

## 4. Monetary and financial conditions

### Exchange rate, interest rates and monetary developments

The Hong Kong dollar exchange market has continued to trade in an orderly manner and the exchange rate has stayed close to the strong-side Convertibility Undertaking (CU). Growth of Hong Kong dollar monetary aggregates has remained subdued, but growth of credit, particularly loans for external use, has regained some momentum and may raise prudential concerns.

#### 4.1 Exchange rate and interest rates

The Hong Kong dollar exchange market has continued to trade in an orderly manner and the spot exchange rate stayed within a tight band of 7.751 - 7.765 in the first half of 2013, despite volatile global and domestic financial conditions during the period. The first quarter saw the Hong Kong dollar exchange rate easing back slightly from the strong-side CU level along with the consolidation in the local equity market (Chart 4.1). In the second quarter, the local equity market faced even more sell-off pressure amid concerns about a tapering of asset purchases by the US Fed and a slowing Mainland China economy. But the Hong Kong dollar exchange rate instead strengthened modestly due to banks'

rising liquidity demand. In July and August, the spot exchange rate continued to move in a tight range and closed at 7.7551 at the end of August.

The trade-weighted Hong Kong dollar nominal effective exchange rate index (NEER) rose by 1.0% during the first half of 2013 (Chart 4.2). This mainly reflected the appreciation of the US dollar against most major currencies amid improving growth prospects of the US economy. Meanwhile, the Hong Kong dollar real effective exchange rate index (REER) strengthened at a faster pace relative to the Hong Kong dollar NEER, due to slightly higher inflation in Hong Kong relative to its trading partners.

**Chart 4.1**  
Hong Kong dollar exchange rate



Source: HKMA.

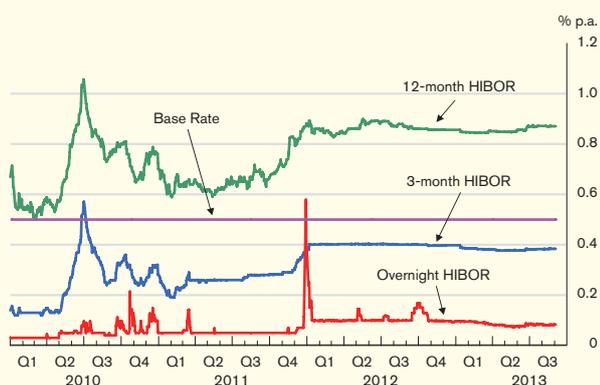
**Chart 4.2**  
Nominal and real effective exchange rates



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

The Hong Kong dollar interest rates continued to stay low in the first half of 2013 (Chart 4.3). The Base Rate under the Discount Window operated by the HKMA remained unchanged at 0.5% with the Federal Funds Target Rate kept at 0 - 0.25%. In the Hong Kong dollar money market, the interbank rates were also generally stable, with the overnight and three-month HIBOR fixing edging down to 0.09% and 0.38% at the end of June. The 12-month HIBOR fixing however increased by one basis point to 0.87%. Mainly reflecting a decline in the US dollar LIBORs, the Hong Kong dollar forward discount broadly narrowed in the first half of 2013 (Chart 4.4).

**Chart 4.3**  
Hong Kong dollar interest rates



Sources: CEIC and HKMA.

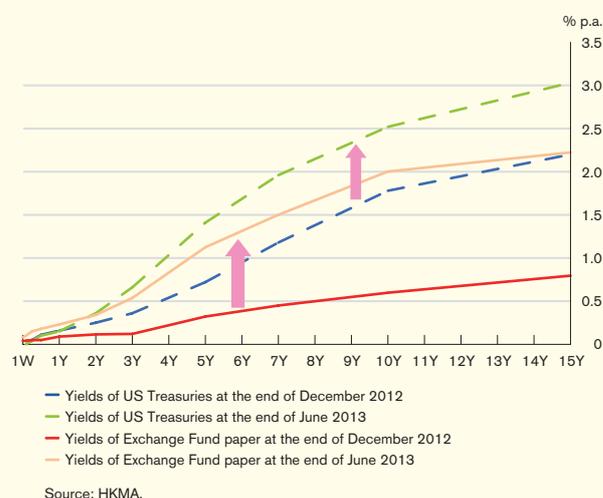
**Chart 4.4**  
Hong Kong dollar forward points



Source: HKMA.

On the other hand, the yields of Exchange Fund paper broadly moved up and steepened along with their US dollar counterparts (Chart 4.5). The pick-ups were particularly notable in the second quarter amid heightened concerns of a tapering in asset purchases by the US Fed and an earlier-than-expected policy rate hike. Overall, the yields of Exchange Fund paper saw slightly larger increases, thus leading to a modest narrowing in the long-dated yield spreads with the US Treasuries.

**Chart 4.5**  
Yield curve movements in the first half of 2013

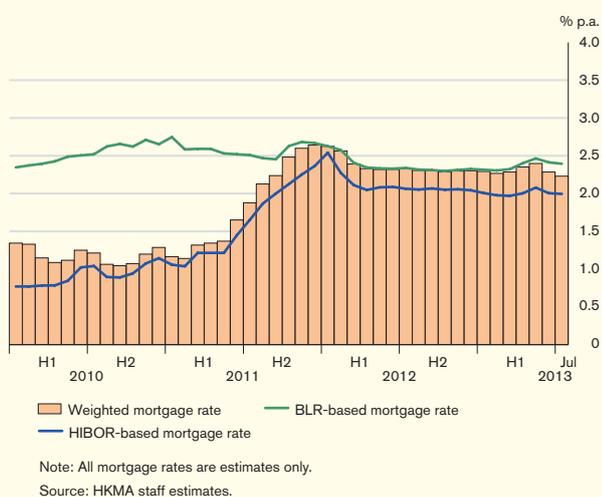


Source: HKMA.

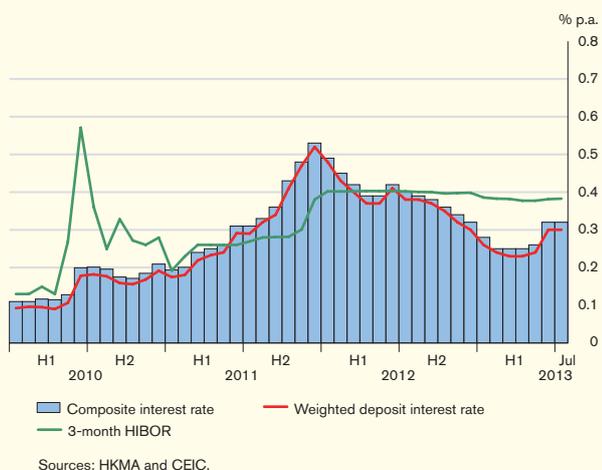
At the retail level, the Hong Kong dollar interest rates remained low in the first half of 2013. While the Best Lending Rates (BLR) was stable at 5.00% or 5.25%, the average mortgage interest rate for new mortgages fluctuated mildly between 2.27% and 2.40%. In particular, banks raised the mortgage rates in April and May reportedly due to the impact of a mandatory increase in the risk-weight floor for residential mortgages, but

later in June they offered more attractive HIBOR-based mortgage schemes (Chart 4.6). On the funding side, after stabilising at a low of 0.23% in March and April, the weighted deposit rates picked up in May and June largely due to increased liquidity demand from banks (Chart 4.7). As such, the composite interest rate, which indicates the average cost of funds for banks, climbed to 0.32% in June after decreasing to a recent low of 0.25% in February.

**Chart 4.6**  
Mortgage interest rates for newly approved loans



**Chart 4.7**  
Deposit interest rates and the average cost of funds



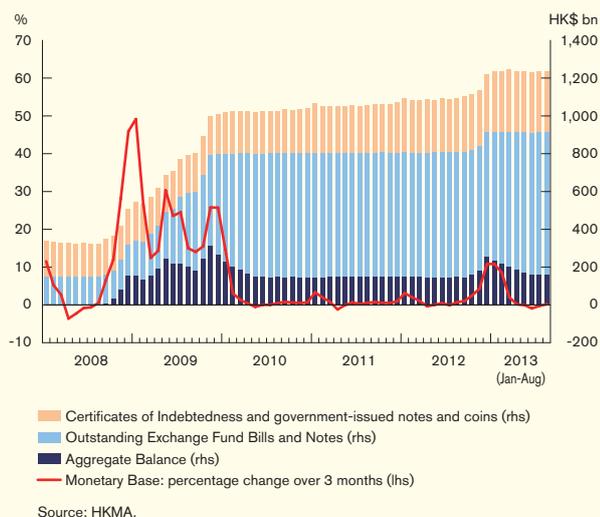
Interest rates edged down again more recently at both the wholesale and retail levels along with improvement in banks' liquidity conditions, yet the long-dated yields of Exchange Fund paper continued to stay at recent high levels. In the near term, the low interest rate environment is expected to continue in Hong Kong. The latest consensus estimates project the three-month HIBOR to be roughly stable in the range of 0.4 - 0.5% over the next 12 months. Broadly tracking the movements of interbank rates, lending and deposit rates are likely to remain relatively low in the near term, although the exact pricing would still hinge on the relative demand and supply conditions for loans and deposits.

But further ahead in the medium term, the latest term structure of swap rates has pointed to steeper increases in the Hong Kong dollar interbank rates, for example, by some 200 basis points for the three-month HIBOR in three years' time. In fact, markets remain nervous about any change in the Fed's monetary stance and could be responsive to incoming economic data and Fed's communications. As such, it is expected the US dollar and Hong Kong dollar interest rates, as well as the bond markets, could see much volatility in the period ahead.

## 4.2 Money and credit<sup>18</sup>

The Monetary Base stood at HK\$1,231.8 billion (or 59.2% of GDP) at the end of June and little changed from the end of 2012, with small fluctuations stemming from changes in the outstanding Certificate of Indebtedness (CIs) and currency notes (Chart 4.8). In the absence of net inflows, the strong-side CU was not triggered. This contrasted with the repeated triggering in the fourth quarter last year that had led to inflows of HK\$107.2 billion during the quarter. On the other hand, the Aggregate Balance fell in the first half of 2013, to HK\$163.9 billion at the end of June upon the additional issuance of HK\$92.0 billion of Exchange Fund Bills.

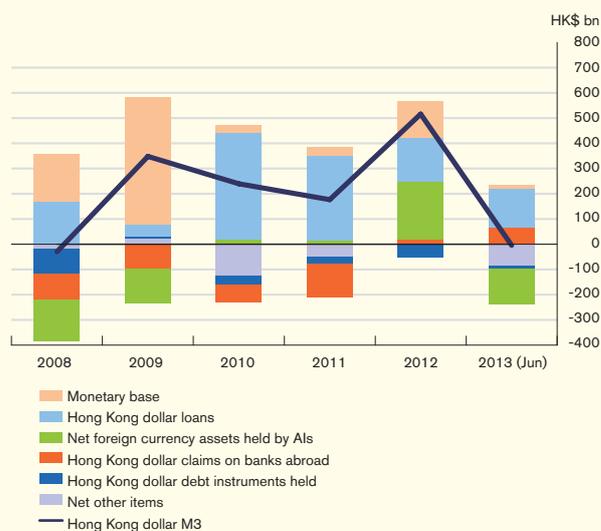
**Chart 4.8**  
Monetary Base components



The Hong Kong dollar monetary aggregates also held steady after recording a brisk increase in 2012. The Hong Kong dollar broad money supply (HK\$M3) only increased marginally by an annualised 0.4% during the first half of 2013. Within the HK\$M3, coins and notes in the hands of the public rose by an annualised 12.5%, while

bank customers' deposits and negotiable certificates of deposits held by the non-bank sector decreased by 0.4% and 0.5% respectively. Analysed by the asset-side counterparts of the HK\$M3 under the framework of monetary survey, AIs' net foreign currency assets and their capital and reserves (which were part of net other items), were contractionary on broad money supply, while robust growth in domestic credit and an increase in AI's claims on banks abroad provided an offset (Chart 4.9). On the other hand, the seasonally adjusted Hong Kong dollar narrow money supply (HK\$M1) grew much faster than the HK\$M3, at an annualised rate of 16.1% due to fast increases in coins and notes in the hands of the public and demand deposits.

**Chart 4.9**  
Changes in the HK\$M3 and the asset-side counterparts

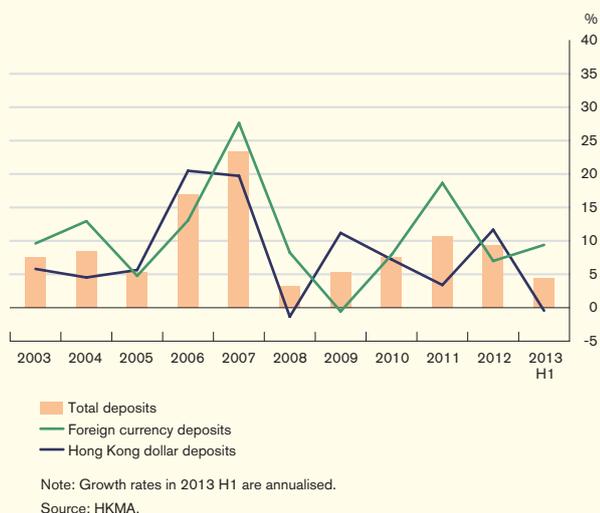


<sup>18</sup> Unless otherwise stated, the annualised rate of change presented in this section is prorated based on the year-to-June rate.

## Monetary and financial conditions

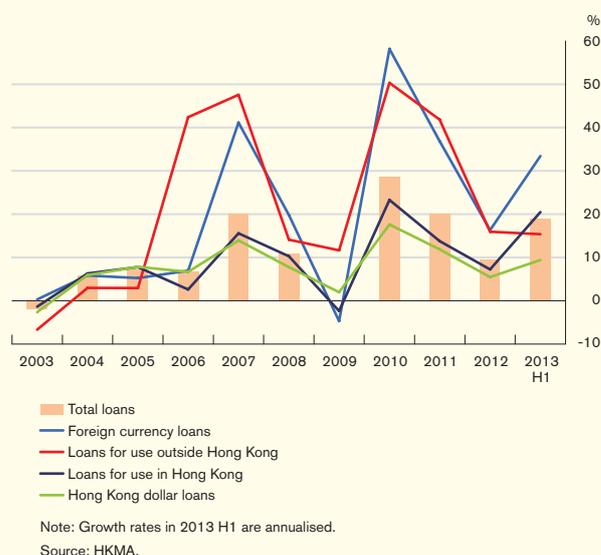
During the first half of 2013, Hong Kong dollar deposits edged down by an annualised 0.4%, but foreign currency deposits continued to increase robustly by 9.4% (Chart 4.10). Within the latter, US dollar deposits declined notably, while deposits in other currency denominations picked up due partly to a sharp rise in renminbi deposits. The recent developments of renminbi deposits are discussed in further detail later in this section. Overall, total deposits with the AIs increased by an annualised 4.4% in the first half of 2013, slower than the 9.3% increase for the whole of 2012.

**Chart 4.10**  
Deposit growth



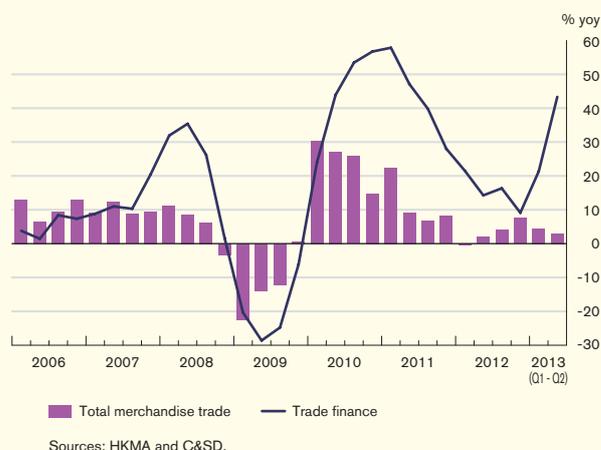
On the credit side, total loan growth accelerated sharply to an annualised rate of 19.0% in the first half of 2013, yet with most of the expansion being recorded in the second quarter (Chart 4.11). Driven by sturdy growth in trade finance and rising liquidity demand by multinational corporations, foreign currency lending rose an annualised 33.4% in the first half. Hong Kong dollar loans grew by an annualised 9.4%, compared with the 5.5% increase for 2012 as a whole.

**Chart 4.11**  
Loan growth



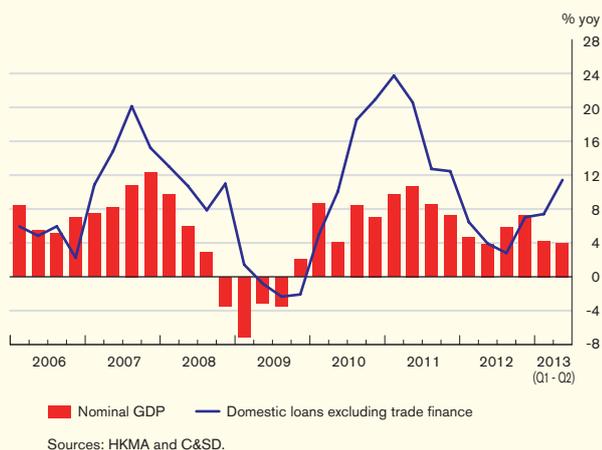
Meanwhile, loans for use outside Hong Kong expanded a solid 15.4% in annualised terms, roughly the same pace as in 2012. Loans for use in Hong Kong however rose at a faster rate of 20.5%, in part due to a 95.9% surge in trade finance. The notable increase in trade finance was in sharp contrast with Hong Kong's subdued trade flows (Chart 4.12). This has raised the HKMA's concerns about banks' credit standards and the latent funding risks.

**Chart 4.12**  
Trade finance and merchandise trade



Excluding loans for trade finance, other loans for use in Hong Kong also saw a faster increase, particularly in the second quarter of 2013, and their growth rate had also exceeded the nominal GDP growth (Chart 4.13). Loan growth was mainly supported by lending to the non-property-related sectors (Chart 4.14), within which lending for wholesale and retail trade expanded briskly on the back of strong business in this sector. Loans to financial concerns and stockbrokers also gathered strength. Lending for property development picked up after a slight decline in the first quarter, yet the pace of expansion in the residential mortgage loans slowed gradually, largely reflecting the dampening impact of stamp duty and prudential measures on the housing market. While credit card advances grew at a modest pace, loans for other private purposes recorded a faster increase compared with last year. Overall, the increase in consumer credit and residential mortgage loans has pushed the household debt-to-GDP ratio further to a record 62% by mid-2013, compared with 51% at the end of 2008 (Chart 4.15).

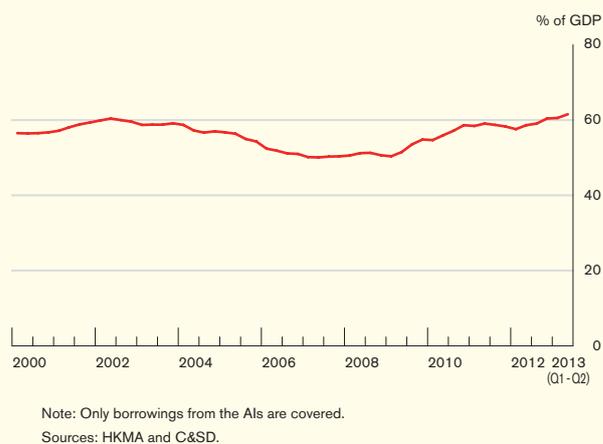
**Chart 4.13**  
Other domestic loans and nominal GDP



**Chart 4.14**  
Other domestic loans by sector



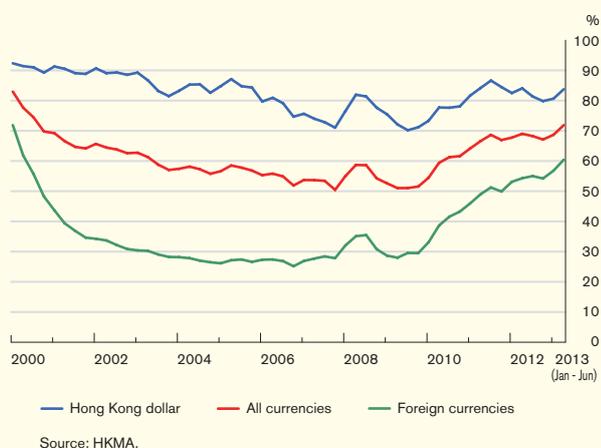
**Chart 4.15**  
Household debt-to-GDP ratio



## Monetary and financial conditions

As Hong Kong dollar loans expanded while its deposit counterpart declined, the Hong Kong dollar loan-to-deposit ratio climbed to 83.7% in June 2013 from 79.8% in December 2012 (Chart 4.16). Due to rapid expansion in foreign currency lending, the foreign currency loan-to-deposit ratio also rose sharply to a 13-year high of 60.4% in June 2013 from 54.2% in December last year.

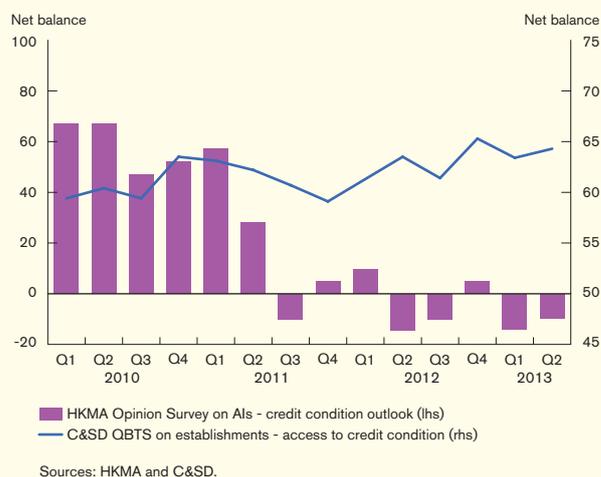
**Chart 4.16**  
Loan-to-deposit ratios



However, there are signs of moderation in loan growth more recently and the liquidity conditions have alleviated somewhat. Growth in trade finance and other domestic lending slowed in July, and the Hong Kong dollar loan-to-deposit ratio decreased slightly. Moreover, the latest

HKMA Opinion Survey on Credit Condition Outlook still points to weak credit demand in the period ahead, with the net balance of responses (the difference between the proportion of surveyed AIs expecting an increase and those expecting a decrease) remaining in the negative territory (Chart 4.17). On the other hand, credit supply is expected to remain accommodative with the continuation of the low interest rate environment. The latest Quarterly Business Tendency Survey also indicates no signs of deterioration in credit access for the non-bank private sector.

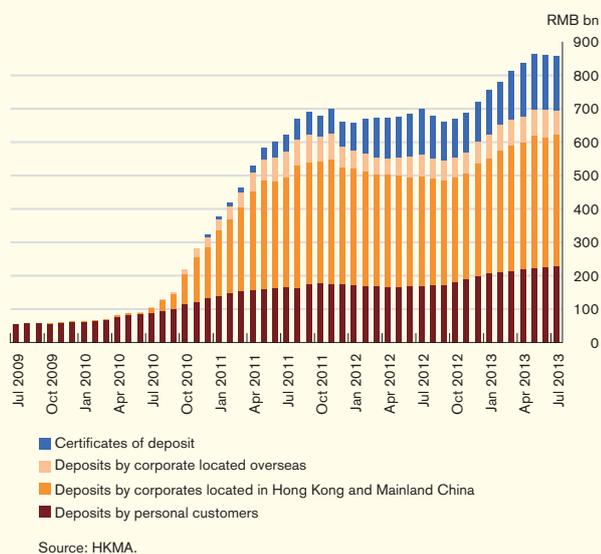
**Chart 4.17**  
Surveys on credit demand and credit access



## Monetary and financial conditions

The liquidity pool of Hong Kong's offshore renminbi banking business continued to expand steadily in the first half of 2013. The total outstanding amount of renminbi deposits and certificates of deposit (CDs) rose notably by 19.5% (not annualised) from last year to RMB860.7 billion at the end of June (Chart 4.18). Within the total, customer deposits rose firmly by 15.7%, largely driven by the corporate customer accounts with the growing popularity of renminbi as a settlement currency. Meanwhile, personal customer deposits also increased, with share of deposits held by non-resident personal customers amounting to 4.8% of total personal customer deposits. As renminbi deposits grew faster than deposits in other currency denominations, the proportion of renminbi deposits in the banking system rose to 10.4% of total deposits at the end of June.

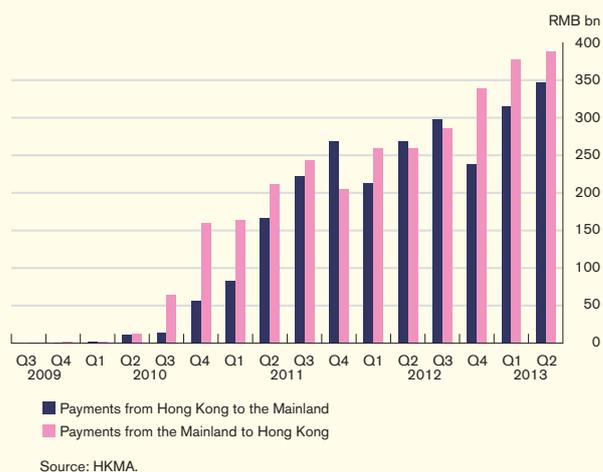
**Chart 4.18**  
Renminbi deposits and outstanding certificates of deposit in Hong Kong



Renminbi trade settlement conducted through Hong Kong banks grew to RMB1,695.3 billion in the first half of 2013 from RMB1,419.4 billion in the preceding half-year period. The amount of

inward remittances to Hong Kong and outward remittances to Mainland China were largely balanced, with the ratio of inward to outward remittances staying at 1.2 in the first half (Chart 4.19).

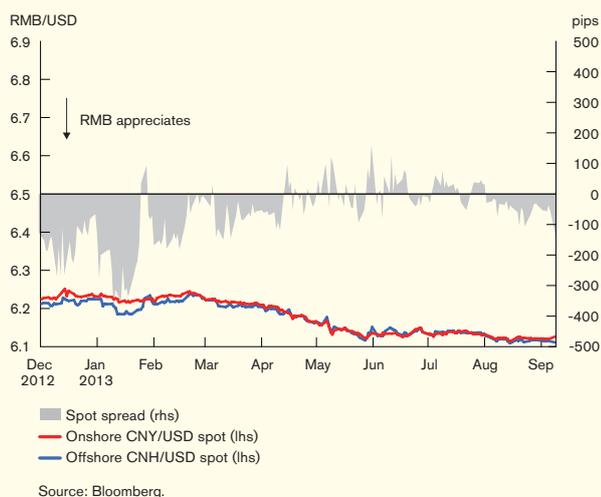
**Chart 4.19**  
Flows of renminbi trade settlement payments



Other renminbi banking business also witnessed solid growth during the first half. In particular, renminbi financing activities in Hong Kong continued to grow vibrantly, with outstanding loans expanding by 39.8% from six months earlier to RMB110.5 billion. The number of participating banks in Hong Kong's renminbi clearing platform rose to 208 at the end of June from 204 six months ago. A total of 1,623 renminbi correspondent accounts were set up by overseas banks at banks in Hong Kong at the end of June, up from some 1,400 accounts at the end of 2012. Meanwhile, amounts due to and from overseas banks were RMB127.2 billion and RMB139.7 billion respectively. The net amount due from overseas banks continued to be positive, suggesting that Hong Kong banks are providers of renminbi funds to their overseas counterparts.

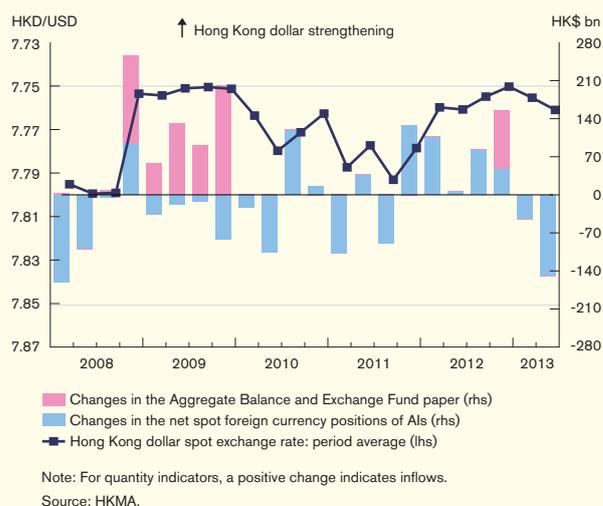
The Hong Kong’s offshore renminbi exchange rate (CNH) tracked closely with the onshore counterpart (CNY), with the spread between CNH and CNY narrowing to about 40 pips in August from an average of around 200 pips in January (Chart 4.20). The CNH interbank market saw notable advancement in recent months, with the establishment of CNH HIBOR fixing in June, and the enhancements in July of renminbi liquidity facilities provided by the HKMA. The three-month CNH HIBOR fixing was largely stable in July and August, closing at 2.77% at the end of August. Looking ahead, the CNH interbank market is expected to expand steadily along with the healthy development of renminbi business in Hong Kong.

**Chart 4.20**  
Onshore and offshore renminbi exchange rates



This contrasted with the strong demand and inflow pressures in the final quarter of last year, when the HKMA injected more than HK\$100 billion into the banking system. But on the whole, outflow pressures in the non-bank private sector were not particularly strong in the first half, as shown by the price and quantity indicators as well as anecdotal reports (Chart 4.21). The Hong Kong dollar spot exchange rate only eased moderately, and there was no significant decrease in the AIs’ net spot foreign currency positions, except in June when a correction in the local equity market was underway.<sup>19</sup> Still, banks’ increased demand for the Hong Kong dollar has provided a partial offset to those outflow pressures.

**Chart 4.21**  
Fund flow indicators (quarterly)



### 4.3 Capital flows

#### Demand for Hong Kong dollar assets

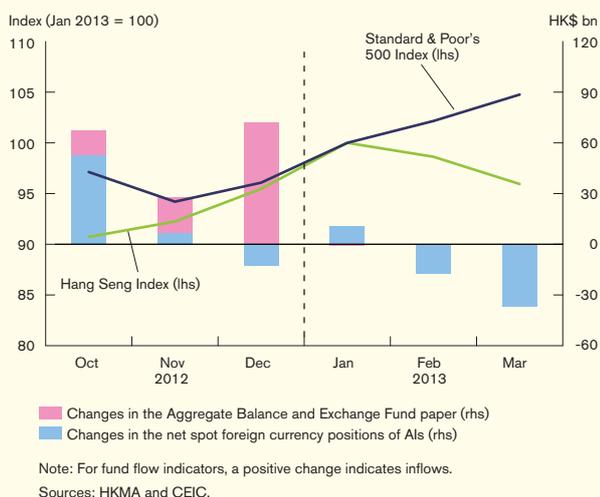
Demand for Hong Kong dollar assets from the non-bank private sector weakened somewhat during the first half of 2013 amid a volatile global economic and financial environment.

There was only mild selling pressure on the Hong Kong dollar in the first quarter, reportedly driven by asset reallocation strategies of global investors towards the US currency and equities amid signs of improvements in the US economy and the stellar performance of the US equity market. This was evidenced by a stronger US dollar and relative underperformance of the Hong Kong

<sup>19</sup> It should be noted that changes in the net spot foreign currency positions of the AIs, or the equivalent of their net spot Hong Kong dollar positions, include the effects of valuation changes like price and exchange-rate changes, and, therefore, are only a proxy for net Hong Kong dollar fund flows.

equity market compared with the US market (Chart 4.22). Shifting market sentiment also affected the fund flow pattern, with concerns about hot money inflows in January being overtaken by worries over capital drain since February due to a stronger US dollar, rising US treasury yields, the Cypriot financial turmoil and uncertainties over Japan's reflationary policies. As a result, the Hong Kong dollar spot exchange rate eased gradually while AIs' net spot foreign currency positions decreased during the first quarter, signalling weaker Hong Kong dollar demand from the non-bank private sector.

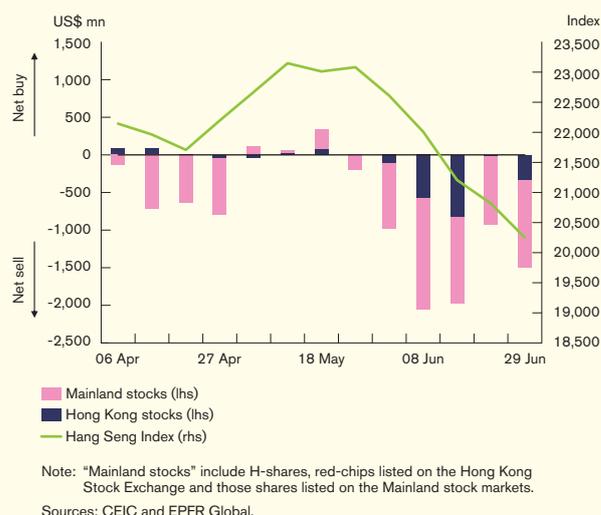
**Chart 4.22**  
Stock market performance and fund flow indicators (monthly)



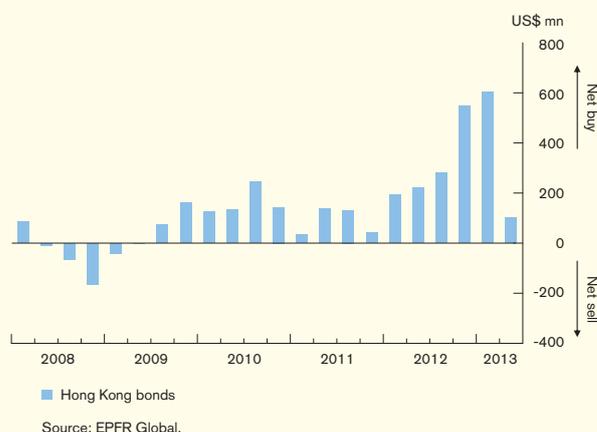
Fund flow pressures remained moderately negative in the second quarter with most activity occurring mainly after the US Fed Chairman's taper comments on 22 May. Hong Kong dollar outflow pressures in the non-bank private sector partly reflected increased demand from the banking sector, resulting in the Hong Kong dollar spot exchange rate easing slightly, from an average of 7.7554 in the first quarter to 7.7610 in the second quarter. Meanwhile, AIs' net spot foreign currency positions declined, partly signalling Hong Kong dollar funds flowing from the non-bank private sector to the banking sector in June. According to market surveys, global mutual funds off-loaded equities of the regional markets (including Hong Kong) much more

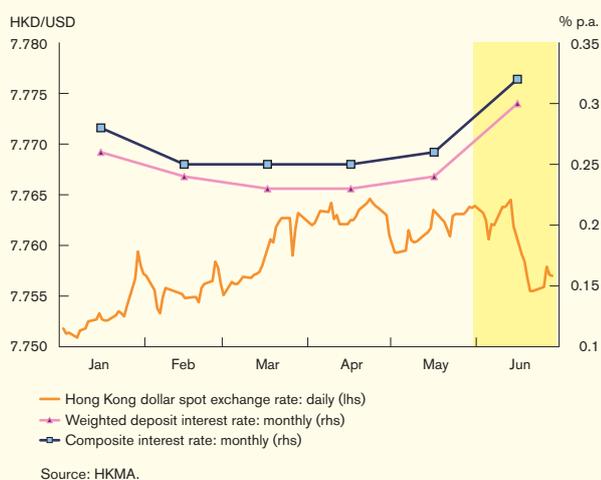
aggressively in June, attributable in part to heightened concerns about the US Fed's exit strategy on quantitative easing (Chart 4.23). There was also a sharp retreat of net foreign buying of Hong Kong bonds, in line with the trend that large firms were reported to have turned more to banks for funds (Chart 4.24). At around the same time, however, banks increased their buying of the Hong Kong dollar, in part reflecting stronger liquidity demand towards the half-yearly closing. This was corroborated by the visible upticks in the average funding costs of banks and a slight strengthening of the Hong Kong dollar against the US dollar towards the end of June (Chart 4.25).

**Chart 4.23**  
Market survey of equity-related flows (weekly)



**Chart 4.24**  
Market survey of bond-related flows (quarterly)



**Chart 4.25**  
**Liquidity conditions and exchange rate**


During the first half of the year, two more observations can be made. First, recent experiences reveal that Japan's QQE has yet to cause substantial Hong Kong dollar fund flows, in contrast with what had happened soon after the US' third round of quantitative easing. Secondly, the Linked Exchange Rate System continued to enjoy high market credibility, serving as an anchor for the stability of Hong Kong dollar exchange rate. For example, notwithstanding a strong expectation of renminbi appreciation in the early part of this year, there were no signs of exchange-rate speculation against the Linked Exchange Rate System.

### Balance of Payments and cross-border capital flows

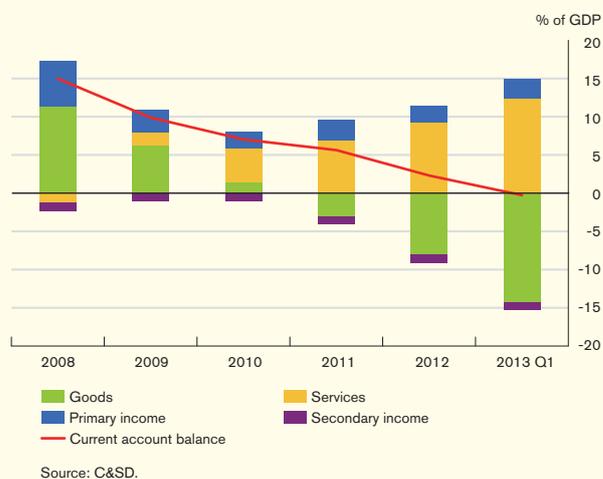
The Balance of Payments (BoP) statistics showed that reserve assets expanded only slightly by HK\$16.4 billion (3.2% of GDP) in the first quarter, mainly due to increases in CIs and incomes from foreign currency assets, which were more related to the normal operation of the Currency Board instead of autonomous inflow pressures. This compared with an increase of HK\$94.3 billion (16.9% of GDP) in reserve assets in the fourth quarter of last year when the HKMA conducted foreign exchange operations on a large scale (Table 4.A). Recent HKMA data indicate that the foreign currency reserve assets of the Exchange Fund declined somewhat in the second quarter.

**Table 4.A**  
**Balance of Payments account by standard component**

In percent of GDP	2011	2012	2012				2013
			Q1	Q2	Q3	Q4	Q1
<b>Current Account</b>	5.6	2.3	1.1	-1.4	6.0	3.1	-0.3
<b>Capital and Financial Account</b>	-5.8	-1.8	2.9	6.6	-9.8	-5.8	-2.5
Capital transfers	-0.1	-0.1	0.0	-0.2	0.0	-0.1	0.0
<b>Financial non-reserve assets (net change)</b>	-1.3	7.5	16.1	5.3	-2.5	11.2	0.8
Direct investment	0.1	-3.6	-1.8	2.0	-3.7	-9.8	-18.1
Portfolio investment	-0.6	-0.6	40.2	3.7	-10.2	-30.8	6.7
Financial derivatives	1.1	0.7	0.3	0.1	0.2	2.1	0.8
Other investment	-1.9	10.9	-22.6	-0.5	11.2	49.6	11.5
<b>Reserve assets (net change)</b>	-4.5	-9.3	-13.2	1.5	-7.2	-16.9	-3.2
<b>Net errors and omissions</b>	0.2	-0.5	-4.0	-5.2	3.8	2.7	2.7

Source: C&SD.

Despite a slight improvement in the terms of trade, the current account registered a small deficit of HK\$1.3 billion (0.3% of GDP) in the first quarter, extending the broadly weakening trend since 2008 (Table 4.A and Chart 4.26). The decline in the current account balance was due to an increase in the merchandise trade deficit, which exceeded a rise in the service trade surplus. While the second quarter current account figure was not available at the time of writing, the national income data revealed that the overall trade balance turned into a deficit during that quarter. This may presage a further weakening of the current account position in the second quarter, given that factor income is small relative to the trade balance.

**Chart 4.26**  
**Current account balance**


Net private-sector financial capital inflows also tapered off markedly, declining to HK\$4.0 billion (0.8% of GDP) in the first quarter from HK\$62.6 billion (11.2% of GDP) in the previous quarter (Table 4.A). On a net basis, the inflow was primarily propelled by portfolio investments and other investments relating to loans and deposits, whereas direct investment outflows provided only a partial offset.

A closer look at the portfolio investment statistics suggested there were equity inflows by both residents and non-residents (Table 4.B). Local banks also increased their holdings of short-term debts issued by non-residents quite substantially. However, non-residents purchased less Hong Kong debt securities, although local enterprises continued to tap into the overseas bond markets partly with a view to lock in cheap US dollar funding.

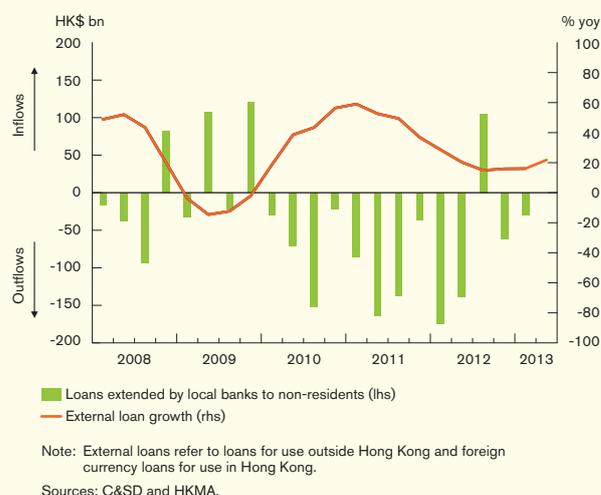
**Table 4.B**  
Cross-border portfolio investment flows

(HK\$ bn)	2011	2012	2012				2013
			Q1	Q2	Q3	Q4	Q1
By Hong Kong residents							
Equity and investment fund shares	-237.3	-133.8	83.4	-27.5	-84.3	-105.3	24.8
Debt securities	81.5	-135.4	-4.4	38.9	-49.0	-121.0	-39.8
By non-residents							
Equity and investment fund shares	47.1	193.9	74.5	2.4	65.7	51.3	46.2
Debt securities	97.7	62.7	41.4	3.8	13.9	3.6	2.6

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

The account of other investment recorded net inflows, in part driven by large currency and deposit inflows by local residents including banks. However, it should be noted that this type of capital flows tends to be volatile and may not necessarily involve the conversion of Hong Kong dollars, so it may not reliably reflect the Hong Kong dollar fund flow conditions. On the other hand, capital outflows relating to external loans persisted, extending the broad trend between 2010 and 2012 (Chart 4.27). The recent demand for these loans was in part supported by interest rate and exchange rate arbitrage activities between Mainland China and Hong Kong.

**Chart 4.27**  
Loans extended by local banks to non-residents



### Outlook for capital flows

The baseline outlook is for net fund flow pressure to remain fairly moderate in the remainder of the year, with manageable gross inflows and outflows from time to time. As such, the spot exchange rate may continue to move sideways within a narrow range near the strong side, and the size and direction of fund flows are likely to display short-term variations owing to fickle market sentiment, the evolving global outlook and seasonal liquidity demand due perhaps to IPO activity and year-end financial reporting.

That said, in view of the recent fluctuations in the global financial markets and regional exchange rates, this baseline outlook is subject to considerable uncertainty, with Hong Kong dollar fund flows probably facing much greater volatility. On the downside, concerns about the tapering of asset purchases by the US Fed remains acute and this could heighten global financial market volatility, thereby adversely feeding through to fund flows. Domestically, overvaluation risks in the property markets and signs of macroeconomic imbalances point to risks of broader economic adjustments and asset price corrections. In the event that these risks materialise, large outflows might happen. On the upside, a possible revival in stock market fund-raising activities may bolster Hong Kong dollar demands.

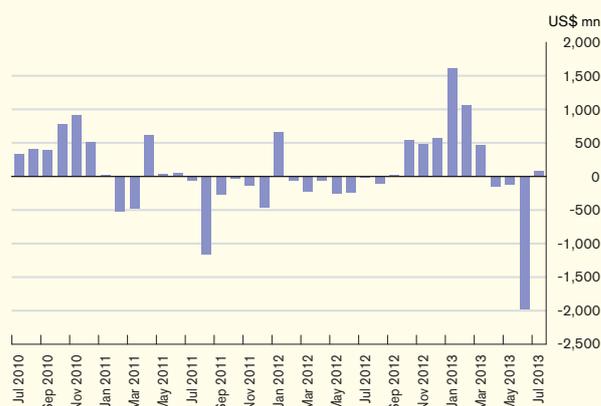
## Asset markets

Local equity prices have come under pressure amid a number of negative external developments over the past six months. The market is expected to remain volatile in the period ahead in view of increasing uncertainties over the policy outlook for the US and Mainland China, and escalated Syrian geopolitical tensions. The domestic debt market, however, was resilient despite the recent turbulence in global bond markets. Issuance of offshore renminbi debt securities has continued to expand rapidly. The property market showed signs of moderation amid concerns about interest rate hikes and uncertain economic prospects. However, property valuation remained highly stretched, with housing affordability deteriorating further and the gap between rental yield and interest rate shrinking considerably.

### 4.4 Equity market

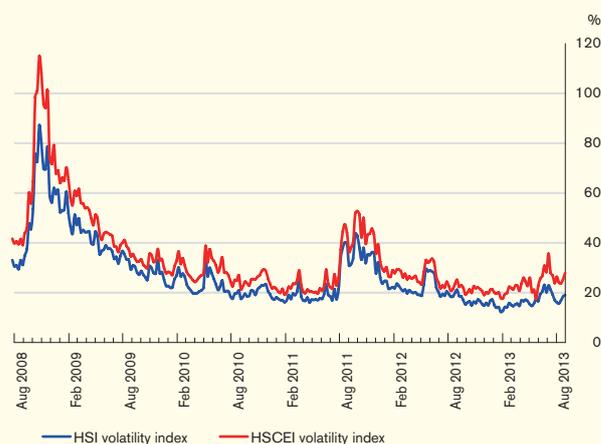
The equity market in Hong Kong has taken a roller coaster ride over the past six months amid a series of negative developments on the external front. The inconclusive Italian election results, along with contagion fears stemming from the banking crisis in Cyprus, weighed on the market in March. Investors regained their risk appetite subsequently as the US labour market showed signs of strength. However, market sentiment turned negative when Fed Chairman Ben Bernanke signalled that the central bank may scale back its stimulus programme soon in his testimony to the Congress in May. Following the June Federal Open Market Committee (FOMC) meeting, the Fed unveiled its plan for tapering the quantitative easing. This coincided with a liquidity crunch in China, triggering a pullback of foreign investors in local equity funds (Chart 4.28). Implied volatility of local equities surged to a one-year high (Chart 4.29). Although local equities pared some of their losses following Bernanke's dovish comments in his semi-annual testimony, the market came under pressure again towards the end of August as comments from FOMC members prompted speculation that the Fed may start to slow its asset purchase in September.

**Chart 4.28**  
Equity fund flows into Hong Kong



Source: EPFR Global.

**Chart 4.29**  
Volatility indices of the Hang Seng Index and Hang Seng China Enterprises Index



Sources: Bloomberg and HKMA staff estimates.

## Monetary and financial conditions

In view of the deteriorating external environment, the Hang Seng Index (HSI) fell below the 20,000 level in June, keeping investors on the sideline. The average daily turnover dwindled to HK\$51.5 billion in July. Overall, the HSI decreased by 5.6% from March to August. Meanwhile, the Hang Seng China Enterprises Index (HSCEI), also known as the H-share index, fell notably by 14.1% as the slowdown of the Mainland economy and the tight funding conditions continued to weigh on the H-share market (Chart 4.30).

**Chart 4.30**  
The Hang Seng Index and Hang Seng China Enterprises Index

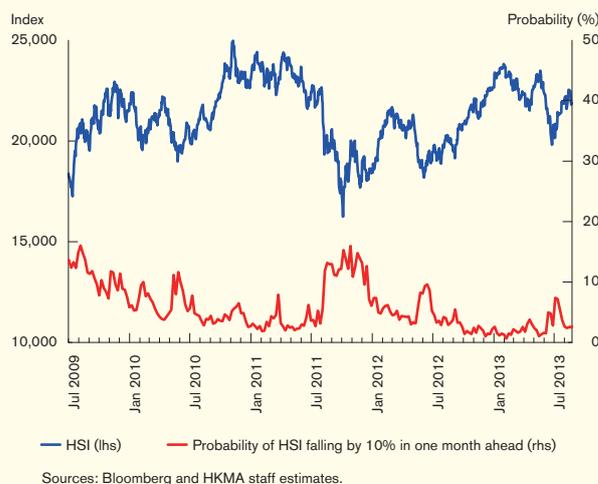


Looking ahead, the downside risk of the market, as measured in terms of the probability of a 10% fall in the HSI in one month ahead, appears limited, given that local equities still offer attractive valuation relative to the past five-year average (Charts 4.31 and 4.32). However, the market is likely to be volatile for the rest of the year as sentiment is highly susceptible to external market conditions. In particular, how and when the Fed will finally taper quantitative easing can potentially lead to sharp adjustment in local asset valuation. The pace of global economic recovery, especially given the uncertain outlook for the Mainland and increased tensions in Syria, will continue to cast a shadow over local equities.

**Chart 4.31**  
Cyclically adjusted price-earnings ratios of the Hang Seng Index



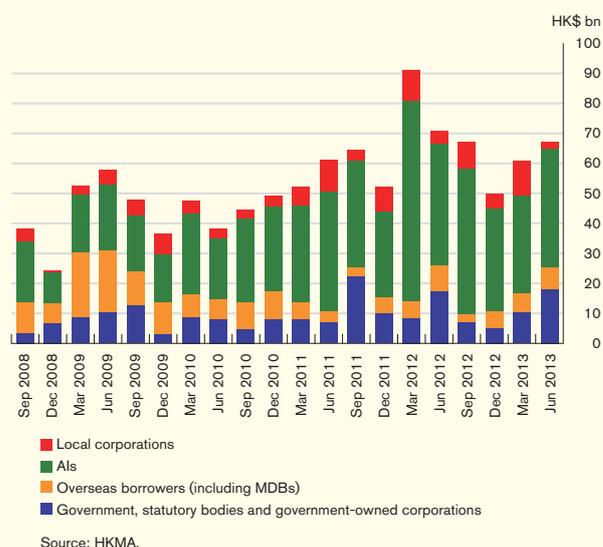
**Chart 4.32**  
Hang Seng Index and its option-implied probability of falling by 10% in one-month



## 4.5 Debt market

The Hong Kong dollar debt market grew despite heightened volatility in global bond markets. In the first half of 2013, total issuance rose markedly by 8.8% year on year to HK\$1,174.4 billion (Chart 4.33). The public sector provided the main growth driver, issuing HK\$131.2 billion or 13.9% more debt than the same period in 2012.<sup>20</sup> In contrast, the local private sector, which is composed of AIs and local corporations, saw a significant decline in its debt issuance.<sup>21</sup> This was, to some extent, attributed to reduced issuance towards the end of June amid the Fed’s announcement of its quantitative easing tapering plan, which reduced investors’ appetite for bond investment and sparked a massive sell-off in global bond markets, including the Hong Kong dollar debt market. Average bond yields rose sharply and thus reduced private sector debt issuance in June (Chart 4.34). Meanwhile, issuance of longer-tenor bonds also dropped as market sentiment weakened. The proportion of newly issued private sector debt securities (excluding CDs) maturing in more than five years declined to 37.5% of total issuance in the first half of 2013 from 40.7% recorded during the same period in 2012.<sup>22</sup>

**Chart 4.33**  
New issuance of non-Exchange Fund Bills and Notes Hong Kong dollar debt



**Chart 4.34**  
Average yields of Asian and Hong Kong Local Bonds



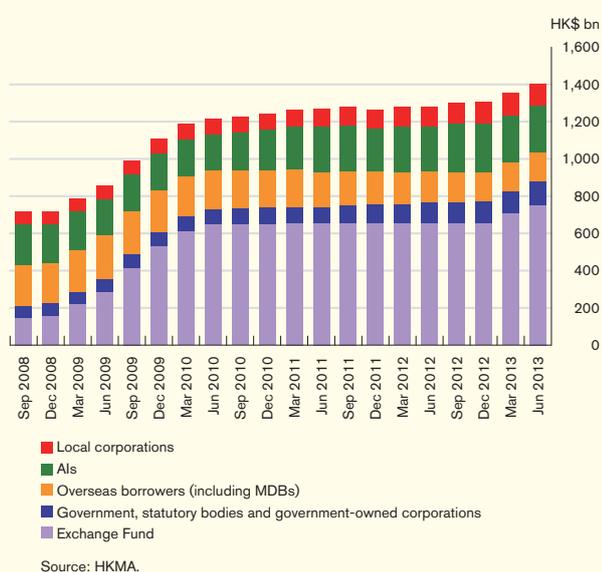
<sup>20</sup> Exchange Fund paper issuance accounted for 89.1% of total issuance of Hong Kong dollar debt. The Government issued a total amount of HK\$20.0 billion worth of bonds under its Government Bond Programme. Debt issued by statutory bodies/government-owned corporations jumped by 34.4% to HK\$8.4 billion.

<sup>21</sup> New debts issued by AIs and local corporations fell by 33.1% and 2.4% to HK\$72.1 billion and HK\$13.8 billion respectively.

<sup>22</sup> The “private sector” consists of AIs, local corporations and non-MDB overseas borrowers.

With notable growth in total issuance, the outstanding amount of Hong Kong dollar debt rose by 9.7% year on year to a record high of HK\$1,405.0 billion at the end of June (Chart 4.35).<sup>23</sup> Overseas borrowers including multilateral development banks (MDBs) continued to see their debt outstanding contract by 1.9%, while the outstanding amount of debt issued by the local private sector registered a year-on-year growth of 5.1% despite the considerable decline in issuance.

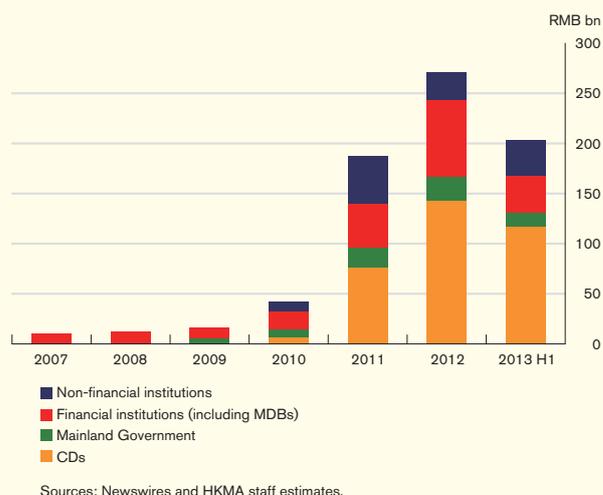
**Chart 4.35**  
Outstanding Hong Kong dollar debt



Notwithstanding the recent turbulence in global bond markets, the offshore renminbi debt securities market in Hong Kong continued to flourish with rapid growth in issuance. A total

amount of RMB203.9 billion worth of debt securities were issued in the first half of 2013, up remarkably by 26.4% from the same period in 2012 (Chart 4.36). While the primary market continued to be dominated by financial institutions, participation by non-financial institutions increased significantly. During the review period, debt issued by local and Mainland non-financial institutions amounted to RMB35.1 billion, more than triple the RMB11.2 billion recorded in the same period of 2012. As a result, the proportion of non-financial debt in total issuance excluding CDs jumped to 41.6%, almost equivalent to the share of debt issued by financial institutions (including MDBs).

**Chart 4.36**  
New issuance of offshore renminbi debt securities



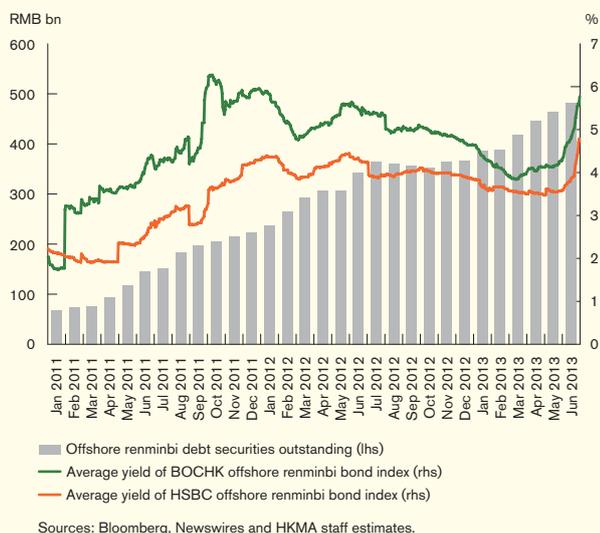
<sup>23</sup> This was equivalent to 30.9% of the Hong Kong dollar M3 or 25.0% of Hong Kong dollar denominated assets of the entire banking sector.

Meanwhile, the market saw an increase in issuance of speculative grade debt securities. In the first six months of 2013, issuance of debt securities rated BB+ or below amounted to RMB16.0 billion, almost triple the RMB5.5 billion recorded during all of 2012. This was equivalent to 35.1% of total rated new issues (excluding CDs) during the period (Chart 4.37). The issuance of speculative grade debt securities, coupled with the recent sell-off in global bond markets, contributed to a rise in the average yields of offshore renminbi bonds (Chart 4.38).

**Chart 4.37**  
Proportions of rated new issues and speculative grade issues (excluding CDs)



**Chart 4.38**  
Offshore renminbi debt securities outstanding and offshore renminbi bond yields



The fast growth in issuance pushed the outstanding amount of offshore renminbi debt securities in Hong Kong higher by 40.7% year on year to a record level of RMB481.8 billion as at end-June 2013 (Chart 4.38). Despite weaker investors' appetite for bond investment, the market is expected to expand steadily, particularly with the removal of the 25% renminbi liquidity ratio requirement and the launch of CNH HIBOR fixing. Starting from 25 April 2013, participating banks are no longer required to hold at least 25% of their total renminbi deposits in eligible renminbi liquefiable assets. This gives banks more flexibility in managing their assets and thus may boost the demand for debt securities. Separately, with the launch of CNH HIBOR fixing on 24 June 2013, the market will likely see a more diverse mix of debt securities as the fixing provides a reliable benchmark for pricing floating-rate debt and interest rate hedging instruments.

In recent years, there has been a tendency for domestic corporates to shift from bank and equity financing to the bond market to meet their funding needs. This has significantly boosted the growth of the local bond market, widely defined to cover not only bonds denominated in Hong Kong dollar but also those issued in other currencies by entities operating in Hong Kong. Box 3 discusses the driving forces behind this development.

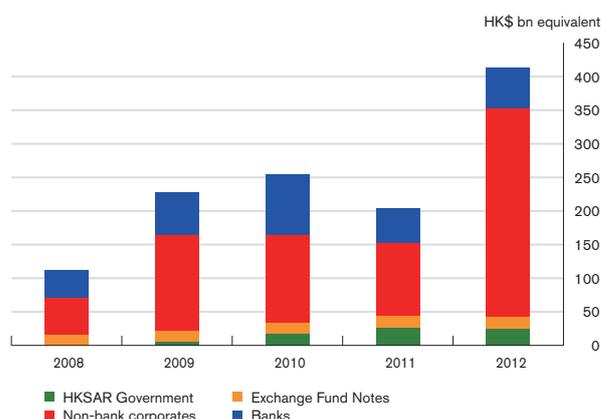
### Box 3 Driving forces behind the recent rapid growth of the Hong Kong bond market<sup>24</sup>

In Hong Kong, corporates have traditionally relied on bank loans or the equity market for funding needs. The bond market has thus been much less developed, as compared with those in advanced economies. However, in recent years, there has been a shift of corporates from bank and equity financing to the bond market for their long-term financing. This box reviews the recent developments of the bond market in Hong Kong and discusses the driving factors behind its recent growth.

#### An overview of the recent developments

The Hong Kong bond market has grown rapidly over the past few years. Issuances reached HK\$414.0 billion in 2012, more than three times the amount in 2008 (Chart B3.1). Much of the growth was driven by issuances of local corporates, accounting for 73.4% of the total. A significant portion of the issuances came in the form of longer-dated papers, with average maturity of new issuances lengthening to 7.9 years in 2012 from 6.5 years in 2008 (Chart B3.2). Corporate bonds denominated in US dollar have increased particularly strongly (Chart B3.3).

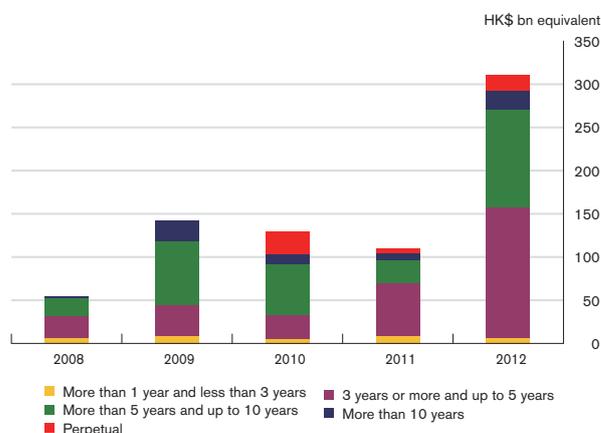
**Chart B3.1**  
New issuances in the Hong Kong bond market



Note: Only notes with original maturity of more than one year are included in calculations.

Sources: Newswires and HKMA staff estimates.

**Chart B3.2**  
New corporate bond issuances by maturity

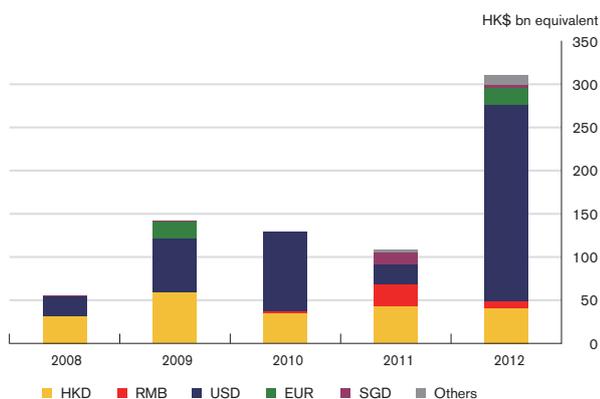


Note: Only notes with original maturity of more than one year are included in calculations.

Sources: Newswires and HKMA staff estimates.

<sup>24</sup> In this study, the Hong Kong bond market refers to the market covering (i) bonds denominated in Hong Kong dollar, regardless of the nationality of the issuers; and (ii) bonds denominated in all other currencies, issued by any entities operating in Hong Kong. This definition largely reflects two considerations, namely, the financing needs of the borrowers based in Hong Kong and the availability of statistics.

**Chart B3.3**  
Corporate bond issuances by currency



Note: Only notes with original maturity of more than one year are included in calculations.  
Sources: Newswires and HKMA staff estimates.

*Driving forces behind the recent developments*

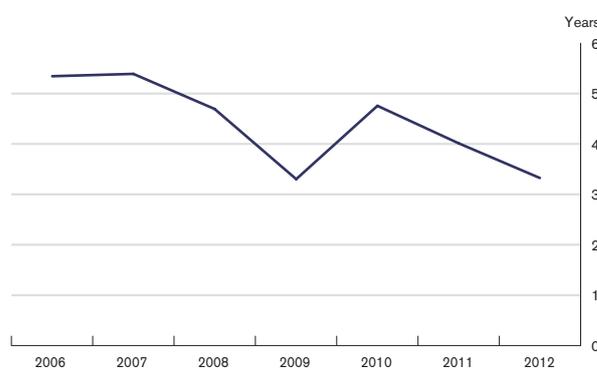
The recent strong growth of the Hong Kong bond market, especially with respect to corporate issuances, can to a significant extent be attributed to a host of supply- and demand-side factors.

**Supply-side factors**

- *Diminished access to the loan market:* a number of global macroeconomic factors have reduced banks’ capacity and willingness to make long-term loans. In the aftermath of the global financial crisis, increased uncertainty about the outlook for the global economy to some extent reduced the appetite of the banking sector for longer-tenor exposures. The resulting decline in long-term bank credit was

exacerbated by the deleveraging undertaken by European banks. Average tenor of syndicator loans shortened to 3.3 years in 2012 from 4.7 years in 2008 (Chart B3.4). Tight credit conditions in this market segment, coupled with increased global financial volatility in recent years, have pushed up long-term borrowing costs sharply.<sup>25</sup>

**Chart B3.4**  
Average tenor of Hong Kong syndicated loans



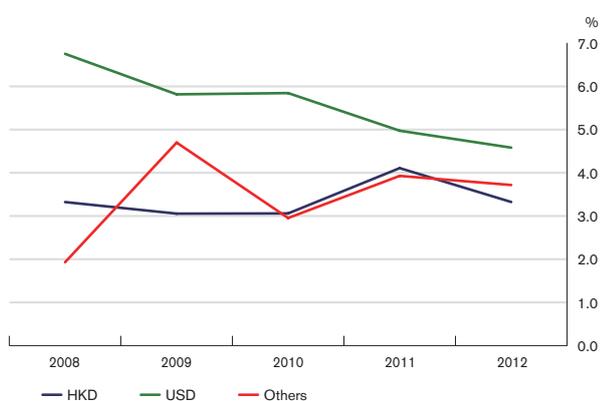
Sources: Bloomberg and HKMA staff estimates.

- *Increased competitiveness of bond financing:* extraordinary accommodative monetary policies adopted by advanced economies following the global financial crisis have flooded the market with liquidity and pushed interest rates down to historical lows. As a result, there has been a global tendency for investors to move into the corporate bond market which offers relatively higher returns. This “search for yield” phenomenon caused corporate bond yields to fall, which in turn allowed

<sup>25</sup> For instance, in the Hong Kong syndicated loan market, loan costs jumped to 252 basis points above the reference rate in the second half of 2012 from 122 basis points in the same period of 2008.

corporates to raise funds at relatively low costs (Chart B3.5). In Hong Kong, investors have also gradually become more receptive to bonds issued by some well-known, but unrated or sub-investment grade, local issuers. This increased willingness of investors to take risk has paved the way for new corporate entrants to tap the market.

**Chart B3.5**  
Weighted average yields of new corporate bond issuances



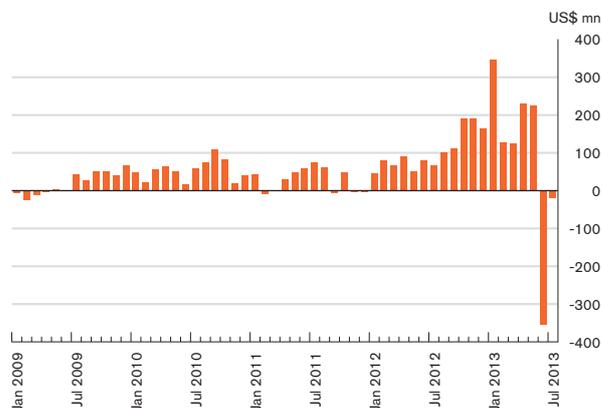
Note: Only notes with original maturity of more than one year are included in calculations.  
Sources: Newswires and HKMA staff estimates.

### Demand-side factors

- Improved fundamentals in Asia:* in sharp contrast with the US and Europe, economic fundamentals have generally improved in Asia. Credit ratings of a number of economies in the region have either been upgraded or affirmed since the global financial crisis. This positive development has to a significant extent revalued Asian assets and attracted institutional investors globally. As these investors increased the weighting of Asian bonds in their portfolio,

Hong Kong as well as many other Asian economies have benefited from the resulting fund flows (Chart B3.6).

**Chart B3.6**  
Bond fund flows into Hong Kong



Source: EPFR Global.

- Increased sophistication of Asian investors:* investors have in general become more sophisticated in Asia and hence more receptive to investable assets other than stocks. As the global financial crisis revealed the importance of assessing credit risk, many financial institutions in the region have developed in-house credit risk evaluation for their own or their clients' investments, which has indirectly opened the door for them to enter the market of higher yielding products such as corporate bonds.
- Rising popularity of medium-term note (MTN) programme:* MTN programme in Hong Kong has grown in popularity in recent years.<sup>26</sup> The programme, which can speed up the bond issuance process considerably, has made it convenient for private bankers to approach issuers through "reverse enquiry".<sup>27</sup>

<sup>26</sup> MTN programme is a debt issuance programme which allows companies to quickly and efficiently issue bonds using standardised documentation.

<sup>27</sup> Reverse enquiry is a common practice whereby investors approach and ask the companies-of-interest to issue bonds specifically for them, instead of passively waiting for public tenders.

### *Concluding Remarks*

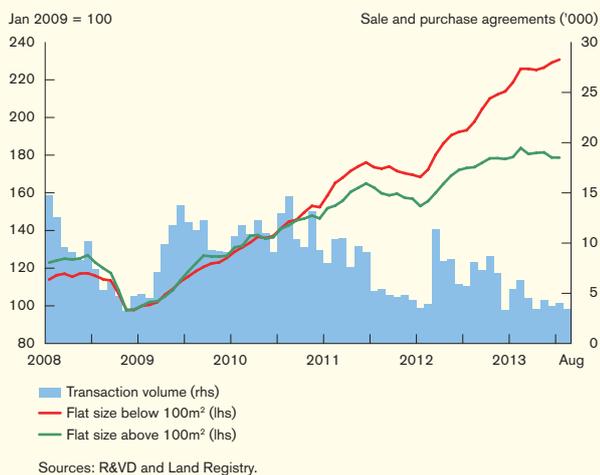
The bond market has grown considerably in Hong Kong in recent years. While the growth, to some extent, is driven by the cyclical “search for yield” phenomenon in the wake of the low interest rate environment, the structural forces that are taking place should not be downplayed. Moreover, over the past few years, the HKSAR Government has made significant strides in promoting the bond market including, among others, the implementation of the Government Bond Programme in 2009. To the extent that these forces remain at work, the growth of the market is likely to continue, although the momentum of the shift may weaken somewhat as interest rates rebound globally.

## 4.6 Property markets

### Residential property market

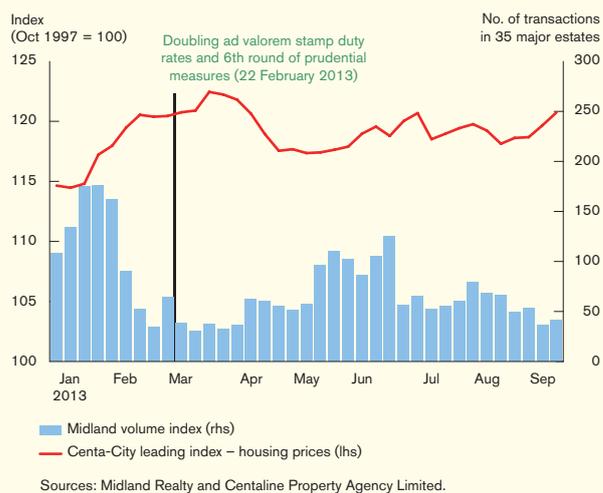
Housing prices have softened and transaction volume has declined noticeably since February this year following the introduction of stamp duty and prudential measures by the Administration and the HKMA. The weaker property market also in part reflected more cautious sentiment amid less promising economic prospects and rising expectation of future interest rate hikes. On the other hand, holding power of home owners remained relatively strong amid a still-favourable labour market environment. This, together with rather tight supply, has helped prevent significant falls in housing prices. However, as property valuation remains highly stretched, property market imbalances are still elevated and continue to entail macroeconomic and financial stability risks for Hong Kong.

**Chart 4.39**  
Residential property prices and transaction volumes



The overall housing prices rose sharply in the first quarter of 2013 but then stayed flat in the second quarter (Chart 4.39). This led to a cumulative increase of 6.8% in housing prices during the first half, compared with a 25.7% increase for the whole of 2012. In the upper-middle and luxury segment, prices increased at a lot more moderate pace of 0.4% for the first half as a whole. Housing prices continued to show slight softening in the third quarter according to provisional transaction records from agents, with the Centa-City leading index staying virtually unchanged in July and August (Chart 4.40).

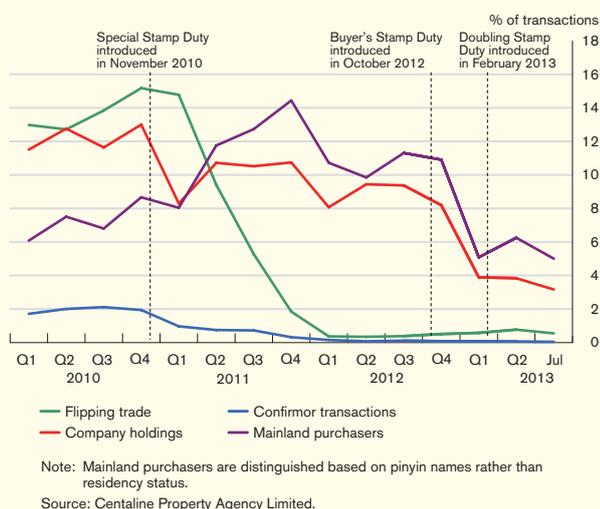
**Chart 4.40**  
Residential property prices and transaction volumes estimated by realties



On the other hand, transaction volume has contracted significantly, with only about 28,000 sale and purchase agreements being lodged with the Land Registry in the first half of 2013, down from some 40,100 agreements in the preceding half-year period. In particular, secondary-market transactions dropped by about one-third in the first half. Speculative activities, as indicated by confirmor transactions and flipping trade, also remained largely contained, while company holdings and non-local demand have dropped

significantly after the introduction of the Buyer's Stamp Duty and doubling of the ad valorem stamp duty rates (Chart 4.41). Meanwhile, primary-market transactions fell by 26.1%, in part because developers have slowed, at least temporarily, their pace of launching new projects with the Residential Properties (First-hand Sales) Ordinance taking effect since late April. Anecdotal news suggests transactions in the secondary market remained weak in the third quarter, while the launch of the first-hand flats has quickened somewhat.

**Chart 4.41**  
**Confirmer transactions, flipping trade, company holdings and Mainland purchasers**



Nevertheless, property valuation is still highly stretched. As growth in private household income failed to catch up with housing price growth, housing affordability has continued to deteriorate. The HKMA's estimated price-to-

<sup>28</sup> The price-to-income ratio measures the average price of a typical 50 square-metre flat relative to the median income of households living in private housing, from a potential home buyer's perspective with reference to the prevailing housing prices.

<sup>29</sup> The income-gearing ratio compares the amount of mortgage payment for a typical flat of 50 square metres (under a 20-year mortgage scheme with a 70% loan-to-value ratio) with the median income of households living in private housing, from a potential home buyer's perspective with reference to the prevailing housing prices. As such, 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.

income ratio climbed to 14.7 in mid-2013, just above the peak reached in 1997 (Chart 4.42).<sup>28</sup> The income-gearing ratio also rose to a high of 65% in June, notably above the long-term average of 50%.<sup>29</sup> Moreover, if the mortgage interest rate were much higher, say three percentage points above the current level, the income-gearing ratio would have reached an even more acute level of 84%. Another sign of misalignment in housing prices is the record-low rental yield, which on average has dropped to 2 - 3% (Chart 4.43). In particular, from an asset-pricing perspective, the rental yield could be low relative to the mortgage costs, risk premia, expected capital gains and other costs of ownership.

**Chart 4.42**  
**Indicators of housing affordability**



**Chart 4.43**  
**Housing rental yield for fresh leases**



## Monetary and financial conditions

In contrast to the upbeat outlook over the past few years, Hong Kong's housing market is expected to see some consolidation in the period ahead. While the low interest rate environment has fuelled the rapid upsurge in property prices, such favourable conditions may reverse earlier and sharper than expected. Indeed, long-dated interest rates in Hong Kong have recently increased amid concerns about a tapering of asset purchases by the US Federal Reserve, although the feed-through to the local mortgage interest rate has remained slow. However, when interest rates return to more normal levels, this could lead to a sharp rise in mortgagors' repayment burden, by about 10% for each percentage-point rate increase under a 20-year mortgage according to our in-house estimates. Moreover, rental yields could become less attractive and this could put a drag on property valuation.

Besides, moderation of Hong Kong's domestic economy as well as unstable regional economic environment could also cloud the prospects of the housing market. Tail risks in the global economy and the financial markets also have not disappeared, and if realised, could exert further pressure on housing prices. Stamp duty and prudential measures will also continue to restrain investment and non-local demand.

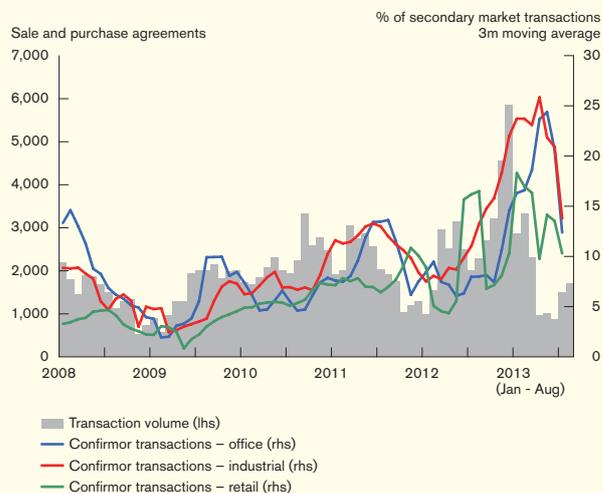
The prudential measures implemented so far have helped bring down the actual loan-to-value ratio for new mortgages from an average of 64% before policy measures to 56% recently, and the debt-servicing ratio from an average of over 40% to 36%. In any case, banks should continue to strengthen their risk management in mortgage lending business and maintain a conservative

credit stance in order to mitigate the risks of interest rate hikes and the rapidly changing macro-financial conditions. Meanwhile, home buyers should stay vigilant on property market and interest rate developments and avoid stretching themselves with excessive borrowing.

### *Commercial and industrial property markets*

The once-buoyant non-residential market has also cooled quite notably. Total transactions contracted substantially, with only about 11,400 sale and purchase agreements being lodged with the Land Registry in the first half of 2013, down from 20,600 agreements in the preceding half-year period (Chart 4.44). Indeed, just in the second quarter, transaction volume fell by about two-thirds from the first quarter. Confirmed transactions, a measure of speculative activities, also decreased significantly but were still high in terms of proportion to total transaction volume.

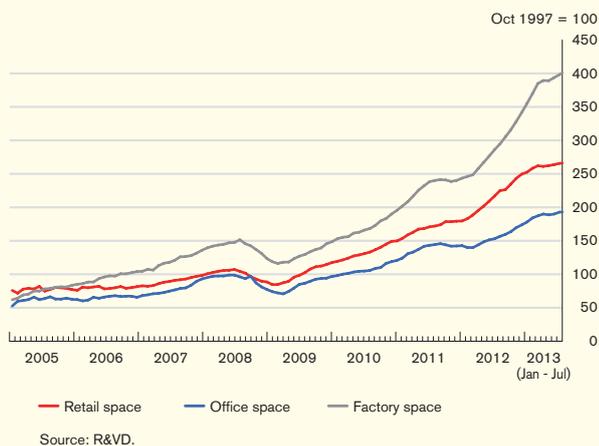
**Chart 4.44**  
Transactions in non-residential properties



Sources: Land Registry and Centaline Property Agency Limited.

On the other hand, prices of non-residential properties continued to increase, by 5 - 8% for office and retail space and 12% for flatted factories during the first half of 2013 (Chart 4.45). Rentals were also resilient, picking up on a broad base by 6 - 7% for these three types of properties, and overall rental yields remained close to the historical low of 2 - 3%. According to property consultancy firms, the support to prices and rentals was mainly from properties in suburban locations, while prime location properties saw a modest decrease in valuation and rentals.

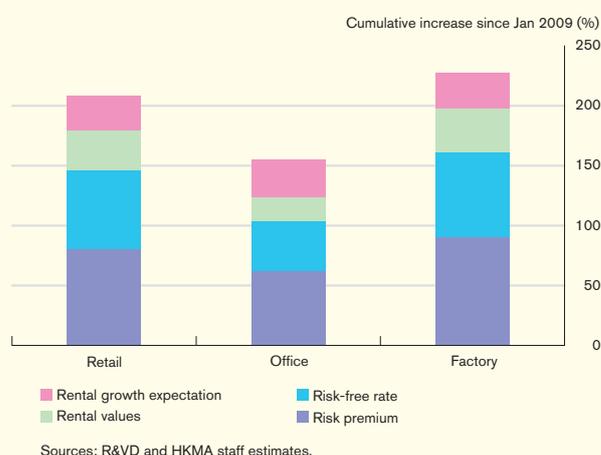
**Chart 4.45**  
Non-residential property price indices



Potential overvaluation risks in the non-residential property market would remain a key concern in terms of macroeconomic and financial stability. Our study shows that increased risk appetite (partly reflecting expectations of future capital gains) and the low interest rate environment have made outsized contributions to

the rapid run-up in non-residential property prices since 2009 (Chart 4.46).<sup>30</sup> Given that these two factors are subject to cyclical reversals, abrupt property price corrections could be triggered. In terms of banking and financial stability, this could lead to a rise in non-performing loans and a deterioration in banks' asset quality. As such, it is critically important that banks should restrain their exposure to property-related lending and maintain a prudent stance when granting new mortgages and asset-backed loans.

**Chart 4.46**  
Decomposition of non-residential property price increases since 2009



The upsurge in non-residential property prices and rentals also has implications for Hong Kong's macroeconomic stability and external competitiveness. Higher rental costs would make Hong Kong companies more vulnerable to sudden deteriorating economic and business environment, possibly with great impact on bankruptcy and unemployment. With that said, the build-up of rental pressures may be mitigated to some extent in the second half of the year, due to wavering investment sentiment in the property market, the effects of prudential policy measures, and subdued demand for business premises in light of uncertain growth prospects.

<sup>30</sup> A three-stage dividend discount model (DDM) is adopted, based on the approaches developed by the Bank of England. The DDM breaks down changes in prices into development in expected rental value growth, rental value, the risk-free interest rate, and the risk premium. An increase in property prices would be attributed to higher current or expected rents but lower risk-free rate or risk premium. For more details on the DDM, see J. Benford and O. Burrows (2013), "Commercial property and financial stability", *Bank of England Quarterly Bulletin*, First Quarter, pages 48 - 58. and N. Panigirtzoglou and R. Scammell (2002), "Analysts' Earnings Forecasts and Equity Valuations." *Bank of England Quarterly Bulletin*, Spring, pages 59 - 66.