4. Monetary and financial conditions

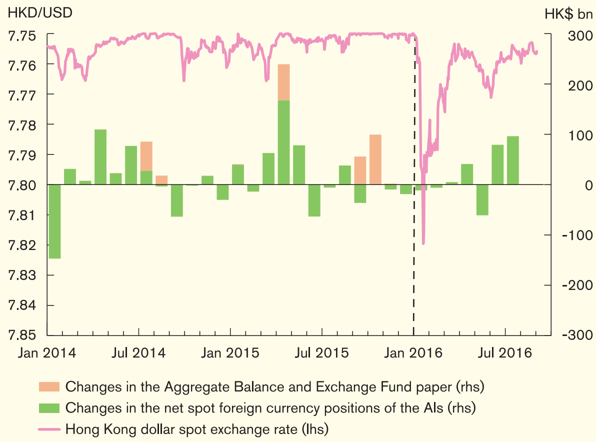
Exchange rate, capital flows and monetary developments

The Hong Kong dollar exchange rate remained broadly stable despite shifts in market sentiment and the United Kingdom's vote to leave the European Union. Total loans also reverted to a moderate increase, in part supported by the recovery in the domestic economic activities. Going forward, the uncertainty stemming from US interest rate normalisation and the Brexit developments will continue to overshadow fund flows.

4.1 Exchange rate and capital flows

The Hong Kong dollar spot exchange rate remained broadly stable despite shifts in market sentiment and increased economic uncertainty stemming from Brexit (Chart 4.1). After some strengthening in March due in part to improved market sentiment and ordinary commercial demand for the Hong Kong dollar, the Hong Kong dollar spot exchange rate softened again in April and May amid the growing expectation of a further US interest rate hike. The Hong Kong dollar exchange rate regained some strength after the US Federal Open Markets Committee decided to keep interest rates unchanged at its meeting on 14-15 June. While the United Kingdom's (UK) vote to leave the European Union (EU) in late June (Brexit) sent shock waves through the global financial markets, the Hong Kong dollar exchange rate remained calm. In fact, there were net Hong Kong dollar inflows into the non-bank private sector in July, as suggested by the rise in the net spot foreign currency positions of banks. The Convertibility Undertaking was not triggered during the review period (Chart 4.2).

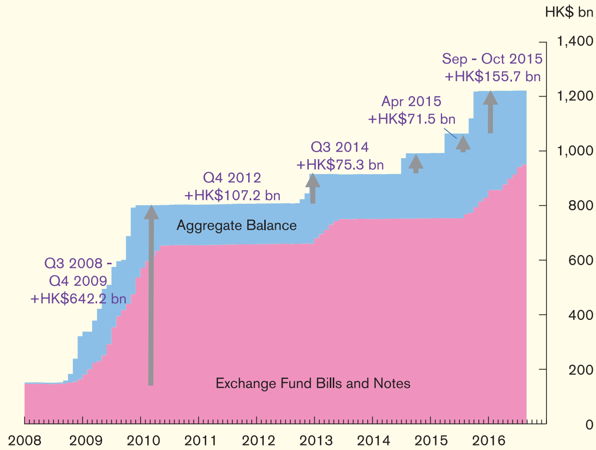
Chart 4.1
Exchange rate and fund flow indicators



Note: For fund flow indicators, a positive value indicates inflows and the change in the net spot foreign currency positions of the AIs for August and September are not yet available.

Sources: HKMA and staff estimates.

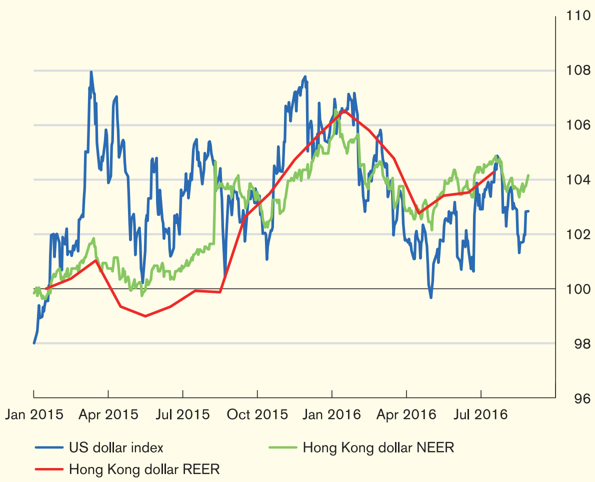
Chart 4.2
Fund flow indicators



Source: HKMA.

Broadly consistent with the movements of the US dollar, the Hong Kong dollar nominal effective exchange rate index (NEER) softened in the first quarter but strengthened somewhat thereafter (Chart 4.3). The Hong Kong dollar real effective exchange rate index (REER) showed similar trends as the nominal index, because the slightly positive, but narrowing, year-on-year inflation differential between Hong Kong and its trading partners exerted only small influences on the overall real exchange rate movements.

Chart 4.3
Nominal and real effective exchange rates



Note: Real effective exchange rate index is seasonally adjusted and only available on a monthly basis.
Sources: C&SD and HKMA staff estimates.

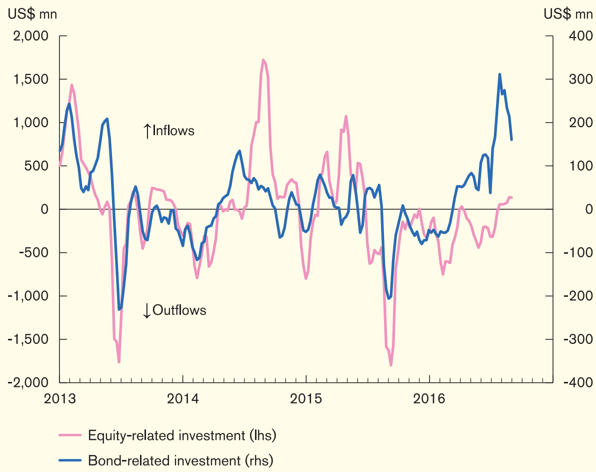
As for capital flows, equity-related investments experienced outflow pressures in the first seven months but some inflows in August. According to the latest Balance of Payments (BoP) statistics, there were net equity portfolio investment outflows in the first quarter as non-residents continued to reduce their holdings of Hong Kong equity and investment fund shares amid a sell-off in the local stock market (Table 4.A).[22] A survey from global mutual funds further shows that equity-related outflows broadly continued between April and July, but at a somewhat narrower pace (Chart 4.4). In August, there were even some equity-related inflows alongside a pickup in local stock prices. On the other hand, debt portfolio investment saw more inflows as Hong Kong banks notably scaled back their holdings of foreign bonds in the first quarter while investors had invested in more Hong Kong bonds since the second quarter in part reflecting more issuance of Hong Kong dollar debt by multilateral development banks (MDBs) for infrastructural investment purposes (see also section 4.4).

Table 4.A
Cross-border portfolio investment flows

(HK$ bn)	2014	2015	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1
By Hong Kong residents							
Equity and investment fund shares	-318.2	-407.8	-105.4	-97.5	8.9	-213.8	22.5
Debt securities	42.1	-361.3	-81.0	-109.3	-122.0	-49.0	111.6
By non-residents							
Equity and investment fund shares	136.7	-375.6	-119.4	-198.9	-26.4	-30.9	-48.5
Debt securities	75.0	49.9	23.0	10.5	-5.7	22.1	-0.9

Note: A positive value indicates capital inflows.
Source: C&SD.

Chart 4.4
Market survey of equity and bond-related flows



Note: Data refer to moving four-week sums.
Source: EPFR Global.

Going forward, the direction and scale of Hong Kong dollar fund flows remain highly uncertain, in part depending on the developments of Brexit

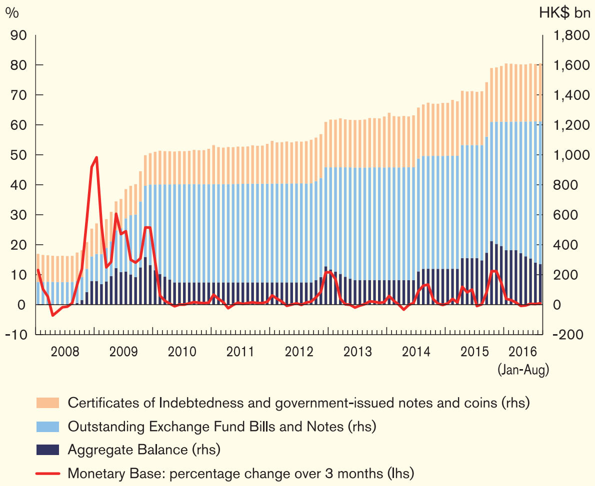
[22] At the time of writing, the second-quarter BoP statistics were not yet available.

and the US interest rate normalisation process. While still-abundant global liquidity may induce gross inflow pressures on the Hong Kong dollar alongside investments in Mainland China equities listed in Hong Kong, such pressures may be restrained as local economic conditions have become less favourable to support a stronger cyclical economic expansion.

4.2 Money and credit

Hong Kong's monetary conditions remained accommodative in the first half of 2016 and in recent months, with the Hong Kong dollar Monetary Base remaining at sizeable levels. The total of the Aggregate Balance and the outstanding Exchange Fund Bills and Notes (EFBNs) remained largely steady at around HK$1,222.4 billion during the first half (Chart 4.5), with the contraction of the Aggregate Balance being offset by the expansion in the outstanding EFBNs amid issuances of additional Exchange Fund Bills (which amounted to HK$83 billion) to meet the strong demand by banks for liquidity management. With slight increases in Certificates of Indebtedness and Government-issued notes and coins in circulation, the Monetary Base grew by a modest 1.0% in the first half.

Chart 4.5
Monetary Base components



Source: HKMA.

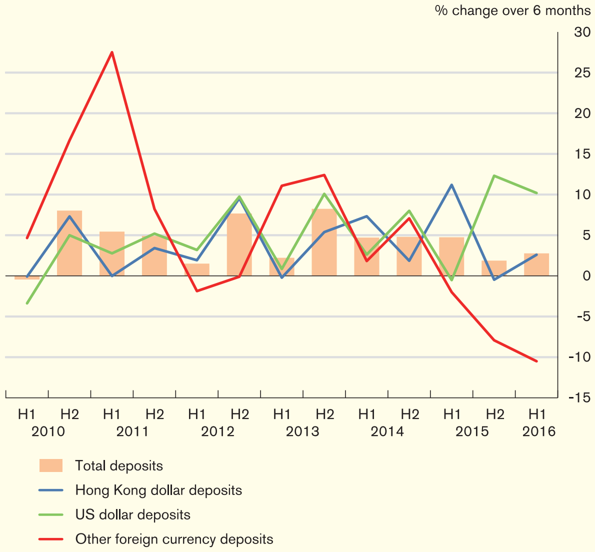
Compared with the Monetary Base, the Hong Kong dollar broad money supply (HK$M3) expanded at a faster pace, in part reflecting the money creation from stronger Hong Kong dollar loan growth. The HK$M3 picked up by 2.3% in the first half of 2016 after edging down by 0.2% in the second half of 2015. As the main component of HK$M3, Hong Kong dollar deposits grew by 2.6% after declining by 0.5% in the second half of 2015 (Chart 4.7). Such pick-up was in part driven by an increase in demand and savings deposits amid stabilisation in the equity market between March and May. Analysed by the asset-side counterparts, growth in the HK$M3 mainly reflected the increases in Hong Kong dollar loans and Hong Kong dollar net claims on banks abroad (Chart 4.6).

Chart 4.6
Changes in the HK$M3 and the asset-side counterparts

Note: The HK$M3 in the monetary survey has been adjusted to include foreign currency swap deposits and to exclude government deposits and Exchange Fund deposits with licensed banks.
Source: HKMA staff estimates.

On the other hand, with heightened volatilities in the foreign exchange market, US dollar deposits and other foreign currency deposits showed mixed performance during the first half. Partly reflecting the continued increase in US dollar deposits held by Mainland non-bank customers in response to the renminbi depreciation, growth in US dollar deposits remained strong at 10.2% in the first half (Chart 4.7). Meanwhile, other foreign currency deposits fell at a sharper pace of 10.5%, mainly due to the contraction in renminbi deposits. As a whole, total deposits with the authorized institutions (AIs) rose slightly faster by 2.8% in the first half of 2016.

Chart 4.7
Deposit growth



Source: HKMA.

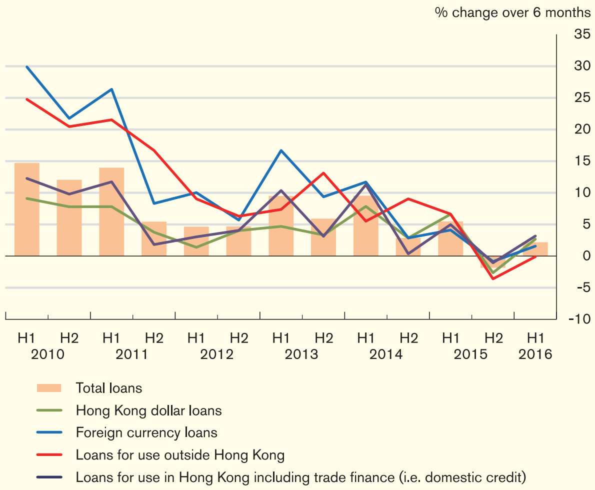
With liquidity in the banking system remaining abundant, Hong Kong dollar interest rates continued to stay at low levels during the first half. The three-month Hong Kong Interbank Offered Rate (HIBOR) fixing rate stabilised at around 0.54% in the second quarter after facing upward pressures in early 2016 (Chart 4.8), while the overnight HIBOR fixing rate continued to hover at low levels of about 0.05%, only seeing fluctuations around the end of each quarter due to banks' seasonal liquidity needs. Broadly following its US dollar counterpart, the Hong Kong dollar yield curve flattened and generally shifted downward in the first half. In particular, the average yield of 10-year Hong Kong Government Bond decreased to 1.14% in June from 1.65% six months earlier. At the retail level, banks' average funding costs (measured by the composite interest rate) remained steady at a low level of 0.26%. The average lending rate for new mortgages declined slightly to 1.90% in June from 1.93% in December last year, in part reflecting increased competition for mortgage lending business.

Chart 4.8
Hong Kong dollar interbank interest rates and yield of the 10-year Government Bond

Sources: HKMA and staff estimates.

Bank credit resumed expansion along with the stabilisation of the macro-financial environment, yet the underlying momentum remained modest amid weak credit demand. Total bank loans reverted to a moderate increase of 2.2% in the first half following a 1.8% decline in the preceding half-year period (Chart 4.9). Recovering along with the domestic economic activity during the second quarter, loans for use in Hong Kong increased by 3.2% in the first half compared with a 1.1% decline in the preceding half-year period. On the other hand, despite the resumption of positive growth in the second quarter, loans for use outside Hong Kong edged down by 0.1% in the first half of 2016, mainly reflecting the cut-back of foreign currency borrowings by Mainland non-bank customers amid the renminbi depreciation in the first quarter. By currency, reflecting the strong increase in the second quarter, Hong Kong dollar loans and foreign currency loans expanded by 2.7% and 1.6% respectively during the first half. At the start of the third quarter, total loans stayed virtually unchanged in July compared with the end of June.

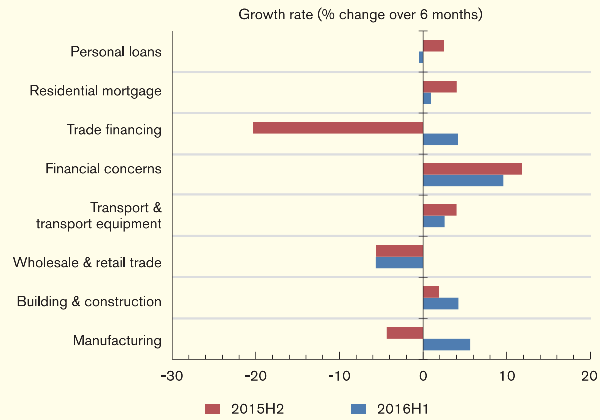
Chart 4.9
Loan growth



Source: HKMA.

Within loans for use in Hong Kong, loans to most major business sectors registered positive growth during the first half. Trade finance and loans to manufacturing resumed positive growth in the first half (Chart 4.10), reflecting the improvement in merchandise trade flows and domestic economic activities in the second quarter. Loans to financial concerns continued to expand strongly in the first half, while loans to building, construction and property development increased at a faster pace on the back of the private construction activities in the pipeline. While continuing to decline in the first half as a whole, loans to wholesale and retail trade registered positive growth in the second quarter amid signs of stabilisation in retail sales performance.

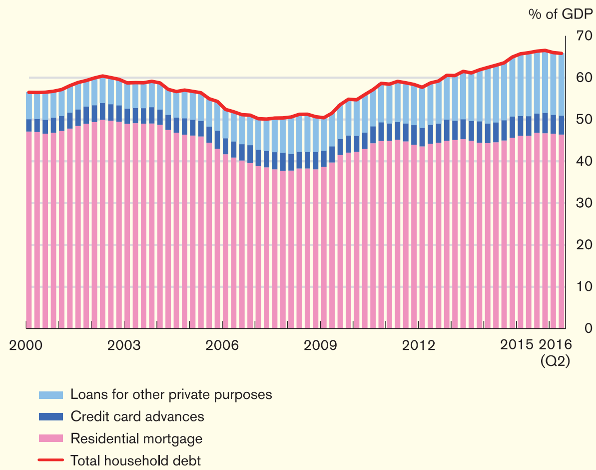
Chart 4.10
Growth in domestic loans by selected sectors



Source: HKMA.

Growth in household debt moderated to 0.5% in the first half from 3.6% in the second half of 2015. Within the total, personal loans (which comprise credit card advances and loans for other private purposes) dropped by 0.5%, the first decline since the first half of 2009. Growth in residential mortgage loans also slowed further to 1.0%, mainly reflecting the weak housing transactions during the first quarter. With growth in household debt slowing, the household debt-to-GDP ratio declined to 65.8% in the second quarter from 66.5% in the fourth quarter of 2015 (Chart 4.11).

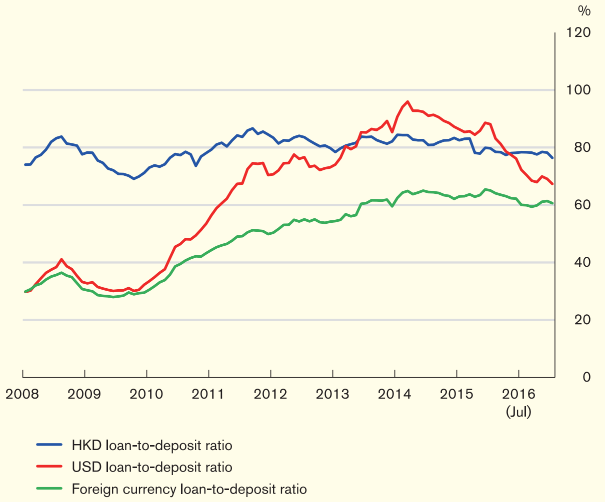
Chart 4.11
Household debt-to-GDP ratio and its components



Note: Only borrowings from AIs are covered.
Source: HKMA.

Banks' funding conditions remained stable, as indicated by the steady loan-to-deposit (LTD) ratios. Reflecting the relative changes in deposits and loans, the Hong Kong dollar LTD ratio registered 78.2% at the end of June, unchanged compared with the end of 2015 (Chart 4.12). As US dollar deposits continued to expand while US dollar loans stayed flat, the US dollar LTD ratio dropped to 69.1% at the end of June from 76.1% registered six months earlier. The foreign currency LTD ratio moved down slightly to 61.4% from 62.2% during the same period.

Chart 4.12
LTD ratios



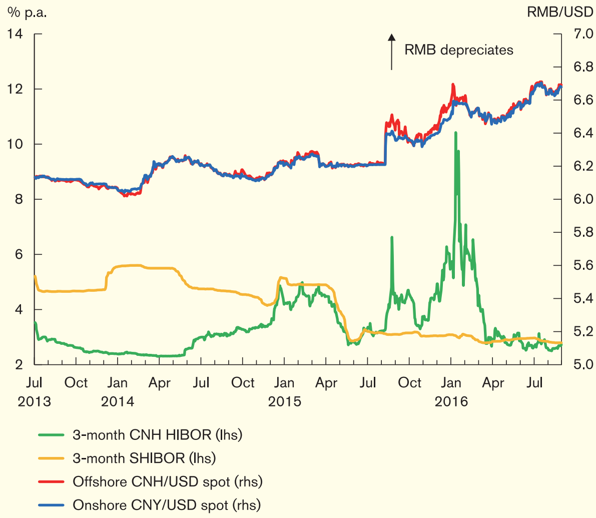
Source: HKMA.

Going forward, credit demand may on one hand be supported by the continuation of accommodative monetary stance in the advanced economies, while on the other hand be restrained by the cautious business outlook and heightened uncertainties surrounding the external environments. The latest HKMA Opinion Survey on Credit Condition Outlook still points to an expected decline in credit demand in the next three months (Table 5.A of Chapter 5).

Offshore renminbi banking business

Reflecting market concerns about the Mainland economy and the strengthening of the US dollar amid risk-off flows and expectation of US rate hike, both the onshore (CNY) and the offshore (CNH) renminbi exchange rates have weakened since April (Chart 4.13). Moving into the third quarter, the CNH once reached again in mid-July the low level of 6.7 per US dollar registered in January. Meanwhile, after widening to very high levels in January, the discount of the CNH exchange rate vis-à-vis its onshore counterpart has been broadly contained at moderate levels since March. Despite occasional pick-ups, the CNH interbank interest rates have also been largely stable, with the three-month CNH HIBOR closing at 2.73% at the end of August.

Chart 4.13
CNY and CNH exchange rates and interbank interest rates

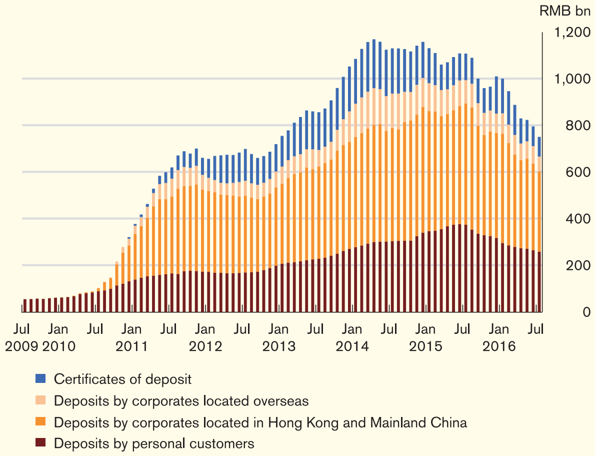


Sources: Bloomberg and Treasury Markets Association.

The renminbi liquidity pool in Hong Kong contracted further in the first half of 2016 as depreciation pressure continued to linger on the renminbi exchange rate. The total outstanding amount of renminbi customer deposits and certificates of deposit (CDs) declined by 21.2%

from six months earlier to RMB796.2 billion at the end of June (Chart 4.14 and Table 4.B). Within the total, renminbi customer deposits fell by 16.4% during the first half, with both personal and corporate deposits registering sharper declines. Over the same period, outstanding CDs dropped by 46.8% due to a fall in CD issuances and maturing of a relatively large amount of CDs.

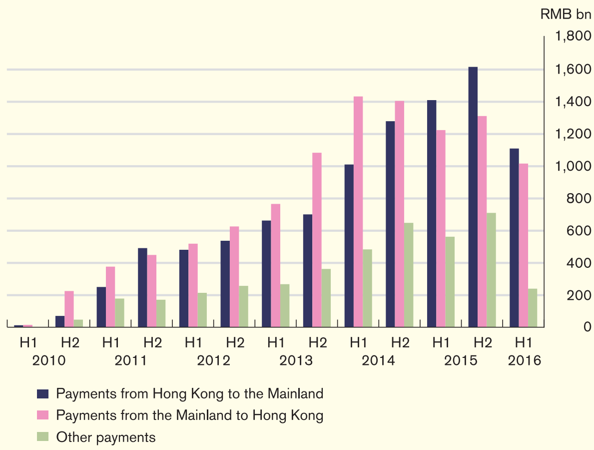
Chart 4.14
Renminbi deposits and CDs in Hong Kong



Source: HKMA.

Other aspects of the offshore renminbi banking business also softened. The amount of renminbi bank loans outstanding declined modestly by 3.4% to RMB287.3 billion at the end of June. Renminbi trade settlement handled by banks in Hong Kong also decreased to RMB2,365.2 billion in the first half of 2016, down 35.0% from the preceding half-year period (Chart 4.15 and Table 4.B). Among the total, outward trade remittances to Mainland China witnessed a sharper contraction than inward remittances to Hong Kong. That said, Hong Kong's position as a global hub for offshore renminbi clearing and settlement remained robust, with the average daily turnover of renminbi real time gross settlement system staying high at RMB869.0 billion in the first half.

Chart 4.15
Flows of renminbi trade settlement payments



Source: HKMA.

Development of the offshore renminbi business will continue to face headwinds from soft market expectations on the renminbi exchange rate. Once confidence in the Mainland economy improves, and as Mainland's capital account liberalisation process and the Belt and Road Strategy make new progress, such as the launch of the Shenzhen-Hong Kong Stock Connect, it is expected the offshore renminbi business will gather strength. The inclusion of the renminbi into the International Monetary Fund's (IMF) Special Drawing Rights (SDR) basket starting from October may also strengthen the demand for renminbi-denominated assets, thereby offering further support to the offshore renminbi business.

Table 4.B
Offshore renminbi banking statistics

	Dec 2015	Jun 2016
Renminbi deposits & certificates of deposit (CDs) (RMB bn)	1,010.4	796.2
Of which:		
Renminbi deposits (RMB bn)	851.1	711.5
Share of renminbi deposits in total deposits (%)	9.3	7.5
Renminbi certificates of deposit (CDs) (RMB bn)	159.3	84.7
Renminbi outstanding loans (RMB bn)	297.4	287.3
Number of participating banks in Hong Kong's renminbi clearing platform	217	213
Amount due to overseas banks (RMB bn)	105.7	93.3
Amount due from overseas banks (RMB bn)	132.1	135.4

	Jan – Jun 2016
Renminbi trade settlement in Hong Kong (RMB bn)	2,365.2
Of which:	
Inward remittances to Hong Kong (RMB bn)	1,016.0
Outward remittances to Mainland China (RMB bn)	1,109.7
Turnover in Hong Kong's RMB RTGS system (Daily average during the period; RMB bn)	869.0

Source: HKMA.

Asset markets

Hong Kong equity market staged a rebound after the sharp correction in early 2016 on the back of solid gains in major stock markets, easing concerns about a global downturn, and increased expectation that major central banks would maintain or further relax their monetary policies. However, the market remains susceptible to changes in the external environment, in particular with respect to the pace of US monetary normalisation. The Hong Kong dollar debt market expanded markedly, while issuers scaled back issuance further in the offshore renminbi debt market. The residential property market has stabilised since the second quarter, but the outlook has become more uncertain in the face of the increase in new housing supply and the uncertain global financial environment.

4.3 Equity market

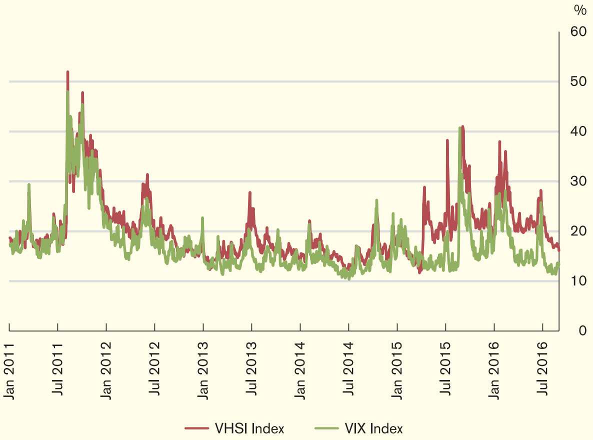
The Hong Kong equity market staged a rebound after falling to its lowest level in more than four years in February. Sentiment was boosted by the solid gains of the US and other major stock markets. In addition, the recovery of oil price from a 14-year low in early 2016 alleviated concerns about a severe slowdown of the global economy, thus lending support to all major markets, including Hong Kong. While the UK's referendum to leave the EU triggered a brief decline of the market in June, momentum resumed quickly amid expectation that the US Federal Reserve would be more gradual in its rate hikes and other central banks would further relax their monetary policies. With global interest rates staying at historical lows and government bond yields of some major advanced economies dipping into negative territories, investors regained their appetite for risky assets globally, which also benefited local equities.

Overall, the Hang Seng Index (HSI) and the Hang Seng China Enterprises Index (HSCEI), also known as the H-share index, increased by 20.2% and 20.5% respectively between March and August 2016 (Chart 4.16), with the option implied volatility of the HSI (VHSI) staying at a relatively low range of 10% to 30% (Chart 4.17).

Chart 4.16
Equity prices in Hong Kong

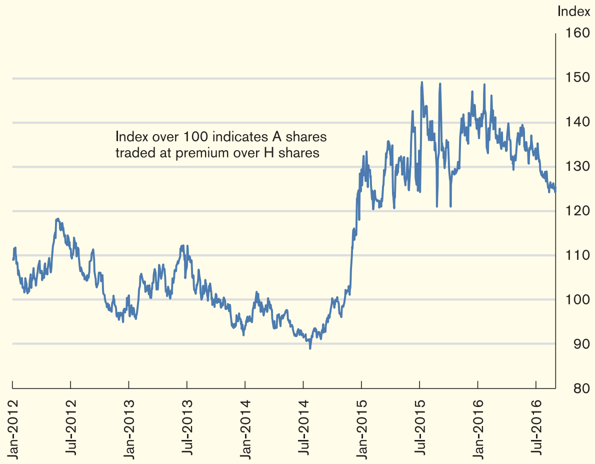
Source: Bloomberg.

Chart 4.17
Option-implied volatilities of the HSI and S&P 500



Source: Bloomberg.

Chart 4.18
Hang Seng China AH Premium Index

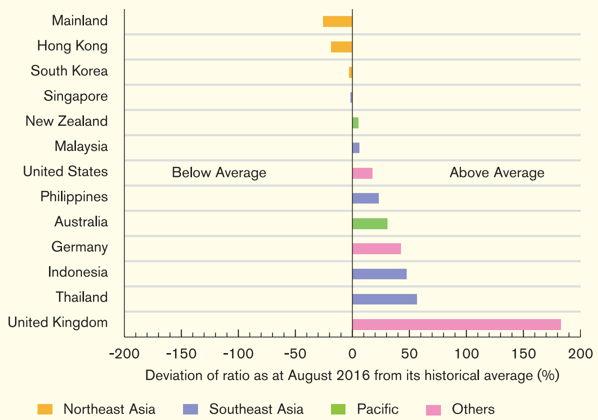


Source: Bloomberg.

The price discrepancy between stocks listed in the Mainland and Hong Kong markets, while remaining tangible, narrowed moderately during the review period. By the end of August, the Hang Seng China AH Premium Index had declined by around 8.5% from the level at end-February (Chart 4.18). The narrowing of the price discrepancy is attributable to a reduction of outlook uncertainties among investors in the two markets, as reflected by the recent decline of the option-implied volatility.[23]

Looking forward, the relatively attractive valuations of the Hong Kong market versus other markets in the region may render it more resilient to minor setbacks (Chart 4.19). Nonetheless, the market remains susceptible to unexpected changes in the external market conditions. In particular, uncertainties about the pace of US monetary normalisation and global economic growth prospects are likely to keep investors cautious.

Chart 4.19
Price-earnings ratios of Asia Pacific (excluding Japan) and other major markets



Sources: Bloomberg and HKMA staff estimates.

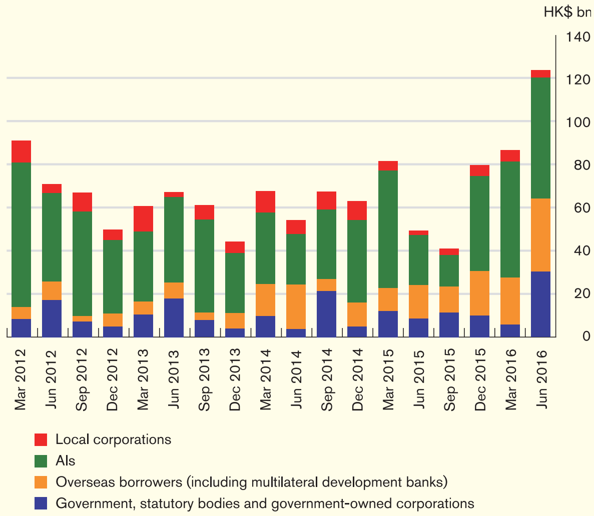
[23] See Chung, Hui and Li (2013) "Explaining share price disparity with parameter uncertainty: Evidence from Chinese A- and H-shares", *Journal of Banking and Finance*, 37 (2013) pp1073–1083.

4.4 Debt market

The Hong Kong dollar debt market expanded further in the first half of 2016 on the back of strong issuance by domestic and international borrowers. Total debt issuance registered a notable growth of 29.7% year on year to HK$1,510.0 billion. The public sector, the domestic private sector, and the overseas borrowers including MDBs saw their debt issuance increase by 26.8%, 40.9% and 112.2% respectively over the same period in 2015 (Chart 4.20). In particular, new debt issued by MDBs reached HK$2.8 billion in the second quarter, more than tripling the amount in the first quarter, reflecting an increase in the use of bonds for raising funds for their infrastructural investment.[24] Against this backdrop, Hong Kong has experienced bond fund inflows to the market since March after seven months of net fund outflows (Chart 4.21).

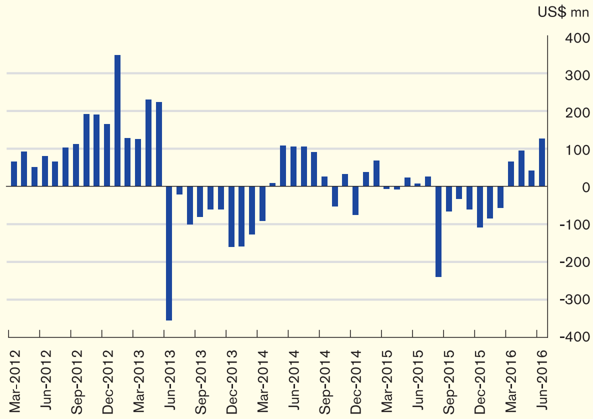
As a result of the significant increase in issuance, the total amount of Hong Kong dollar debt outstanding rose by 15.7% to a record high of HK$1,654.4 billion at the end of June 2016, which is equivalent to 28.0% of Hong Kong dollar M3 or 22.8% of Hong Kong dollar denominated assets of the entire banking sector (Chart 4.22). The Exchange Fund and overseas borrowers including MDBs contributed most to the increase, with their outstanding debt increasing by 21.2% and 19.5% to HK$912.4 billion and HK$183.8 billion respectively.

Chart 4.20
New issuance of non-Exchange Fund Bills and Notes Hong Kong dollar debt



Source: HKMA.

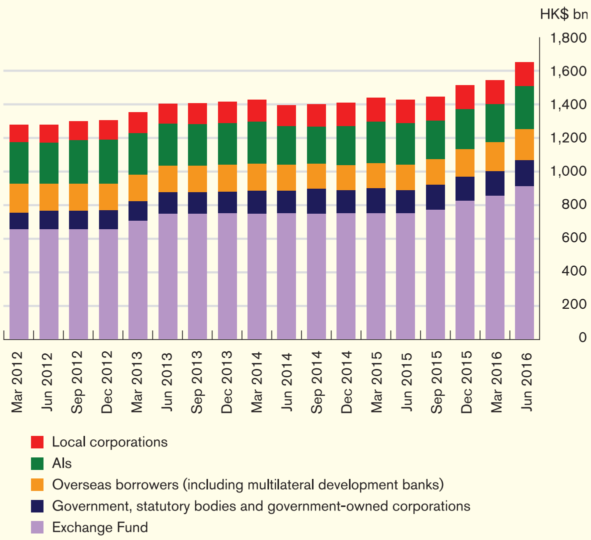
Chart 4.21
Bond fund flows into Hong Kong



Source: EPFR Global.

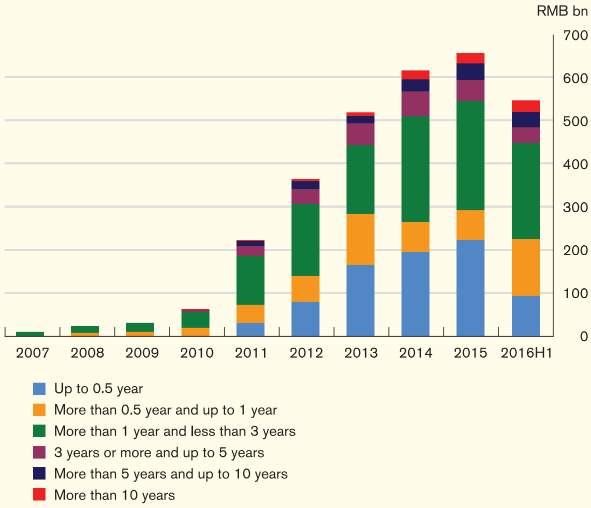
[24] The major MDBs issuing Hong Kong dollar denominated debt securities in the first half of 2016 include Asian Development Bank, International Finance Corporation (IFC), and International Bank for Reconstruction and Development. In view of increased cooperation between Hong Kong and MDBs, the recent increase may signify the beginning of a new trend. For instance, the IFC signed a Memorandum of Understanding with the HKMA on facilitating infrastructure financing on 4 July 2016.

Chart 4.22
Outstanding Hong Kong dollar debt



Source: HKMA.

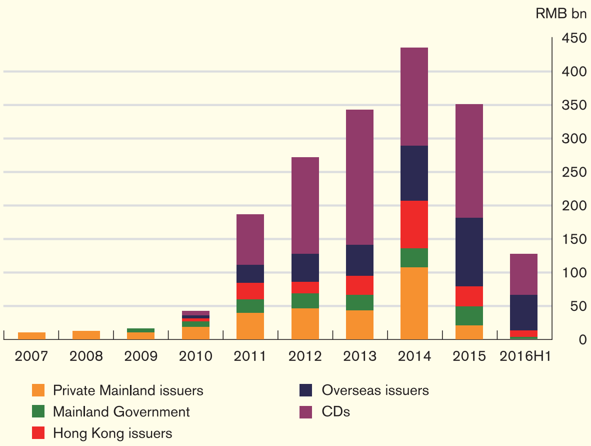
Chart 4.24
Outstanding amount of offshore renminbi debt securities by remaining tenor



Sources: Newswires and HKMA staff estimates.

Meanwhile, the offshore renminbi debt market in Hong Kong continued to shrink in part reflecting widespread concerns earlier this year about a global economic slowdown and the supply side reforms in Mainland China which may have discouraged corporates' plans for expansion, thus lowering their financing needs. In the first half of 2016, offshore renminbi debt issuance amounted to RMB126.9 billion, down by 29.4% year on year (Chart 4.23). As a result, the outstanding amount of the offshore renminbi debt securities decreased by 16.8% year on year to RMB549.2 billion at the end of June 2016 (Chart 4.24).

Chart 4.23
New Issuance of offshore renminbi debt securities



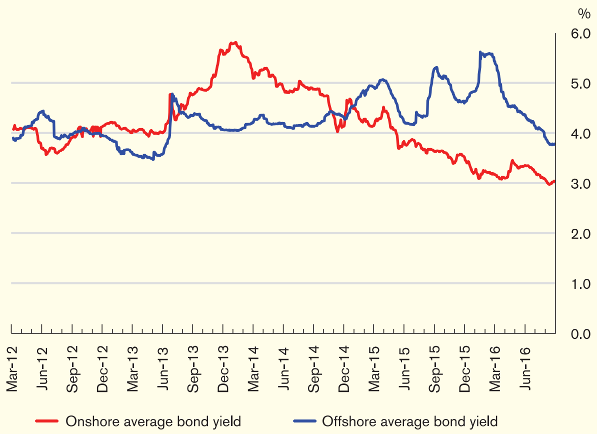
Sources: Newswires and HKMA staff estimates.

The decline in non-certificate-of-deposit (non-CD) debt issuance was across the board for all types of issuers. Mainland borrowers led retreat, down by 85.8% year on year to RMB3.6 billion in the first half of 2016. The slowdown is to a significant extent due to the weaker investor appetite for dim sum bonds amid renminbi weakness against the US dollar, as well as the lower borrowing costs in Mainland China (Chart 4.25). New regulations permitting more domestic and international participation in the onshore interbank bond market might have also encouraged more Mainland enterprises to tap the onshore bond market.[25] Overseas borrowers reduced their issuance at a more moderate pace. In the first half of 2016, their non-CD renminbi debt issuance totalled RMB52.5 billion, down by 18.7% year on year. Among overseas issuers, Australian borrowers accounted for 20.4% of the total

[25] For example, on 6 May 2016, the People's Bank of China (PBoC) announced that qualified institutional investors are allowed to enter the interbank bond market on a registration basis. Regarding international participation, the PBoC announced *Procedures for Foreign Central Banks and Similar Institutions to Enter China's Inter-bank Bond Market* on 14 April 2016. On 27 May 2016, the Shanghai head office of the PBoC and the State Administration of Foreign Exchange (SAFE) issued related implementing rules, allowing a wide range of foreign institutional investors to participate in the onshore interbank bond market.

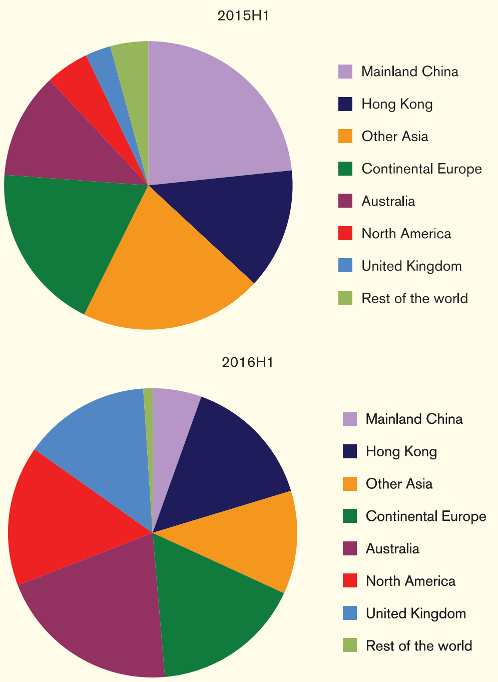
issuance in the first half of 2016, compared to the 11.8% in the same period of 2015 (Chart 4.26). Borrowers from the UK and North America also saw their shares of issuance increase significantly.

Chart 4.25
Average yields of onshore vs. offshore renminbi bond indices



Sources: Bloomberg, Hang Seng Indexes Company Ltd, and China Central Depository & Clearing Co., Ltd.

Chart 4.26
New issuance of non-CD offshore renminbi debts by country of operation



Sources: Newswires and HKMA staff estimates.

Looking ahead, the outlook for the near-term development of the offshore renminbi debt market remains uncertain. On the supply side, despite the tangible refinancing pressure for offshore renminbi borrowers in the coming year, the lower borrowing costs onshore would likely continue to be a major factor affecting Mainland enterprises' decision to issue renminbi debt in the offshore market. Meanwhile, the opening-up of the Mainland bond market to overseas issuers and investors may present an alternative source of renminbi financing. On the demand side, US dollar based investors' incentive to hold dim sum bonds may reduce due to the recent weakness of renminbi vis-à-vis the US dollar. However, while the recent trend is unlikely to reverse any time soon, the inclusion of the renminbi in the IMF's SDR basket in October this year may boost the demand for renminbi-denominated assets in the longer term, creating an environment more conducive to the development of the market.

4.5 Property markets

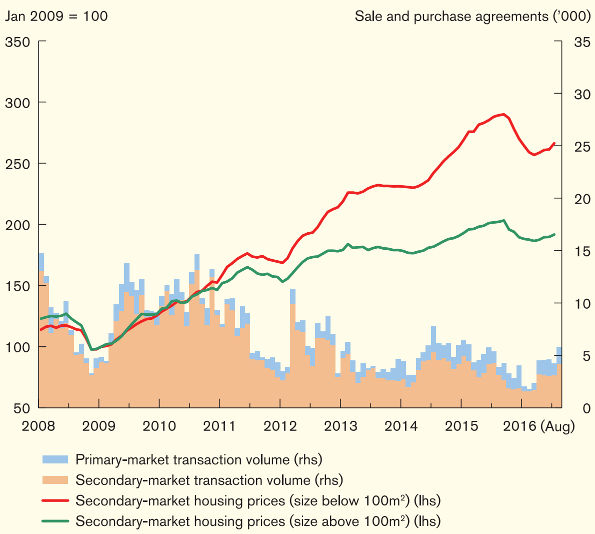
Residential property market

The residential property market has stabilised since the second quarter. Amid improvement in market sentiment and increased new launches in the primary market, the average monthly transactions bounced up to 4,567 in the second quarter, and 5,032 in July and August (Chart 4.27). In particular, secondary-market transactions recovered from the record low level in February, while primary market sales increased sharply on the back of property developers' aggressive promotional schemes to lure buyers, including the offering of mortgage plans with very high loan-to-value (LTV) ratios and interest and repayment holidays.[26]

[26] In this regard, potential buyers should take into account any changes that may occur in the future, carefully assessing their repayment ability and making a shrewd and prudent decision. For more details, see the inSight article on "Mortgage Loans with High Loan-to-Value Ratios offered by Property Developers" published by the HKMA on 20 June 2016.

Housing prices have picked up since the second quarter along with the recovery in the transaction volume. Secondary-market housing prices have risen by 3.7% in April–July after falling by 11.3% between September 2015 and March this year (Chart 4.27). Prices of small and medium-sized flats (with saleable area of less than $100m^2$) increased faster than the prices of large flats (with saleable area of at least $100m^2$) in recent months. While the price premium of primary market flats relative to secondary market flats has narrowed, property developers have raised selling prices and reduced discounts more recently amid improved market sentiment. Recent market data also indicated that secondary market housing prices continued to rise during the third quarter.

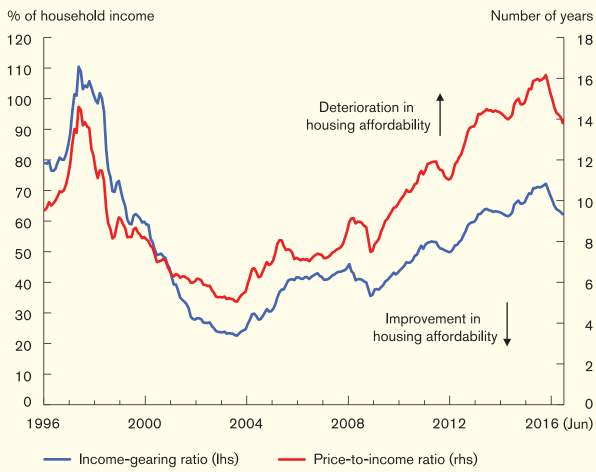
Chart 4.27
Residential property prices and transaction volume



Sources: R&VD and Land Registry.

Housing affordability remained stretched, with the housing price-to-income ratio stayed high at 14.0 in the second quarter, close to the 1997 peak of 14.6. Moreover, the income-gearing ratio was 62.9% in the second quarter, well above the long-term average of about 50% (Chart 4.28).[27] As the cumulative decline in housing rentals was smaller than the decrease in housing prices from its peak last September, the buy-rent gap remained close to its recent high (Chart 4.29)[28], while residential rental yields continued to stay low at 2.2-3.0%.

Chart 4.28
Indicators of housing affordability

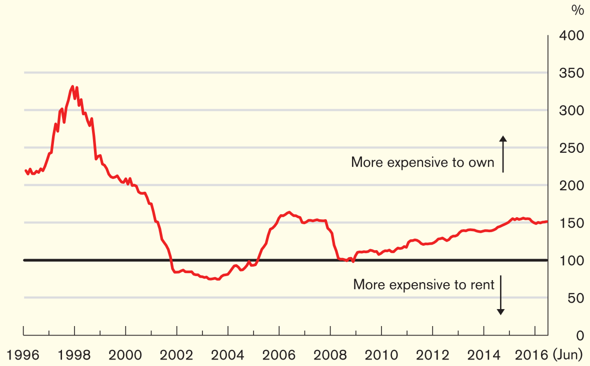


Sources: R&VD, C&SD and HKMA staff estimates.

27 The price-to-income ratio measures the average price of a typical $50m^2$ flat relative to the median income of households living in private housing. Alternately, the income-gearing ratio compares the amount of mortgage payment for a typical $50m^2$ flat (under a 20-year mortgage scheme with a 70% LTV ratio) to the median income of households living in private housing. The income-gearing ratio is not the same as a borrower's actual debt-servicing ratio, which is subject to a maximum cap by the HKMA prudential measures.

28 The buy-rent gap estimates the cost of owner-occupied housing (under a 20-year mortgage scheme with a 70% LTV ratio) relative to rentals.

Chart 4.29
Buy-rent gap



Note: This indicator is calculated as the ratio of the cost of purchasing and maintaining a 50m² flat with that of renting it.
Sources: R&VD, C&SD and HKMA staff estimates.

Mortgage interest rates continued to stay low, with a number of major banks lowering their mortgage rates further in recent months amid increased competition for mortgage business. However, the eventual rise in US interest rates would bring upward pressures on mortgage rates and hence debt-serving burdens. That said, banks in Hong Kong have sufficient buffer to withstand risks stemming from the property market. Reflecting the effectiveness of the macro-prudential measures implemented by the HKMA since 2009, the average LTV ratio for new mortgages declined to 53.3% in July from 64% before the measures were introduced, and the debt-servicing ratio also fell by about 6 percentage points to 33.8%.

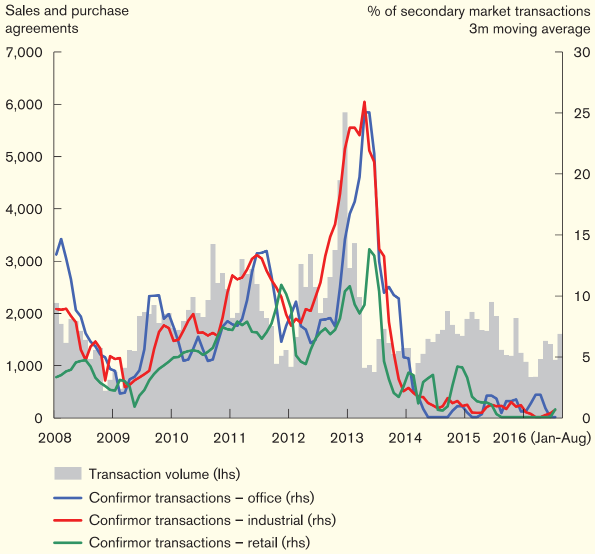
The residential property market outlook has become more uncertain. On one hand, while market expectation of still-abundant global liquidity could provide some support to the housing market, the uncertainty surrounding the pace and effect of US rate hike will continue to pose headwinds. On the other hand, rising housing completion will shrink the housing supply-demand gap and exert pressure on property developers to speed up their sales. Slower domestic growth and uncertainty from the evolving Brexit development could also dampen market sentiment and pose downside risks to the property market.

Non-residential property market

Despite signs of stabilisation, the non-residential property market remained soft in the first half of 2016 amid financial market volatility and challenges facing the retail sector. Transaction volume declined by 20% to a monthly average of 1,171 in the first eight months, as market activities slowed in the first quarter before picking up in the second quarter (Chart 4.30). Speculative activities remained subdued, as indicated by the low levels of confirmor transactions. Meanwhile, prices of office space, retail premises and flatted factories have declined by around 3.7% to 7.7% in the year to July (Chart 4.31). On the other hand, rentals of office space and flatted factories saw a modest increase compared with the end of 2015, while rentals of retail space dropped. The overall rental yields across segments continued to stay low at 2.6-3.3%.

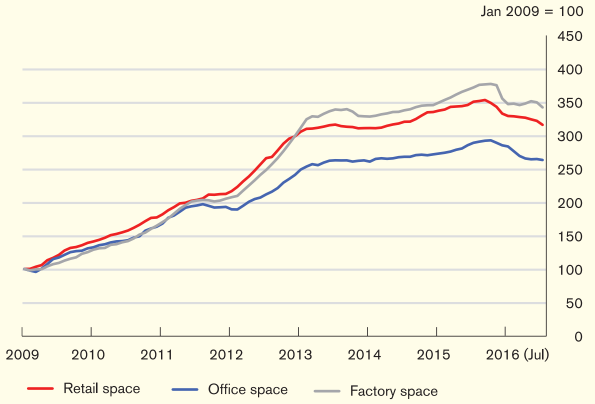
Looking ahead, the non-residential property market would on one hand be supported by the expectation of low US interest rates for longer period, while on the other hand dragged by heightened uncertainty in the global financial environment after Brexit and slower domestic economic growth. Across different market segments, while office vacancy rates stayed low and the demand from Mainland-related companies for office space at prime locations appeared to be robust, the uncertain business outlook does not bode well for the segment. Meanwhile, the end of revitalisation measures for older industrial buildings may slow market transactions of flatted factories, while prolonged weakness in the retail sector may continue to exert downward pressure on retail rentals, particularly at prime locations.

Chart 4.30
Transactions in non-residential properties



Sources: Land Registry and Centaline Property Agency Limited.

Chart 4.31
Non-residential property price indices



Source: R&VD.