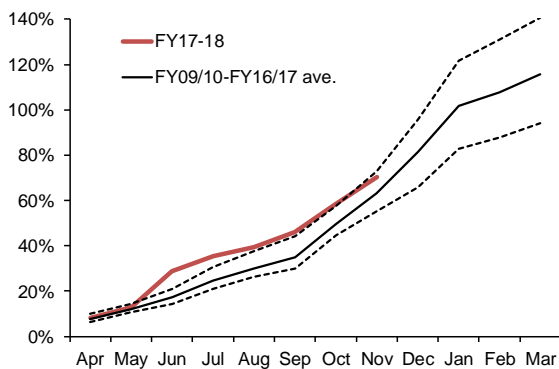
**17. In FY2017/18, a continuation of the fiscal surplus and further accumulation of fiscal reserves are expected.** According to the FY2017/18 budget, the government plans to boost expenditure by 5.3 percent with measures to support infrastructure, senior citizens and the tourism sector, while maintaining a fiscal surplus of HKD16.3 billion.<sup>9</sup> However, projections of the fiscal surplus will be revised upward given the fast pace of revenue collection amid a brisk economic recovery and on-track expenditure disbursement (Figure 24-25). Fiscal soundness is hence expected to strengthen over the near term. Faced with the headwinds that come with an aging population, such as an increase in healthcare and social spending, as well as a decline in growth potential given a shrinking labor force, the government’s fiscal management stance over the medium to long-term horizon will likely remain prudent.

**Table 1. Consolidated Fiscal Account (HKD bn)**

	FY11/12	12/13	13/14	14/15	15/16	16/17	17/18
Revenue (a)	437.7	442.2	455.3	478.7	450.0	573.1	507.7
Operating Rev	339.4	344.6	355.3	393.9	381.5	411.7	-
Capital Revenue	98.3	97.5	100.1	84.7	68.5	161.4	-
Expenditure (b)	364.0	377.3	433.5	396.2	435.6	462.1	491.4
Operating Exp	296.4	302.9	337.7	316.3	347.4	353.3	-
Capital Exp	67.6	74.4	95.8	79.9	88.3	108.8	-
(c) = (a)-(b)	73.7	64.8	21.8	82.5	14.4	111.1	16.3
(c) share of GDP (%)	3.8	3.2	1.0	3.6	0.6	4.5	-
(d) Fiscal Reserve	669.1	733.9	755.7	828.5	842.9	954.0	970.3
(d) share of GDP (%)	34.6	36.0	35.3	36.7	35.1	38.3	-
(d) in terms of number of months of Exp	22.1	23.3	20.9	25.1	23.2	24.8	-

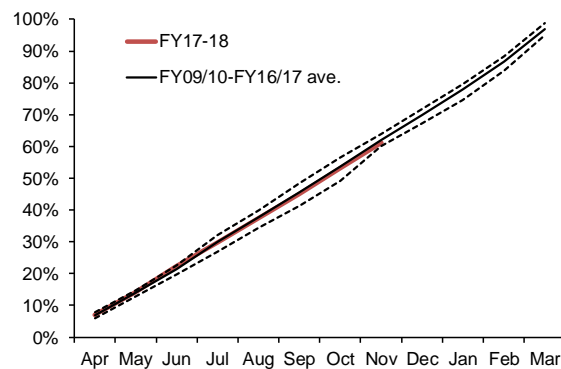
Note: FY17/18 numbers are based on the budget.  
Source: CEIC

**Figure 24. Collected Revenue to Original Estimate**



Note: Dotted lines show the highest/lowest figures of the period FY09/10-FY16/17.  
Source: CEIC

**Figure 25. Disbursed Expenditure to Original Estimate**



Note: Dotted lines show the highest/lowest figures of the period FY09/10-FY16/17.  
Source: CEIC

<sup>9</sup> The Article 107 of the Basic Law stipulates the principle to keep the expenditure within the limits of revenues in drawing up the budget. This tends to result in conservative estimates of revenue and fiscal surplus, which is rather welcome from the viewpoint of maintaining fiscal soundness.

**Box: Factors Affecting Hibor**

The widened gap between the USD Libor and the Hibor since late 2015 when the U.S. Federal Reserve began the interest rate normalization process indicates that factors other than developments in the U.S. have also affected the Hibor. Market sources assert that the impact of China’s financial and macroeconomic developments have become increasingly relevant in recent years while domestic factors such as Hong Kong’s competitiveness as an IFC, as discussed in the Selected Issue A, could also have an important role. He, Leung, and Ng (2008) found that although U.S. shocks dominated, China shocks also accounted for the unexpected fluctuations in the Hibor, based on data between 1998 and 2006.<sup>10</sup> Following their methodology, this box examines the factors affecting the Hibor with updated data for the period 2007-2017.

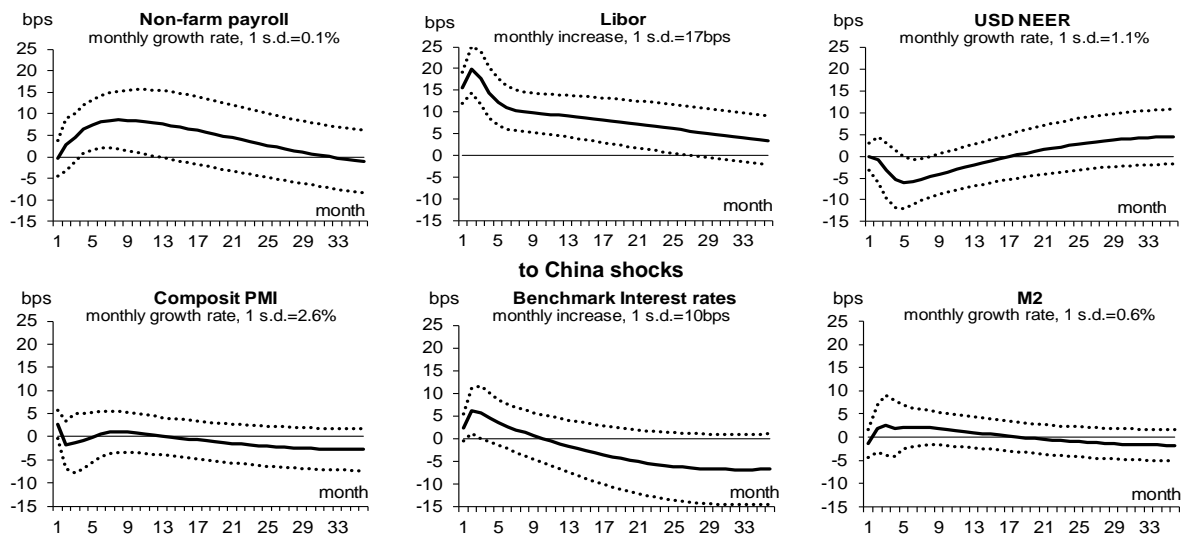
**Data and Methodology**

A seven-variable Vector Autoregression (VAR) model, composed of U.S. non-farm payroll employment (seasonally adjusted), the USD Libor (three-month), the USD NEER, China’s composite PMI (seasonally adjusted)<sup>11</sup>, a weighted average of China’s benchmark lending rate and deposit rate<sup>12</sup>, China’s M2 (seasonally adjusted), and the Hibor (three-month), is employed to estimate the impact of the U.S. and China shocks on the Hibor. Shock identification is based on the Cholesky decomposition in the order mentioned above. The sample period is between January 2007 and October 2017, while the lag length of the model is set to two based on several information criteria, including the Akaike Information Criteria.

**Estimation Results**

The impulse responses of the Hibor are shown below. The impact of U.S. shocks on the Hibor remain dominant. In particular, the USD Libor’s influence on the Hibor is statistically significant for more than two years following the occurrence of the shock, while macroeconomic factors represented by non-farm payroll employment are also important.<sup>13</sup>

**Figure B1. Impulse Responses of the Hibor to U.S. shocks**



Note: Dotted lines indicate the 95 percent confidence band.  
Source: CEIC, Markit, AMRO staff estimates

<sup>10</sup> He, Dong, Leung, Frank, and Ng Philip (2008), “The influence of US and Mainland shocks on Hong Kong’s short-term interest rates,” *Hong Kong Monetary Authority Quarterly Bulletin*, March 2008.

<sup>11</sup> He et al. (2008) uses industrial production (IP, value added of industry), instead of the composite (manufacturing plus services) PMI. To avoid some unnaturally volatile data in IP, and to capture recent relative importance of the services sector, this box employs the composite PMI instead. However, similar results are obtained regardless of the real sector variables used.

<sup>12</sup> The weight for the benchmark lending rate is calculated as  $loans / (loans + deposits)$ . For the deposit rate, the corresponding weight is used.

<sup>13</sup> It is difficult to interpret the response to the USD NEER, although it is statistically significant only between 5-8 months of a shock occurring. In theory, a strong USD should lead to an increase in the Hibor as discussed in He et al (2008). This is because a strong USD (i) would increase demand for HKD due to lower inflation and (ii) would reduce the supply of HKD from the private sector due to expectations of HKD appreciation. In reality, however, inflation rate in Hong Kong was relatively higher during the sample period due partly to booming housing rents while HKD supply continued to be ample, as analyzed in Selected Issue A. These developments might have resulted in unclear estimation results.

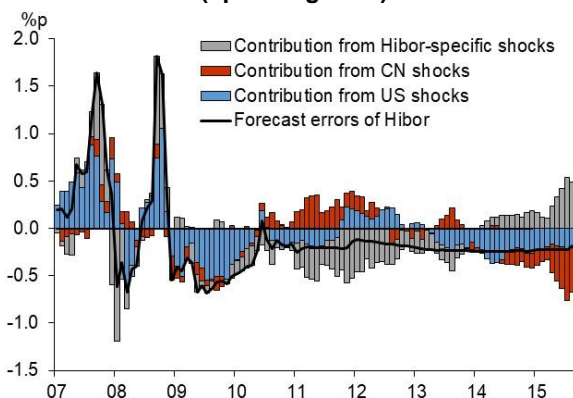
Regarding China’s influences, the impact of a shock to PMI is negligible. However, a shock to China’s benchmark rate has a positive and hump-shaped impact, akin to that of a shock to the Libor, which is statistically significant in the first few months of the shock occurring. This is in contrast to the results of the original study by He et al (2008), which demonstrated the negative dynamic effect of China’s benchmark rate on Hibor in the first few months. Regarding shocks from China’s M2, our response function is not statistically significant, while the original study showed a positive response of Hibor in the first few months. These different dynamic impacts of China’s benchmark rate and M2 on Hibor may reflect a gradual transition of monetary tools of China from ‘quality-based’ instruments to the ‘price-based’ instruments. In sum, our results suggest that not only do unexpected developments in the U.S. financial and macroeconomic sectors affect the Hibor, but so do developments in China’s financial sector.

The growing importance of China’s developments are confirmed by historical decomposition of the Hibor in this VAR system, which decomposes forecast errors of the Hibor into shocks of variables. To help understand developments before and after the onset of the U.S. Federal Reserve’s normalization process, two results are shown below.

First, Figure B2 shows decomposition of forecast errors from January 2007 to August 2015, based on the estimation with data during this period.<sup>14</sup> The sum of three U.S. shocks accounted for the bulk of the Hibor’s unexpected changes from 2007 to 2010. Since then, however, the influence of China shocks has become larger. China’s benchmark rate hikes from late 2010 to late 2012 might have positive impacts on Hibor, while benchmark rate cuts from late 2014 to late 2015 likely had negative impacts on Hibor.

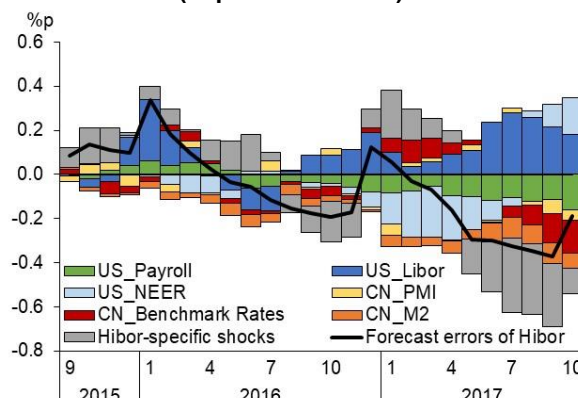
Second, Figure B3 shows decomposition of forecast errors from September 2015 onwards, based on the estimation with data up until August 2015. The forecast errors in this period would capture unexpected developments since the U.S. Federal Reserve’s interest rate up-cycle, which cannot be predicted by data before then. Interestingly, the negative forecast errors for most of 2017 was due mainly to Hong Kong-specific shocks, which offset the positive contribution from the USD Libor. This implies that factors other than U.S. and China factors examined here are materially affecting the Hibor and keeping it low at present. The ample liquidity in Hong Kong may be one of such factors. Therefore, in addition to external developments in the two largest economies, domestic developments should also be carefully monitored to support a more accurate assessment of the outlook for the Hibor.

**Figure B2. Historical Decomposition of the Hibor (up to Aug 2015)**



Note: The contribution from Hibor-specific shocks indicates residual impacts on Hibor, after controlling for the influence of six U.S. and China variables, thereby covers all factors that are not explained by them. The same applies to Figure B3.  
Source: CEIC, Markit, AMRO staff estimates

**Figure B3. Historical Decomposition of the Hibor (Sep 2015 onwards)**



Source: CEIC, Markit, AMRO staff estimates

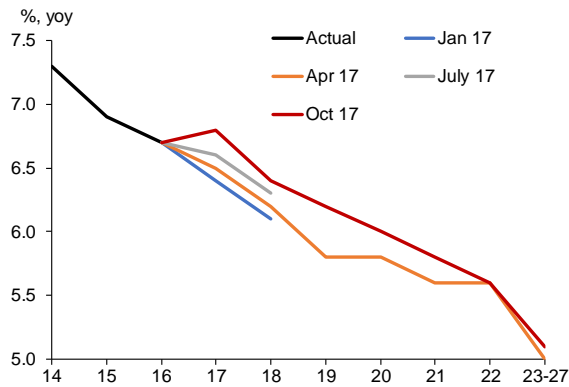
<sup>14</sup> This is based on the assumption that for the three-month Hibor, speculations on the initial rate hike in December 2015 must be reflected in September 2015.

**B. Risks and Vulnerabilities**

**B.1 Growth Risks**

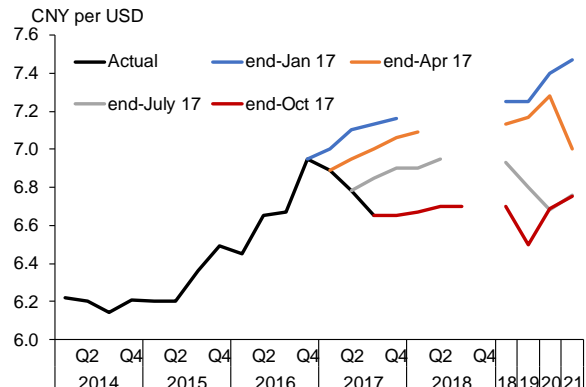
**18. Near-term risks to growth have receded, due mainly to the improved outlook for China’s economy and the continuing global economic and trade recoveries.** At the beginning of 2017, market economists projected that China’s real GDP growth rate in 2017 would decelerate to 6.4 percent from 6.7 percent in 2016. Since then, the growth forecast for 2017 had been steadily revised upward (Figure 26). Higher growth projection, coupled with slowing capital outflows and the introduction of the counter-cyclical adjustment factor to the renminbi fixing in May 2017, have helped overcome overly pessimistic expectations for the renminbi (Figure 27). Meanwhile, the global growth performance has clearly improved since early 2017, especially in Euro Area and the U.S., which has boosted the world trade activities. The improved macro and currency outlook for China, together with improved global trade and growth performance, has diminished near-term risks for Hong Kong’s economy and its financial markets.

**Figure 26. Median Forecast for China’s Real GDP Growth Rate**



Note: Long-term forecast is available only in April and October survey.  
Source: Consensus Economics

**Figure 27. Median Forecast for the CNY Spot Exchange Rate**

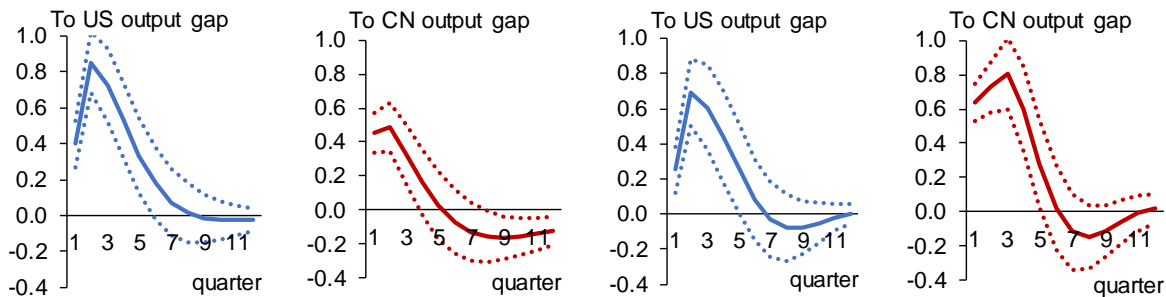


Note: Above figure shows historical transition of forecast median calculated by Bloomberg based on its survey results of roughly 70 contributors.  
Source: Bloomberg

**19. However, the upturn in 2017 has not changed the medium-term prospect of a gradual slowdown in China’s growth rate, implying mild but prolonged negative pressures on Hong Kong’s economy over the medium to longer term.** Ongoing deleveraging in both the financial and non-financial sectors, which will take time to achieve significant results, as well as aging and a decline in the working age population in the longer term, seem to underpin such cautious outlook for China. Continual upgrades in China’s economy towards high-quality development might lower China’s growth rate as well, although the change in China’s economic structure could open up new opportunities for Hong Kong, particularly in the area of financial intermediation as well as professional services sector. Uncertainties over the progress of China’s reform agenda and the potential spillovers on Hong Kong requires close attention, given the deep economic

relationship and consequently, the higher impact of cyclical economic movements in China on Hong Kong (Figure 28).

**Figure 28. Responses of Hong Kong's output gap to US's and China's**  
Q4:2002-Q3:2017                      Q1:2007-Q3:2017



Note: Numbers are based on estimation results of a simple three-variable VAR model composed of the output gaps of U.S., China, and Hong Kong.  
Source: CEIC, AMRO staff estimations

## 20. Policy uncertainty by the U.S. administration has eased to a large extent, but remains significant.

A trade war between the U.S. and China is assessed to be unlikely as it will be too damaging to both countries. However, the protectionist sentiment of the U.S. administration will likely remain. Given that re-exports between the U.S. and China account for 9.8 percent of Hong Kong's total exports in 2016, the potential impact of elevated tensions between these two economies on Hong Kong's small and open economy should continue to be monitored. On the fiscal policy front, the U.S. tax reform plan was approved by Senate and House of Representatives in December 2017, which includes a permanent federal corporate tax reduction from 35 percent to 21 percent, a low one-time repatriation tax on corporate profits brought back from overseas, and individual tax cut. These will have both positive and negative impacts on Hong Kong. On the one hand, it will be a boost to the U.S. economy and bolster global trade volumes, which will benefit Hong Kong. On the other hand, a stronger U.S. economy will be accompanied by higher USD interest rates and a stronger U.S. dollar. These will lead to higher HKD interest rates and Hong Kong dollar appreciation in effective terms, which would affect households with mortgages and external competitiveness. On top of that, the one-time special repatriation tax may cause large and rapid capital outflows by regional headquarters of U.S. firms located in Hong Kong.<sup>15</sup>

## 21. Should geopolitical tensions in different parts of the world flare up, Hong Kong would not be spared from spillover effects on the global economy and financial markets.

These include tensions over the Korean Peninsula and the Middle East, and the ongoing Brexit negotiations, although impacts of these events on global financial markets have been contained so far.

<sup>15</sup> As of June 2017, U.S. firms accounted for 20.0 percent of the number of regional headquarters in Hong Kong, the highest, followed by Japan's 16.5 percent. Data on the size of their deposits is not available.



**Authorities' Views**

*Global economic conditions improved with the synchronous cyclical rebound in real activities, but uncertainties remain, including the pace of U.S. monetary policy normalization, the changes in direction of monetary policies by some other major central banks, uncertain potential impacts of U.S. tax reform on global capital flows, the risks of rising protectionist sentiment, as well as the heightened geopolitical tensions.*

**B.2 Policy Normalization by Major Central Banks****22. Monetary policy normalization by major central banks, in particular by the U.S.**

**Federal Reserve, will likely result in higher domestic financing costs moving forward.** In view of the moderation in inflationary pressures in the U.S., risks of a faster-than expected interest rate hike by the U.S. Federal Reserve has receded to some extent. That said, inflationary pressures may heighten in response to fiscal expenditures of the U.S. tax reform. In addition, policy normalization by major central banks, including the tapering of asset purchase programs, is likely to proceed in the months ahead leading to tighter global financial conditions. Consequently, HKD interest rates are likely to rise.

**23. The pace at which Hong Kong dollar interest rates will rise, however, is highly uncertain given that the ample liquidity in the banking system has resulted from a confluence of factors.** As discussed in Selected Issue A, both push and pull factors contributed to the expansion in Hong Kong's monetary base, which resulted in lower HKD interest rates compared to USD counterparts. The pace at which these factors could reverse cannot be fully ascertained. With regard to the push factors, the market baseline scenario for normalization of monetary policies is gradually progressing, but the pace depends heavily on several factors including inflation trends and risk taking activities by financial institutions. In terms of the pull factors, many of which are structural in nature, Hong Kong remains an attractive destination for funds. China's hard landing is currently a small risk. However, materialization of this risk can lead to a reversal of the money that has been drawn into Hong Kong on the basis of its gateway function to China. As such, the impact of monetary policy normalization as well as the factors contributing to the low interest rate environment should be carefully monitored.

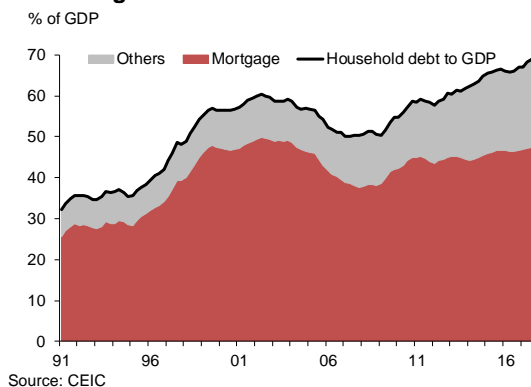
**24. The eventual rise in Hong Kong dollar interest rates would dampen the economy, mainly through increased household and corporate debt-service burdens.** As of Q3 2017, 93.4 percent of newly approved residential mortgage loans were tied to the Hibor rate, implying a higher interest rate burden should domestic interest rates rise. Amid the prolonged low interest rate environment after the GFC and rising house prices, the household debt-to-GDP ratio has continued to increase to a record level of 69.1 percent



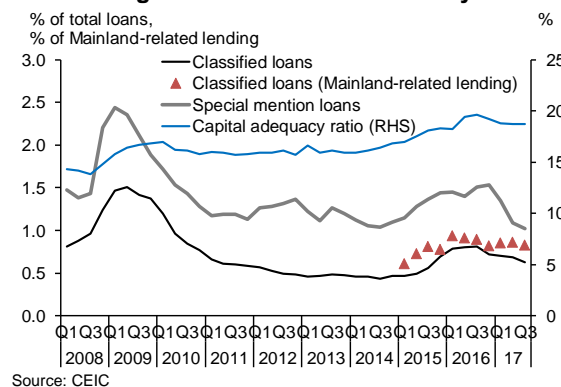
in Q3 2017 (Figure 29). While the growth in mortgage loans has become moderate, thanks to macro-prudential measures, other household borrowings rose rapidly.<sup>16</sup> This suggests that not only will the residential property market be significantly affected by a rise in domestic interest rates, but so will private consumption as a whole. The situation could be exacerbated further by the negative wealth effects from housing price declines. Overall credit to the private non-financial sector peaked at 324.5 percent in Q2 2017 from 292.9 percent of GDP in Q1 2016<sup>17</sup>, indicating that a further increase in the debt servicing burden of both household and corporates, should interest rates rise rapidly. Furthermore, an appreciation of the U.S. dollar as a result of higher USD interest rates will lead to a stronger Hong Kong dollar and reduce the external competitiveness.

**25. The overall banking system will likely remain sound in the face of tightening global financial market conditions.** On the credit risk front, the asset quality of banks has gradually improved since Q4 2016 with retail banks' classified loan ratio at 0.62 percent as of Q3 2017. Meanwhile, the capital adequacy ratio was high at 18.7 percent as of Q3 2017 (Figure 30). On the liquidity risk front, the Liquidity Coverage Ratio (LCR) of category 1 institutions was 144.2 percent in Q2 2017, well above the statutory minimum requirement of 80 percent. With such strong balance sheets, together with macro-prudential and other supervisory measures in place, the overall banking system will likely remain sound even under a severe stress scenario where interest rates increase rapidly.<sup>18</sup>

**Figure 29. Household Debt to GDP**



**Figure 30. Banks' Asset Quality**



**Authorities' Views**

**Authorities acknowledged that the U.S. monetary policy normalization process may result in higher HKD interest rates under the LERS. The rise in the U.S. interest rates could cause the Libor-Hibor gaps to widen, resulting in easing of the HKD/USD spot exchange rate towards the weak-side CU rate of HKD7.85 for one USD. Should the weak-side CU be**

<sup>16</sup> There is the possibility that even these non-mortgage borrowings could be eventually used to finance housing related needs, especially when considering the cultural practice of parents supporting their children in the purchase of residential properties.  
<sup>17</sup> BIS, Credit to the non-financial sector (available at <https://www.bis.org/statistics/totcredit.htm?m=6%7C380%7C669>).  
<sup>18</sup> According to the HKMA's macro stress testing, bank's credit losses (at the 99.9 percent confidence level) as a percentage of their loan portfolio would be low at 1.20 percent in Q2 2019, under the scenario that real interest rates (Hibor) increase by 300 bps in Q3 2017 and by another 300 bps increase in Q2 2018.

*triggered, the HKMA will conduct HKD purchasing operations, which should exert pressure on HKD interest rates to rise. The above are in line with the design of the LERS. Authorities stressed that, despite the U.S. interest rate hikes, banks in Hong Kong have maintained strong capital and liquidity positions, while funding costs have remained low and stable, underpinned by a large retail deposit base. They viewed that banks are well aware of the need to maintain prudent credit risk management as sharp hikes in interest rates could test their asset quality, given the rising levels of corporate leverage and household debt-servicing burdens.*

### **B.3 Residential Property Markets**

#### **26. Domestic risks mainly stem from the residential property market, which has been buoyant amid the prolonged low interest rate environment and tight housing supply.**

There is a risk of a significant correction in the residential property market should HKD interest rates increase sharply. Given that household debt is at historically high levels and mortgage loans are dominated by floating interest rate loans, private consumption could be significantly affected by higher debt servicing burdens and negative wealth effects from decline in house prices. Building and construction activities will also be significantly affected. As a result, bank asset quality could deteriorate given the sizable exposure to property developers and mortgage borrowers.<sup>19</sup>

#### **27. Despite some recent signs of stabilization, the outlook for the residential property market remains uncertain.**

Downside risks stem from a likely increase in HKD interest rates, an expansion in housing supply over the medium-term, the tightening effects of macro-prudential and demand-side management measures, and low housing affordability (Figure 31). However, there are still upside risks given that demand-side factors and supply-side factors, which are sticky in the short-run, continue to be present (see Selected Issue B).

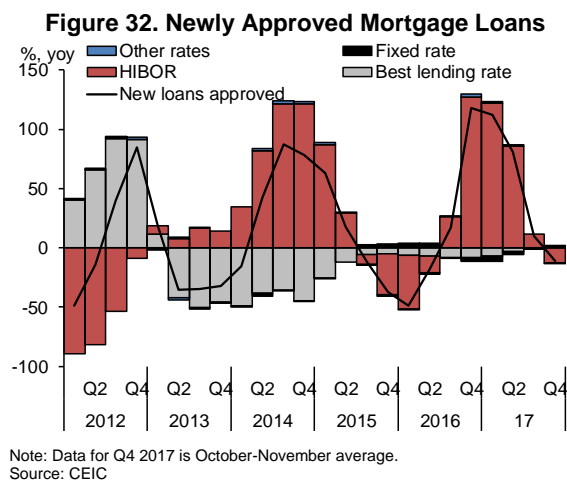
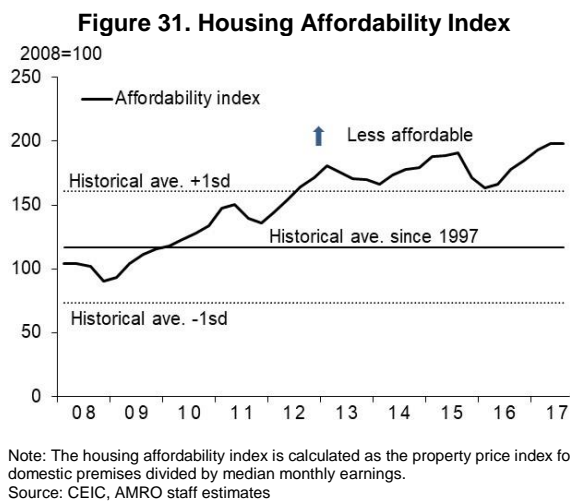
#### **28. Demand for new mortgage loans is still high, notwithstanding some recent moderation, which may raise already elevated household leverage.**

The rebound in HIBOR-based floating rate mortgage loans (Figure 32) and the high level of household debt suggests that a rise in interest rates could fuel a vicious cycle of rising debt service burdens and rising household debt. Under such a scenario, housing prices could decline with the deterioration of mortgage loans into negative equity, although the risk is small in the near term owing to the increase in residential flat prices and the eight rounds of HKMA prudential measures (Figure 33).

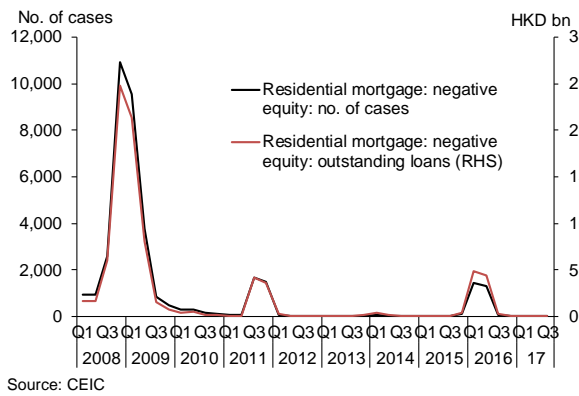
<sup>19</sup> The sum of mortgage loans and loans to construction, property development and investment accounts for 44.4 percent of total domestic loans in Q3 2017.

**29. Anecdotal information supports the view that property developers have continued to offer aggressive promotional schemes to homebuyers.** As pointed out in AMRO’s 2016 report, such schemes include the provision of mortgage loans with high LTV ratios of around 95 percent, by granting the full loan amount or topping up of bank loans that are subject to a regulatory LTV cap of 50-60 percent. As developers are not supervised by HKMA, the loans offered by them do not need to conform to the authorities’ macro-prudential measures. At present, the risks associated with these schemes remain contained as these loans account for only about five percent of total mortgage loans by banks. In addition, these schemes are only provided by cash-rich developers. In May 2017, the HKMA strengthened macro-prudential measures with regard to banks’ exposures to property developers, which will help safeguard banking system soundness. That said, continued vigilance on banks’ exposures to developers and their promotional schemes via on-site/off-site monitoring of banks is encouraged. Another channel from which mortgage loans can be topped up also warrants attention - this involves parents utilizing the rising collateral value of their own homes to borrow from banks for the purpose of financing their children’s home purchases.

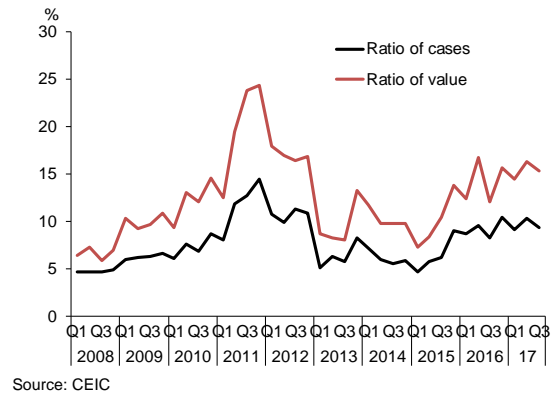
**30. Purchases of residential properties by Chinese investors are picking up, although overall speculative activities remain contained.** Receding but lingering concerns over the RMB depreciation, elevated property prices in some Chinese cities, and the offering of financial packages by property developers that help offset the buyer’s stamp duties imposed on non-resident owners, are likely to have contributed to the recent uptick (Figure 34). While the share of residential properties of Chinese investors remains low compared to the period prior to the introduction of the buyer’s stamp duty in 2012, close monitoring is warranted.



**Figure 33. Mortgage Loans in Negative Equity**



**Figure 34. Number of Purchases of Housing Premises by Chinese**



**Authorities’ Views**

*The outlook for the residential property market remains uncertain, and as such, the authorities emphasized that they would continue to monitor developments closely and make policy adjustments as necessary. In the near term, amid continued expectations for low interest rates and persistent housing shortages, they viewed that positive market sentiment might continue to support the property market. In addition, the sales strategies of property developers may also boost demand. That said, they pointed out that the gradual projected increase in supply of public and private housing will narrow the housing supply-demand gap and keep property price growth contained. They were in agreement with AMRO that the potential impact of the U.S. Federal Reserve’s balance sheet reduction and further U.S. rate hikes on global and domestic financial conditions could have a significant impact on the property market. The HKMA and the government stressed that they would continue to monitor these developments closely, as well as the potential impact on a stretched housing market, and would adjust existing policy measures as necessary.*

## C. Policy Discussions

- 31. Current macro-prudential and demand-side management measures on the residential property market should be maintained, with continued vigilance on household borrowing and bank lending practices.** The tightening measures announced by HKMA in May 2017, targeting lending to both property developers and households, are welcomed. These measures are expected to curtail risks emanating from the circumvention of banking regulations by property developers and excessive borrowing by households. In fact, anecdotal information suggests that spreads between the mortgage lending rate and the Hibor base rate have widened slightly, reflecting more stringent capital requirements. The quarter-on-quarter increase in bank loans to property developers has also gradually moderated,<sup>20</sup> while that of new mortgage loans turned negative in Q3 2017.<sup>21</sup> Meanwhile, the pace of monthly house price increases has decelerated as discussed, although prices are still rising. Policy measures should be maintained for now, and continued close monitoring of leverage by households and developers is encouraged to ensure that any excessive borrowing does not jeopardize financial stability.
- 32. However, additional tightening measures or relaxation of existing measures should be considered as and when necessary, as the outlook for the residential property market remains highly uncertain.** As discussed in Selected Issue B, the current buoyancy is backed by various demand and supply factors. On the one hand, the housing supply shortage is likely to persist given the long queue and lead-time to increase supply of public housing will continue to keep prices at high levels. On the other hand, low HKD interest rate conditions may reverse quickly due to faster-than-expected rate hikes by the U.S. Federal Reserve on the back of strong growth momentum and excessive risk-taking across financial markets. The monitoring of developments across these supply and demand factors, as well as the actual responses of house prices and transaction volumes to those developments, will enable the authorities to recalibrate policy measures in a timely fashion.
- 33. Given that the output gap has turned positive and fiscal reserves are ample, the government should deploy fiscal measures to address structural issues and to support longer-term growth.** In view of the aging population, fiscal measures should focus on, amongst others, supporting health care spending and retirement benefits, raising housing supply to meet the needs of the population, especially of those in the low-income group, and alleviating the impact on growth of a shrinking labor force. Enhancing tax incentives for growth-driving sectors and increasing expenditure on quality education to

<sup>20</sup> It was 3.4 percent in Q3 2017, compared to 5.1 percent in Q1-Q2 2017 average.

<sup>21</sup> It was -20.7 percent in Q3 2017, compared to 7.5 percent in Q1-Q2 2017 average.

raise labor productivity are also important for the upgrading of the economy. The Chief Executive's policy priorities, announced in October 2017, which includes raising housing supply, doubling gross domestic expenditure on Research and Development (R&D) as a percentage of the Gross Domestic Product, halving the profit tax rate for the first HKD 2 million of profits and increasing education expenditure, are encouraging. Initiatives to strengthen economic ties with China should be pushed ahead to enhance Hong Kong's growth potential and competitiveness as an IFC. That said, faced with a still uncertain external outlook and geopolitical tensions, counter-cyclical fiscal policy measures could be deployed if necessary. The relatively high import leakage which lowers the fiscal multiplier, and the higher expenditure requirements for healthcare and social welfare amid an aging population, should be taken into account when formulating such measures. In this regard, one-off fiscal measures that are targeted towards supporting those who will be most affected by a slowdown in the economy, would be appropriate.

### **Authorities' Views**

**Macro-prudential and demand-side management measures on the residential property market have successfully maintained banking system prudence and contained investment and speculative activities, while flexible and disciplined fiscal policy should tackle cyclical and structural challenges.** *Authorities viewed that measures imposed on the residential property market have been effective so far and authorities will continue to closely monitor ongoing developments to consider if adjustments to these measures are warranted. Faced with an aging society, upholding fiscal soundness is key in maintaining the LERS, which serves as a nominal anchor for Hong Kong's economy.*



## Annex. Selected Issues

### A: Hong Kong's Ample Liquidity

This study analyzes the ample liquidity situation in Hong Kong and aims to identify the factors that could potentially trigger an outflow. It is widely perceived that a key factor contributing to low HKD interest rates relative to that of USD counterparts, despite the ongoing monetary policy normalization in the U.S., is the ample liquidity in Hong Kong. However, it is uncertain how long this environment will continue or how quickly such liquidity might be withdrawn. This box discusses the factors contributing to the ample liquidity, and categorizes them into push factors and pull factors for a clearer understanding of the factors that could potentially trigger a reversal in liquidity and a rise in interest rate.<sup>22</sup>

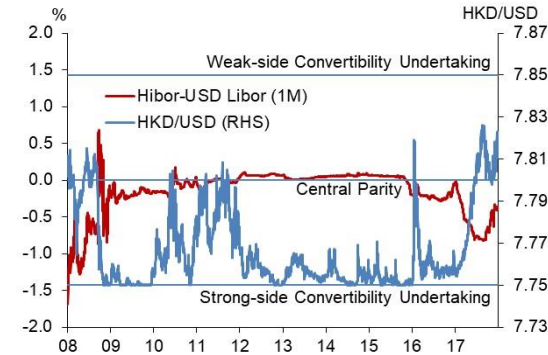
#### Push Factors

##### ➤ *The U.S. Federal Reserve's accommodative monetary policy and the LERS*

As the value of the HKD against the USD has to be confined within a narrow band under the LERS, the HMKA's FX operations of purchasing HKD against USD (i.e., triggering of strong-side CU) as a result of massive capital inflows amid the U.S. Federal Reserve's accommodative monetary, have led to sharp increases in HKD liquidity. In early 2008, Hibor was lower than Libor and this was compensated by a weak HKD against the USD, slightly above the center of the band, i.e., 7.80. After the Lehman collapse, both Libor and Hibor increased sharply. The narrowed interest rate gaps, together with Hong Kong's safe haven status, fuelled capital inflows and triggered the strong-side CU (Figure S1). This caused the HKD selling operations by the HKMA to prevent further HKD appreciation, which resulted in an expansion of the monetary base (Figure S2). The increased monetary base led to a decline in HKD interest rates, which in turn reduced the appreciation pressure on the HKD. Thereafter, the monetary base continued to rise as the U.S. Federal Reserve's policy stance became more accommodative because the HKMA does not have autonomy in controlling the monetary base as explained above. That said, capital inflows have frequently nudged the exchange rate to the strong-side CU from late 2013 to late 2015 despite stable and narrowed interest rate gaps, which suggests that the U.S. Federal Reserve's monetary policy is not the only factor affecting Hong Kong's liquidity.

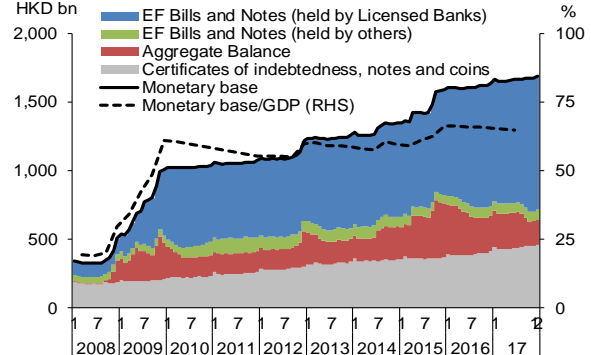
<sup>22</sup> In this study, the monetary base (M1) is envisaged as a proxy of the liquidity to capture developments of Hibor.

**Figure S1. Interest Rate Gaps and HKD/USD**



Source: Bloomberg

**Figure S2. Monetary Base in Hong Kong**

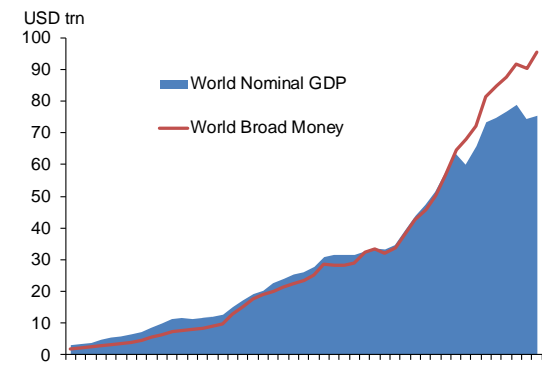


Source: CEIC

➤ **Monetary policies of major central banks**

The accommodative policy stance of major central banks, other than the U.S. Federal Reserve, have also helped fuel capital inflows and the accumulation of liquidity in Hong Kong. Accommodative policies by major central banks, such as the ECB and the BOJ, would have likely been of key consequence. After all, QEs by these major central banks, in addition to the U.S. Federal Reserve, has led

**Figure S3. World Broad Money and GDP**



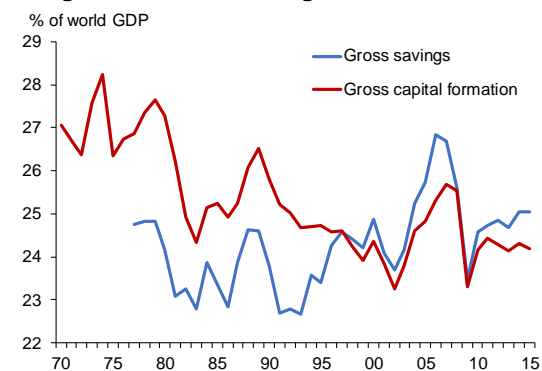
Source: CEIC, AMRO staff estimates

to the global aggregate broad money growing much faster than nominal GDP since the GFC (Figure S3). These economies continue to face the zero lower bound of policy rates and below-target inflation even after the recent economic recovery, pointing to a protracted period of accommodative monetary policy ahead.<sup>23</sup> The QEs led to capital outflows from the developed markets into emerging markets in search of higher yields.

➤ **The global cyclical upturn and lower spending**

The recent global economic recovery has bolstered corporate profits, but as spending needs by firms remain subdued, deposits have consequently risen. Unconventional monetary policies and sizable fiscal policies after the GFC have contributed to a cyclical upturn recently and rising corporate profits. Market sentiment has also recovered, as reflected in the equity price rally with subdued volatility in 2017. That said, firms remain cautious in their spending, especially

**Figure S4. World Savings and Investments**



Source: World Bank

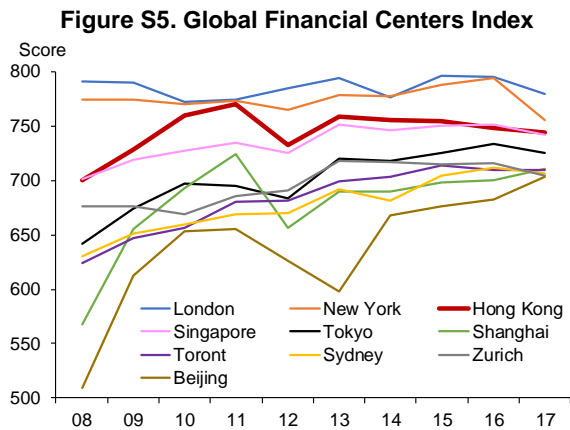
<sup>23</sup> The ECB and the BOJ introduced the negative interest rate policy (NIRP) which broke the zero lower bound, but even the NIRP would have a limit due to the cost of holding cash.

on fixed assets, leading to a rise in the world savings to GDP ratio (Figure S4). From the viewpoint of banking sector, subpar loan demands have led to the accumulation of deposits across banks globally, which in turn, would have contributed to the increase in Hong Kong’s liquidity.

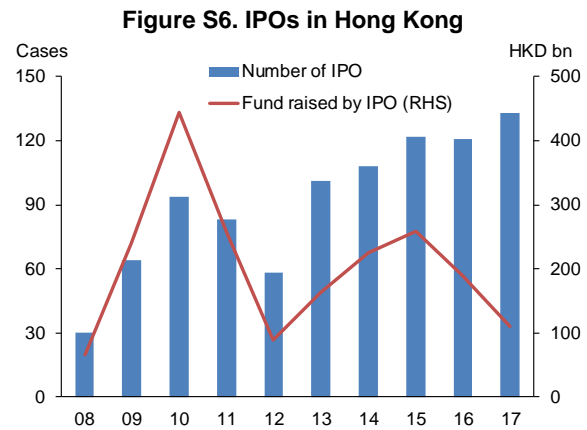
**Pull Factors**

➤ **Hong Kong’s competitiveness as an IFC**

**Hong Kong’s strong position as an IFC attracts global liquidity.** The push factors above do not necessarily ensure that Hong Kong is able to absorb inflows of global liquidity. Pull factors are also important. In this respect, Hong Kong’s standing and reputation as a global financial center remains uncontested as evidenced by its first-placed ranking in Asia and third-placed ranking in the world, based on the latest results of the Global Financial Center Index (Figure S5). Hong Kong has a favourable business environment with its high-grade financial and legal services as well as other professional services. Economic policies, particularly those related to taxation, FX management and capital controls, are efficient and transparent. Hong Kong also boasts employees with high educational standards as well as high English communication skills, well-equipped transportation and solid ICT infrastructure. As a result, Hong Kong has managed to secure its competitiveness as an IFC even after the GFC, as reflected by the rising trend in IPOs (Figure S6).



Note: The Global Financial Centers Index (GFCI) is published bi-annually (Spring and Winter). The chart above utilizes only the Winter results. The GFCI is measured using various data (e.g., business environment, human capital, infrastructure, and size of financial sector) and online survey results. Source: Z/Yen Group and the China Development Institute



Note 1: Data for 2017 is up to November.  
 2: Funds raised by IPO moderated in 2016-17. In 2016, it was a global trend, and the HKEx was ranked as the top stock exchange in the world. In 2017, the decline is due to the emergence of ‘new economy’ IPOs and the lack of big deals. Source: Bloomberg, CEIC

➤ **Hong Kong’s unique position as a gateway to China**

**The emergence of China as a major economy has propelled Hong Kong into an advantaged position as one of the gateways to China.** Over the past two decades, China and Hong Kong have undertaken various steps to strengthen economic and financial ties with each other. (Table S1). These initiatives, by and large, have helped anchor Hong Kong’s growth prospects by taking advantage of Hong Kong’s competitive advantage in the financial services and other professional services sectors, although a number of cities in China are

catching up in these areas. In addition, anecdotal information suggests that sizable amount of money may be currently parked in Hong Kong for the eventual purpose of pursuing business expansions in China, in tandem with the Belt and Road Initiative. Still stringent restrictions in China on economic activities by foreign companies, as well as policy uncertainties in areas such as capital controls, may have contributed to such retention of money in Hong Kong.

**Table S1. Major Steps Taken for Deeper Economic and Financial Cooperation with China**

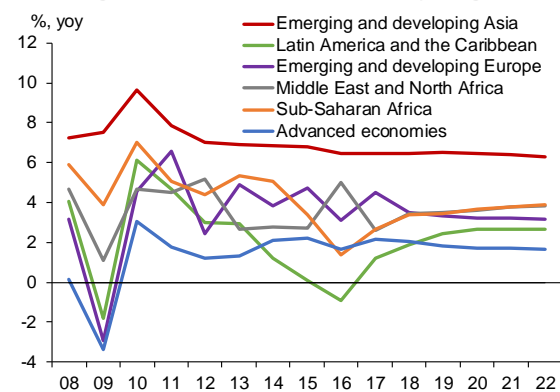
Area	Year	Initiatives	Main elements
Economic Cooperation	2003-	Closer Economic Partnership Agreement, (CEPA)	FTA between HK and China covering four areas such as trade and investment
	2011-	Guangdong-Hong Kong-Macau Greater Greater Bay Area (GGBA)	Deeper corporation to further develop the area, accounts for 12% of greater China's GDP
Financial Cooperation	2004-	Opening of Offshore RMB business	Offshore RMB deposits and offshore RMB bond issuances were authorized
	2014-	Cross-boundary investment channels	Two stock connects between Shanghai and Shenzhen, and one Bond Connect
Belt and Road	2016-	By Government	Established "Steering Committee for the Belt and Road" and "Belt and Road Office" to play role as a "Super Connector"
	2016	By HKMA	Established infrastructure Finance Facilitation Office (IFFO)

Source: Authorities' website, AMRO

➤ **Favourable growth and asset market performance in Emerging Asia**

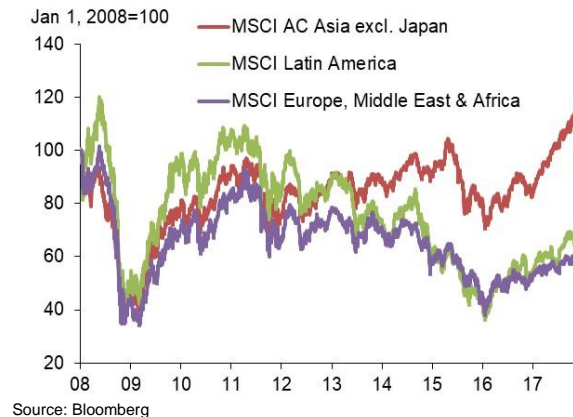
**Emerging Asia has registered stronger growth and equity performance than other regions, thereby inducing capital inflows into the region.** Owing to China's high and stable growth, as well as ASEAN countries' robust growth supported by strengthened FX reserve buffers and improved macroeconomic policy managements, the region has outperformed other emerging regions in terms of both growth and equity returns (Figure S7-S8). This has naturally drawn money into the region, including into Hong Kong.

**Figure S7. Real GDP Growth by Region**



Source: IMF

**Figure S8. Equity Performance by Region**



Source: Bloomberg

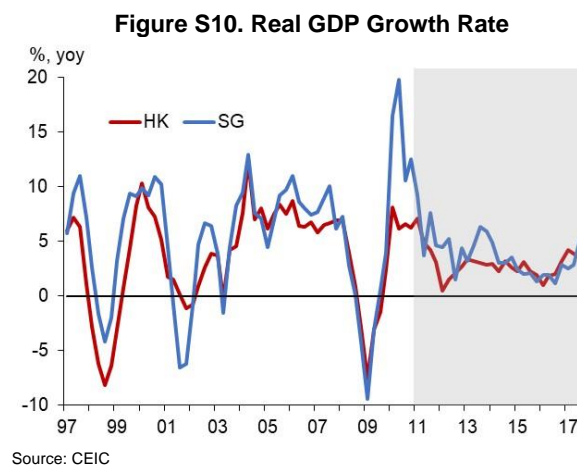
**Policy Implications**

**Various factors have contributed to Hong Kong's ample liquidity situation, but the near-term focus for policy makers should be on the push factors in view of potential capital outflows and interest rate increases.** As discussed, Hong Kong's ample liquidity has been

the result of a combination of push and pull factors, and not simply the U.S. Federal Reserve's monetary policy. However, at least in the short-run, close attention should be paid to the push factors, including the policy normalization process by major central banks, while pull factors are mostly structural and will not normally trigger sudden capital outflows. Over the medium- to long-term, both push and pull factors could cause capital outflows. Competition with financial centers in Asia including China's emerging cities could affect the status of Hong Kong as an IFC over time. The money currently parked in Hong Kong may also flow out once opportunities outside Hong Kong become more attractive. Therefore, efforts to maintain Hong Kong's status in terms of financial regulation and investment facilitation should continue. On the other hand, the ample liquidity situation can continue to be longer than widely expected. For example, a successful implementation of the Belt and Road Initiative, on the sideline of firmed-up Hong Kong's status as an IFC, could possibly maintain the size of monetary base and the low interest rate environment in Hong Kong for a prolonged period of time. Given the lack of monetary policy autonomy under the LERS, which has established Hong Kong's strong position as an IFC, calibrating macro-prudential measures that could help mitigate excessive risk-taking activities would be appropriate.

## B: Hong Kong's Residential Property Market – A Comparison with Singapore

This study compares residential property market conditions and developments in Hong Kong and Singapore, with the aim of ascertaining the likely drivers behind the greater buoyancy in Hong Kong compared with Singapore and providing policy suggestions. One notable observation is the clear divergence between the pace of housing price increases in Hong Kong with that of Singapore's since 2011, in both nominal and real terms (Figure S9). This is interesting given that the two financial centers (FCs) share a number of economic fundamentals in common, such as a small and open economic structure, high GDP per capita, as well as stable population growth amid an aging society.<sup>24</sup> Cyclical economic developments are also similar with Singapore having a slight lead (Figure S10).<sup>25</sup> Furthermore, faced with rising residential property prices, the two FCs started to introduce macro-prudential and demand-side management measures around the same time: towards the end of 2009 for Hong Kong and early 2010 for Singapore. The lineup of measures is mostly similar in kind, involving LTV caps, DSR limits, and stamp duties (only since late 2010), although Hong Kong's measures are relatively tighter in terms of degree (Table S2).<sup>26</sup> In order to gain more insights into the reasons behind the relative buoyancy of Hong Kong's residential property market, which is the focus of our study, one needs to therefore look beyond the similarities of the two markets and evaluate factors other than growth factors and macro-prudential measures. For the purposes of our study, these other factors are categorized as either supply and demand factors, although there may not always be a clear distinction between the two.



<sup>24</sup> The average annual population growth rate for the period 2011-2016 was 0.75% in Hong Kong and 1.67% in Singapore, while the number of domestic households grew at 1.21% and 1.65% respectively. Due to this demographic factor, the demand for housing therefore may have been slightly stronger in Singapore than in Hong Kong.

<sup>25</sup> The same applies if using the output gap as a basis of measurement.

<sup>26</sup> The primary objective of macro-prudential measures is for HKMA to safeguard banking system prudence and not to control housing prices directly. In that sense, these measures, alongside the Government's demand-side management measures, have successfully reined in speculative investment activities and maintained bank balance sheet soundness.



**Table S2. Selected Measures on the Residential Property Market**

	Hong Kong	Singapore
<b>Maximum LTV (Loan-to-Value) caps</b>	<u>1<sup>st</sup> borrowing</u> Self-use: 40 – 60%, Non self-use: 40 or 50% <u>Not 1<sup>st</sup> borrowing</u> Self-use: 30 – 50%, Non self-use: 30 or 40% First round: Oct 2009/Last round: May 2017	<u>1<sup>st</sup> borrowing</u> : 60 or 80% <u>2<sup>nd</sup> borrowing</u> : 30 or 50% <u>3<sup>rd</sup> borrowing</u> : 20 or 40% First round: Feb 2010 Last round: Jan 2013 (refined in Nov 2016)
<b>Minimum DSR (Debt-Servicing-Ratio)</b>	<u>1<sup>st</sup> borrowing</u> Self-use: 40 – 50%, Non self-use: 30 – 40% <u>Not 1<sup>st</sup> borrowing</u> Self-use: 30 – 40%, Non self-use: 30 – 40% First round: Aug 2010/Last round: May 2017	60% Introduced : Nov 2016
<b>Stamp Duties</b>	<u>Special Stamp Duty</u> : 10-20% <u>Buyer's Stamp Duty</u> : 15% <u>Ad valorem Stamp Duty</u> : 15% First round: Nov 2010 Last round: Nov 2016 (refined in Apr 2017)	<u>Additional Buyer's Stamp Duty</u> : 3-15% Raised: Jan 2013

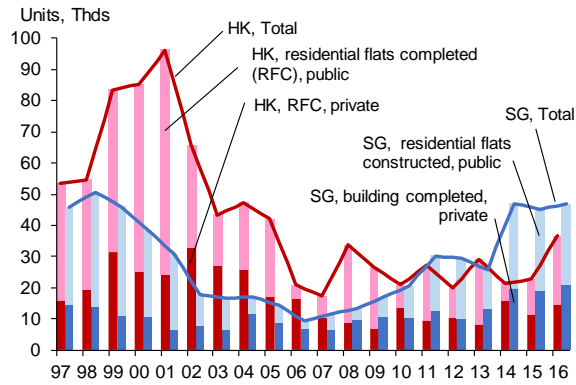
Note: In addition to the above, there are several other macro-prudential measures related to the residential property market, including the imposition of additional capital adequacy requirements for exposures to property developers that offer mortgage loans with high LTV ratios (Hong Kong) and minimum cash down payments (Singapore). Source: Authorities' websites, AMRO

## Supply-side Factors

### ➤ Land and housing supply

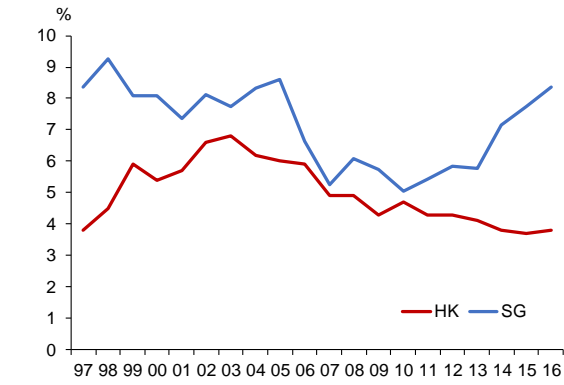
**The supply of new housing flats in Hong Kong has been eclipsed by the supply in Singapore in recent years.** After the transfer of sovereignty of Hong Kong from the U.K. to China in 1997, raising the housing supply was an important government priority, as evidenced by the first Chief Executive's target of producing 85,000 new flats annually. Supply of new housing was on an upward trend from then on, while demand was more volatile, dampened by some adverse events such as the Asian Financial Crisis (AFC) in 1997, the dot-com crash in 2001, and the SARS outbreak in 2003 (Figure S11). Following each of the three crisis periods, the housing market experienced a major correction, which resulted in negative wealth effects on homeowners and generated public discontentment. Consequently, the policy agenda of raising the housing supply started to have a lower priority. Post-GFC, however, housing prices began to exhibit strong upward momentum, while housing supply remained mostly flat. According to our sources, the reasons behind the flat housing supply range from some inertia on the part of the government due to previous experiences of public backlash, tough negotiations with landowners and the public's reactions towards the conversion of agricultural lands and neighbouring country parks into residential property land. In addition, the government had suspended regular land sales until 2010 and it takes time in housing commencement and completion, notwithstanding the recent gradual recovery. The current Chief Executive has announced several initiatives to boost housing supply, including the establishment of the Land Supply Task Force, but market participants are uncertain if such initiatives would bear fruit in the short-run. In contrast, the housing supply in Singapore has increased steadily since the mid-2000s in both the public (HDBs) and private sectors. The divergent housing supply situations in Singapore and Hong Kong can be confirmed by the widening gap in the vacancy rates of private flats in the two cities (Figure S12).

**Figure S11. Housing Supply**



Note: Hong Kong's housing supply by public sector shows the sum of public rental flats and subsidized flats for sale.  
Source: CEIC

**Figure S12. Vacancy Rate (private flats)**

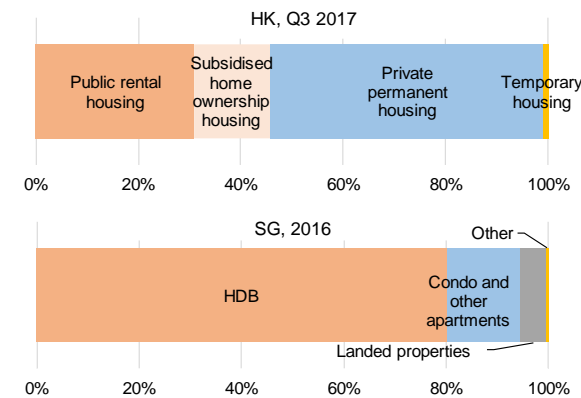


Source: CEIC

➤ **Presence of public housing**

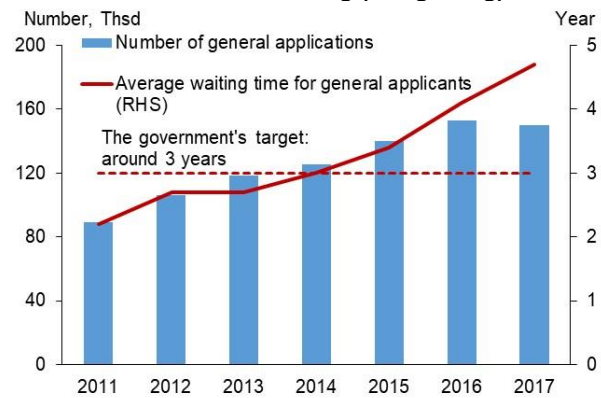
The influence of the Hong Kong government's housing policy might have been more limited due to the smaller weight of public housing compared to Singapore's. In Hong Kong, rental and subsidized housing by the government account for around 45 percent of total housing, compared to around 80 percent in Singapore (Figure S13). The dominance of public housing in Singapore has been the result of the government's continuous supply of HDBs, which has helped avoid overheating in the overall residential market. The tight public housing supply in Hong Kong is demonstrated by the rising number of applicants albeit the recent slight moderation, as well as the high average waiting time at 4.7 years as of end-June 2017 (Figure S14).

**Figure S13. Types of Dwelling**



Source: National authorities

**Figure S14. Applications and Waiting Time for Public Rental Housing (Hong Kong)**



Note 1: "General applications" stands for the number of applicants from family and elderly one-person, and does not include that from non-elderly one-person.  
2: Data is as of end-June of each year.  
Source: National authorities

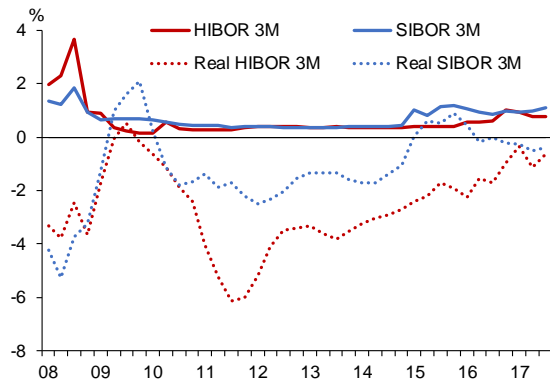
**Demand-side Factors**

➤ **Interest rates**

Interest rates in Hong Kong have been lower than Singapore's, particularly in real term. The very accommodative monetary policy by the U.S. Federal Reserve, as well as the ample liquidity in Hong Kong have kept Hong Kong's short-term interest rates lower than those in

Singapore's. In addition, amid relatively higher inflation, Hong Kong's real short-term interest rates have been trending deeper into the negative territory than Singapore's (Figure S15).<sup>27</sup> Furthermore, Hong Kong's short-term interest rates are well below benchmark levels implied by the Taylor rule (Figure S16)<sup>28</sup>. The risks associated with such an ultra-easy interest rate condition have been partially mitigated by tighter macro-prudential measures, but exuberant house prices have resulted nonetheless.

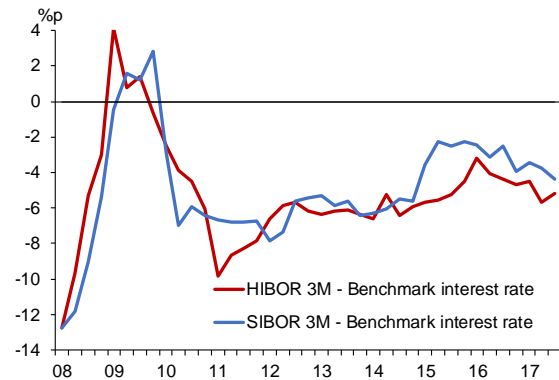
**Figure S15. Short-term Interest Rates**



Note: For real interest rate calculation, HIBOR and SIBOR are deflated by underlying inflation and MAS core inflation, respectively.

Source: CEIC, AMRO staff estimates

**Figure S16. Gaps Between Actual and Benchmark Interest Rates**



Note: Benchmark interest rates for Hong Kong are calculated based on the Taylor rule assuming the inflation target of 3% (2%) and the equilibrium real interest rate of 3% (4%), considering that the average inflation and real GDP growth rates during 1Q 2008-3Q 2017 are 3.2% (1.8%) and 2.7% (4.1%), respectively (figures in parentheses represent those for Singapore). Coefficients for inflation and output gap are mechanically set at 1.5 and 0.5, respectively.

Source: CEIC, AMRO staff estimates

➤ **Home ownership ratio**

**Hong Kong's home ownership ratio remains low, suggesting that genuine demand by first-time buyers, which is less sensitive to macro-prudential measures, is strong.**

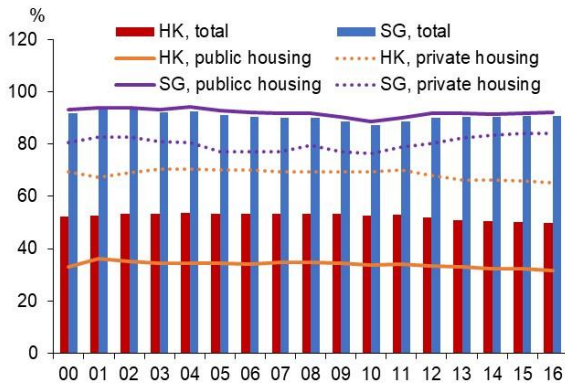
Compared to Singapore's home ownership ratio of around 90 percent, Hong Kong's home ownership ratio has remained low, at around 50 percent, and is even on a mild downward trend since the GFC due to the deterioration in housing affordability (Figure S17). This implies that there is pent-up demand for first homes by Hong Kong residents, which surfaces more noticeably once the market turns bearish. In fact, at times when the price-rent gap—the relative housing price to housing rent—moderated, the home ownership ratio increased or at least stabilized (Figure S18). Because of such pent-up demand, downward adjustments in housing prices have been marginal and short-lived. Instead, such demand has led to further price rallies and lower ownership ratios. The dominance of first-time buyers means that the coverage of macro-prudential measures does not fully extend to all housing transactions in the market, as first-time home owners are entitled to exemptions or face less stringent conditions to ensure genuine demand is not overly cramped. This could have narrowed the scope and thereby weakened the effectiveness of macro-prudential and demand-side

<sup>27</sup> In Singapore, the SIBOR (Singapore Interbank Offered Rates) is now the more dominant reference interest rate for residential mortgages in place of the SOR (Singapore Swap Offer Rate). Hence, in the text, only SIBOR is highlighted, noting that the difference between SIBOR and SOR is small and negligible.

<sup>28</sup> A caveat here is that this rule cannot simply tell optimal interest rates for the two cities where the inflation target framework is not adopted.

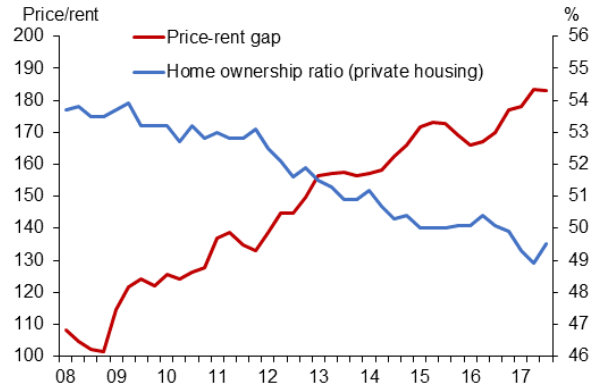
management measures in Hong Kong, although they do not aim to control housing prices. In contrast, the high ownership ratio in Singapore and the government’s dominant role in the housing market has enabled policy measures to be enforced effectively, including those aimed at curtailing speculative activities.

**Figure S17. Home Ownership Ratio**



Source: National authorities

**Figure S18. Private Home Ownership Ratio and Price-rent Gap (Hong Kong)**



Note: The price-rent gap is the relative value of housing price to housing rent. Source: CEIC, National authorities

➤ ***Demands from foreigners, particularly Chinese households and firms***

**Demand from China for both residential and office properties might have supported the bullish outlook on Hong Kong’s housing market.** The introduction of the buyer’s stamp duty in October 2012 in Hong Kong and the increase in stamp duties in January 2013 in Singapore have successfully curbed speculative residential property transactions by foreigners. That said, such stamp duties are not imposed on permanent residents (PR). Based on anecdotal information, closer economic ties between China and Hong Kong in recent years has resulted in an increase in the number of Chinese nationals with Hong Kong PR status.<sup>29</sup> These buyers, who are allowed to purchase flats in Hong Kong without extra stamp duty, are said to be looking to invest in Hong Kong properties due to lingering concerns over the RMB depreciation and rising property prices in the Mainland China. Furthermore, anecdotal information points to strong demand by Chinese firms for premium office space in Hong Kong, especially in Central.<sup>30</sup> With the Belt and Road Initiative opening up more business prospects, more Chinese firms are led to have landmark offices in Hong Kong, the unique gateway to China. The bullish office property market may have produced spillovers on the residential property market.

**Policy Implications**

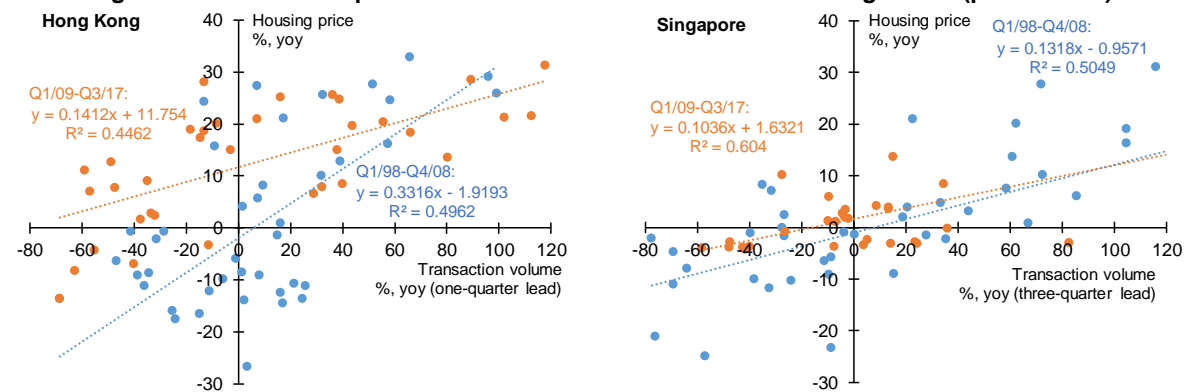
**The Hong Kong government’s initiatives to tackle housing supply shortages and to improve housing affordability are welcome, while the active use of macro-prudential**

<sup>29</sup> In general, a foreigner can acquire PR status in Hong Kong if he or she is a resident in Hong Kong for at least seven years. Meanwhile, the number of PR holders in Singapore has leveled off since 2010 due to more stringent screenings.

<sup>30</sup> According to the latest Premium Office Rent Tracker by Jones Lang LaSalle. Hong Kong Central commands the world’s most expensive annual rent for premium office space at USD323/sqft, compared to 26<sup>th</sup> ranked Singapore at USD84/sqft.

**measures will address risks of overheating.** Macro-prudential and demand-side management measures have successfully contained risks stemming from speculative activities and less prudent lending by banks in both Hong Kong and Singapore. However, the difference mainly relates to ability to unleash housing supply and Hong Kong is significantly more constrained in this aspect. In Hong Kong, the buoyant housing market could continue until there is a visible increase in housing supply, which will take time. In addition, the outlook for demand-side factors, including low interest rates, is uncertain, and may persist given that they are by and large, structural. The resulting imbalance between supply and demand may have led to a prolonged bullish outlook for housing price. Indeed, in Hong Kong, the housing price has broadly been on an upward trend and become less sensitive to transaction volumes, unlikely in Singapore (Figure S19). Hence, a combination of both fiscal policy—to increase housing supply—and macro-prudential and demand-side management measures—to curb excessive risk-taking and overheating—is warranted. A credible long-term plan to increase housing supply will also help rein in market expectations of a further rise in housing prices, and thereby enhance effectiveness of macro-prudential measures.

**Figure S19. Relationship Between Transaction Volumes and Housing Prices (private flats)**



Source: CEIC, AMRO staff estimates



## Appendix I. Selected Economic Indicators for Hong Kong, China

	2013	2014	2015	2016	2017 Est.	2018 Proj.
<b>Real Sector and Prices</b>	(in yoy percentage change unless otherwise stated)					
Nominal GDP (in HKD bn)	2,138.3	2,260.0	2,398.4	2,491.0	2,655.2	2,809.5
Nominal GDP (in USD bn)	275.7	291.4	309.4	320.9	-	-
Real GDP	3.1	2.8	2.4	2.0	3.6	3.0
Private consumption	4.6	3.3	4.8	1.8	4.6	3.5
Government consumption	2.7	3.1	3.4	3.4	3.4	3.4
Gross domestic fixed capital formation	2.6	-0.1	-3.2	-0.3	3.2	2.8
Building and construction	-4.3	9.3	2.2	3.9	-	-
Machinery, equipment and intellectual property products	11.3	-8.7	-7.7	-4.6	-	-
Exports	7.8	1.0	-1.4	0.9	5.3	3.1
Goods	8.2	0.8	-1.7	1.8	-	-
Services	6.0	1.6	0.3	-3.2	-	-
Imports	8.3	1.0	-1.8	1.2	5.6	3.2
Goods	9.9	1.5	-2.7	1.1	-	-
Services	-2.1	-2.2	5.0	2.0	-	-
GDP deflator	1.8	2.9	3.7	1.8	2.8	2.8
Headline inflation	4.3	4.4	3.0	2.4	1.5	2.0
Underlying inflation	4.0	3.5	2.5	2.3	-	-
Unemployment rate (%)	3.4	3.3	3.3	3.4	-	-
<b>External Sector</b>	(in percent of GDP)					
Overall BoP	2.7	6.2	11.8	0.4	-	-
Current account	1.5	1.4	3.3	3.8	5.0	3.5
Financial non-reserve assets	-1.3	2.9	6.4	-3.7	-	-
<b>Fiscal Sector (General Government)</b>	(in percent of GDP, end-Mar of fiscal year)					
Revenue	21.3	21.2	18.8	23.0	-	-
Expenditure	20.3	17.5	18.2	18.5	-	-
Cosolidated budget balance	1.0	3.6	0.6	4.5	4.8	3.0
<b>Monetary and Financial Sector</b>	(in yoy percentage change unless otherwise stated, end-period)					
M1	9.7	13.1	15.4	12.3	-	-
M2	12.4	9.5	5.5	7.7	-	-
M3	12.4	9.6	5.5	7.7	-	-
Total loans	16.0	12.7	3.5	6.5	-	-
Classified loan ratio (%)	0.5	0.5	0.7	0.7	-	-
Capital adequacy ratio (%)	15.9	16.8	18.3	19.2	-	-
<b>Memorandum Items</b>						
Interest rates (% , end-period)						
Three-month Hibor	0.4	0.4	0.4	1.0	-	-
10Y Govt' bond yield	2.7	2.0	1.7	1.9	-	-
Asset prices						
Hang Seng stock index (end of period, 1964=100)	23,306	23,605	21,914	22,001	-	-
(% yoy)	2.9	1.3	-7.2	0.4	-	-
Residential property prices (end of period, 1999=100)	245.1	278.3	285.0	307.4	-	-
(% yoy)	7.7	13.5	2.4	7.9	-	-
Spot exchange rate (HK\$/US\$, period ave.)	7.756	7.754	7.752	7.762	-	-
Official reserve assets (US\$bn, end-period)	311.2	328.5	358.8	386.3	-	-



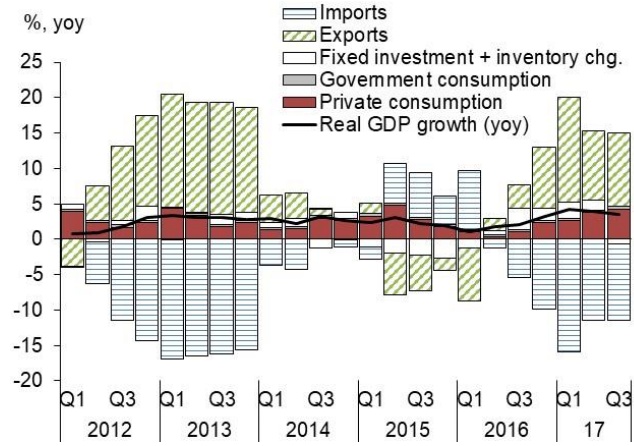
## Appendix II. Data Adequacy for Surveillance Purposes: A Preliminary Assessment

Surveillance Areas	Data Availability <sup>(i)</sup>	Reporting Frequency/Timeliness <sup>(ii)</sup>	Data Quality <sup>(iii)</sup>	Consistency <sup>(iv)</sup>	Others, if Any <sup>(v)</sup>
National Accounts	Available	Quarterly, within 1.5 months after the end of the reference quarter (for preliminary data).	-	-	-
Balance of Payments (BOP) and External Position	Available	Quarterly, within 3 months after the end of the reference period.	-	-	-
State Budget and Government/ External Debt	Available	Budget: Monthly, within one month after the end of the reference period. External debt: Same as the BOP.	-	-	-
Money Supply and Credit Growth	Available	Money supply: Monthly, within one month after the end of the reference period.  Credit growth: Monthly, within one month after the end of the reference period.	-	-	-
Financial Sector Soundness Indicators	Available	Financial Soundness Indicators (FSIs) are available from the IMF website. Quarterly, within 3 months after the end of the reference quarter.	-	-	-
SOE Statistics	-	-	-	-	-

Appendix III. Additional Figures

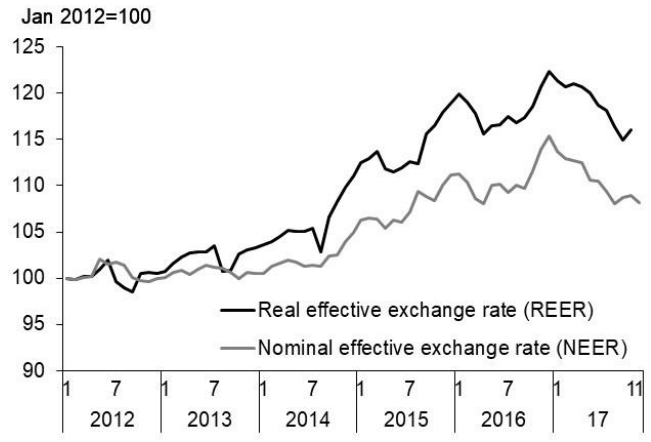
Figure 1. Real Sector

Real GDP growth has recovered steadily on the back of resilient private consumption and improved external demand.



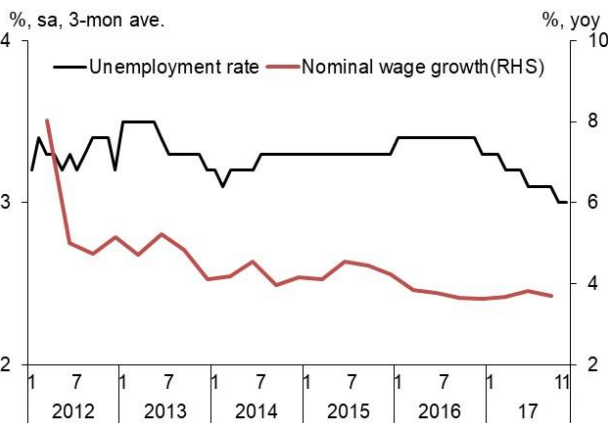
Source: CEIC

The HKD REER appreciation has receded in line with a weaker USD and stronger RMB.



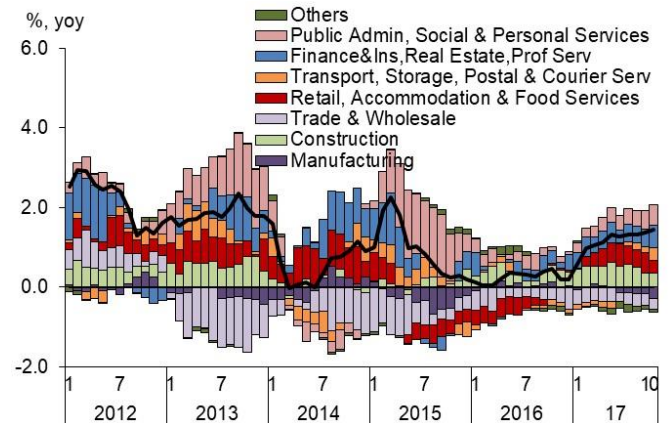
Source: CEIC

Labor market conditions remain favorable.



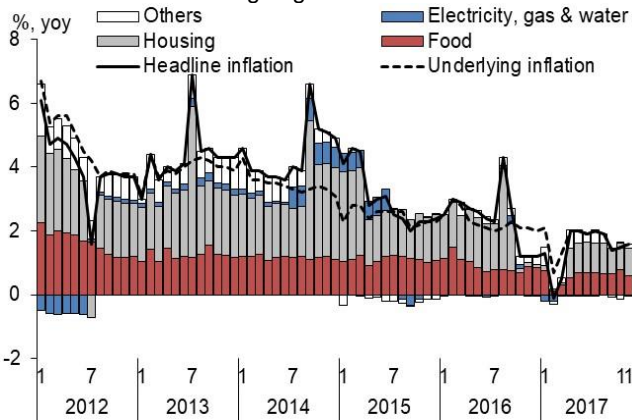
Source: CEIC

Employment growth is solid, partly backed by the recovery in tourism-related sectors.



Source: CEIC

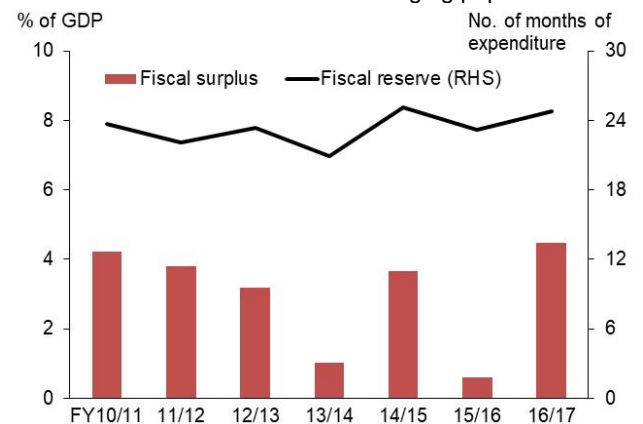
Inflationary pressure is contained, but the recent buoyancy in housing prices will likely put upward pressures on the CPI going forward.



Note: Headline inflation in February 2017 fell by 0.1 percent, as the timing of the Lunar New Year (end January in 2017 as opposed to February in 2016) resulted in lower food prices and package tour charges (included in "Others").

Source: CEIC

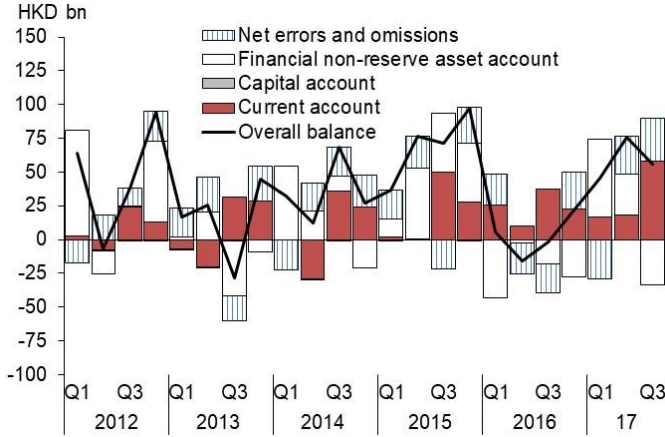
The fiscal position remains strong with ample policy space, although expenses for healthcare and social welfare will continue to increase due to an aging population.



Source: CEIC

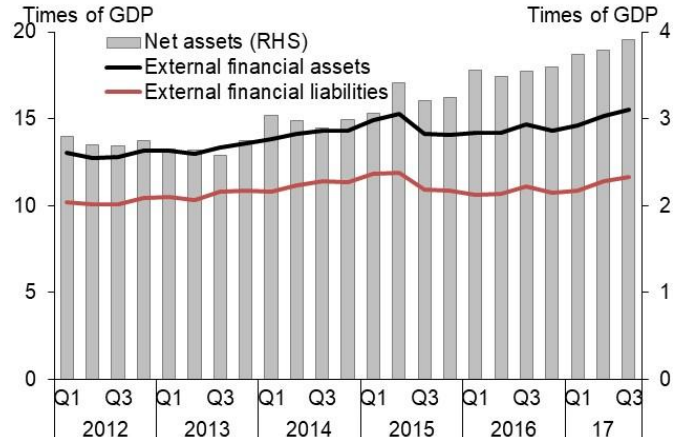
**Figure 2. External Sector**

The current account remains in surplus, while the BoP continues to record a surplus since Q4 2016.



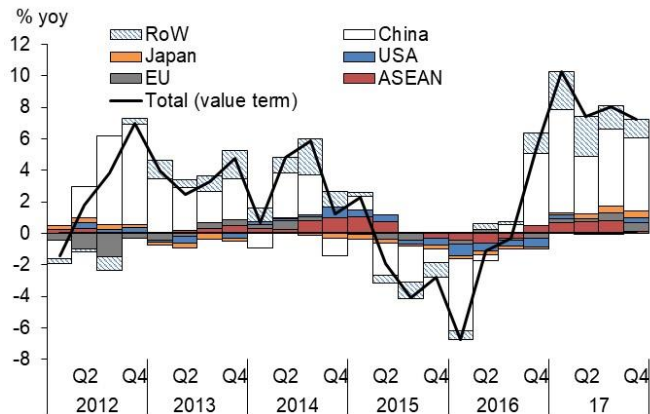
Source: CEIC

The net international investment position remained strong at 3.9 times GDP in Q3 2017.



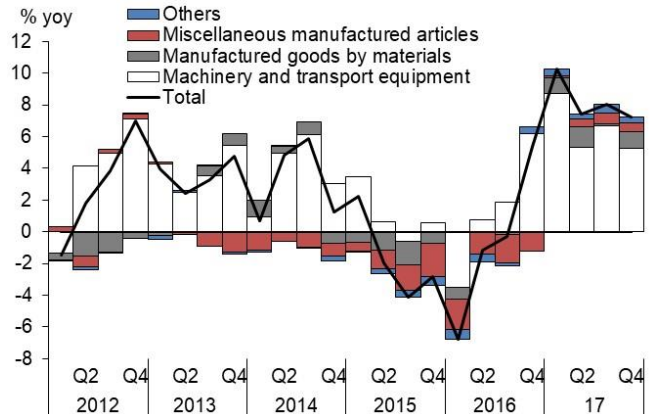
Source: CEIC

Merchandise exports have shown a strong recovery since Q4 2016, due mainly to stronger exports to China and India.



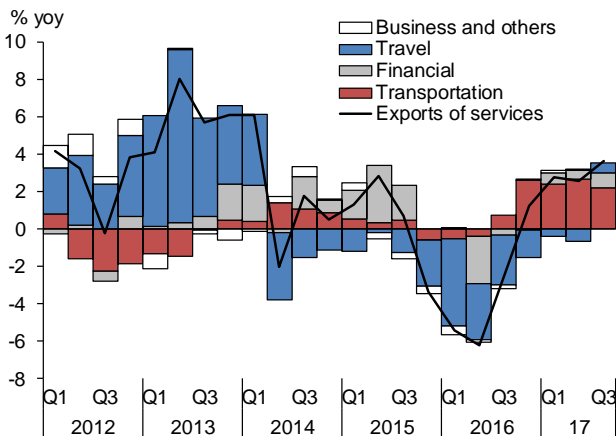
Note: Data for Q4 2017 is October-November average.  
Source: CEIC

A pick-up in machinery and equipment exports has been primarily responsible for the recovery in exports.



Note: Data for Q4 2017 is October-November average.  
Source: CEIC

Services exports continue to recover, supported by improved transportation and travel services.



Source: CEIC

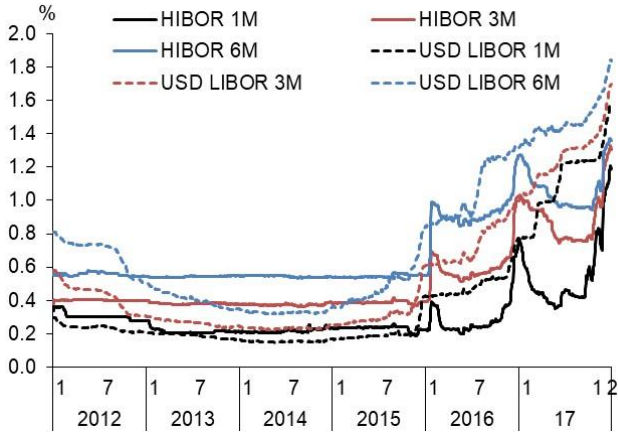
Although tourist spending is still weak, visitor arrivals from China are picking up as the base effect of one-trip-per-week policy fades and the RMB strengthens against the HKD.



Note: A decline in visitor arrivals in August 2017 was mainly due to Typhoon Hato, the strongest storm to hit Hong Kong since 2012.  
Source: CEIC, Bloomberg, AMRO staff calculations

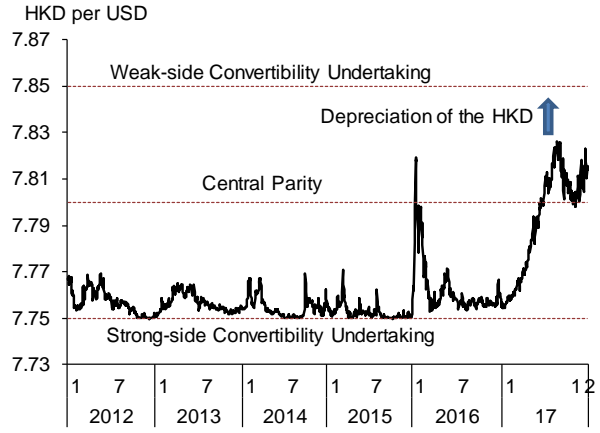
**Figure 3. Monetary and Financial Sector**

USD Libor premiums over Hibor narrowed in Q4 2017 amid additional issuances of EF bills and several well-received initial public offerings.



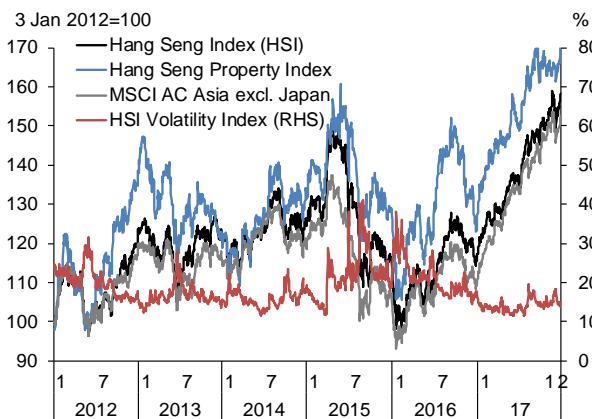
Source: Bloomberg

Reflecting the changes in interest rate premium, the HKD spot exchange rate saw some two-way movements in Q4 2017.



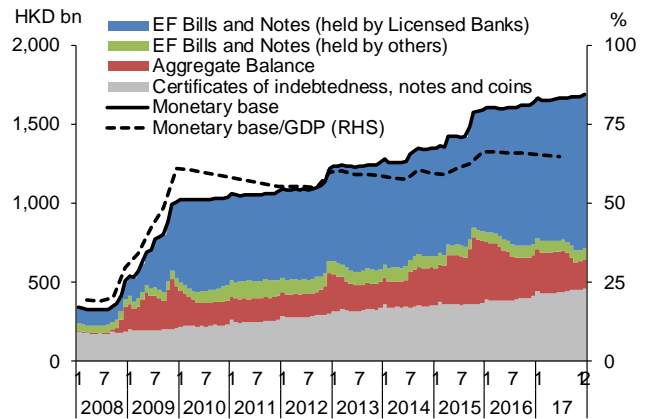
Source: Bloomberg

Hong Kong's equity prices have been rising strongly since the beginning of this year, in tandem with the global rally.



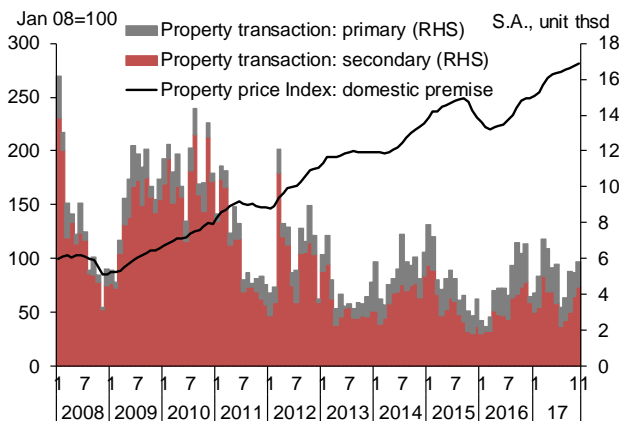
Source: Bloomberg

Domestic liquidity conditions remain accommodative.



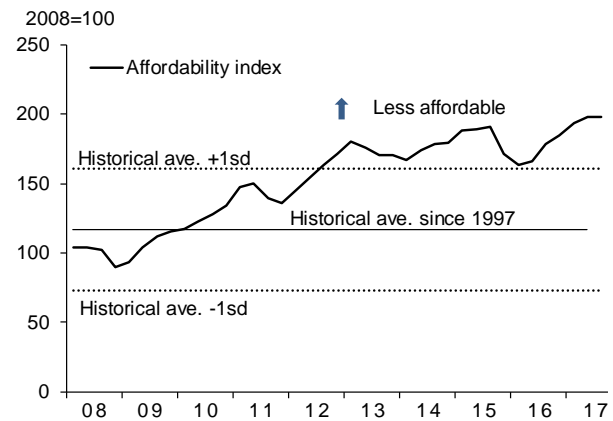
Source: CEIC

The residential property market remains buoyant, although there are some signs of stabilization after the tightening of macro-prudential measures in May 2017.



Note: Data on the property prices is available up to September 2017.  
Source: CEIC

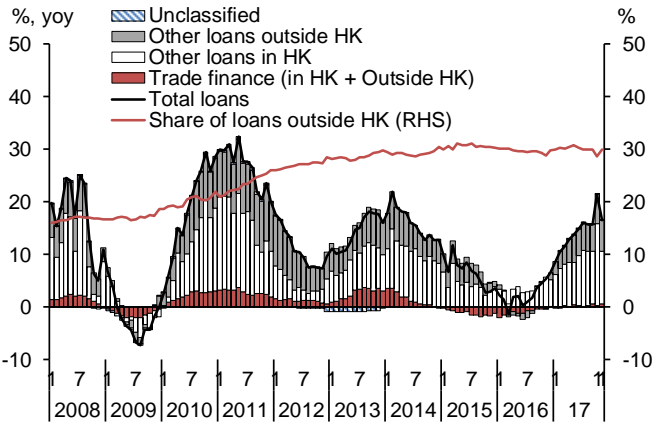
The ratio of flat prices to income is at a historically high level, suggesting a deterioration in housing affordability.



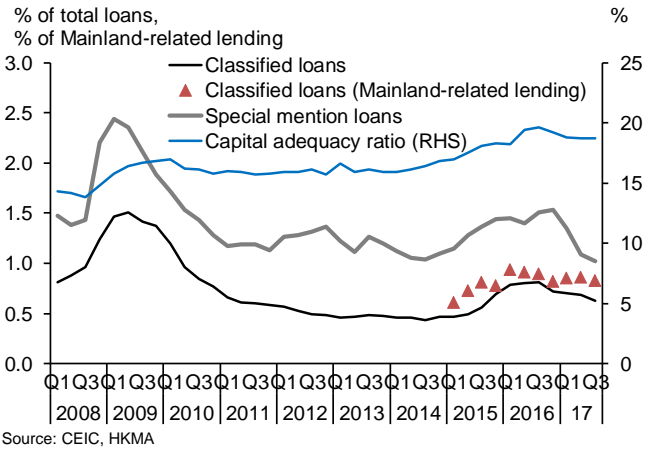
Note: The housing affordability index is calculated as the property price index for domestic premises divided by median monthly earnings.  
Source: CEIC, AMRO staff calculations

**Figure 4. Banking Sector and Household Debt**

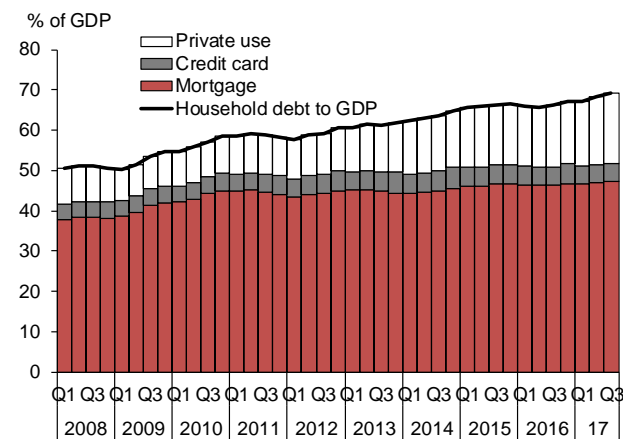
Total loan growth is recovering strongly, reflecting better domestic economic activities and external demand.



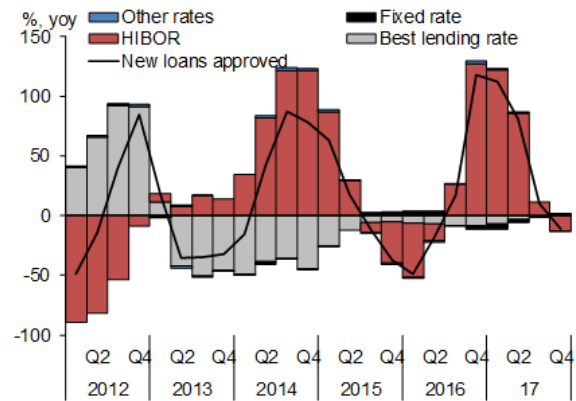
The deterioration in the asset quality of banks has eased, and banks are well-capitalized.



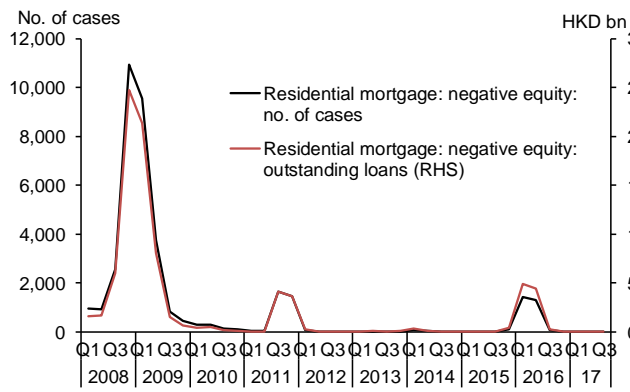
The household debt-to-GDP ratio remains at historically high levels, due to increasing mortgage and private use loans.



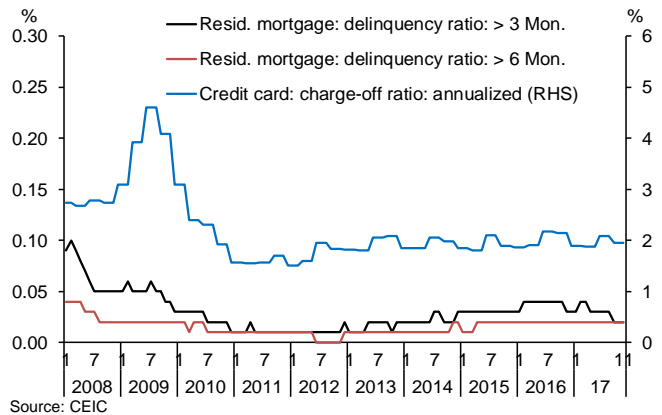
The majority of newly approved residential mortgage loans are tied to the HIBOR rate, implying a higher interest rate burden in future.



The amount of negative equity in residential mortgages remains quite low, but may increase in the future should there be a housing market correction.



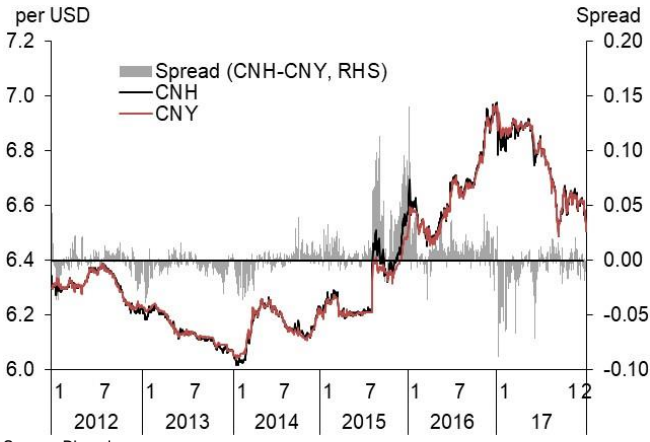
Although leading indices of household default remain contained, the impact of the interest rate increase should be closely monitored.





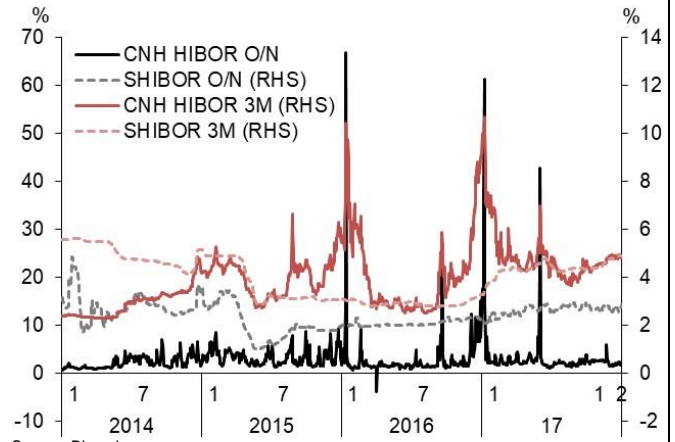
**Figure 5. Offshore RMB Markets in Hong Kong**

The CNH (offshore RMB) premium was observed during H1 2017 when concerns over the CNY (onshore RMB) depreciation climbed up.



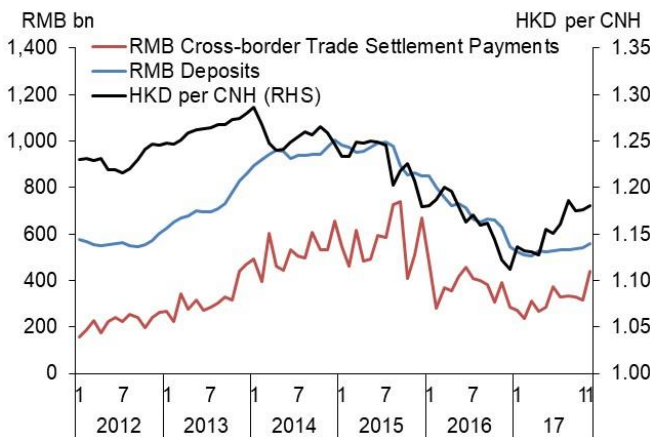
Source: Bloomberg

The CNH premium was largely due to spikes up in offshore RMB interbank interest rates, although such events were short-lived due to HKMA's liquidity supports.



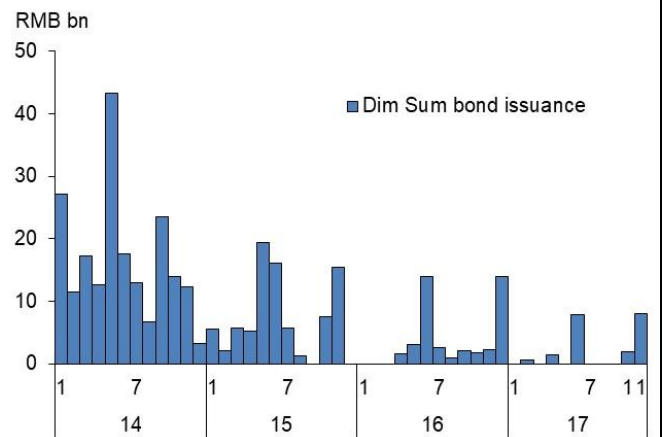
Source: Bloomberg

Declines in RMB trade settlements and deposits have stabilized in line with RMB appreciation.



Source: Bloomberg, CEIC

The Dim Sum bond market (offshore RMB bond market) remains stagnant amid subdued investors' demands.



Source: Bank of China (Hong Kong)