4. Monetary and financial conditions

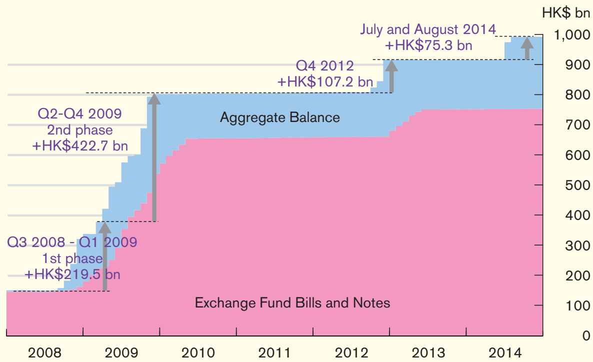
Exchange rate, capital flows and monetary developments

Despite increased volatility in the global financial markets and depreciation pressures on the emerging-market currencies, the Hong Kong dollar remained stable and continued to trade in an orderly manner. While bank liquidity remained abundant, loan growth has slowed quite visibly amid weaker credit demand. Going forward, the divergent growth and monetary policy paths of the advanced economies, particularly with the uncertain timing and pace of US interest rate normalisation, will be a major risk to fund flows and the monetary and financial stability of Hong Kong.

4.1 Exchange rate and capital flows

The Hong Kong dollar spot exchange rate moved between 7.75 and 7.77 against the US dollar in the second half of 2014. There was repeated triggering of the strong-side Convertibility Undertaking in July and early August amid strong commercial and equity-related demand, leading to corresponding increases in the Aggregate Balance (Chart 4.1). The Hong Kong dollar exchange rate then softened in late September and early October due to the broad US dollar strength and corrections in the local stock market on renewed worries about the global economic prospects. The Hong Kong dollar exchange rate strengthened in early December on the back of equity-related demand, but softened again in mid-December on repatriation of IPO proceeds.

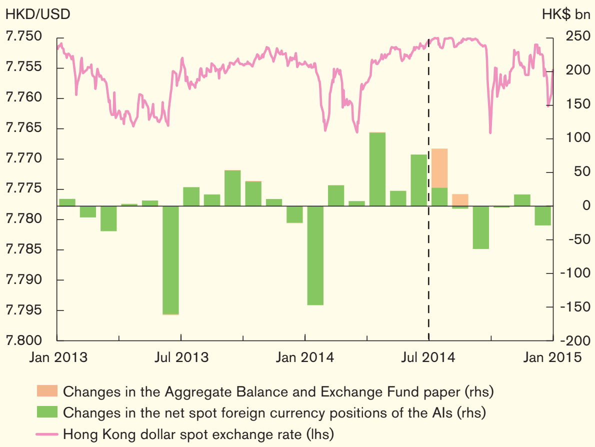
Chart 4.1
Fund flow indicators



Source: HKMA.

On the whole, currency stability remained intact and there were no significant net Hong Kong dollar fund flows into or out of the non-bank private sector in the fourth quarter, as evidenced by the small changes in banks' net spot foreign currency positions (Chart 4.2).

Chart 4.2
Fund flow indicators and exchange rate



Note: For fund flow indicators, a positive value indicates inflows.
Sources: HKMA and staff estimates.

Stepping into early 2015, the Hong Kong dollar continued to trade in an orderly manner, although international currency markets were shocked by the Swiss National Bank's action to remove the exchange rate cap of Swiss franc with the euro. The Hong Kong dollar spot exchange rate briefly strengthened and stayed near 7.75, but it later retraced. The Government and the HKMA reiterated the full commitment to the Linked Exchange Rate system.

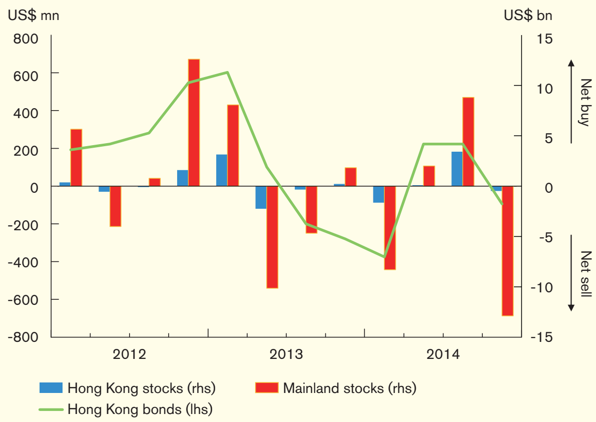
As for portfolio investment flows, sizable capital inflows occurred in the third quarter and this was broadly consistent with the movements in the Hong Kong dollar flows. The Balance of Payments (BoP) statistics also showed notable equity portfolio inflows in the third quarter as Hong Kong residents reduced their holdings of foreign equities and non-residents purchased a large amount of local stocks in Hong Kong (Table 4.A).[21] Debt portfolio investments also showed similar inflow patterns. However, in the fourth quarter, the local investment environment was cast down by worries about weaker global growth prospects, intensified geopolitical tensions, and increased volatility in the international currency markets. Survey results from global mutual funds also pointed to equity and debt portfolio outflows in that quarter (Chart 4.3).

Table 4.A
Cross-border portfolio investment flows

(HK$ bn)	2012	2013	2014 Q1	2014 Q2	2014 Q3
By Hong Kong residents					
Equity and investment fund shares	-159.6	-179.4	-75.7	10.7	32.9
Debt securities	-151.3	-335.2	63.3	-100.3	40.3
By non-residents					
Equity and investment fund shares	224.5	67.6	-8.5	24.7	160.3
Debt securities	54.9	61.0	9.4	11.4	11.9

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

Chart 4.3
Market survey of equity and bond-related flows



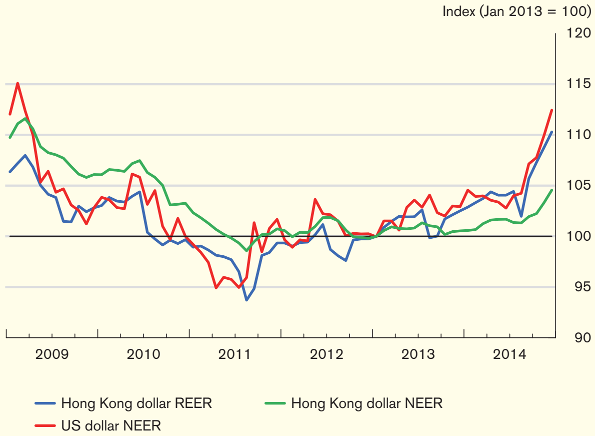
Source: EPFR Global.

With the launch of the Shanghai-Hong Kong Stock Connect in November, two-way equity portfolio flows between Mainland China and Hong Kong have increased. At this initial stage, the north-bound trade was generally larger than the south-bound trade, in part reflecting the relatively stronger global demand for Mainland China stocks. In fact, gross capital flows between Hong Kong and Mainland China have increased considerably over time amid the growing economic integration. Box 4 reviews the developments of these cross-border capital flows and discusses their implications for the Hong Kong economy.

21 At the time of writing, the fourth-quarter BoP statistics are not yet available.

From a broader perspective, the trade-weighted Hong Kong dollar nominal effective exchange rate index (NEER), which measures the relative strength of the Hong Kong dollar against a basket of trading partner currencies, picked up by 2.8% in the second half of the year along with the strengthening of the US dollar (Chart 4.4). Given the widening of the inflation differential between Hong Kong and its trading partners, the Hong Kong dollar real effective exchange rate index (REER) rose even faster at 6.0%. The relatively high headline inflation in Hong Kong reflected mainly the phasing-out of one-off relief measures domestically and the disinflationary pressures in the major economies.

Chart 4.4
Nominal and real effective exchange rates



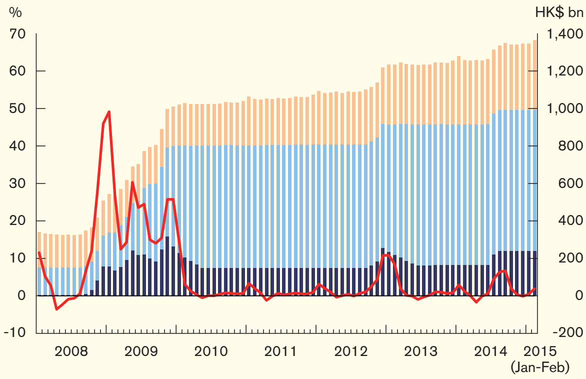
Note: Real effective exchange rate index is seasonally adjusted.
Sources: C&SD and HKMA staff estimates.

Looking forward, the still-uncertain timing and pace of US interest rate normalisation could increase the volatility in fund flows and the risk of reversals from Hong Kong. Indeed, the financial stability risks associated with the strengthening US dollar and the sharp drop in oil prices have led to turbulence in some of the more vulnerable emerging market economies in late 2014. While the Hong Kong dollar has been little affected so far, there is a risk that a sudden rise in risk-off sentiment could threaten negative spillovers to Hong Kong through various financial channels. On the other hand, the ECB's expanded asset purchase programme, together with BoJ's expanded QQE, would still render support to global risk appetite and asset prices, thereby increasing the chance of inflows into Hong Kong. The relative strength of these factors will inevitably affect the scale and volatility of fund flows in Hong Kong. As such, it is expected that the Hong Kong dollar spot exchange rate will be subject to more volatility in the short and medium terms.

4.2 Money and credit

Hong Kong's monetary and credit conditions remained accommodative in the second half of 2014 and early 2015, with ample liquidity in the banking system and interest rates staying at low levels. Money market operation was smooth and without disorderly adjustments, even at times of turbulent external environment. Market liquidity received additional boost, with further expansion in the Aggregate Balance amid the repeated triggering of the strong-side Convertibility Undertaking in July and August. As a result, having stayed flat for a year or so, the Hong Kong dollar Monetary Base jumped by 6.6% in the second half of 2014 (Chart 4.5). Other monetary base components such as Certificates of Indebtedness, notes and coins in circulation, and outstanding Exchange Fund Bills and Notes however showed little change.

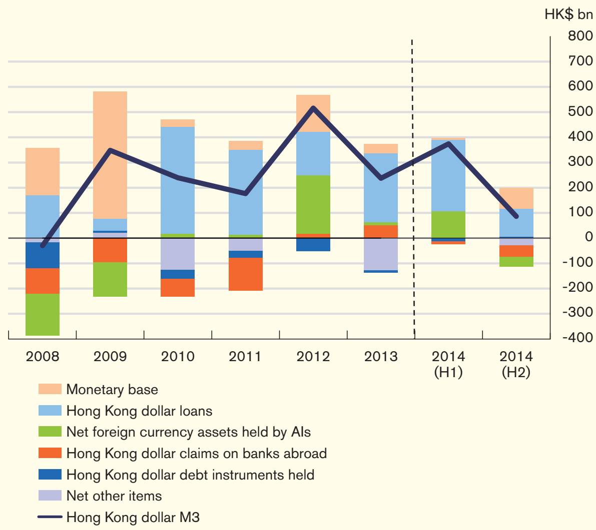
Chart 4.5
Monetary Base components



Source: HKMA.

While the Monetary Base picked up faster in the second half, monetary aggregates as a whole increased at a slower pace. Mainly dragged down by time deposits and negotiable certificates of deposit held by the non-bank sector, Hong Kong dollar broad money supply (HK$M3) only grew by an annualised 3.3% in the second half, down from 14.4% in the first half. Analysed by the asset-side counterparts, the slowdown in money growth in the second half mainly reflected the contractionary forces stemming from decelerated loan growth and a decrease in authorized institutions' (AIs') net foreign currency assets and Hong Kong dollar claims on banks abroad (Chart 4.6).

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

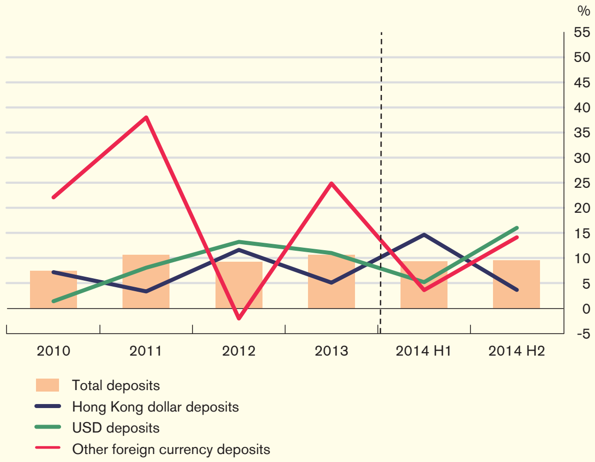


Note: The HK$M3 in the monetary survey has been adjusted to include foreign currency swap deposits and to exclude government deposits and Exchange Fund deposits with licensed banks.

Source: HKMA staff estimates.

As the main component of HK$M3, Hong Kong dollar deposits only increased at an annualised rate of 3.7% in the second half, much slower than the 14.7% growth in the preceding half year (Chart 4.7). On the other hand, growth in US dollar deposits and other foreign currency deposits accelerated to an annualised 16.0% and 14.2% respectively. In particular, renminbi deposits picked up faster by an annualised 16.8%. Overall, total deposits with the AIs rose by an annualised 9.6% in the second half, roughly the same pace as in the first half.

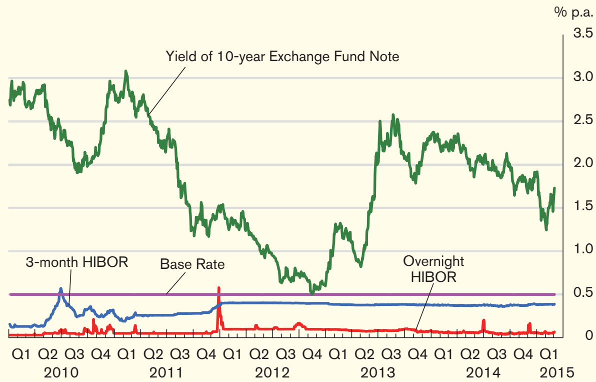
Chart 4.7
Deposit growth



Note: Growth rates in 2014 H1 and H2 are annualised.
Source: HKMA.

Largely reflecting the ample liquidity conditions, the wholesale funding costs continued to stay at low levels during the second half of 2014. The overnight and three-month HIBOR fixing rates were roughly stable at around 0.06% and 0.37% respectively and well below the Base Rate of 0.5% (Chart 4.8). There were only occasional fluctuations in the short-term interbank rates due to increased equity funding demand and banks' liquidity need ahead of the quarter-ends and holiday seasons. Broadly following the US dollar counterparts, the Hong Kong dollar yields picked up in the medium tenor but declined in the long tenor. The average yield of 10-year Exchange Fund Note decreased to 1.79% in December from 2.05% in June. Meanwhile, the composite interest rate, which reflects the average funding costs of retail banks in Hong Kong, decreased to 0.39% from 0.47%. The average lending rate for new mortgages was steadily low at around 1.95% in the second half.

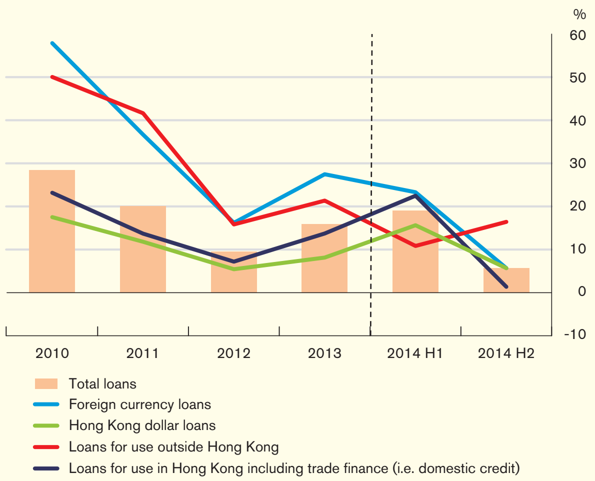
Chart 4.8
Hong Kong dollar interbank interest rates and yield of 10-year Exchange Fund Note



Sources: CEIC and HKMA.

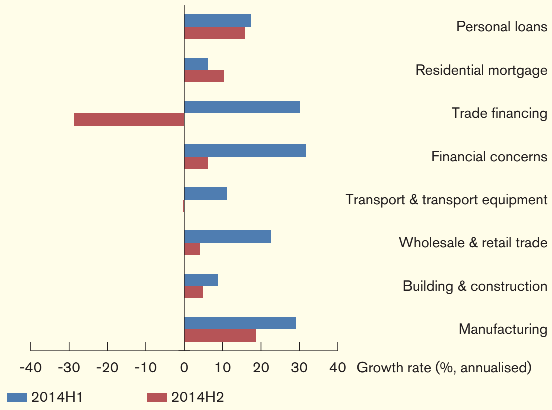
While the interest rates remained at low levels, loan growth decelerated quite noticeably, in part due to somewhat weaker credit demand and the effect of prudential measures in place. The annualised growth rate of total loans and advances slowed to 5.7% in the second half from 19.1% in the first half (Chart 4.9). Both Hong Kong dollar and foreign currency loans recorded slower increases. Analysed by territorial usage, domestic credit (including trade finance) saw a sharp deceleration in growth, to 1.4% (annualised) in the second half from 22.6% in the first half. On the other hand, growth in loans for use outside Hong Kong accelerated to 16.5% (annualised). For 2014 as a whole, total loan growth moderated to 12.7% from 16.0% in 2013.

Chart 4.9
Loan growth



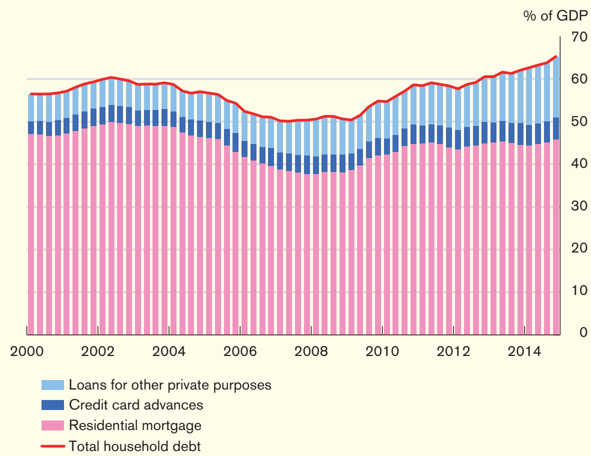
Note: Growth rates in 2014 H1and H2 are annualised.
Source: HKMA.

Chart 4.10
Loans for use in Hong Kong by sector



Source: HKMA.

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

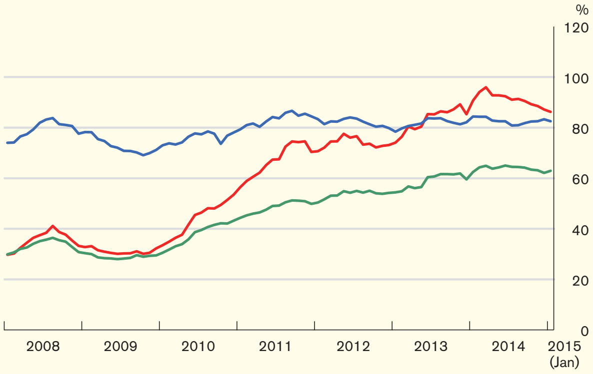


Note: Only borrowings from AIs are covered.
Source: HKMA.

Within domestic credit, trade finance dropped sharply by 28.6% (annualised) in the second half of the year, while loans to other major business sectors saw various degrees of growth moderation (Chart 4.10). In particular, loans to financial concerns and wholesale and retail trade only increased slowly after strong growth in the first half. Household debt however continued to increase quite rapidly. Growth in personal loans (which comprise credit card advances and loans for other private purposes) remained fast at an annualised 15.7% in the second half. Moreover, along with more active property transactions, growth in mortgage loans picked up to an annualised 10.3% from 6.1% in the first half. As a result, the household debt-to-GDP ratio rose to 65.3% at the end of 2014 (Chart 4.11).

Reflecting slower credit demand and partly the effect of the Stable Funding Requirement (SFR)[22], banks' funding conditions have generally improved. The Hong Kong dollar loan-to-deposit ratio remained largely steady at around 82.0% in the second half of 2014, while the US dollar loan-to-deposit ratio levelled off from 92.4% at the end of June to 87.2% at the end of December (Chart 4.12).

Chart 4.12
Loan-to-deposit ratios



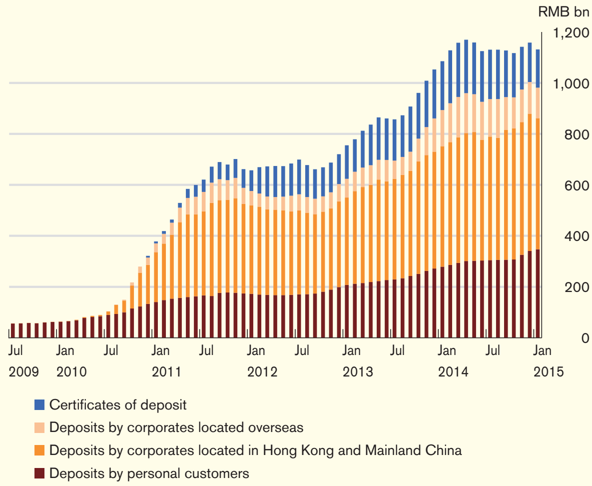
Source: HKMA.

While credit growth slowed and banks' funding conditions showed signs of improvement, there continue to be incentives for excessive borrowing as monetary conditions in Hong Kong would likely stay accommodative in the short term. However, the imminent end to the historically low interest rate environment in the US and hence Hong Kong is one of the key risk factors. When the US policy interest rate rises, monetary conditions in Hong Kong would inevitably tighten. Banks' funding pressures would increase, while the non-bank private sector could be subject to the risk of credit and liquidity squeeze.

Offshore renminbi banking business

The offshore renminbi banking business in Hong Kong maintained solid growth in the second half of 2014. The liquidity pool expanded further, with the total outstanding amount of customer deposits and certificates of deposit (CDs) rising to RMB1,158.3 billion at the end of 2014, up 3.0% (not annualised) from six months earlier and 10.0% year-on-year (Chart 4.13 and Table 4.B). Out of the total, customer deposits recorded robust growth in the second half, with personal deposits increasing visibly after the removal of the daily conversion limit of RMB20,000 for Hong Kong residents in November. Moreover, deposits by corporate customers grew steadily in the second half. However, the amount of outstanding CDs declined as major Chinese banks reduced CD issuance. Meanwhile, the outstanding amount of renminbi bank loans expanded by 34.8% (not annualised) in the second half of 2014.

Chart 4.13
Renminbi deposits and CDs in Hong Kong

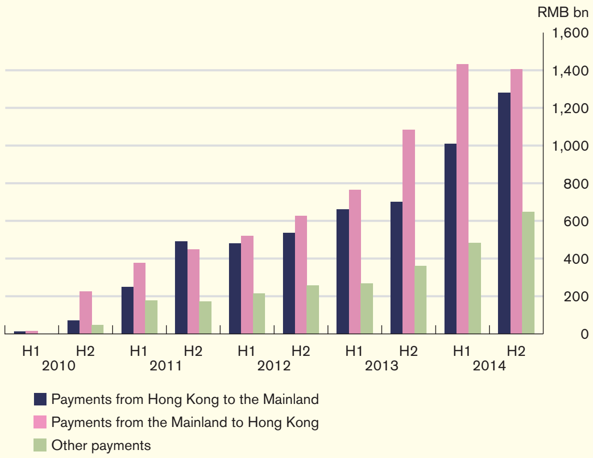


Source: HKMA.

22 The HKMA introduced the Stable Funding Requirement (SFR) in October 2013 requiring AIs with significant loan growth to ensure adequate stable funding to support their lending business from 2014 onwards. In November 2014, the HKMA announced some refinements of the SFR, which among others, change the loan growth threshold and the frequency of review and report submission with effect from 2015.

Renminbi trade settlement maintained a strong growth momentum, with transactions handled by banks in Hong Kong totalling RMB3,332.1 billion in the second half, an increase of 13.9% (not annualised) from the first half and 55.3% from the same period a year earlier (Chart 4.14 and Table 4.B). Outward remittances to Mainland China continued to grow at a fast pace in the second half, while inward remittances to Hong Kong levelled off. Hong Kong's position as a global hub for offshore renminbi clearing and settlement has further strengthened, with the average daily turnover of renminbi real time gross settlement (RTGS) system climbing to RMB732.7 billion in 2014 from RMB395.4 billion in 2013.

Chart 4.14
Flows of renminbi trade settlement payments



Source: HKMA.

As an important milestone in Mainland China's capital account liberalisation process, the Shanghai-Hong Kong Stock Connect (SHKSC) was launched on 17 November 2014 to allow international investors to invest in the Mainland A-share market through Hong Kong, and Mainland investors to trade Hong Kong shares through Shanghai. On the same day, the renminbi daily conversion limit for Hong Kong residents was removed, making it more convenient for Hong Kong residents to participate in renminbi financial transactions.[23] The HKMA also introduced several measures to facilitate banks' management of renminbi liquidity and strengthen market infrastructure to facilitate offshore renminbi activities.[24] Overall, these initiatives are conducive to the further development of offshore renminbi business in Hong Kong and will strengthen Hong Kong's role as the premier offshore renminbi business centre.

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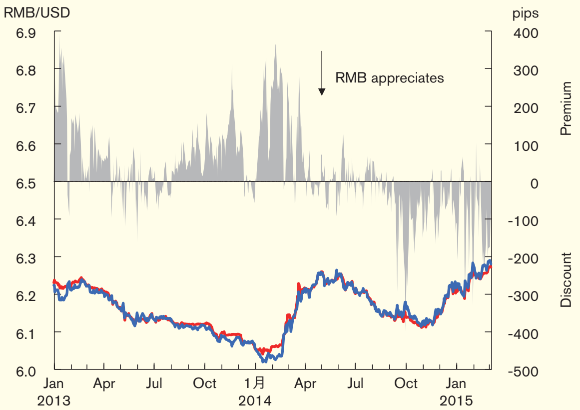
23 The daily conversion limit of RMB20,000 for Hong Kong residents has been removed with effect from 17 November 2014. Under the new arrangement, banks will square their positions arising from RMB conversions conducted with Hong Kong residents in the offshore market instead of the onshore market. Meanwhile, the restrictions on renminbi cashnote conversions and banks' renminbi lending to Hong Kong residents have been lifted.

24 Starting from 10 November 2014, the HKMA offers intraday renminbi funds of up to RMB10 billion to banks participating in renminbi business in Hong Kong. The HKMA has also designated seven banks as Primary Liquidity Providers in October 2014. With access to a dedicated repo facility provided by the HKMA, the Primary Liquidity Providers pledged to expand their market-making activities in Hong Kong and use the Hong Kong platform in promoting their global offshore renminbi business.

Broadly tracking the movements of the onshore renminbi exchange rate (CNY), the Hong Kong offshore renminbi exchange rate (CNH) weakened against the US dollar in late 2014 and early 2015 amid the broad strength of the US dollar (Chart 4.15). The CNH showed slightly more volatility in daily movements than the CNY. Its spread vis-à-vis the CNY has also turned to a discount since September and once widened to over 300 pips in October 2014 and again in January 2015. Generally following the trend of the onshore interbank rates, the CNH interbank liquidity saw some signs of tightening in the second half and recent months, with the three-month CNH HIBOR rising from around 3% at the end of June 2014 to 4.21% at the end of February 2015. This was partly attributable to increased funding demand along with expansion in renminbi transactions, as well as seasonal liquidity demand around the year end and ahead of the Chinese New Year Holidays.

Chart 4.15
Onshore and offshore renminbi exchange rates



Source: Bloomberg.

Table 4.B
Offshore renminbi banking statistics

	2013	2014
Renminbi deposits & certificates of deposit (CDs) (RMB bn)	1,053.0	1,158.3
Of which:		
Renminbi deposits (RMB bn)	860.5	1,003.6
Non-Hong Kong residents' renminbi deposits (RMB bn)	19.0	30.8
Share of renminbi deposits in total deposits (%)	12.0	12.4
Renminbi certificates of deposit (CDs) (RMB bn)	192.5	154.7
Renminbi trade settlement in Hong Kong (RMB bn)	3,841.0	6,258.3
Of which:		
Inward remittances to Hong Kong (RMB bn)	1,848.9	2,837.8
Outward remittances to Mainland China (RMB bn)	1,362.9	2,289.3
Ratio of inward to outward remittances to Mainland China	1.4	1.2
Renminbi outstanding loans (RMB bn)	115.6	188.0
Number of participating banks in Hong Kong's renminbi clearing platform	216	225
Turnover in Hong Kong's RMB RTGS system (Daily average during the period; RMB bn)	395.4	732.7
Amount due to overseas banks (RMB bn)	166.0	145.2
Amount due from overseas banks (RMB bn)	164.5	193.3

Source: HKMA.

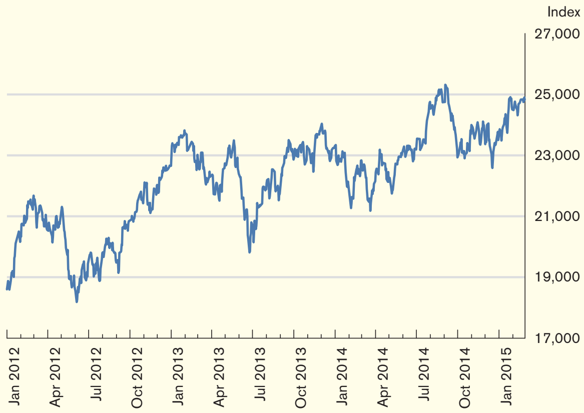
Asset markets

The local equity market has taken a roller coaster ride over the past six months amid increased uncertainties over the external environment. Reflecting this, the option-implied volatility of local equities once rose to a 16-month high before a noticeable downward trend started in late-December. The Hong Kong dollar debt market contracted slightly despite the growth in issuance, while the offshore renminbi debt market has continued its rapid expansion with increased product diversity. The residential property market turned more active with the support of the ongoing low interest rate environment and a tight demand-supply balance.

4.3 Equity market

Reflecting a volatile external and domestic environment, the equity market in Hong Kong has experienced significant swings over the past six months. Right after the last summer break, renewed concerns over the US monetary normalisation process, coupled with weaker-than-expected economic indicators of Mainland China, triggered a selloff in local equities. In September, the equity market posted the worst monthly performance in more than two years, with the Hang Seng Index (HSI) falling by 7.9% (Chart 4.16). Prices came under further pressure in early-December amid sustained weakness of oil prices that aroused concerns about an imminent global economic slowdown. Nevertheless, buoyed by encouraging US economic data and the Fed's commitment to be "patient" about raising interest rates, the local equity market, managed to pare loss by the end of 2014 and continued to gain momentum in 2015 in the wake of the ECB's quantitative easing program starting from March 2015.

Chart 4.16
Equity prices in Hong Kong

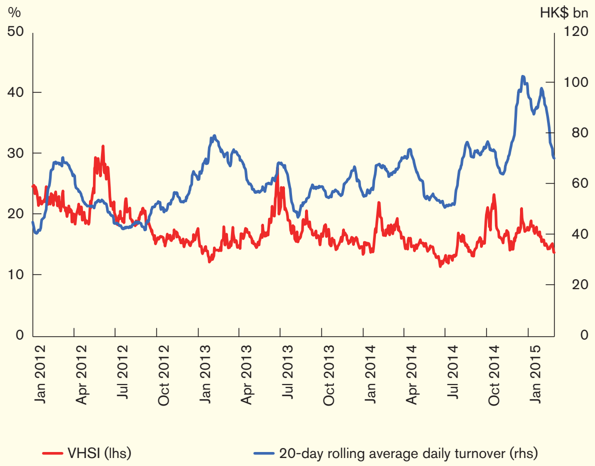


Source: Bloomberg.

Overall, the HSI increased slightly by 0.33% from September 2014 to February 2015, whereas the Hang Seng China Enterprises Index, riding the back of the monetary policy easing cycle on the Mainland, increased by 11.15%. In view of a deteriorating external environment, the option-implied volatility of the HSI (VHSI) touched its 16-month high in October and moved above the 20 mark again in mid-December (Chart 4.17).

Since then, the VHSI has been on a downward path, which is arguably attributable to the recent wave of policy easings by central banks around the world.[25] Meanwhile, trading activities in the equity market surged in the second half of 2014, with the average daily turnover of local equities standing at HK$75,137.7 million over the period.

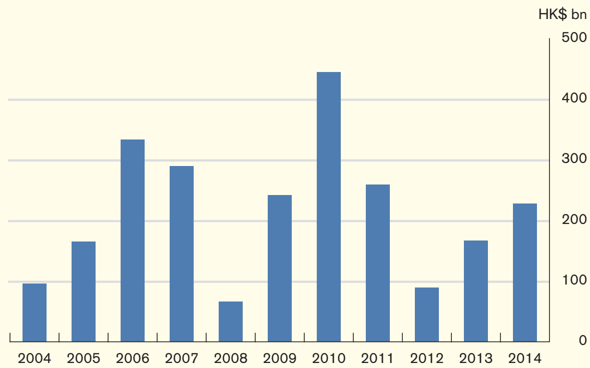
Chart 4.17
Option-implied volatility of the HSI (VHSI) and average daily turnover of the equity market



Sources: Bloomberg.

In the primary market, fund-raising activities in Hong Kong continued to see solid growth in 2014 (Chart 4.18). Despite the slowdown in the three months ended November, the IPO market recorded a strong rebound in December, helping Hong Kong secure the second place in global IPO rankings of the year. Throughout the year, funds raised from IPOs amounted to HK$227.7 billion, representing a 36.8% increase from 2013.

Chart 4.18
The IPO market in Hong Kong

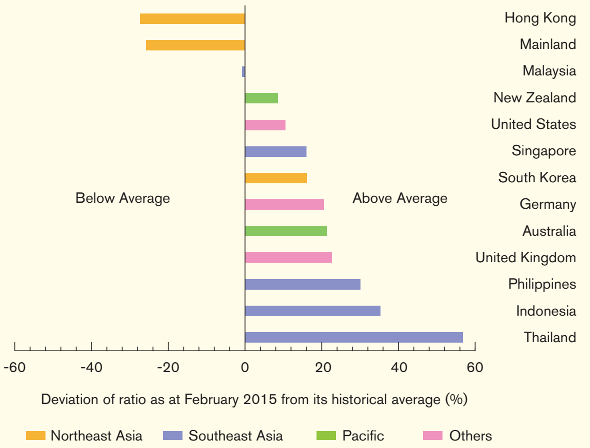


Source: CEIC.

Looking ahead, given the low valuations historically and comparatively in the region, the local market should be resilient to minor setbacks (Chart 4.19). The launch of the Shanghai-Hong Kong Stock Connect last November should benefit the local equity market in the medium term, though it may take some time for market participants to get familiar with the scheme. This important infrastructure will be key to broadening the market's investor base and deepening its integration with the Mainland. That said, trading is likely to be volatile in view of an uncertain global market outlook. In particular, risks of tightening monetary conditions from expected Fed rate hikes and concerns over a global economic slowdown will no doubt cast a shadow on local equity prices. All these suggested that the equity market is unlikely to have a smooth ride for the rest of the year.

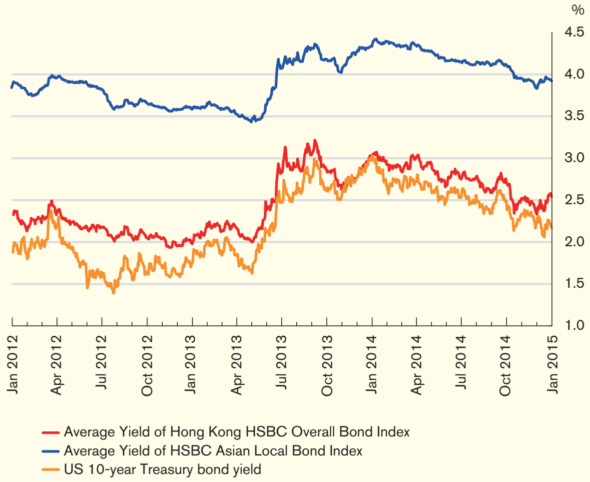
[25] Rey (2013), "Dilemma not Trilemma: The Global Financial Cycle and Monetary Policy Independence," Jackson Hole Economic Symposium, showed that market volatility tends to move in tandem with monetary policy shocks.

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



Sources: Bloomberg, CEIC and HKMA staff estimates.

Chart 4.20
Average yields of Asian and Hong Kong Local Bonds and US 10-year Treasury bond yield

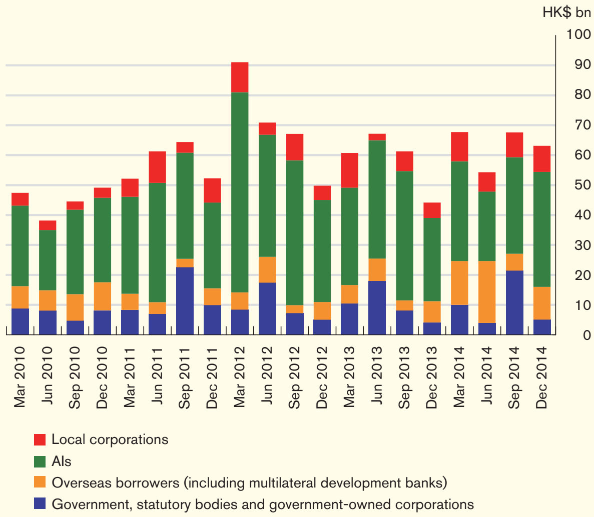


Source: Bloomberg.

4.4 Debt market

Amid heightened volatility in global financial markets, safe-haven demand and favourable inflation outlook pushed US Treasury yields lower in the second half of 2014 despite the end of the Fed's quantitative easing programme in October 2014 (Chart 4.20). Domestic bond yields fell along with those in the US, leading to an increase in primary market activities by the private sector. New debt issued by the private sector jumped by 10.0% to HK$210.9 billion in 2014 (Chart 4.21).[26&27] Meanwhile, the public sector also issued 2.5% or HK$53.6 billion more debt.[28] Overall, total issuance registered a 3.1% growth to HK$2,430.0 billion in 2014. Separately, to further promote the development of the Hong Kong dollar debt market, the HKMA introduced two measures in December 2014, namely, streamlining the tenors of Exchange Fund Notes and Government Bonds (GBs), and the introduction of a discount facility for GBs. By eliminating the overlap of the two types of bonds in longer tenors, the measures aimed at helping establish a single benchmark yield curve for the local currency debt market.

Chart 4.21
New issuance of non-Exchange Fund Bills and Notes Hong Kong dollar debt



Source: HKMA.

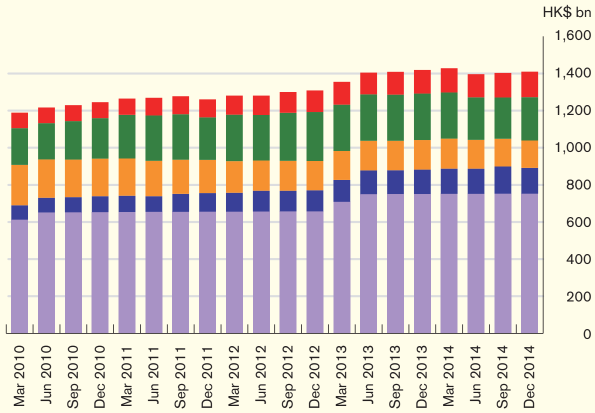
[26] Private sector comprises banks, local corporations and overseas borrowers excluding multilateral development banks (MDBs).

[27] In 2014, issuance by non-MDB overseas borrowers and local corporations surged by 118.5% and 30.1% year on year to HK$50.5 billion and HK$33.3 billion respectively. Banks, however, issued 11.1% less debt than 2013 at HK$127.1 billion.

[28] Issuance by statutory bodies/government-owned corporations declined significantly by 9.5% year on year to HK$9.6 billion, while new debt issued by the Exchange Fund and the Government rose by 2.5% and 2.7% from the preceding year to HK$2,177.3 billion and HK$30.8 billion respectively. Of the total issuance, 89.6% was accounted for by Exchange Fund papers.

With more debt maturing than issued, the Hong Kong dollar debt market saw its outstanding balance falling year-on-year for the third consecutive quarter in the fourth quarter of 2014. At the end of the year, outstanding Hong Kong dollar debt securities stood at HK$1,409.8 billion, down by 0.7% from a year earlier (Chart 4.22). The decline was mainly driven by a reduction of 2.8% in private sector debt outstanding, which more than offset the mild increase of 1.0% in outstanding debt issued by the public sector.

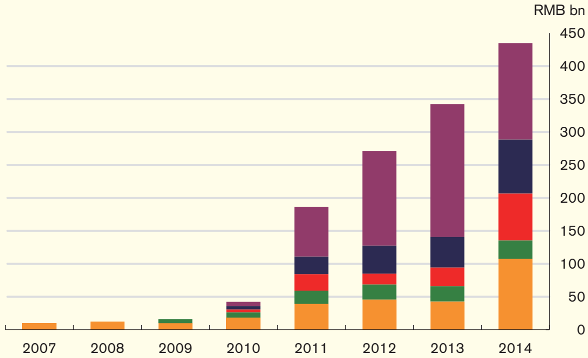
Chart 4.22
Outstanding Hong Kong dollar debt



Source: HKMA.

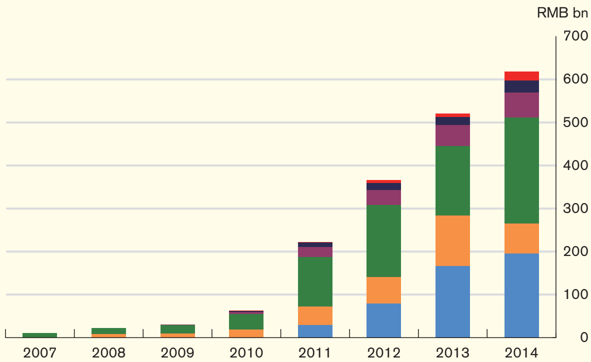
Meanwhile, issuance in the offshore renminbi debt market remained vibrant.[29] Although primary market activities slowed in the second half of 2014, total issuance of offshore renminbi debt securities registered a significant growth of 27.0% to RMB434.7 billion in 2014 (Chart 4.23). In particular, non-Certificate of Deposit (CD) debt issuance reached RMB288.5 billion, more than double the amount recorded in 2013. New debt issued by private Mainland corporations continued to grow despite a slowing economy. In 2014, non-CD debt securities issued by private Mainland issuers reached RMB107.6 billion, up considerably by 150.3%. Hong Kong issuers also contributed significantly to the rapid growth, issuing RMB42.4 billion or 148.4% more debt than in 2013. Strong issuance pushed outstanding amount of offshore renminbi debt securities 18.8% higher year-on-year to RMB618.1 billion as at end-December 2014 (Chart 4.24).

Chart 4.23
New issuance of offshore renminbi debt securities



Sources: Newswires and HKMA staff estimates.

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



Sources: Newswires and HKMA staff estimates.

29 Our figures include offshore renminbi debt securities that are issued in Hong Kong or without a specified country of issuance.

Apart from issuance, last year also saw increased product diversity in the offshore renminbi debt market. For instance, the United Kingdom issued its first sovereign renminbi bond, while a bank issued its first contingent convertible capital renminbi debt security, which also happened to be the largest private offshore renminbi debt issue on record.[30] These issues should help deepen the market and expand investor base.

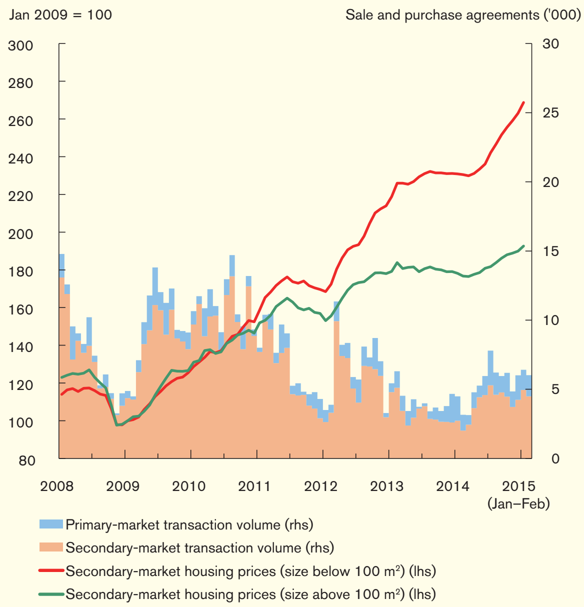
Looking ahead, the market is expected to expand steadily this year. While concerns over the weakening of the currency against the US dollar and the economic slowdown on the Mainland may continue to weigh on investor sentiment, the relatively higher yield of offshore renminbi debt securities is likely to remain attractive to investors. This, coupled with the increasing use of the renminbi in trade and financial transactions outside Mainland China and strong refinancing needs of the market, may lend support to issuance in the coming year (Chart 4.24).[31]

4.5 Property markets

Residential property market

The residential property market turned more active in the second quarter of 2014 and remained buoyant for the rest of the year with the support of the ongoing low interest rate environment and a tight demand-supply balance. For the whole of 2014, transaction volume bounced up by 25.9% to 63,807 units from a record low of 50,676 in 2013, though still lagged behind the high levels in 2010-12 (Chart 4.25). The pick-up was mainly driven by primary-market transactions, which jumped by 52.6% to a seven-year high of 16,857 units and accounted for 26.4% of total transactions, up from 21.8% in 2013. Secondary-market transactions increased by 18.5% from 2013 but remained 31.3% below the level in 2012. On the other hand, with the Government's demand-management measures still in place (in the form of higher stamp duties), speculative and investment activity such as confirmor transactions, short-term flipping trades and company holdings remained weak (Chart 4.26).

Chart 4.25
Residential property prices and transaction volume



Sources: Rating and Valuation Department (R&VD) and Land Registry.

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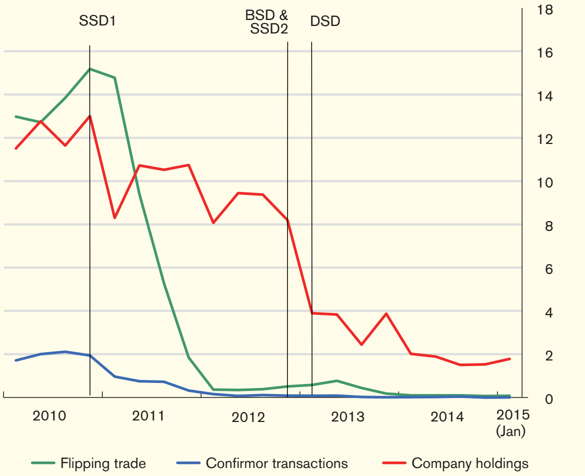
30 The bank issue was also the first offshore renminbi debt security qualified as Additional Tier 1 capital under the Basel III framework.

31 The renminbi has become the fifth most used payment currency in December 2014 according to the Society for Worldwide Interbank Financial Telecommunication (SWIFT).

Chart 4.26
Confirmor transactions, flipping trade and company purchasers



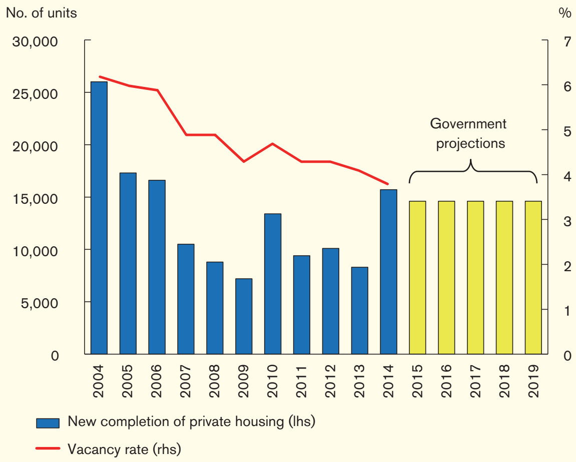
Note: SSD1 and SSD2 refer to Special Stamp Duties introduced in November 2010 and October 2012, respectively; BSD refers to Buyer Stamp Duty introduced in October 2012; DSD refers to doubling of the ad valorem stamp duty introduced in February 2013.
Source: Centaline Property Agency Limited.

Meanwhile, after holding flat for about a year, housing prices have picked up visibly since the second quarter of 2014. This brought the full-year price increase to 13.5%, compared with 7.7% in 2013. The resurgence was most notable in the segment of small and medium-sized flats (with saleable area of less than 100 m^2), while prices of large flats (with saleable area of at least 100 m^2) saw slower increase. Anecdotal information shows that the price premium of new flats over second-hand flats has widened slightly. In early 2015, housing prices continued to rise at a fast pace as indicated by the Centa-City Leading Index, while transactions remained firm before easing in February in part due to seasonal distortions of the Chinese New Year holidays.

In the leasing market, housing rentals rose faster at 6.1% in 2014, compared with 3.4% in 2013. But given a much faster increase in housing prices, the average rental yield edged down to a record low of 2.7% in December, and its spread with the 10-year Government Bond yield declined to a recent low, suggesting strong risk appetite for residential properties.

Overall, the balance of housing demand and supply remained tight, with the vacancy rate falling to 3.8% at the end of 2014, compared with the long-term average of 5.1% over 1994-2013 (Chart 4.27). The increase in new completion of private housing, by almost 90% to 15,700 units in 2014, was from a low base and still below the pace of household formation. For the five years from 2015 to 2019, the Government projects new completion at an average of 14,600 units per year.

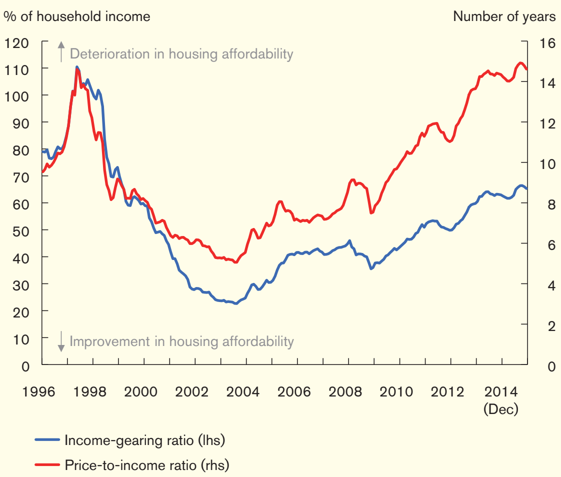
Chart 4.27
Private flat completion



Sources: R&VD, Transport and Housing Bureau, and the 2015 Policy Address by the Chief Executive of the Hong Kong SAR Government.

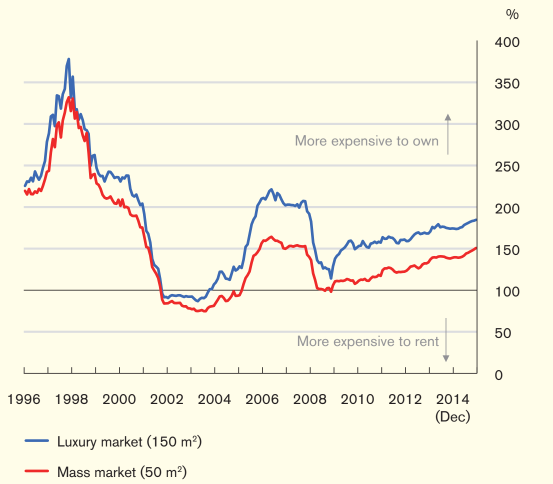
Given the latest market developments, housing affordability has become a lot more stretched relative to household income and the risk of overheating has increased. The housing price-to-income ratio rose to a record high of 14.8 in the fourth quarter of 2014 compared with the 1997 peak of 14.6, while the income-gearing ratio climbed higher to 65.9%, a level well above the long-term average of 50% (Chart 4.28).[32] Moreover, the income gearing ratio is highly sensitive to the interest rate level. If the interest rate returned to a more normal level, say rising by 300 basis points, the income gearing ratio would have soared to 86.0%. As a measure of the relative cost of owning than renting a flat, the buy-rent gap widened further (Chart 4.29).[33]

Chart 4.28
Indicators of housing affordability



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

Chart 4.29
Buy-rent gap



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

Following the past six rounds of prudential tightening, the average loan-to-value (LTV) ratio for new mortgage loans has declined to around 55% and the debt servicing ratio (DSR) to 35%. In view of the renewed signs of overheating in the property market, coupled with the increasing household indebtedness, the HKMA introduced a new round of prudential measures in late February 2015, including lowering the LTV ratio cap, the maximum DSR and the stressed DSR limit for residential mortgages.[34] These measures aim to strengthen the risk management of banks in relation to their mortgage lending business and to enhance borrowers' ability to cope with the impact in the event of a property market downturn. At the same time, banks using the Internal Ratings-Based (IRB) approach are required to apply a 15% risk-weight floor to their entire residential mortgage portfolios before the

[32] The price-to-income ratio measures the average price of a typical 50 m² 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 50 m² flat (under a 20-year mortgage scheme with a 70% loan-to-value 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 cap by the HKMA prudential measures.

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

[34] The maximum LTV ratio for self-use residential properties with value below HK$7 million is lowered by a maximum of 10 percentage points. Also, the maximum DSR for mortgage loans to borrowers who acquire their second residential property for self-use is reduced to 40% from 50%. At the same time, the stressed-DSR cap is lowered correspondingly to 50% from 60%. Furthermore, for mortgage loans of all types of non-self-use properties, the maximum DSR is lowered to 40% from 50%, and the stressed-DSR cap to 50% from 60%.

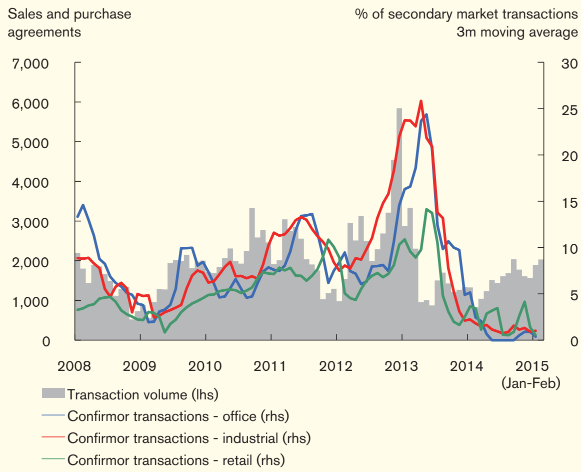
end of June 2016.[35] In early March, the HKMA further tightened the DSR caps for mortgages that require co-financing or mortgage insurance schemes and put banks under more stringent supervisory requirements if they lend to money lenders that engage in the business of mortgage finance.[36]

The outlook for the residential property market will depend on a host of factors including interest rate movements, housing supply conditions, and the global and domestic growth prospects. In particular, when the Fed starts raising the policy interest rate, monetary conditions in Hong Kong would inevitably tighten and this would dampen housing demand and put housing prices under pressure. The overall effect would also hinge on the pace and timing of the rate hikes and the associated financial market responses, which remain highly uncertain. In any case, along with the rise in interest rates, debt repayment and servicing burden would increase (e.g. by an estimated 30.5% for a 20-year mortgage under the assumption of a 300-basis-point rate hike). It should also be noted that rate hikes will not be one-off but in multiple rounds in the coming cycle.

Commercial and industrial property markets

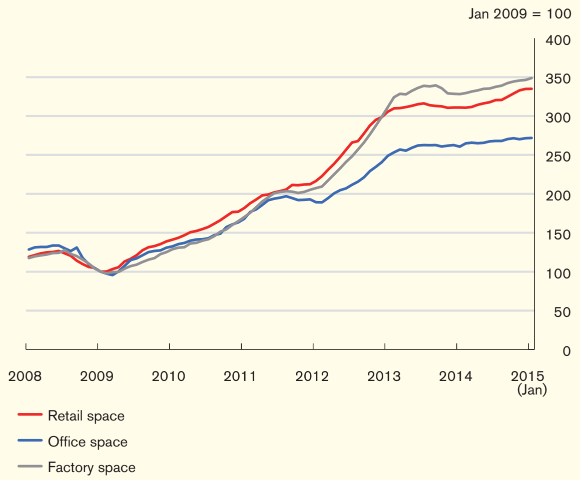
Sentiments in the commercial and industrial property markets also improved gradually. Transaction volume picked up from the lows in the first quarter to an 18-month high in September and stayed firm recently. But given the weak start, transaction volume was still 10.8% lower than in 2013 and remained at relatively low levels by historical standards (Chart 4.30). Speculative activity remained broadly muted, except that confirmor transactions of retail space picked up modestly in recent months (Chart 4.30). Sale prices of office space recorded moderate gains of 3.4% for 2014 as a whole, while sale prices of flatted factories and retail space rose by a faster 5.4% and 7.7% respectively (Chart 4.31). Rentals increased roughly at the same pace as sale prices, and rental yields stayed steadily low at 2.4-2.9%. Looking ahead, the major headwinds for the commercial and industrial property market are interest rate hikes and softening of rental earnings that could bring down capital values.

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.

[35] The 15% risk-weight floor was only applicable to new residential mortgage loans, not the entire residential mortgage portfolios as required under the new arrangement. In the interim, banks need to achieve a 10% risk-weight floor to their entire residential mortgage portfolios by the end of June 2015.

[36] When mortgage applicants seek additional financing that results in total mortgage finance amounting to more than 20% over the normal permissible LTV ceilings, there requires a 5-percentage-point knock down on the applicable DSR caps.

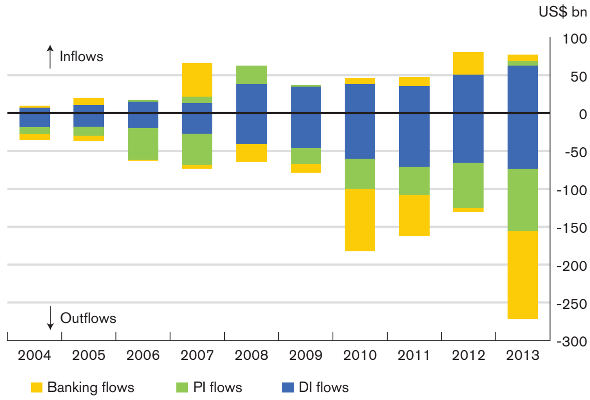
Box 4
Bilateral capital flows with Mainland China: Implications for Hong Kong's real economy

Amid the growing economic integration with Mainland China, Hong Kong's bilateral capital flows with Mainland China have increased at a phenomenal rate, whether in terms of direct investment, portfolio investment or banking flows. This Box studies the recent developments of these different types of bilateral flows with Mainland China and analyses how these flows can affect Hong Kong's real economic activities. Apart from bilateral capital flows, this Box also explains how investment flows intermediated by Hong Kong between Mainland China and the rest of the world translate into real economic activities in Hong Kong.

The trends and nature of bilateral capital flows with Mainland China

While a full set of bilateral capital flows data between Hong Kong and Mainland China under the Balance of Payments (BoP) framework is not available from official sources, some of the major components and sub-components under direct investment (DI), portfolio investment (PI) and banking flows are available or can be estimated by statistical methods. Our estimates of the bilateral capital flows statistics for the period from 2004 to 2013 are presented in Charts B4.1 to B4.4. In line with common perception, gross capital flows between Hong Kong and Mainland China have increased significantly (Chart B4.1). Analysed by various types of capital flows, DI used to be the only major driver behind the overall bilateral flows, but PI and banking flows have increasingly taken shape along with Mainland China's capital account liberalisation process. Nevertheless, capital outflows from Hong Kong to Mainland China remain generally larger than inflows from the other way round.

Chart B4.1
Selected bilateral capital flows between Hong Kong and Mainland China



Notes: Rough and incomplete estimates based on DI, PI and selected banking flows. A positive value indicates an inflow to Hong Kong (an increase in Hong Kong residents' external financial liabilities or a decrease in Hong Kong residents' external financial assets) while a negative value indicates an outflow to Mainland China (an increase in Hong Kong residents' external financial assets or a decrease in Hong Kong residents' external financial liabilities).

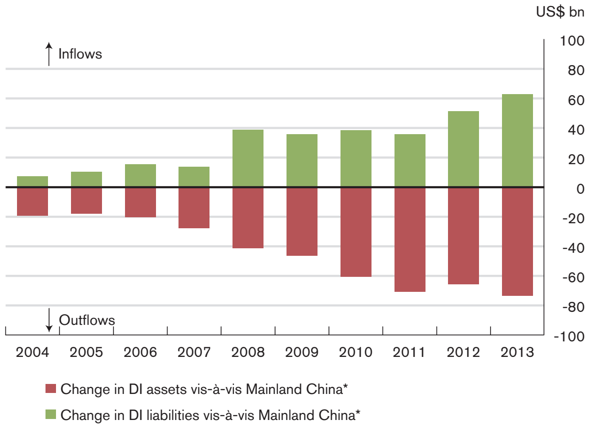
Source: HKMA staff estimates.

a) DI flows

In the past decade, gross DI inflows from Mainland China to Hong Kong expanded from about US$7 billion to over US$60 billion (Chart B4.2).[37] These DI activities involved setting up of new businesses and acquisitions, in sectors such as leasing and commercial services, wholesale and retail trade, and banking and insurance. Gross DI outflows from Hong Kong to Mainland China were even larger, rising from about US$20 billion to over US$70 billion. These DI outflows were mainly in the form of industrial investment to develop processing trade business but have been geared more towards Mainland China's domestic market over the past decade, with the bulk of DI outflows now channelling to information and communication, investment and holding, real estate and professional and business services.

[37] DI inflows are based on Mainland China data published by the Ministry of Commerce.

Chart B4.2
Bilateral DI flows between Hong Kong and Mainland China



Note: * A positive value indicates an inflow to Hong Kong while a negative value indicates an outflow to Mainland China.
Source: The Ministry of Commerce.

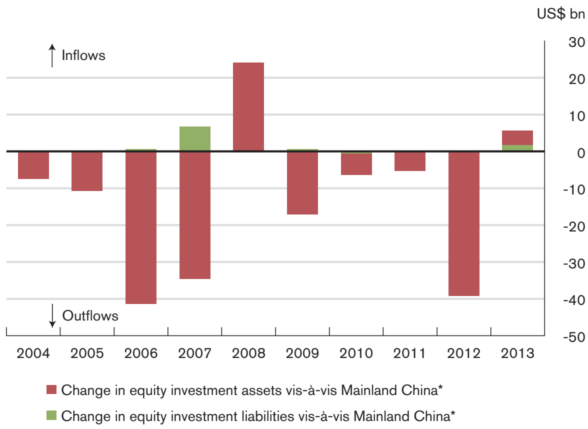
b) *PI flows*

Gross PI inflows from Mainland China to Hong Kong remained relatively small (Chart B4.3).[38] Among the total, it is estimated that equity PI inflows into Hong Kong were first recorded in 2006 and averaged only less than US$4 billion a year in the period to 2013. The main investment channels are through the Qualified Domestic Institutional Investor (QDII) scheme and more recently the Shanghai-Hong Kong Stock Connect (SHKSC), but they are all subject to quotas. Debt PI inflows were also small at less than US$2 billion a year, according to our estimates based on the QDII data.

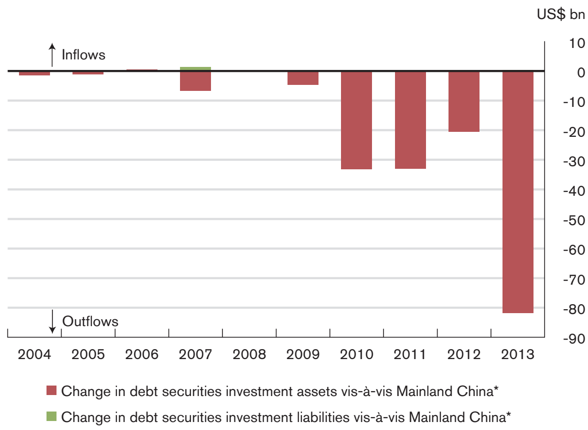
On the other hand, PI outflows have broadly increased on the back of vibrant Mainland-related equity fundraising and debt issuance activities. Equity PI outflows averaged about US$13 billion a year in 2004-13. Nowadays, such outflows include Hong Kong residents' investment through the Qualified Foreign Institutional Investor (QFII) scheme, RMB QFII scheme and the SHKSC. The subscriptions for H-share IPO by local residents are also treated as equity PI outflows because they involve transactions between residents and non-residents. Debt PI outflows were negligible in the past but have risen to over US$20 billion a year since 2010, due partly to the increased issuance of dim sum bonds in Hong Kong and the launch of a pilot scheme for eligible local institutions to invest in the Mainland's interbank bond market.

Chart B4.3
Bilateral PI flows between Hong Kong and Mainland China

a) PI: Equity investment



b) PI: Debt securities investment



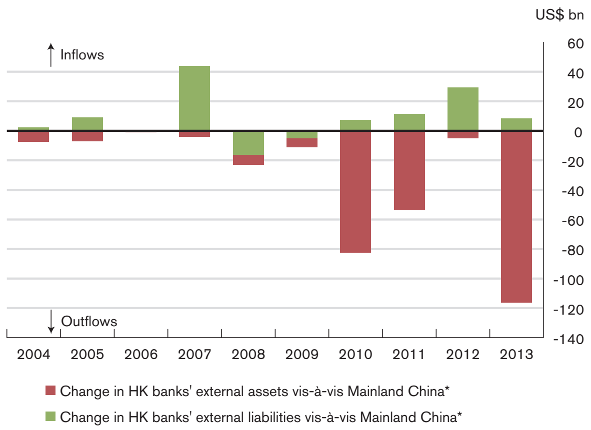
Note: * A positive value indicates an inflow to Hong Kong while a negative value indicates an outflow to Mainland China.
Source: HKMA staff estimates.

[38] PI outflows are estimated using Hong Kong PI stock data from the IMF's Coordinated Portfolio Investment Survey while inflows are mainly from QDII data by applying a proportion for Hong Kong drawn from Yao and Wang (2012) "What are the Challenges and Problems Facing China's Outward Portfolio Investment: Evidence from the Qualified Domestic Institutional Investor Scheme." HKIMR Working Paper No. 31/2012.

c) Banking flows

Gross banking inflows from Mainland China to Hong Kong have been fairly volatile, averaging around US$9 billion a year in 2004-13 possibly driven by Mainland customers' deposits in Hong Kong and Mainland banks' lending to local banks (Chart B4.4). In contrast, with the rise of local banks' Mainland-related lending, gross banking outflows from Hong Kong to Mainland China have expanded markedly from an average of around US$5 billion a year in 2004-09 to over US$60 billion in recent years.[39]

Chart B4.4
Bilateral banking flows between Hong Kong and Mainland China



Notes: * A positive value indicates an inflow to Hong Kong while a negative value indicates an outflow to Mainland China. See also footnote 39.
Source: HKMA staff estimates.

How do bilateral capital flows translate into Hong Kong's real economic activities?

Hong Kong's bilateral capital flows with Mainland China are underpinning local real economic activities in a number of ways. While the effect of DI flows is rather straight forward (mainly in terms of new business start-ups, job creation and capital investment), the way in which PI flows and banking flows interact with economic activities is a lot more complicated. In the following section, we focus on how these bilateral flows translate into local real activities through the channels of trade in financial services and external income flows as captured in the Gross National Income (GNI) statistics.

a) Trade in financial services

Hong Kong's bilateral capital flows with Mainland China, which are transactions in financial assets and liabilities between Hong Kong residents and Mainland residents, involve the provision and purchase of financial services by Hong Kong and are recorded as exports and imports of financial services respectively.

Broadly speaking, PI inflows are associated with exports of financial services while PI outflows are associated with imports of financial services. The financial services provided include brokerage services, fund management services and other financial intermediation services incurred in the transactions. For instance, when Mainland residents invest in equities, bonds and investment funds in Hong Kong's capital markets, the earnings of local brokers and intermediaries are recorded as Hong Kong's exports of financial services. On the opposite side, when Hong Kong residents invest in the Mainland capital markets, the earnings of Mainland brokers and intermediaries from the PI outflows are treated as imports of financial services.

However, it is worth noting that a large part of PI outflows are related to Hong Kong residents buying H-shares and dim sum bonds being offered locally in Hong Kong, which also generate exports of financial services from Hong Kong. Well before these PI outflows would occur, there are H-share listing, placements and debt issuances by Mainland entities, which would create underwriting and corporate finance

[39] Specific details in Hong Kong banks' external claims and liabilities vis-à-vis Mainland China are used as proxy for banking flows. Still, due to data limitation, some banking flows such as Mainland banks' lending to Hong Kong non-banks are excluded.

business for local banks and financial companies, with earnings from these activities contributing to exports of financial services from Hong Kong.

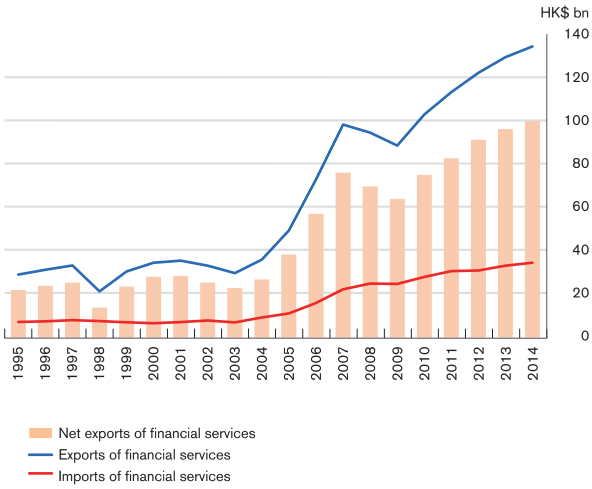
More importantly, transactions between Mainland entities and other non-residents through Hong Kong can also create value-added to GDP as Hong Kong's services earnings, given the unique Mainland China dimension in Hong Kong's capital markets. However, these capital flows are not reported under the BoP framework. In the equity market, for example, Mainland-related enterprises account for more than 50% of Hong Kong's total stock market capitalisation, and overseas investors (mainly from the US, the UK and Continental Europe) made up 46% of total market turnover in 2013, according to the Cash Market Transaction Survey conducted by the Hong Kong Exchanges and Clearing Limited (HKEx). Increased equity and debt security investment by these overseas investors has also contributed to a sharp increase in Hong Kong's exports of financial services.

The SHKSC pilot scheme, which allows both Hong Kong and overseas investors to trade selected Shanghai-listed stocks in Hong Kong, provides another good example of how PI flows can support Hong Kong's financial services exports. Obviously, southbound trade by Mainland residents can generate brokerage fees and levies earned by Hong Kong as exports of financial services. Moreover, while northbound trade by Hong Kong residents causes import leakages, brokerage services provided in Hong Kong to facilitate overseas investors' northbound trade are additional boosts to Hong Kong's financial services exports. As such, while the gross turnover of northbound trade is generally larger than southbound trade, import leakages from Hong Kong will be offset by financial services exports due from Mainland and overseas investors.

With regard to banking flows, their contribution to the Hong Kong economy's value-added comes in the form of banks' earnings from providing financial intermediation services, particularly through interest margins for loans provided to Mainland entities. Interestingly, such loans are recorded as banking outflows but they contributed to Hong Kong's financial services exports. In fact, recent years saw a notable increase in Hong Kong banks' loan outflows arising from Mainland-related lending.

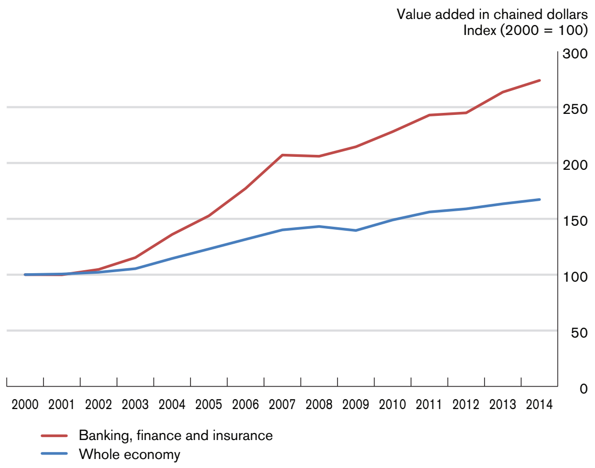
Overall, these developments are reflected in the rising trend of Hong Kong's net exports of financial services and the increasing contribution of the banking, finance and insurance sector to Hong Kong's GDP over the past decade as Mainland China took important steps in capital account liberalisation (Chart B4.5 and Chart B4.6).

Chart B4.5
Hong Kong's exports and imports of financial services



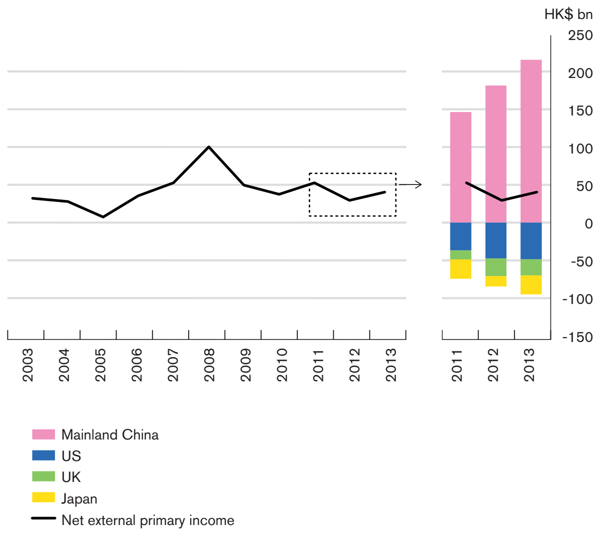
Source: C&SD.

Chart B4.6
Value added of the banking, finance and insurance sector vs. total value added in Hong Kong



Source: C&SD.

Chart B4.7
Hong Kong's external primary income flows



Sources: C&SD and CEIC.

b) External income flows

While capital outflows in general lead to import leakages, they also generate sizable external primary income flows (EPIFs) from abroad for Hong Kong. These are captured in the GNI statistics, yet not in the GDP. Usually, gross capital outflows are associated with external income inflows such as operating profits, dividend payments and interest earnings, while capital inflows are associated with external income outflows. On a net basis, Hong Kong has earned positive EPIFs for more than a decade, which amounted to HK$40.5 billion or 1.9% of GDP in 2013 (Chart B4.7). Income inflows from Mainland China, which totalled HK$215.9 billion (10.1% of GDP) in 2013, actually provided the main support. This is in sharp contrast to the net income outflows vis-à-vis other major economies such as the US, UK and Japan. Moreover, some 70% of the income flows from Mainland China were related to DI, and the remainder was possibly contributed by PI and banking income. In sum, gross capital outflows to Mainland China in the form of DI, PI and banking flows have yielded considerable income inflows for Hong Kong.

Concluding remarks

Our analysis shows that Hong Kong can benefit from increasing capital outflows with Mainland China, rather than just inflows. In particular, despite recent market concerns about investments being diverted to Mainland China, large gross PI and banking outflows can still enhance Hong Kong's GDP and external incomes. This is in part because Hong Kong has a unique Mainland China dimension, in such a way that real economic activities associated with the outflows are generated locally (e.g. the H-share market). Moreover, as a financial intermediary, Hong Kong can gain by serving outflows to the Mainland that are underpinned by overseas demand.