

## 5. Banking sector performance

Despite the unfavourable external environment, the local banking sector continued to grow healthily, characterised by strong capital positions by international standards, sound liquidity and an appreciable increase in earnings, as well as a general improvement in asset quality. As the European sovereign debt and banking crisis intensified, banks in Hong Kong have managed their exposure to Europe prudently. With the Mainland economy slowing, banks' credit risk in respect of their Mainland exposure could also be rising, but the banks should be well positioned to manage such risks.

### 5.1 Profitability and capitalisation

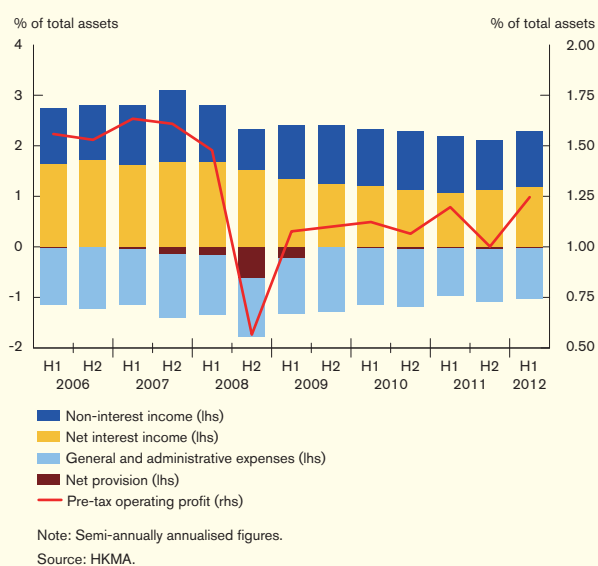
#### Profitability

Despite the prolonged European sovereign debt crisis and a slowdown in the Mainland economy, retail banks<sup>38</sup> registered an appreciable improvement in earnings, with aggregate pre-tax profits growing strongly by 26.9% in the first half of 2012, from the second half of 2011. The

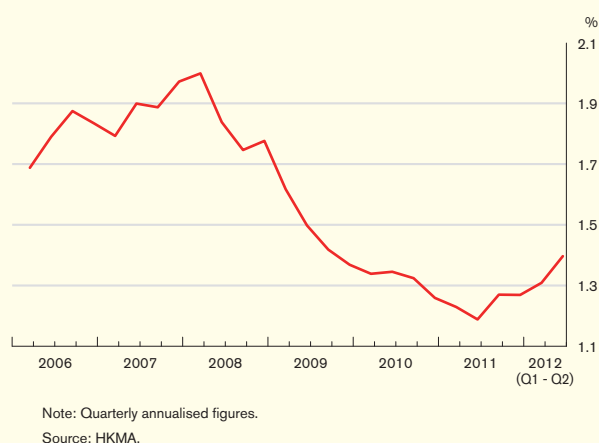
improvement reflected higher net interest and non-interest income as well as lower operating costs and lower net charges for provisions. As a result, the return on assets rose from 1% to 1.25% in the same period (Chart 5.1).

The net interest margin of banks improved further in 2012 H1 to an average of 1.35% (Chart 5.2), from 1.27% in 2011 H2 and 1.21% in 2011 H1. This was partly due to an easing of

**Chart 5.1**  
Profitability of retail banks



**Chart 5.2**  
Net interest margin of retail banks

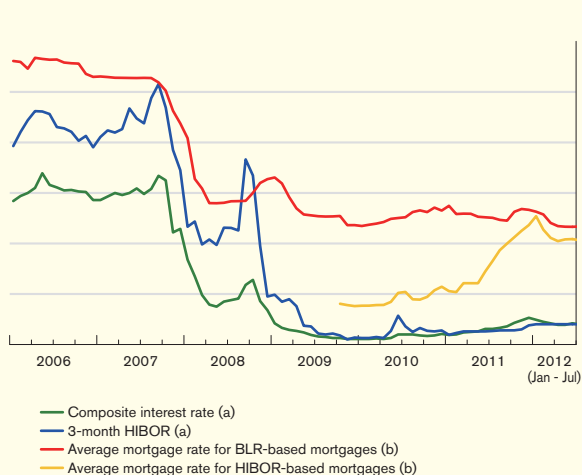


<sup>38</sup> Throughout this chapter, figures for the banking sector relate to Hong Kong offices only, except where otherwise stated.

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banks' funding pressures, as indicated by the composite interest rate, which decreased by 13 basis points in January - July 2012 (Chart 5.3).

**Chart 5.3**  
Interest rates

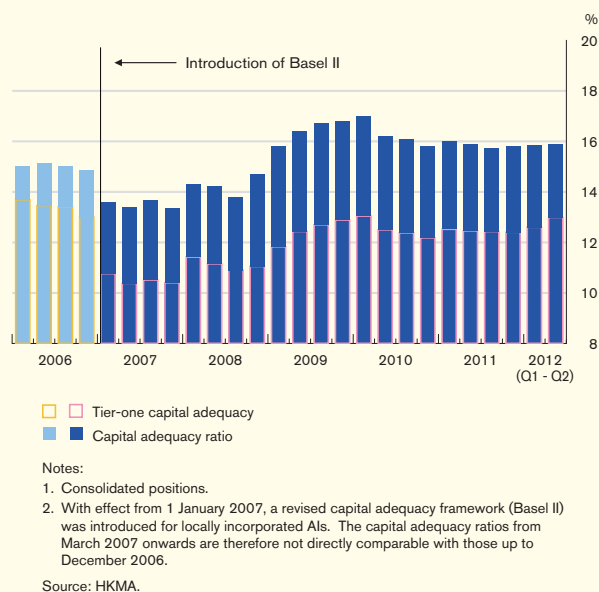


As funding costs in general softened and competition continued to be keen in the mortgage market, both BLR-based (best lending rate-based) and HIBOR-based mortgage rates declined on average by 33 and 30 basis points respectively in January - July 2012 (Chart 5.3). Meanwhile, the share of BLR-based mortgages amongst newly approved mortgage loans increased further to 92.1% in 2012 H1 and 93.4% in July 2012, from 59.7% in 2011 H2.

## Capitalisation

Capitalisation of the banking sector remained well above minimum international standards. The consolidated capital adequacy ratio of locally incorporated AIs remained steady at 15.9% at the end of June 2012, up slightly from 15.8% at the end of December 2011 (Chart 5.4), and the tier-one capital adequacy ratio (the ratio of tier-one capital to total risk-weighted assets) increased to 13%, from 12.4%.

**Chart 5.4**  
Capitalisation of locally incorporated AIs

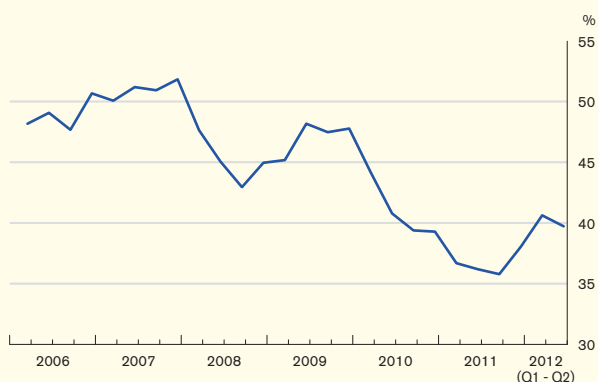


The Basel III framework is scheduled to phase in from 1 January 2013. Data regularly collected by the HKMA indicate that local AIs are well capitalised, traditionally placing significant reliance on common equity to meet regulatory capital requirements. Further, most of the Basel III regulatory adjustments are already required to be deducted from banks' capital base under Hong Kong's existing capital rules. Therefore, Hong Kong banks should be relatively well positioned to meet the higher capital requirements of Basel III.

## 5.2 Liquidity and funding

Liquidity conditions within the banking system remained sound, with the average liquidity ratio of retail banks rising to 39.7% at the end of June 2012, from 38% at the end of December 2011 (Chart 5.5), and continuing to be well above the regulatory minimum of 25%.

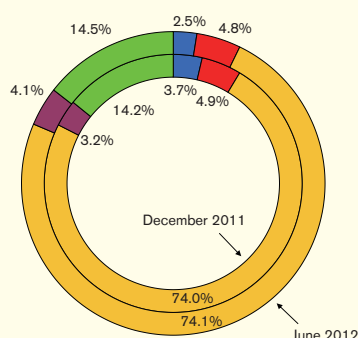
**Chart 5.5**  
Liquidity ratio of retail banks



Note: Quarterly average figures.  
Source: HKMA.

Customer deposits, which are typically less volatile than other funding sources, continued to be the primary funding source for retail banks. At the end of June 2012, the share of customer deposits to banks' total liabilities rose marginally to 74.1%, from 74.0% at the end of December 2011 (Chart 5.6).

**Chart 5.6**  
Liabilities structure of retail banks



■ Due to AIs  
■ Due to banks abroad  
■ Customer deposits  
■ Debt securities outstanding  
■ Other liabilities and capital and reserves

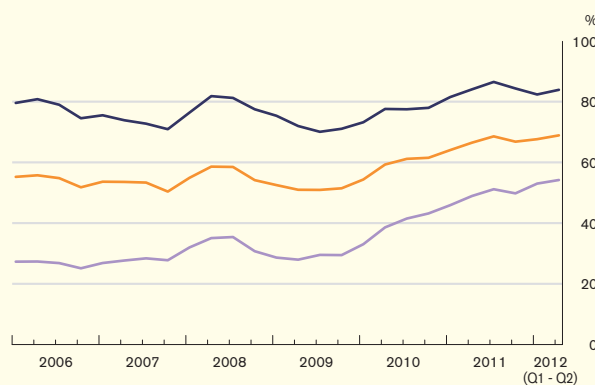
Notes:  
1. Figures refer to the percentage of total liabilities (including capital and reserves).  
2. Debt securities comprise negotiable certificates of deposit and all other negotiable debt instruments.

Source: HKMA.

While the share of customers' deposits remained steady, the share of time deposits to total customer deposits edged down to 42% in June 2012 from 43.3% in December 2011, and stayed significantly lower than the corresponding share of over 50% in 2008 and the years prior to that. This suggests the average maturity of deposits in retail banks may be relatively lower than in previous periods and hence their liquidity could potentially be more affected by the impact of capital outflows.

Meanwhile, the Hong Kong dollar loan-to-deposit (LTD) ratio of all AIs edged down to 84% at the end of June 2012, compared with 84.5% at the end of December 2011. In contrast, both the all currency and foreign currency LTD ratios rose significantly by 2.1 and 4.4 percentage points to 69% and 54.3% respectively at the end of June (Chart 5.7), due to a relatively stronger demand for foreign currency loans outpacing the moderate growth of foreign currency deposits. The lacklustre growth of foreign currency deposits was partly due to the decline of renminbi deposits<sup>39</sup> during the first half of 2012.

**Chart 5.7**  
Loan-to-deposit ratios of all AIs



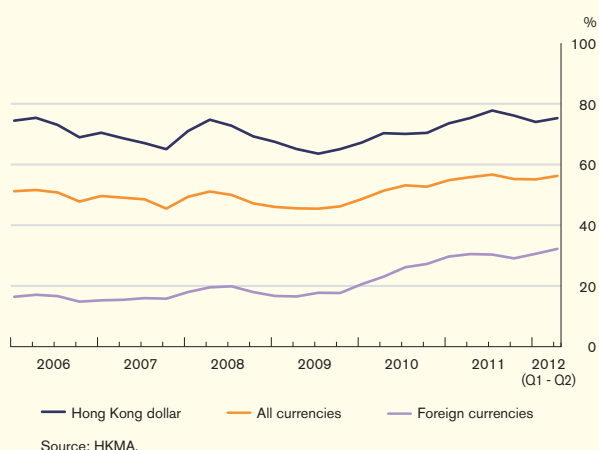
— Hong Kong dollar — All currencies — Foreign currencies  
Source: HKMA.

<sup>39</sup> For details, see Section 4.2.

## Banking sector performance

For retail banks, a similar pattern could also be observed. While the Hong Kong dollar LTD ratio edged down to 75.4% in June 2012 from 76.2% in December 2011, the all currency LTD ratio increased to 56.3% from 55.3%, and the foreign currency LTD ratio rose from 29.1% to 32.2% (Chart 5.8). Given heightened uncertainties in the external environment and the already relatively high LTD ratios, continued vigilance is warranted regarding the risk of a liquidity tightening arising from an abrupt outflow of funds.

**Chart 5.8**  
Loan-to-deposit ratios of retail banks



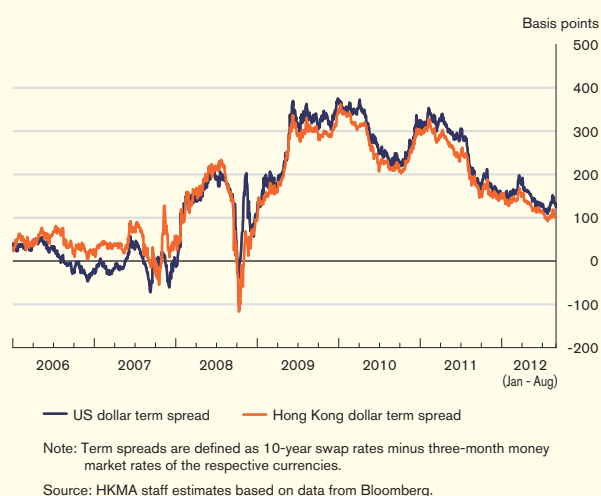
### Foreign currency position

The banking sector's capability to repay liabilities denominated in foreign currencies can be assessed by reference to the aggregate net open position of AIs for all foreign currencies. This position amounted to HK\$46 billion at the end of June 2012, which was equivalent to 0.3% of total assets of AIs, indicating that the overall exposure of AIs to foreign exchange risks may not be of significant concern.

## 5.3 Interest rate risk

The spreads between the long and short-term interest rates for the US dollar and Hong Kong dollar narrowed further in January - August 2012 (Chart 5.9), suggesting that the incentive for banks' search-for-yields activities by borrowing short-term funds to purchase long-term interest-bearing assets may have reduced.

**Chart 5.9**  
Term spreads of Hong Kong and US dollars

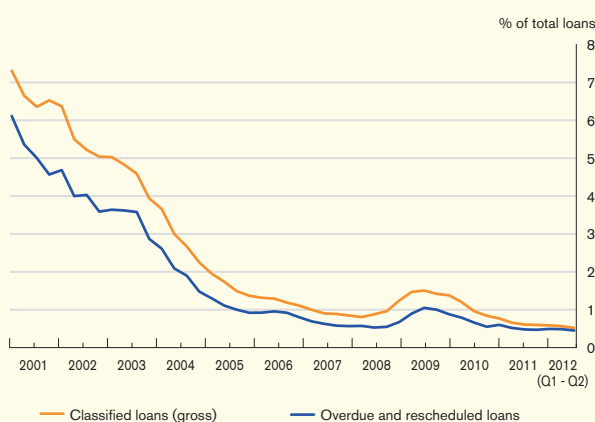


Nevertheless, given that the spreads remained significantly above the levels prevailing prior to the global financial crisis, banks should be watchful in monitoring and managing the potential mark-to-market loss for their financial investments, which could arise from changes in the yield spreads.

## 5.4 Credit risk

The asset quality of retail banks' loan portfolios improved in general during the first half of 2012, with the classified loan ratio falling further to 0.52% at the end of June 2012 from 0.59% at the end of December 2011, and the ratio of overdue and rescheduled loans edging down to 0.45% from 0.49% (Chart 5.10).

**Chart 5.10**  
Asset quality of retail banks



**Notes:**

1. Classified loans are those loans graded as "sub-standard", "doubtful" or "loss".
2. Figures related to retail banks' Hong Kong office(s) and overseas branches.

Source: HKMA.

As economic activities slowed, credit growth within the Hong Kong banking sector moderated further to 4.7% in 2012 H1, from 5.4% in 2011 H2. The growth was largely contributed by foreign currency components, which expanded by a rapid 10%, while Hong Kong dollar loans rose by only 1.4%. Property-related lending<sup>40</sup>

<sup>40</sup> Property lending includes mortgage loans and credit for building, construction and property development and investment.

<sup>41</sup> Loans to households constitute lending to professional and private individuals, excluding lending for other business purposes. Mortgage lending accounts for a major proportion of household loans, while the remainder comprises mainly unsecured lending through credit card lending and other personal loans for private purposes. At the end of June 2012, the share of household lending in domestic lending was 30.3%.

<sup>42</sup> The mortgage lending growth in the first half of 2012 was primarily from the second quarter, as the quarter-on-quarter growth in Q1 was only 0.1%.

increased marginally by 0.2%, compared with a rise of 2.4% in the second half of last year. However, its share to total domestic lending remained high at over 46%. Looking ahead, credit may continue to grow at a slow pace in the second half of 2012. The results of the HKMA Opinion Survey on Credit Condition Outlook in June revealed that a majority of surveyed AIs expected loan demand to remain the same in the subsequent three months, while about one-fifth of them anticipated it to be somewhat lower (Table 5.A).

**Table 5.A**  
Expectation of loan demand in the next three months

(% of total respondents)	Sep 2011	Dec 2011	Mar 2012	Jun 2012
Considerably higher	0	0	0	0
Somewhat higher	14	19	19	5
Same	62	67	71	76
Somewhat lower	19	10	10	19
Considerably lower	5	5	0	0
Total	100	100	100	100

Note: Figures may not add up to 100% because of rounding.

Source: HKMA.

### Household exposure

The growth of household loans<sup>41</sup> slowed slightly to 2.6% in the first half of 2012, from 2.7% in 2011 H2. Within this, reflecting a more buoyant residential property market, mortgage lending went up by 2.5% in the first half<sup>42</sup> following a 1.2% increase in 2011 H2, while other loans for private purposes registered a growth of 5.1% after picking up by 3.8% (Table 5.B). Meanwhile, the level of household debt leverage, as measured by the ratio of household loans to GDP, remained steady at 58.7% at the end of June 2012, compared with 58.3% at the end of December 2011.

**Table 5.B**  
Half-yearly growth of loans to households of all AIs

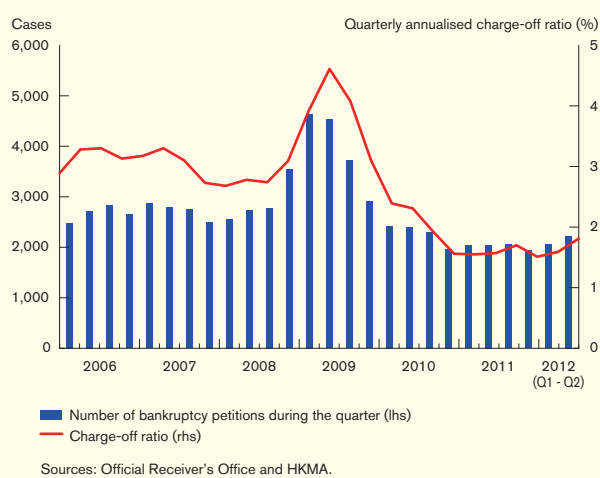
(%)	2009		2010		2011		2012
	H1	H2	H1	H2	H1	H2	H1
Mortgages	1.7	5.6	5.1	8.6	5.5	1.2	2.5
Credit cards	-9.6	5.7	-0.9	17.9	-1.4	15.9	-1.6
Other loans for private purposes	-8.1	8.9	7.9	6.6	9.4	3.8	5.1
Total loans to households	-0.8	6.1	5.1	8.9	5.6	2.7	2.6

Source: HKMA.

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The credit risk associated with unsecured household loans remained well contained, with the quarterly annualised charge-off ratio for credit card lending staying at a low level of 1.81% in 2012 Q2, albeit somewhat higher than the 1.51% in 2011 Q4 (Chart 5.11). The number of bankruptcy petitions likewise remained at a relatively low level, suggesting a relatively low credit risk environment.

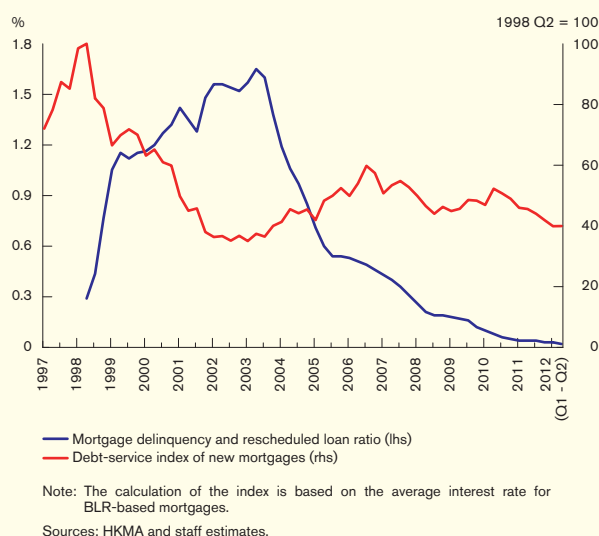
**Chart 5.11**  
Charge-off ratio for credit card lending and bankruptcy petitions



Various other indicators suggest a general improvement in the credit risk of household loans. The delinquency and rescheduled loan ratio of banks' mortgage portfolios fell further to a record low of 0.02% at the end of June 2012 (Chart 5.12), and the debt-service index of new mortgages declined to 40 in 2012 Q2 from 42 in 2011 Q4. The decline in the debt-service index mainly reflected the further increase in the contractual life of mortgage loans and the prevailing low interest rate environment.

However, with the average contractual life of new mortgage loans climbing to a high level of 295 months in June 2012 from 284 months in December 2011, the repayments of these long tenor mortgage loans have become increasingly sensitive to a rise in interest rates. How this may impact on the debt-service burden of households should be closely watched.<sup>43</sup>

**Chart 5.12**  
Delinquency ratio of banks' mortgage portfolios and household debt-service burden in respect of new mortgages



## Corporate exposure<sup>44</sup>

Domestic loans to corporations<sup>45</sup> grew at a slightly more rapid pace of 3.2% in the first half of 2012, after a 1.4% increase in 2011 H2. At the end of June, corporate loans accounted for 69.3% of domestic lending.

A number of indicators suggest a stable credit risk environment for banks' corporate lending. The number of compulsory winding-up orders of companies fell to 154 in the first half, from 170

<sup>43</sup> On 14 September 2012, new measures were introduced by the HKMA related to loan tenor and borrowers with multiple property mortgages. The former measure limits the maximum loan tenor to 30 years for all property mortgage loans. For details, see the HKMA press release "Prudential Supervisory Measures for Mortgage Lending" issued on the same date.

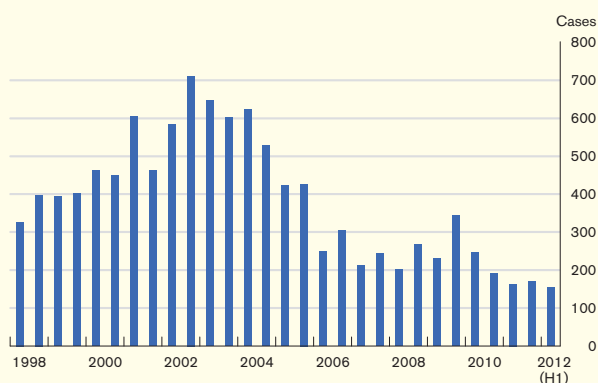
<sup>44</sup> Excluding interbank exposure.

<sup>45</sup> Loans to corporations comprise domestic lending except lending to professional and private individuals.

## Banking sector performance

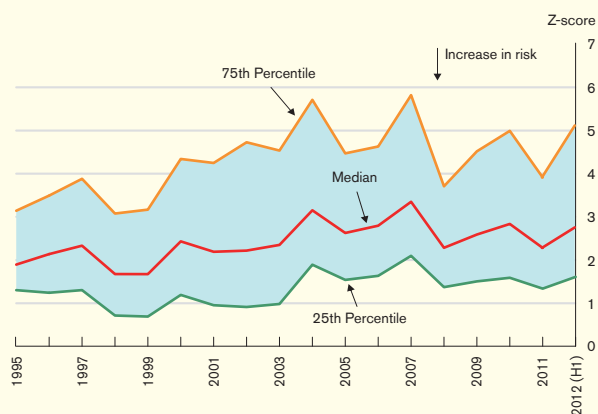
in the preceding six months (Chart 5.13). Meanwhile, the Altman's Z-score<sup>46</sup>, a credit risk measure based on accounting data, headed higher in the first half, indicating an improvement in the financial health of the non-financial corporate sector (Chart 5.14).

**Chart 5.13**  
Number of winding-up orders of companies



Source: Official Receiver's Office.

**Chart 5.14**  
Altman's Z-score: A bankruptcy risk indicator of listed non-financial companies



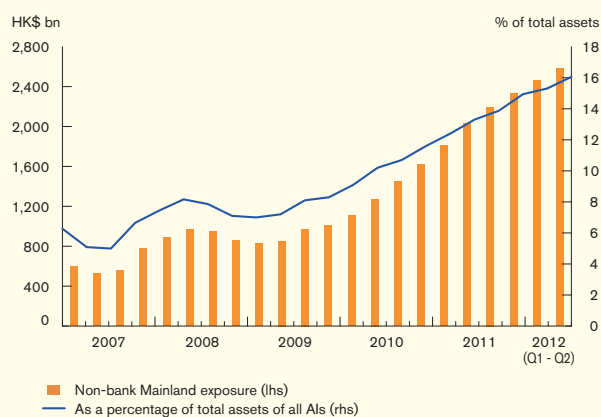
Note: A lower Z-score indicates a higher likelihood of a company default.  
Source: HKMA staff estimates based on data from Bloomberg.

## Mainland exposure

The credit exposure of the domestic banking sector to Mainland-related business expanded further. The total non-bank Mainland exposure of all AIs reached HK\$2,579 billion (16.1% of total assets) at the end of June 2012, from HK\$2,330 billion (14.9% of total assets) at the

end of December 2011 (Chart 5.15). Of this, retail banks' non-bank Mainland exposure<sup>47</sup> rose to HK\$1,717 billion (16.8% of total assets) from HK\$1,572 billion (15.8% of total assets).

**Chart 5.15**  
Non-bank Mainland exposure of all AIs



Note: Figures include exposure booked in AIs' banking subsidiaries in Mainland China.  
Source: HKMA.

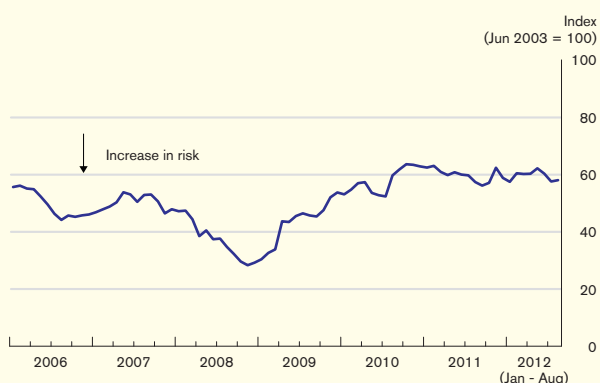
Despite a slowdown in the Mainland economy, the overall asset quality of the Mainland's corporate sector appears to have remained steady, as suggested by its aggregate distance-to-default index<sup>48</sup> which stayed at a more favourable level than prior to the global financial crisis (Chart 5.16).

<sup>46</sup> Altman's Z-score is a credit risk measure based on accounting data. It is a typical credit risk measure to assess the health of the corporate sector based on an array of financial ratios reported in companies' financial statements. The accounting ratios used to derive the Z-score are working capital/total assets, retained earnings/total assets, earnings before interest and taxes/total assets, market value of equity/book value of total liabilities, and sales/total assets.

<sup>47</sup> Including exposure booked in retail banks' banking subsidiaries in Mainland China.

<sup>48</sup> The distance-to-default is a market-based default risk indicator based on the framework by R. Merton (1974), "On the pricing of corporate debt: the risk structure of interest rates", *Journal of Finance*, Vol. 29, pages 449 – 470, in which equity prices, equity volatility, and companies' financial liabilities are the determinants of default risk. In essence, it measures the difference between the asset value of a firm and a default threshold in terms of the firm's asset volatility.

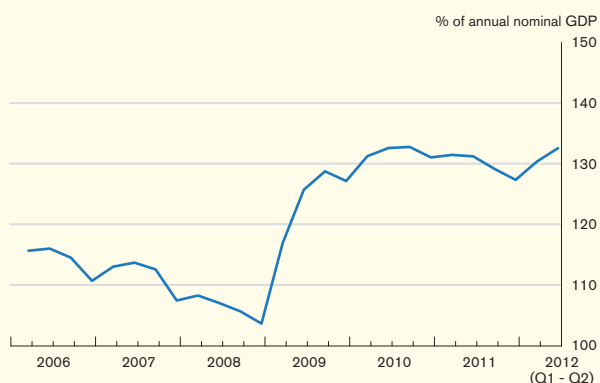
**Chart 5.16**  
Distance-to-default index for the Mainland corporate sector



Note: Distance-to-default index is defined as the simple average of the distance-to-default values of non-financial constituent companies (i.e. excluding investment companies and those engaged in banking, insurance and finance) of the Shanghai Stock Exchange 180 A-share index.  
Source: HKMA staff estimates.

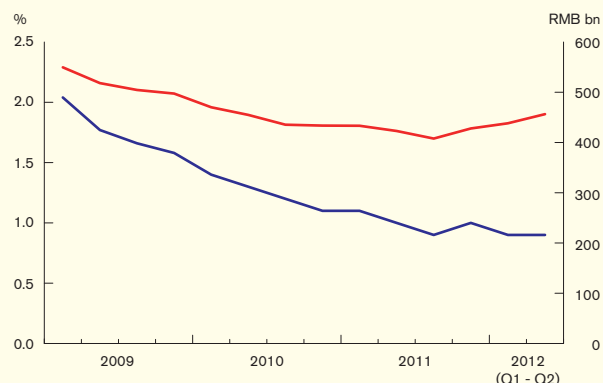
While a substantial share of the non-bank Mainland exposure is backed by guarantees or collateralised, banks should be attentive to the credit risk management of their exposure in view of concerns over a possible further consolidation of the Mainland economy, its relatively high level of credit-to-GDP ratio (Chart 5.17), and the recent increase in the amount of non-performing loans in the Mainland's banking system (Chart 5.18).

**Chart 5.17**  
Credit-to-GDP ratio in Mainland China



Note: Credit-to-GDP ratio is defined as the ratio of claims on the private sector to the sum of quarterly nominal GDP for the latest four quarters.  
Sources: IMF International Financial Statistics and CEIC.

**Chart 5.18**  
Non-performing loans in Mainland China

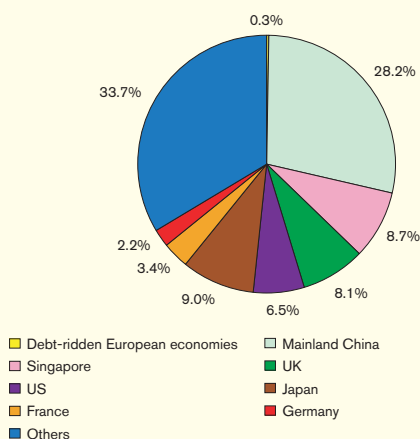


Source: China Banking Regulatory Commission.

*Impact of the European sovereign debt crisis*

The performance of local banks will continue to be affected by the evolution of the European sovereign debt crisis. Partly reflecting the move by banks to cut their exposure, the share of external claims of the Hong Kong banking sector on the more debt-ridden European economies (Greece, Ireland, Italy, Portugal and Spain) decreased to 0.3% by the end of June 2012, from 0.8% a year earlier, while its exposure to the UK, France and Germany was lowered to 13.7% from 14.3% (Chart 5.19). Given that the exposure of

**Chart 5.19**  
External claims of the Hong Kong banking sector on major economies (all sectors) at the end of June 2012



Notes:  
1. Debt-ridden European economies refer to Greece, Ireland, Italy, Portugal and Spain.  
2. Figures do not add up to 100% because of rounding.  
Source: HKMA.



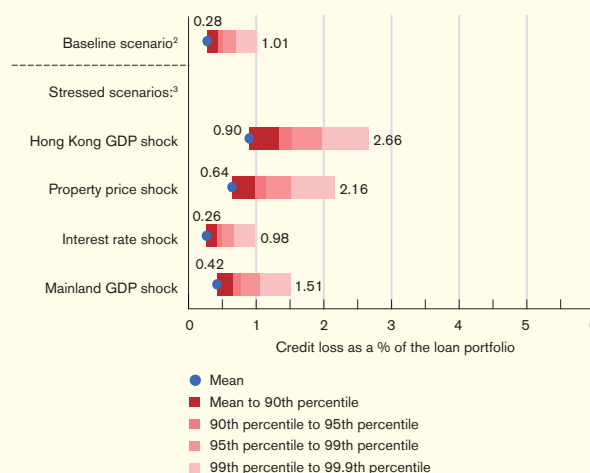
the Hong Kong banking sector to banks in the UK, France and Germany is not immaterial, and these banks in turn have significant exposure to the more debt-ridden European economies, the possible contagion risk and its implications for banks in Hong Kong merit close attention.

*Macro stress testing of credit risk*<sup>49 & 50</sup>

Results of the latest macro stress testing on retail banks' credit exposure suggest that the Hong Kong banking sector remains resilient and should be able to withstand rather severe macroeconomic shocks, similar to those during the Asian financial crisis.

Chart 5.20 presents the simulated future credit loss rate of retail banks in 2014 Q2 under four specific macroeconomic shocks<sup>51</sup> using information up to 2012 Q2.

**Chart 5.20**  
The mean and value-at-risk statistics of simulated credit loss distributions<sup>1</sup>



Notes:

- The assessments assume the economic conditions in 2012 Q2 as the current environment. The Monte Carlo simulation method is adopted to generate the credit loss distribution for each scenario.
- Baseline scenario: no shock throughout the two-year period.
- Stressed scenarios:
  - Hong Kong GDP shock:** reductions in Hong Kong's real GDP by 2.3%, 2.8%, 1.6%, and 1.5% respectively in each of the four consecutive quarters starting from 2012 Q3 to 2013 Q2.
  - Property price shock:** Reductions in Hong Kong's real property prices by 4.4%, 14.5%, 10.8%, and 16.9% respectively in each of the four consecutive quarters starting from 2012 Q3 to 2013 Q2.
  - Interest rate shock:** A rise in real interest rates (HIBORs) by 300 basis points in the first quarter (i.e. 2012 Q3), followed by no change in the second and third quarters and another rise of 300 basis points in the fourth quarter (i.e. 2013 Q2).
  - Mainland GDP shock:** Slowdown in the year-on-year annual real GDP growth rate to 4% in one year.

Source: HKMA staff estimates.

The expected credit losses for retail banks' aggregate loan portfolios two years after the different hypothetical macroeconomic shocks are estimated to be moderate, ranging from 0.26% (interest rate shock) to 0.9% (Hong Kong GDP shock).

Taking account of tail risk, banks' maximum credit losses (at the confidence level of 99.9%) under the stress scenarios range from 0.98% (interest rate shock) to 2.66% (Hong Kong GDP shock), which are significant, but smaller than the loan loss of 4.39% following the Asian financial crisis.

<sup>49</sup> Macro stress testing refers to a range of techniques used to assess the vulnerability of a financial system to "exceptional but plausible" macroeconomic shocks. Details of the model adopted in this exercise can be found in J. Wong et al. (2006), "A framework for stress testing banks' credit risk", *Journal of Risk Model Validation*, Vol. 2(1), pages 3 - 23. An updated framework is used for the current estimations.

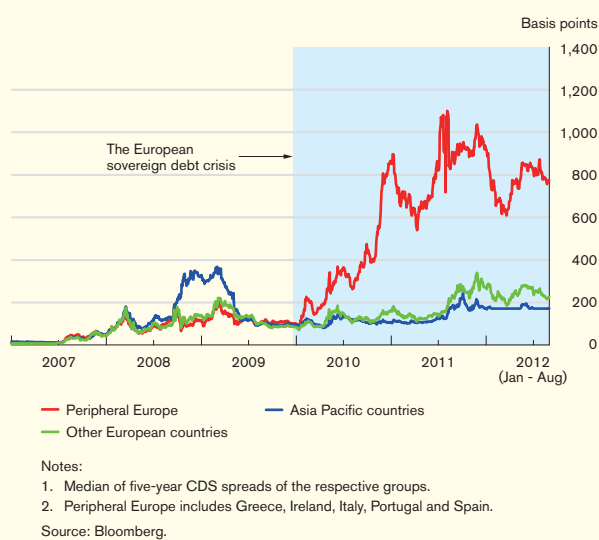
<sup>50</sup> All estimates of credit loss for the overall loan portfolio of Hong Kong banks presented in this Report are based on a revised stress testing framework. They are not strictly comparable to those estimates from the past framework that appeared in previous Reports due mainly to different definitions of credit losses in these two frameworks. Specifically, credit losses in two years after any shock under the revised framework are measured by the estimated specific provision ratio at the end of the second year plus 50% of the estimated specific provision ratio at the end of the first year after the shock, while credit loss estimates from the past framework are derived based on an estimated delinquency ratio at the end of the second year multiplied by a loss-given-default estimate, which is determined by the simulated property price change over the two-year horizon.

<sup>51</sup> These shocks are calibrated to be similar to those that occurred during the Asian financial crisis, except the Mainland China GDP shock.

## 5.5 Systemic risk to the banking system

While the CDS spreads for European banks widened as the European sovereign debt crisis re-intensified in the first half of 2012, the corresponding spreads for Asian banks remained low (Chart 5.21), suggesting the systemic risk of the banking sectors in Asia, so far, has not been severely affected by the sovereign debt problem in Europe.

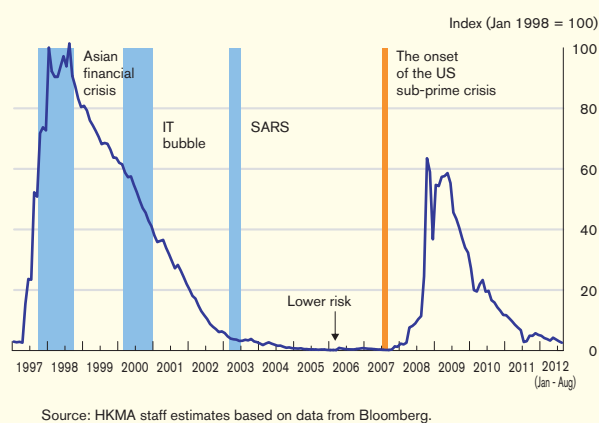
**Chart 5.21**  
CDS spreads of banks in Europe and Asia



In Hong Kong, the banking distress index, a market-based systemic risk indicator for the local banking sector, fell slightly to 2.6 in August 2012

from 4.1 in February (Chart 5.22), indicating that the risk of contagion in the banking system remained insignificant and the probability of an occurrence of multiple bank defaults is small. This optimistic market view was broadly consistent with the latest assessment result of the composite early warning system<sup>52</sup>, which estimated that the banking distress probability remained within the range of the low fragility category, suggesting that the banking sector continued to be stable and resilient.<sup>53</sup>

**Chart 5.22**  
The banking distress index



The Financial Stability Board has recently identified shadow banking as a potential source of systemic risk. Box 5 provides an overview of shadow banking in Hong Kong and assesses the issue by examining the lending activities of listed non-bank companies. The assessment suggests that while a rising trend of lending by domestic non-bank lenders exists, the scale remains small, with no material concerns on their leverage, funding structure and interconnectedness with the local banking sector. Nevertheless, continuous monitoring is required, since the situation may evolve amid rapid regulatory changes in the global financial system.

*Key performance indicators of the banking sector are provided in Table 5.C.*

<sup>52</sup> The composite early warning system is designed to estimate banking distress probability based on 10 leading indicators. These include macroeconomic fundamentals, currency crisis vulnerability, default risk of banks and non-financial companies, asset price misalignments, credit growth, and the occurrence of banking distress in other Asia-Pacific economies. For details, see J. Wong et al. (2010), "Predicting banking distress in the EMEAP economies", *Journal of Financial Stability*, Vol. 6(3), pages 169 - 179.

<sup>53</sup> The composite early warning system is a four-level risk rating system. A. Demirgüç-Kunt and E. Detragiache (2000), "Monitoring Banking Sector Fragility: A Multivariate Logit Approach", *World Bank Economic Review*, Vol. 14(2), pages 287 - 307, has been followed in the selection of the upper bounds of each of the four fragility classes so that type I error associated with the bounds are 10%, 30%, 50% and 100% respectively.

**Table 5.C**  
**Key performance indicators of the banking sector<sup>1</sup> (%)**

	Jun 2011	Mar 2012	Jun 2012
<b>Interest rate</b>			
1-month HIBOR <sup>2</sup> (quarterly average)	0.20	0.33	0.30
3-month HIBOR (quarterly average)	0.26	0.40	0.40
BLR <sup>3</sup> and 1-month HIBOR spread (quarterly average)	4.80	4.67	4.70
BLR and 3-month HIBOR spread (quarterly average)	4.74	4.60	4.60
Composite interest rate <sup>4</sup>	0.31	0.42	0.42
<b>Retail banks</b>			
<b>Balance sheet developments<sup>5</sup></b>			
Total deposits	2.6	1.4	1.3
Hong Kong dollar	1.2	2.9	0.2
Foreign currency	4.5	-0.5	2.7
Total loans	4.5	1.1	3.4
Domestic Lending <sup>6</sup>	4.1 <sup>r</sup>	0.5 <sup>r</sup>	2.9
Loans for use outside Hong Kong <sup>7</sup>	7.3 <sup>r</sup>	4.4 <sup>r</sup>	6.1
Negotiable instruments			
Negotiable certificates of deposit (NCD) issued	47.1	8.2	6.4
Negotiable debt instruments held (excluding NCD)	4.9	2.3	-2.8
<b>Asset quality<sup>8</sup></b>			
As percentage of total loans			
Pass loans	98.20	98.17	98.19
Special mention loans	1.19	1.27	1.28
Classified loans <sup>9</sup> (gross)	0.61	0.57	0.52
Classified loans (net) <sup>10</sup>	0.37	0.32	0.30
Overdue > 3 months and rescheduled loans	0.48	0.49	0.45
<b>Profitability</b>			
Bad debt charge as percentage of average total assets <sup>11</sup>	0.02	0.01	0.01
Net interest margin <sup>11</sup>	1.21	1.31	1.35
Cost-to-income ratio <sup>12</sup>	43.6	46.0	44.4
<b>Liquidity ratio (quarterly average)</b>	36.2	40.6	39.7
<b>Surveyed institutions</b>			
<b>Asset quality</b>			
Delinquency ratio of residential mortgage loans	0.01	0.01	0.01
Credit card lending			
Delinquency ratio	0.20	0.21	0.21
Charge-off ratio — quarterly annualised	1.57	1.59	1.81
— year-to-date annualised	1.53	1.59	1.67
<b>All locally incorporated AIs</b>			
<b>Capital adequacy ratio (consolidated)</b>	15.9	15.9	15.9

## Notes:

- Figures are related to Hong Kong office(s) only except where otherwise stated.
- With reference to the Hong Kong dollar Interest Settlement Rates released by the Hong Kong Association of Banks.
- With reference to the rate quoted by The Hongkong and Shanghai Banking Corporation Limited.
- The composite interest rate is a weighted average interest rate of all Hong Kong dollar interest-bearing liabilities, which include deposits from customers, amounts due to banks, negotiable certificates of deposit and other debt instruments, and Hong Kong dollar non-interest-bearing demand deposits on the books of banks. Further details can be found in the HKMA website.
- Quarterly change.
- Loans for use in Hong Kong plus trade finance.
- Includes "others" (i.e. unallocated).
- Figures are related to retail banks' Hong Kong office(s) and overseas branches.
- Classified loans are those loans graded as "substandard", "doubtful" or "loss".
- Net of specific provisions/individual impairment allowances.
- Year-to-date annualised.
- Year-to-date figures.

<sup>r</sup> Revised figure.

## Box 5

### Shadow banking in Hong Kong – an overview and assessment of lending by listed finance companies

#### Overview

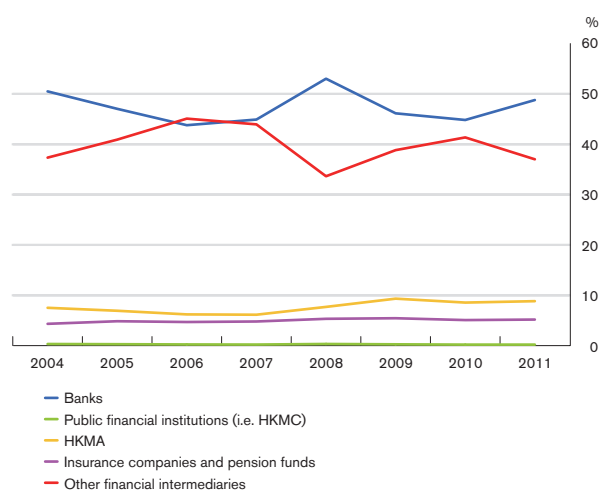
The Financial Stability Board (FSB) has recently identified shadow banking<sup>54</sup> as a potential source of systemic risk. In response, the FSB (2011)<sup>55</sup> introduced an annual monitoring exercise to strengthen the oversight and regulation of shadow banking. This box summarises the key findings of the 2012 monitoring exercise for Hong Kong.

The monitoring exercise requires authorities to assess the size and composition of their own financial systems (the “macro-mapping” exercise) to identify possible areas where significant non-bank credit intermediation and systemic risk may arise.

Chart B5.1 summarises the results for Hong Kong. In terms of asset size, banks remain the largest sector, accounting for around 49% of total assets of the Hong Kong financial system at the end of 2011. Other financial intermediaries (OFIs), including money market funds, hedge

funds, other investment funds and finance companies<sup>56</sup>, constituted 37% of total assets of the financial system. The remaining 14% mainly reflects assets of insurance companies, pension funds, public financial institutions and the HKMA.<sup>57</sup>

**Chart B5.1**  
The Hong Kong financial system by asset share of sectors



Sources: Bloomberg, C&SD, Hong Kong Mortgage Corporation Limited (HKMC), Mandatory Provident Fund Schemes Authority, Securities and Futures Commission, financial reports of companies, HKMA and staff estimates.

The macro-mapping exercise indicates that the scale of OFIs is material. This finding, however, does not imply that OFIs are currently heavily involved in shadow banking activities, as lending does not form a major portion of their assets.<sup>58</sup>

<sup>54</sup> Shadow banking refers to credit intermediation involving entities and activities outside the regular banking system.

<sup>55</sup> Financial Stability Board (2011), “Shadow Banking: Strengthening Oversight and Regulation”.

<sup>56</sup> In this box, finance companies refer to those listed non-bank companies that are classified as “Financials” using the Global Industry Classification Standard by Bloomberg and reported to have “loan receivables” in their balance sheets. Finance companies do not include insurance companies.

<sup>57</sup> Since data for hedge funds and insurance companies are available only up to 2010, their figures for 2011 are estimated by assuming their asset growth rates in 2011 are the same as their respective growth rates in 2010.

<sup>58</sup> At the end of 2011, around 70% of assets of OFIs were in the form of “other investment funds” (mainly bond and equity funds), which are not directly involved in lending. For finance companies, while they are more involved in lending business, the share of lending in total assets for listed domestic finance companies is found to be small at around 2%.

### Lending by listed finance companies

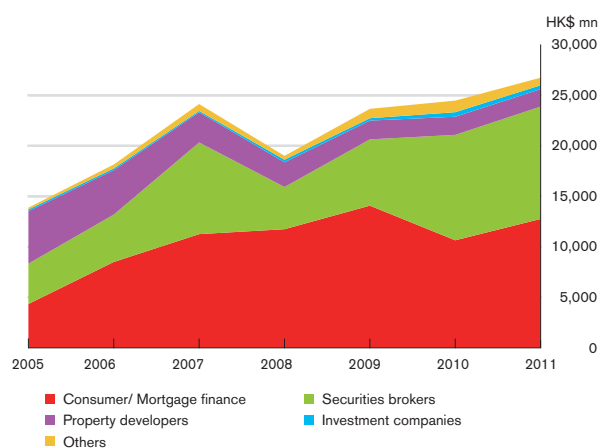
In order to investigate this issue further, we narrowed down the focus to credit intermediation activities by finance companies.<sup>59</sup> We analysed the scale and trend of lending by finance companies using data on the financial accounts of all active non-bank financial companies<sup>60</sup> listed in Hong Kong that are involved in credit intermediation.<sup>61</sup>

It was found that finance companies listed in Hong Kong contain two major groups of companies by reference to their principal places of business, namely Mainland and domestic (Hong Kong) finance companies. For Mainland finance companies listed in Hong Kong, information from their annual reports revealed that most of their lending reflects their credit portfolios on the Mainland, and banks in Hong Kong are not their major end-suppliers of funds, indicating limited implications currently for systemic risk in Hong Kong.

As for domestic finance companies, 58 listed domestic companies engaging in lending business were identified.<sup>62</sup> The scale of lending by these domestic finance companies remained small, amounting to less than 1% of total loans of the domestic banking sector at the end of 2011. These domestic finance companies can be categorised into five major groups according to their principal lending activities: (i) consumer/

mortgage finance companies; (ii) securities brokers; (iii) property developers; (iv) investment companies; and (v) others.<sup>63</sup> Chart B5.2 shows that lending<sup>64</sup> was mainly extended by consumer/ mortgage finance companies (for example, second mortgages, issuance of credit cards, personal loans and instalment loans) and securities brokers (mainly in the form of margin lending).

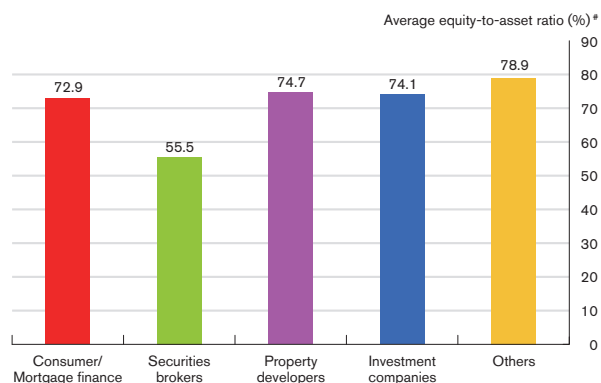
**Chart B5.2**  
Lending by listed domestic finance companies



Sources: Bloomberg, financial reports of companies and HKMA staff estimates.

The financial risks of domestic finance companies are assessed by their leverage. Equity is found to be the major type of funding for these companies, with the average equity-to-asset ratio for the 58 domestic finance companies being 68.9% (Chart B5.3). This indicates that their leverage and funding structure may not entail particularly high systemic risk.

**Chart B5.3**  
Leverage of listed domestic finance companies



\* Simple average of companies in each type

Sources: Bloomberg, financial reports of companies and HKMA staff estimates.

<sup>59</sup> Finance companies accounted for around 6.2% of the total assets of the Hong Kong financial system.

<sup>60</sup> In this box, non-bank companies refer to companies which are not AIs.

<sup>61</sup> Owing to the lack of complete data, the assessment can only rely on data from listed non-bank financial companies in Hong Kong, which at best could only provide a partial picture of non-bank credit intermediation in Hong Kong. Therefore, caution should be exercised in interpreting the results.

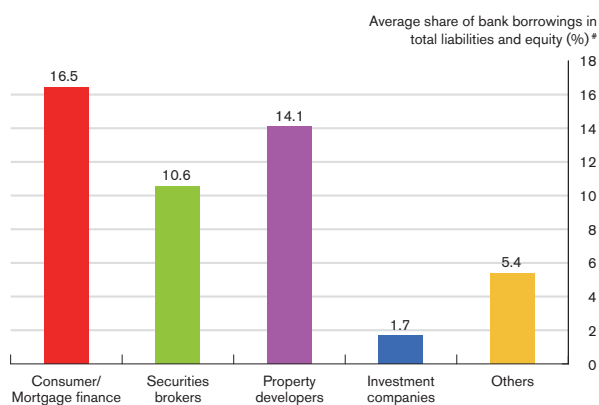
<sup>62</sup> The number excludes companies that are subsidiaries of other domestic finance companies.

<sup>63</sup> The classification of finance companies, however, cannot be perfectly precise because the lending activities of a number of finance companies span across different types.

<sup>64</sup> The lending by the non-bank financial companies is proxied by "loan receivables" or similar items reported in their annual reports.

As for their interconnectedness with the Hong Kong banking sector, bank borrowings are found to be a relatively minor funding source for the domestic finance companies, with the share of bank borrowings in total liabilities (including equity) varying from 1.7% to 16.5% among different types of domestic finance companies (Chart B5.4). The aggregate bank borrowings of these domestic finance companies only accounted for around 3.5% of total loans of the Hong Kong banking sector<sup>65</sup>, indicating that the interconnectedness between the domestic finance companies and the Hong Kong banking sector was low.

**Chart B5.4**  
**Bank borrowings of listed domestic finance companies**



<sup>\*</sup> Simple average of companies in each type

Sources: Bloomberg, financial reports of companies and HKMA staff estimates.

### Conclusion

The assessment suggests that while a rising trend of lending by domestic finance companies exists, the scale remains small, with no material concerns on their leverage, funding structure and interconnectedness with the local banking sector. Nevertheless, continuous monitoring is required, since the situation may evolve amid rapid regulatory changes in the global financial system.

<sup>65</sup> Assuming that all domestic finance companies' bank borrowings are from banks in Hong Kong. This assumption tends to overestimate their interconnectedness with the Hong Kong banking sector.