2. Global setting and outlook

In late 2019, signs of stabilising global activities raised hopes of a global economic recovery. However, such hopes were dented by rising global cases of the coronavirus infection from late January 2020, with mounting concerns over the risks of a global recession triggering bouts of global financial market sell-offs. To contain the economic fallouts, major central banks and several governments have rolled out stimulus measures since early March. In view of the wider spread of the coronavirus, downside risks to the global growth outlook have increased.

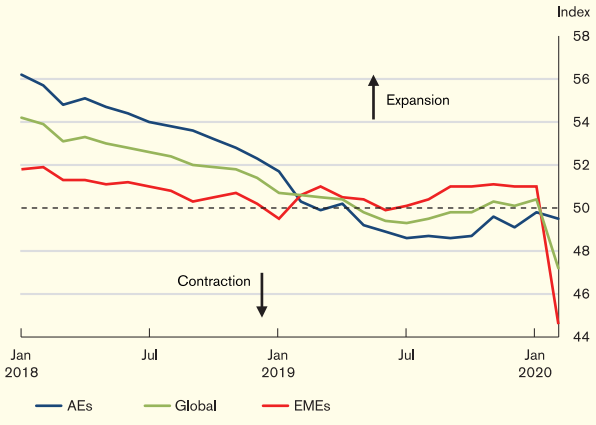
In East Asia, weak global demand clouded the region's economies in the second half of 2019. And, while the coronavirus is expected to dampen growth in regional economies in the near term, with the tourism industry being particularly hard-hit, the region will continue to face challenges from weakening corporate earnings and high private-sector leverage.

In Mainland China, economic growth continued to decelerate in the second half of 2019 amid sluggish domestic and external demand. And, despite the signing of the US-China "phase one" trade deal which helps temporarily reduce external uncertainties, downward pressure remains amid the coronavirus outbreak, the ongoing economic rebalancing and global economic slowdown, which is likely to be counteracted by policy responses on both the monetary and fiscal fronts.

2.1 External environment

Amid lingering trade tensions and policy uncertainty, global economic growth remained soft in the second half of 2019, dampened by sustained weakness in manufacturing and investment. That said, nascent signs of growth stabilisation emerged in the final quarter (Chart 2.1), thanks partly to the earlier monetary easing by the Federal Reserve (Fed) and the European Central Bank (ECB), as well as de-escalating global trade tensions following the agreement of a "phase one" US-China trade deal.

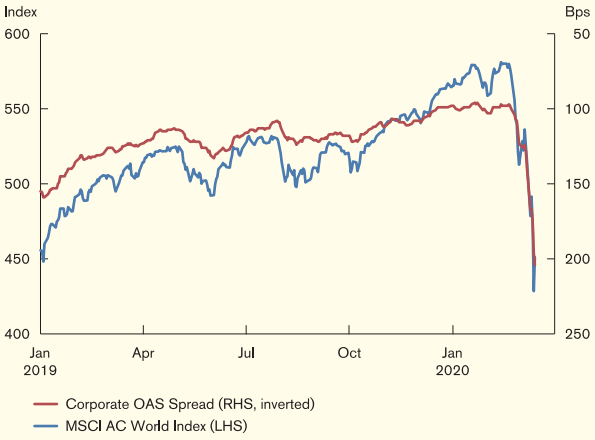
Chart 2.1
Manufacturing Purchasing Managers' Indices



Source: CEIC.

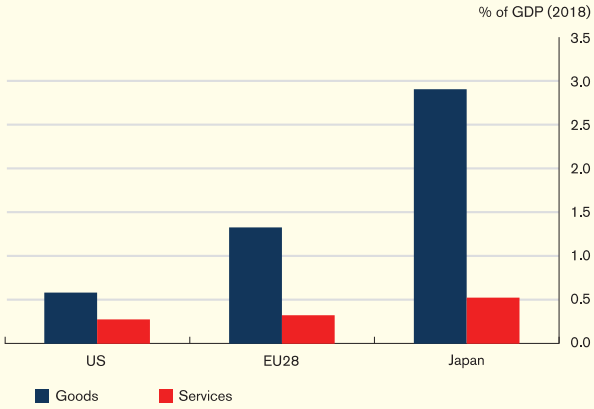
From late January, however, global financial markets experienced bouts of sell-offs amid concerns over rising cases of the coronavirus infection and the subsequent economic fallouts (Chart 2.2). By causing disruptions to production activities and weighing on economic growth in the Mainland, the outbreak could potentially result in significant global spillovers, given the importance of Mainland China in global supply chains and as a major global export destination (Chart 2.3). A surge in international virus cases outside of Mainland China since late February risked adding further supply chain disruptions and weighing directly on economic activity in the affected economies.[5]

Chart 2.2
MSCI All-Country (AC) World Index and Bloomberg-Barclays Corporate Option-Adjusted Spread (OAS)



Note: The corporate OAS spread shown refers to the Bloomberg-Barclays Global Aggregate Corporate Average Option-Adjusted Spread, which measures the yield spread of a basket of global investment grade, fixed-rate corporate debt after adjusting for embedded options. A smaller OAS suggests greater risk appetite in corporate bond markets.
Source: Bloomberg.

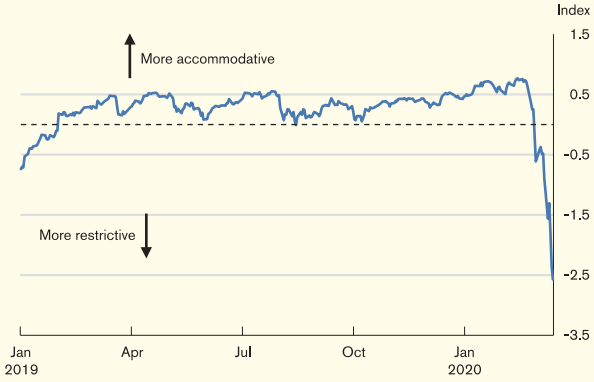
Chart 2.3
Exports of goods and services to Mainland China by selected major advanced economies in 2018 (as % of their Gross Domestic Product)



Note: EU28 refers to the European Union (EU) and the UK.
Sources: CEIC, Eurostat, OECD and HKMA staff calculations.

In response to the potentially significant economic fallouts of the virus outbreak, a number of central banks (including the Fed, the Bank of Canada and the Bank of England) have cut their policy rates since early March, while several governments also announced targeted measures to support affected households and businesses. However, financial markets remained under heavy sell-off pressures, resulting in a marked tightening of global financial conditions which could potentially exacerbate downward pressures on the global economy (Chart 2.4).

Chart 2.4
Bloomberg advanced economies' financial conditions index (FCI)



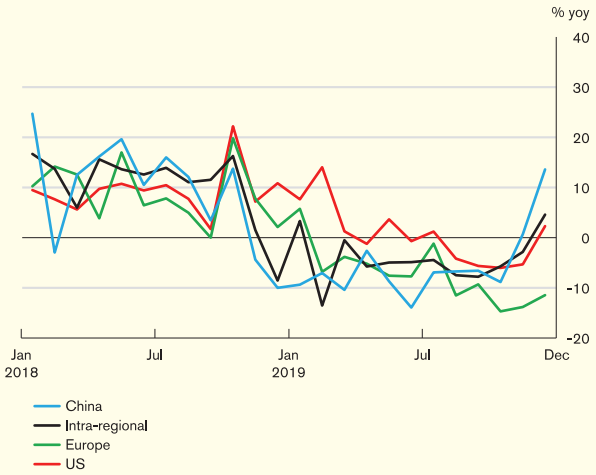
Note: The Bloomberg advanced economies' FCI is the simple average of Bloomberg FCIs of the US, UK and the Euro Area. Readings above (below) zero indicate financial conditions that are more accommodative (restrictive) than the average level prior to the Global Financial Crisis.
Source: Bloomberg.

[5] The virus outbreak could affect the broader economy through multiple channels. Local outbreaks of the coronavirus and the resulting containment efforts, social distancing, income loss, and uncertainty could take a serious toll on consumer spending. For firms, disruptions to production activity and loss of revenues could translate into cash flow problems or even layoffs and closures.

Beyond the coronavirus, the global economic outlook is also clouded by other downside risks and uncertainties. On trade tensions, in particular, while policy risks receded somewhat following the US-China "phase one" trade deal, subsequent negotiations could be difficult, as a number of more thorny structural issues remain to be resolved. In Europe, future EU-UK trade negotiations could be expected to be bumpy, thereby prolonging the post-Brexit uncertainty. Separately, the sharp fall in global oil prices since March could entail headwinds for major oil-exporting EMEs.

In East Asia, real activity remained subdued in the second half of 2019 amid the lacklustre global demand. The region's exports to all major destinations, including the US, European economies and Mainland China, stayed weak in the second half (Chart 2.5). There are some early signs that the region's tech cycle downturn is bottoming out, with large electronic companies reporting improvement in profits in late 2019.[6] However, whether this will mark any meaningful rebound in the region's tech exports is yet to be seen.

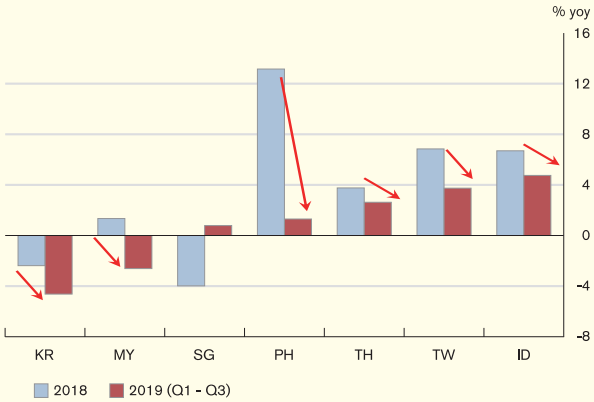
Chart 2.5
East Asia: Merchandise exports to major destinations



Sources: CEIC and HKMA staff calculations.

The continuing weaknesses in growth and lingering trade uncertainties have also weighed on investors' sentiment, with gross fixed capital investment in most East Asian economies declining in 2019 (Chart 2.6). Such decline in investment could undermine the region's potential growth in the longer term. To support economic growth in an environment of tepid inflation, the central banks of Indonesia, the Philippines and South Korea reduced their policy interest rate again in the second half of 2019 after their rate cuts in the first half, while the Bank of Thailand also lowered its policy interest rate for the first time since 2015.

Chart 2.6
East Asia: Gross fixed capital formation

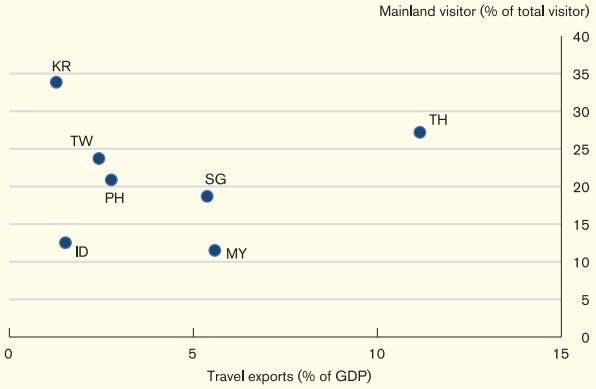


Sources: CEIC and HKMA staff calculations.

The outbreak of the coronavirus has raised concerns that the region's economies may be facing yet further pressure on top of the ongoing weakness in growth. Many regional economies have imposed travel restrictions to and from Mainland China. As a result, the first-round economic impact from the virus would be felt most by the tourism industry. Economies where Mainland visitors account for a large share of their inbound tourists and travel services exports account for a significant share of their GDP would be hardest hit (Chart 2.7). The outbreak could also affect the region's manufacturing sector given the closely integrated supply chains with Mainland China.

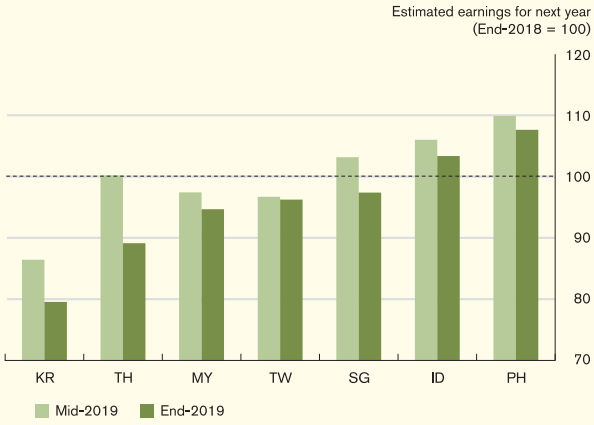
[6] For instance, major technology companies in the region like Samsung Electronics and Taiwan Semiconductor Manufacturing Co Ltd reported better-than-expected earnings for the fourth quarter of 2019.

Chart 2.7
East Asia: Travel exports and Mainland visitors



Note: Data as of Q3 2019.
Sources: CEIC and HKMA staff calculations.

Chart 2.8
Expected earnings of benchmark stock indices' constituents



Source: Bloomberg.

In the near term, the outbreak will continue to weigh on economic activities and investor sentiment. Experience of the 2003 Severe Acute Respiratory Syndrome (SARS) outbreak suggests that such effect could be short-lived, but it depends on the severity and spread of the outbreak and the effectiveness of the government's remedial actions. Indeed, economies in East Asia will face multiple headwinds.

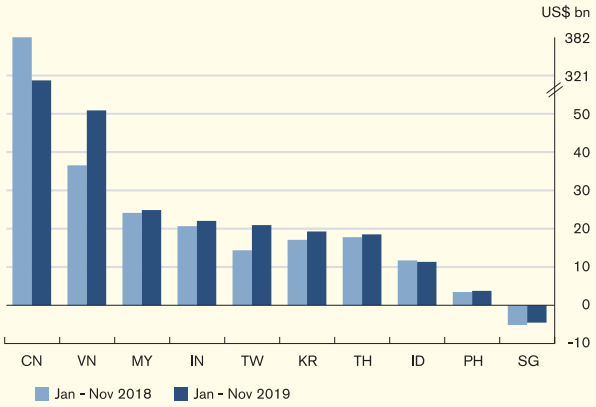
First, while the market is expecting corporate earnings to deteriorate in the near term (Chart 2.8), the globally accommodative monetary conditions have encouraged search for yield activities and thus driven up asset prices without much support from fundamentals. The region's equity market has, therefore, become more vulnerable to a turn in investor sentiment.

Second, the weakening corporate earnings and economic growth may make the region's private sector more difficult to service their debt. While the lowering of domestic interest rates could provide some breathing space for indebted corporates and households, it could also sow the seeds of a further debt build-up. As detailed in Box 1, the risk of private-sector debt overhang could also be intensified by an increase in benchmark-driven fund inflows into the region's financial markets, although the influence appears to be limited to corporates with stronger financial fundamentals and to longer-term borrowing.

Third, on the external front, the rising trade surplus with the US could increase the risk of East Asian economies being faced with a more inward-looking US trade policy. Despite recent progress on the first phase trade deal between the US and Mainland China, trade tension still remains as fundamental issues are yet to be resolved. International companies may continue to diversify their China-centric supply chains to avoid tariffs, as evidenced by the rising trade surplus of many Asian economies with the US (Chart 2.9). As of November 2019, the year-to-date aggregated trade surplus of nine emerging Asian economies (excluding Mainland China) with the US has increased to approximately

US$167 billion. Such a widening in the trade surplus with the US, if it continues, could put these Asian economies at risk of being the next target of the trade war. For example, the US administration has imposed a huge tariff of up to 456% on Vietnam's steel imports in July 2019.[7] In view of this, the region's trade outlook is still highly uncertain, despite the trade truce between the US and Mainland China.

Chart 2.9
Trade in goods surplus with the US



Source: US Bureau of Economic Analysis.

[7] For details, please see press releases by the U.S. Department of Commerce on 2 July 2019 and 16 December 2019.

Box 1
Implications of benchmark-driven investment for emerging market economies

Introduction

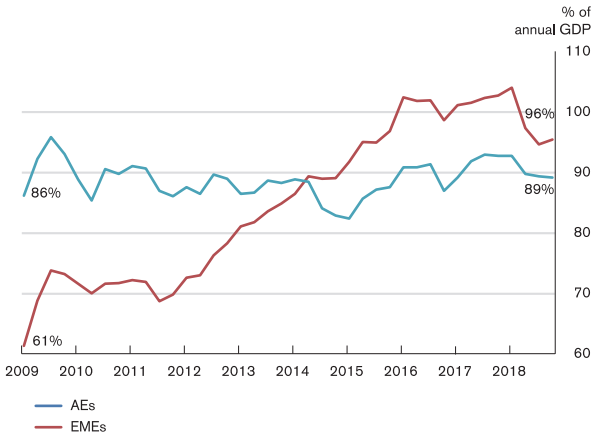
Over the past decade, international financial integration has intensified, leading to a considerable increase in cross-border portfolio flows globally. A recent estimate suggests that benchmark-driven funds dictate as much as 70 per cent of these flows.[8] Benchmark-driven funds include not only the funds that track investment indices in lock step — commonly known as passive funds — but also those actively managed with reference to investment indices.[9] They can help promote financial market development of emerging market economies (EMEs) by bringing in foreign investors whom these economies otherwise would not be able to attract or reach out to. As a result, this has helped diversify the investor base of EMEs, aiding their long-term growth and stability.

However, can these benefits be harnessed without a cost? For passive bond funds in particular, there are concerns that investing in these funds could weaken the discipline of the underlying corporate bond issuers and lead to a build-up of their leverage.[10] For benchmark-driven funds in general, it is argued that their growth has made portfolio flows more volatile globally in recent years and rendered EMEs more vulnerable given their higher sensitivity to global factors and factors that tend to affect EMEs as a whole.[11] This box examines the financial stability implications of these two issues.

Passive bond funds and corporate leverage[12]

Passive bond funds allocate their investments into the constituent bonds of the underlying benchmark index in proportion to their weightings in the index. As a result, compared with actively managed funds, the mechanical investment decision of passive bond funds could make it less compelling for the issuers of the constituent bonds to act in the interests of the funds' investors.[13] Worse still, from a financial stability point of view, such behaviour encourages excessive borrowing, posing significant credit and solvency risks to the corporate sector of EMEs, especially in view of its sharply higher leverage after the global financial crisis (Chart B1.1).

Chart B1.1
Corporate leverage of EMEs



Note: Figures refer to the outstanding credits to non-financial corporates and expressed as % of GDP.

Source: BIS.

8 Raddatz, Schmukler and Williams (2017) "International asset allocations and capital flows: The benchmark effect", *Journal of International Economics*, 108(C).

9 Portfolio managers of active funds are also found to have a strong tendency to "hug" their benchmarks as tightly as possible to mitigate their career risk of short-term underperformance. See Miyajima and Shim (2014) "Asset Managers in Emerging Market Economies," *BIS Quarterly Review*, September 2014.

10 Sushko and Turner (2018) "The implication of passive investing for securities markets", *BIS Quarterly Review*, March 2018.

11 "Vulnerabilities in a Maturing Credit Cycle", Chapter 1 in April 2019 edition of the IMF's "*Global Financial Stability Report*".

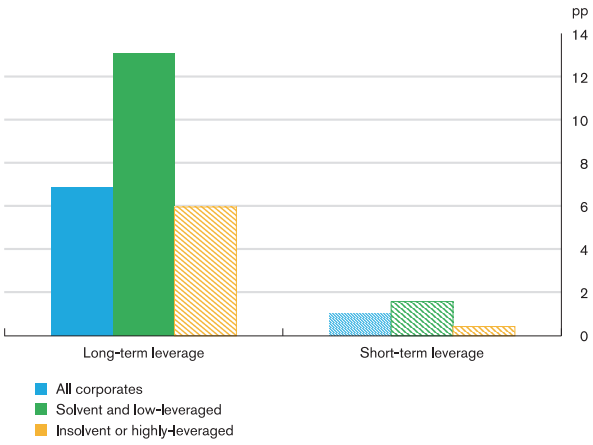
12 Wu and Wong (2019) "Does Passive Bond Investing Encourage Corporate Leverage in Emerging Market Economies?", *HKMA Research Memorandum*, 2019/13.

13 Portfolio managers of actively managed funds can actively cut the holdings of the bonds whose issuers are deemed by them to be too aggressive.

Using EMEs corporates weights in a major EME corporate bond index as a proxy for the exposure of their bonds to passive bond funds investments,[14] it is found that an increase in the exposure will drive up the long-term, but not short-term, leverage of these corporate issuers. The solid blue bar in Chart B1.2 depicts the estimated effects. Apart from promoting the development of corporate bond markets in EMEs, the widened investor base by the passive bond funds for the long-term debts issued is also beneficial to the development of EMEs corporates.

Furthermore, the effect is significant only on EMEs corporates with stronger fundamentals, specifically better solvency and lower leverage (represented by the solid green bar in Chart B1.2). The higher costs of financial distress faced by the highly-leveraged or insolvent corporates appear to have kept them from falling deeper into the debt trap. Taken together, these findings suggest that the growth of passive bond fund investments does not necessarily lead to a material increase in the solvency risks of the corporate sector in EMEs.

Chart B1.2
Effect of corporates exposure to passive bond funds on leverage



Notes:
(1) Figures refer to the estimated effect of a 0.1 pp increase in corporates' weighting in the CEMBI index on the sample corporates' debt-to-equity ratio.
(2) Solvent (insolvent) corporates refer to those whose interest-coverage ratio is higher (lower) than one, while highly (low) – leveraged corporates are those whose debt-to-equity ratio is higher (lower) than the sample median.
(3) Solid bars denote statistical significance at the 10% level.

[14] The Corporate Emerging Market Bond Index Broad Diversified (CEMBI) compiled by J.P. Morgan is chosen for the analysis. At end-2017, CEMBI tracked US$314 billion worth of US dollar-denominated bonds issued by EMEs non-financial corporates, sharing 49% of all corporate debt securities in EMEs.

Benchmark-driven funds and capital flows[15]

To see whether the growth of benchmark-driven funds will make portfolio flows more volatile for EMEs, it is important to examine the impact of benchmark-driven funds on the volatility of their total foreign portfolio investment (FPI) flows relative to that of all the other funds, which are not subject to any constraint. First of all, with equity investment being the focus, it is found that the volatility of benchmark-driven FPI flows is estimated to be generally lower than that of unconstrained FPI flows for each of the 15 EMEs under study. Hence, faster growth of benchmark-driven funds is likely to reduce, rather than increase, the volatility of total FPI flows.

However, the pairwise correlation of benchmark-driven FPI flows between the EMEs is generally found to be much higher than that of unconstrained FPI flows. This is consistent with the absorption ratio — a statistical measure of how similar their risk exposures are — being much higher for the former than for the latter. This suggests that benchmark-driven FPI flows are more likely to co-move (Chart B1.3). Indeed, benchmark-driven FPI flows are estimated to be more sensitive to various global and common EME shocks, as proxied by extreme movements of the VIX index, the BBB yield spread and the MSCI EM index (Chart B1.4). Therefore, despite the generally lower volatility of benchmark-driven FPI flows, their rapid growth potentially increases the risk of the so-called sudden stop for EMEs in times of extreme market adversity.

[15] Lau, Sze and Wong (2020) "Impacts of Benchmark-driven Investment on Volatility and Connectivity of Emerging Market Capital Flows", *HKIMR working paper*, 03/2020.

Chart B1.3
Absorption ratios of FPI flows

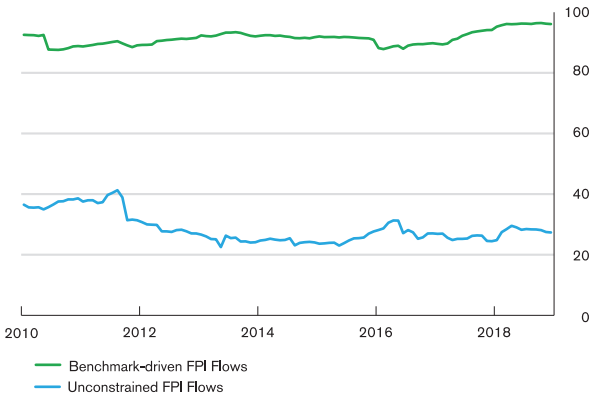
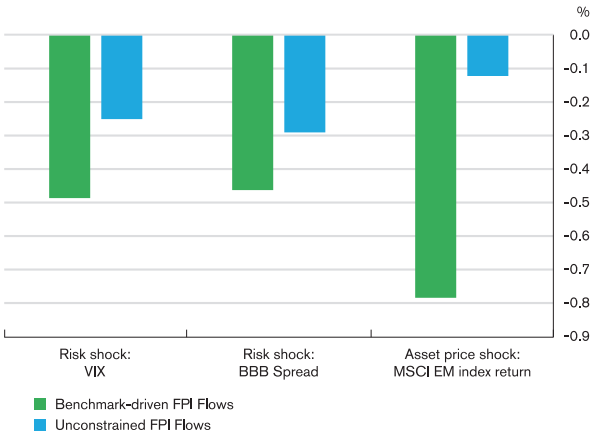


Chart B1.4
Sensitivity of FPI flows to external shocks



Note: Figures refer to the conditional means of the change in benchmark-driven FPI flows and unconstrained FPI flows as a percentage of their respective holdings in response to the specified shock.

Conclusion

Benchmark-driven funds have played an increasingly important role in fostering the development of capital markets in EMEs. On the one hand, they act as important vehicles for foreign investors to tap the lucrative investment opportunities offered by the rapid economic growth of EMEs. On the other hand, they serve as effective mechanisms for EMEs to help fund their economic development.

For the policymaker, the passive or mechanical nature of the investor behaviour associated with these funds has both advantages and disadvantages. A major advantage is that they make FPI flows generally less volatile. However, during economic booms, such behaviour tends to encourage excessive borrowing and breed borrowers with weaker discipline. Fortunately, such negative influence appears to be limited to corporates with stronger financial fundamentals and to longer-term borrowing.[16] Nonetheless, this bears watching as corporate debt continues to amass in many EMEs in view of the current protracted low interest rate environment globally, especially with their FPI flows found likely to be more sensitive now to global shocks than before.

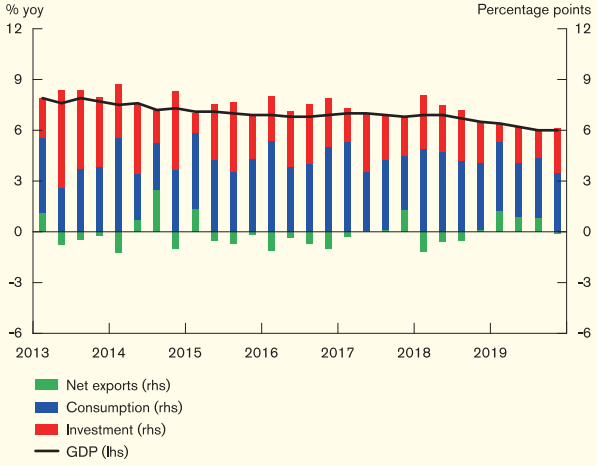
[16] In an effort to reduce the negative influence from passive bond funds, bond index providers have been increasingly adopting alternative weighting schemes for their indices, by incorporating factors such as the credit quality or duration risks of bonds, instead of their outstanding market values only.

2.2 Mainland China

Real sector

Economic growth in Mainland China continued to decelerate in the second half of 2019 amid sluggish domestic and external demand. Year-on-year real GDP growth slowed to 6.0% in the third and fourth quarter from 6.4% in the first quarter and 6.2% in the second (Chart 2.10). Taking the year as a whole, real economic growth moderated from 6.7% in 2018 to 6.1% in 2019, close to the lower bound of the official growth target.

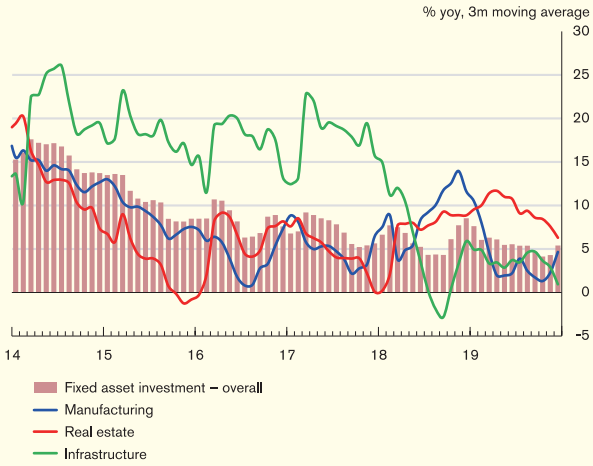
Chart 2.10
Mainland China: Contribution to GDP growth by demand component



Sources: CEIC, NBS and HKMA staff estimates.

Behind the headline growth number, consumption growth decelerated in the second half of the year alongside softer consumer sentiment. A breakdown of retail sales of enterprises above designated size suggested that sales of durable goods, especially automobiles and jewellery, decelerated in the second half, while non-durable goods sales held up relatively well.[17] Fixed asset investment growth also decelerated in the second half amid a broad-based slowdown in major segments. In particular, while real estate and infrastructure investment softened notably in the second half, manufacturing investment accelerated in the last few months of 2019 amid progress in the US-China trade talks, but remained weak compared with the first half (Chart 2.11). As the US and Mainland China were reaching an initial trade deal, both exports and imports rebounded towards the end of 2019 after contracting in previous quarters. The contribution of net exports to overall growth, however, turned negative in the fourth quarter from positive in the first three quarters, as imports rebounded at a much faster pace than exports towards the end of 2019.

Chart 2.11
Mainland China: Fixed asset investment by industry

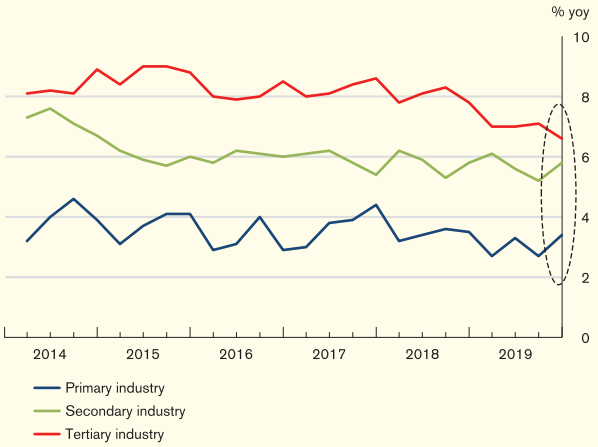


Sources: CEIC, NBS and HKMA staff estimates.

In value-added terms, the tertiary industry continued to fare well in the second half of 2019 amid solid expansion in some higher value-added subsectors such as IT and software, although the headline growth softened towards the end of the year (Chart 2.12). In comparison, business expansion in manufacturing activities decelerated in the third quarter but rebounded in the fourth quarter, in part reflecting the progress made in the US-China trade negotiations. High-tech manufacturing continued to hold up well in the second half of 2019. As tertiary industry growth further outpaced other sectors, its share of value-added in the overall economy rose slightly to 53.9% in 2019 from 53.3% in 2018.

[17] Enterprises above the designated size include wholesale firms with business turnover equal to or higher than RMB20 million, retail firms with business turnover equal to or higher than RMB5 million and accommodation and catering businesses with turnover equal to or higher than RMB2 million.

Chart 2.12
Mainland China: Growth of value-added by industry



Sources: CEIC, NBS and HKMA staff estimates.

Looking ahead, while the signing of the US-China "phase one" trade deal helps reduce external uncertainties facing the Mainland economy temporarily, downward pressure remains amid the ongoing economic rebalancing and global economic slowdown. The outbreak of the coronavirus put additional strains on the Mainland economy. In the short run, service sectors especially retail sales, entertainment, catering and accommodation, transportation and tourism will be hit directly, while indirect impacts through disruptions in transportation and the labour market are likely to ripple through the whole economy.

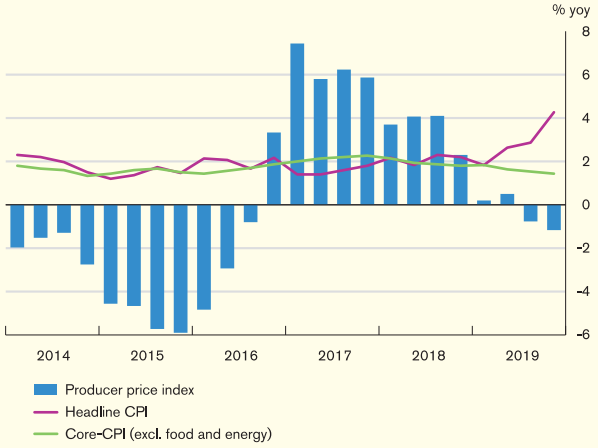
In the face of internal and external headwinds, the annual Central Economic Work Conference held in December 2019 made stabilising the economy a top priority for 2020, reiterating that the authorities will maintain a proactive fiscal policy stance, with an emphasis on policy effectiveness and efficiency. The authorities will also maintain a prudent monetary policy stance to strike a balance between containing financial risks and providing support to the economy by lowering financing costs especially for private and small firms.

To mitigate the potential negative impact of the coronavirus outbreak on growth and financial stability in particular, authorities including People's Bank of China (PBoC), China Banking and Insurance Regulatory Commission (CBIRC), Ministry of Finance (MoF), China Securities Regulatory Commission (CSRC), and State Administration of Foreign Exchange (SAFE) issued a series of measures to shore up market confidence and support the real sector in early February. Key measures include maintaining ample liquidity in the banking system, providing interest subsidies to firms that are critical in supplying materials and equipment to fight the virus, as well as encouraging banks to provide lending support to companies affected by the outbreak, particularly the smaller ones.

While most market analysts expect that economic growth in the first quarter of this year will likely decelerate due to the coronavirus outbreak, the adverse impact will be less pronounced for the full year of 2020. The latest consensus forecasts suggest that Mainland economic growth will ease to 5.2%, 0.7 percentage point lower than the pre-outbreak forecasts.

Inflationary pressure remained moderate during the review period. Headline consumer price inflation edged higher to an average of 3.6% year on year in the second half of 2019 from 2.2% in the first half (Chart 2.13), mainly driven by a notable increase in food prices, especially pork due to the impact of the African swine fever. In comparison, core inflation, measured as consumer prices excluding food and energy items, declined from an average of 1.7% year on year in the first half to 1.5% in the second half of 2019 amid lukewarm economic conditions. On the production front, reflecting sluggish industrial activities, producer price inflation fell into the negative territory in the second half, registering a deflation of 1.0% year on year on average.

Chart 2.13
Mainland China: Consumer price and producer price inflation

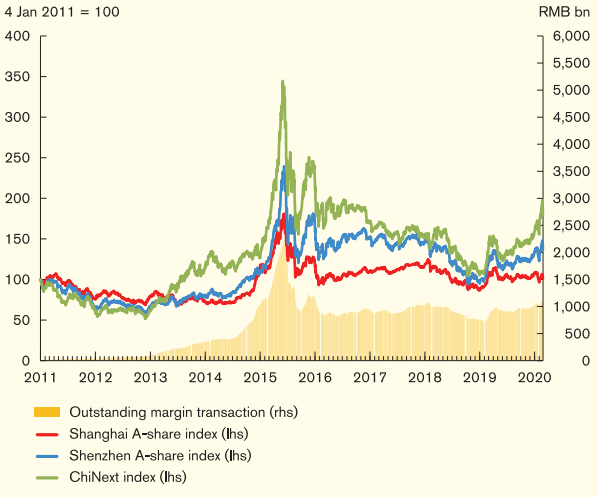


Sources: CEIC, NBS and HKMA staff estimates.

Asset Markets

The Mainland equity market steadily rose in the second half of 2019 before getting hit by the coronavirus outbreak in January 2020. All major boards recorded gains in the second half of 2019 with small caps outperforming large ones. In particular, Shanghai A-share index went up by 2.4% and Shenzhen A-share index climbed 10.3%. In comparison, the ChiNext index, often referred to as "China's Nasdaq", gained 19% (Chart 2.14).

Chart 2.14
Mainland China: The Mainland stock market indices and margin transactions



Sources: CEIC and HKMA staff estimates.

While buoyant market conditions in part reflected improved market sentiment towards the end of 2019 amid the "phase one" trade agreement between the US and Mainland China, the increased weights of China A-shares in the MSCI indices leading to more capital inflows to Mainland equities also played a role. In addition, a solid expansion of manufacturers and service providers with higher value added in recent quarters seemed to have provided support to the rally in stock prices of hi-tech and innovative firms as well.

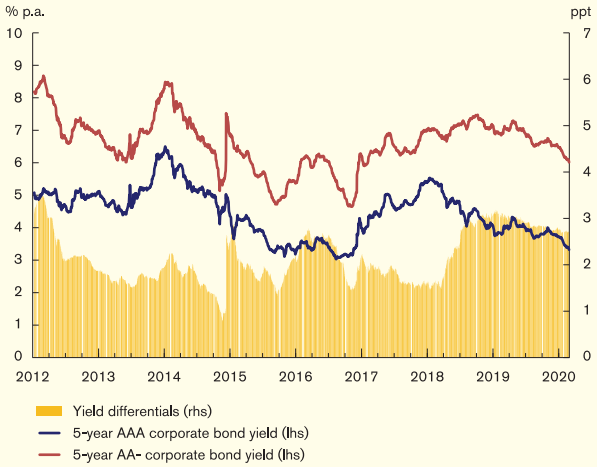
In line with a boosted risk appetite of investors, the outstanding size of margin loans – an indication of leverage used by stock market investors – had also reached a one-year high towards the end of 2019. That said, it was still much smaller than the previous high in mid-2015 before the market turmoil.

However, the coronavirus outbreak in January 2020 sent the stock market on a roller-coaster ride. The Shanghai A-share index wiped out its half-year's gain and dropped 7.7% upon market reopening on 3 February after the Lunar New Year holiday, but then quickly made up the lost ground following a notable rebound of 5% towards the end of February.

Despite improved market sentiment in the second half of 2019, investors remained vigilant over the potential risks from weak-performing firms. In the bond market, while the overall funding costs for corporate issuers edged down in the second half of 2019, the yield spread between issuers with different credit quality remained wide. In particular, corporate issuers with better credit ratings continued to enjoy a relatively lower funding cost after several rounds of required reserve ratio (RRR) cuts (Chart 2.15). By contrast, yields of lower-rated corporate bonds, albeit lowered, stayed at high levels. The persistent yield spread likely reflected the lingering concern of investors in

the face of the deteriorated debt servicing ability of firms with weaker financial positions amid the economic slowdown.

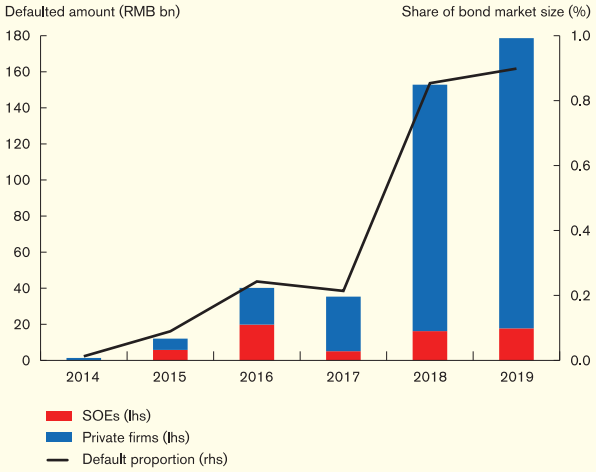
Chart 2.15
Mainland China: Five-year corporate bond yields



Sources: Wind and HKMA staff estimates.

Indeed, the second half of 2019 witnessed bond defaults by 51 corporate issuers, compared with 46 in the first half and 54 in the whole of 2018[18]. The amount of defaulted bonds increased to RMB 179 billion in 2019, 16.3% up from 2018 (Chart 2.16). That said, the relative size of the defaults compared with the entire market – the share of defaulted bonds in total outstanding non-financial debt securities – remained low, although slightly increased to 0.9% in 2019 from 0.8% in 2018. Further analyses suggest that the majority of defaults in the second half of 2019 were concentrated in lower-rated private issuers, especially diversified holding firms, mining firms and construction firms.

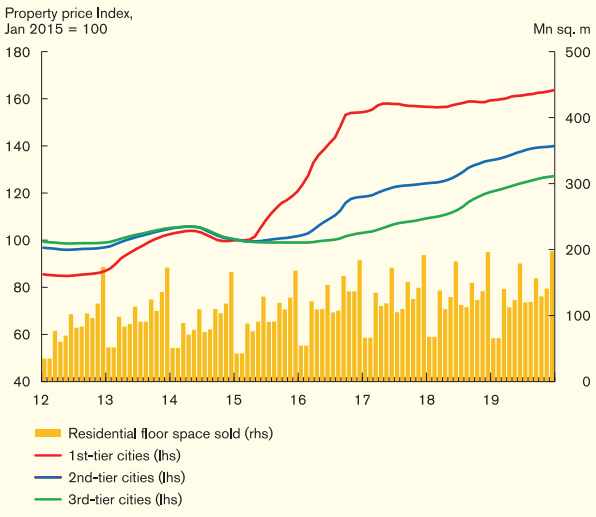
Chart 2.16
Mainland China: Bond default size and proportion



Sources: Wind and HKMA staff estimates.

In the second half of 2019, Mainland property prices further inched up amid buoyant market conditions (Chart 2.17). Reflecting the authorities' efforts to contain potential systemic risks associated with the property market, tightening measures remained in place especially in major cities, including increased down-payment requirements, and home purchase and sale restrictions.

Chart 2.17
Mainland China: Residential prices by tier of cities and floor space sold

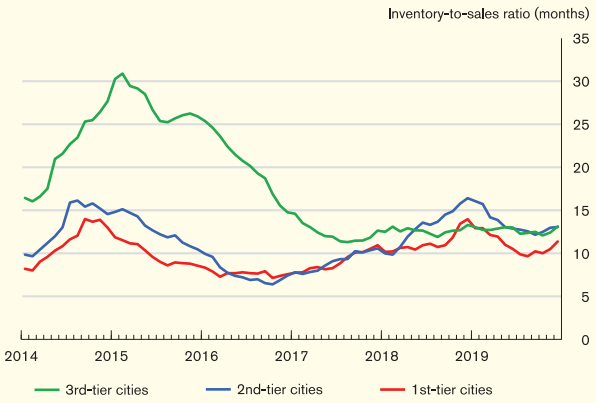


Sources: CEIC and HKMA staff estimates.

[18] Data collected from Wind includes enterprise and corporate bonds, medium-term notes, short-term commercial papers and private placement notes.

In lower-tier cities, housing oversupply issues remained largely in check thanks to the buoyant property market. By December 2019, the inventory-to-sales ratio in third-tier cities declined to 13 months, much lower than the peak of 31 months in early 2015 (Chart 2.18).

Chart 2.18
Mainland China: Inventory-to-sales ratios by tier of cities



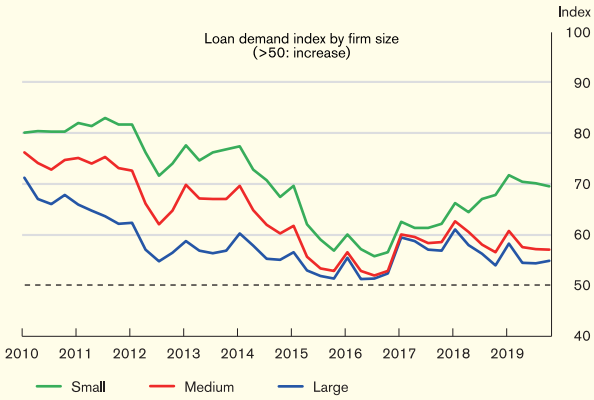
Sources: Wind and HKMA staff estimates.

In the near term, measures to temper speculative demand, such as increased down-payment requirements, are likely to stay in place especially for major cities. In December 2019, the Central Economic Work Conference reiterated the principle that "houses are for living in, not for speculation". For certain lower-tier cities, however, it is reported that local authorities relaxed some restrictive policies such as home purchase restrictions for talented migrants amid the recent economic slowdown. On the supply side, the government pledged to accelerate the construction of indemnificatory housing, as well as to speed up the development of the rental market alongside more flexible ways to increase land supply.

Credit allocation and bank asset quality

In the latter half of 2019, the divergence in loan demand of Mainland firms with different sizes narrowed. In particular, loan demand of large-sized firms showed a soft rebound in the fourth quarter, while that of small-sized firms edged downwards amid the government's efforts to encourage banks' lending towards smaller corporate borrowers (Chart 2.19).

Chart 2.19
Mainland China: Loan demand index by firm size



Source: PBoC.

Nevertheless, the demand for bank loans by small firms remained strong, suggesting that the overall formal credit supply continued to fall short of demand for small firms in recent quarters as credit availability from informal channels for small firms further worsened. Indeed, following the decline of banks' involvement in shadow banking activities and wealth management product (WMP) issuance amid ongoing financial deleveraging, shadow banking activities, such as trust lending and entrusted funds managed by securities companies contracted further in 2019 (Chart 2.20).

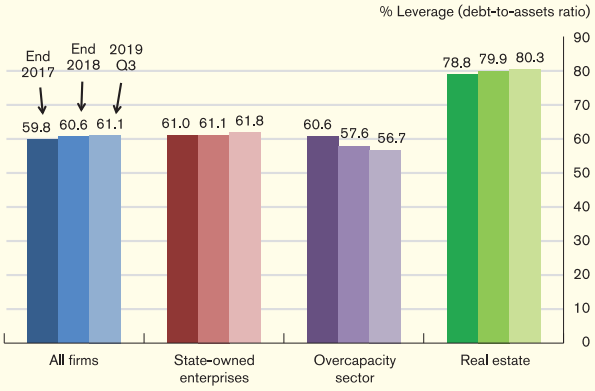
Chart 2.20
Mainland China: Growth of trust loans and entrusted funds managed by securities companies

Sources: CEIC, Securities Association of China and HKMA staff estimates.

To fill the gap left by informal credit contraction, the PBoC introduced several rounds of RRR cuts last year, including two cuts specifically targeting qualified smaller banks in order to facilitate lending to small and micro-sized firms (see the fiscal and monetary policy section for details). As a result, outstanding bank loans to the "smallest" firms with a credit limit less than RMB10 million expanded by over 25% in 2019 compared with 18% in 2018, almost twice the overall loan growth. Reflecting increased loan supply, the average borrowing cost of the "smallest" firms declined to 6.70% at the end of 2019 from 7.39% in 2018.

While the growth of bank lending to the "smallest" firms accelerated further, the expansion of overall bank loans extended to the corporate sector remained largely stable at around 11% in 2019. Although there is no further public information on the distribution of bank credit among firms of different sizes, other than the "smallest" ones, analyses of the listed firm data point to continued deleveraging in overcapacity sectors in the first three quarters of 2019 (Chart 2.21), likely reflecting further tightened loan underwriting standards by banks on inferior corporate borrowers with weaker repayment abilities.

Chart 2.21
Mainland China: Corporate leverage of listed firms

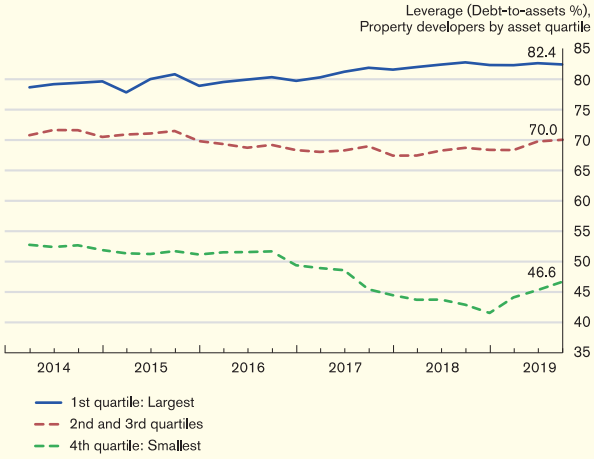


Sources: Bloomberg and HKMA staff estimates.

Overcapacity sectors continued to deleverage, while the overall leverage of listed firms was maintained at a reasonable level. This seems to reflect the ongoing structural deleveraging moves, which are targeted at maintaining the overall leverage of the economy while deleveraging the less efficient borrowers, such as zombie firms, and re-allocating financial resources to more efficient market entities.

Among the most leveraged industries, real estate has a significant financial stability implication given its linkages to both real and financial sectors. By the third quarter of 2019, the leverage ratio of property developers remained largely stable (Chart 2.21). Further analyses suggest that the leveraging was mainly concentrated in large and medium-sized developers whose financial positions are usually better. For small developers, although the level of their leverage remained relatively low, it rebounded after late 2018 amid the buoyant property market conditions in lower-tiers cities, where these small developers are usually concentrated. Given the relatively weaker financial positions of small developers, the rapid increase in leverage warrants close monitoring (Chart 2.22).

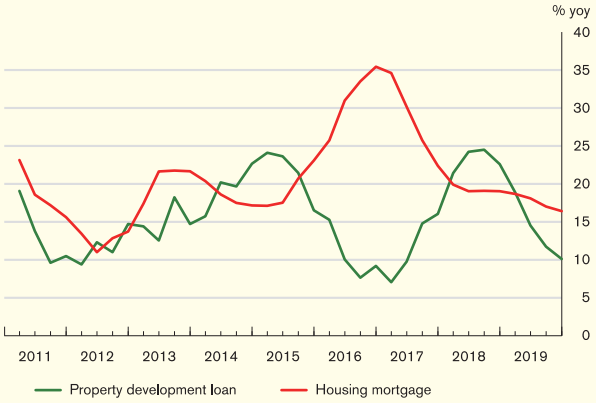
Chart 2.22
Mainland China: Corporate leverage of real estate developers by company size



Sources: Bloomberg and HKMA staff estimates.

Despite the increased leverage of small developers, year-on-year growth in overall property development loans further declined to 10.1% in December 2019 from 22.6% at end-2018 mainly reflecting a high base effect. Growth in mortgages also slowed to 16.4% year-on-year in the fourth quarter of 2019 from 19.0% at the end of 2018, likely due to the tightening measures in place (Chart 2.23). The share of property development loans and mortgages together in total bank loans, which measures banks' direct exposure to the property market, remained largely stable at around 28%.

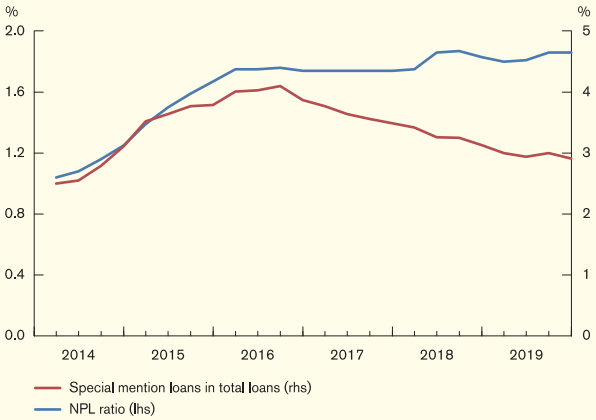
Chart 2.23
Mainland China: Growth of mortgage and property development loans



Sources: CEIC and HKMA staff estimates.

The overall bank asset quality remained robust during the review period. The overall non-performing loan (NPL) ratio stayed below 2%, though slightly edging up to 1.86% in the fourth quarter from 1.83% at the end of 2018. The share of special mention loans in total bank loans was largely steady at a relatively low level around 3.0% during the same period[19] (Chart 2.24).

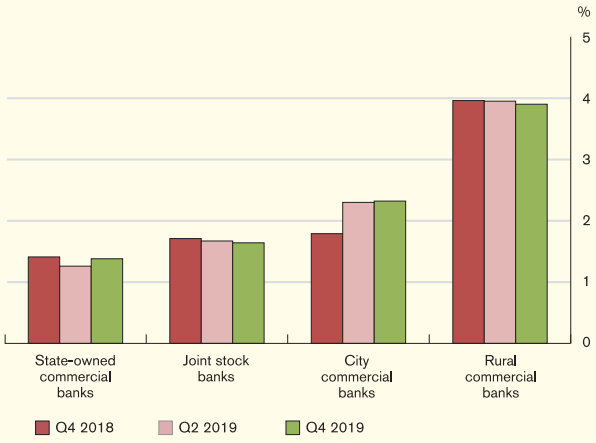
Chart 2.24
Mainland China: NPL ratio and special mention loan ratio



Source: CEIC.

However, smaller banks seemed to have faced some pressures, in part reflecting the fact that the repayment ability of corporate borrowers, especially smaller ones, deteriorated amid the recent economic slowdown. During the review period, the NPL ratio of rural commercial banks remained at relatively high level around 4%. For city commercial banks, the NPL ratio remained largely stable at around 2.30% at the end of 2019 compared with six months ago, in part reflecting accelerated disposal of bad assets especially in the fourth quarter (Chart 2.25).

Chart 2.25
Mainland China: NPL ratio by bank types



Source: CEIC.

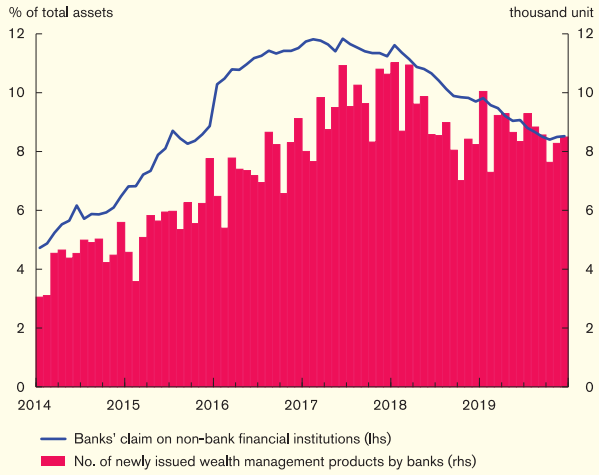
[19] A loan will be classified as special mention loans if the borrower has the ability to repay the loan currently, but may be affected by some unfavourable factors, according to the CBIRC. NPLs include loans that are classified as substandard, doubtful or loss, which are loans that are unlikely to be fully repaid and banks will thus suffer losses of different degrees.

To contain potential systemic risks facing the banking system, the authorities strengthened the regulation of smaller banks and improved bank crisis management by establishing a "four lines of defense" mechanism[20]. As a result, although three small banks defaulted in 2019, the associated impact on the stability of the whole banking sector was rather limited. In particular, after Baoshang Bank's takeover, the interbank funding costs such as short-term repo rates and Shanghai Interbank Offered Rate (SHIBOR) picked up, but the magnitudes were not particularly large. The interbank funding costs soon came down after the PBoC's liquidity injection. In comparison, market reaction seemed to be rather modest on the defaults of Bank of Jinzhou and Hengfeng Bank.

Despite the asset quality pressures facing smaller banks, the overall risk in the Mainland banking sector appears moderate. For now, the NPL ratio of Mainland banks, especially the systemically important ones, remains largely stable at low levels. In addition, relatively high loan loss provisions can also help protect banks against future losses. At the end of 2019, the provision coverage ratio of banks stood at 186%, well above the regulatory requirement. However, close monitoring is recommended for smaller banks, especially as a large proportion of their borrowers are small service providers and local manufacturers that are particularly vulnerable to the adverse impact of the coronavirus outbreak.

During the review period, Mainland banking regulator continued to limit banks' involvement in shadow banking activities to contain systemic risks. Consequently, shadow banking further contracted in the second half of 2019. In particular, the share of banks' claims on non-bank financial institutions in the total bank assets had declined for almost eight quarters by the end of 2019 (Chart 2.26). With the tightening measures on shadow banking activities in place, the issuance of WMPs by banks, which are a major funding source for shadow banking activities, also declined in the second half of 2019.

Chart 2.26
Mainland China: Share of banks' claim on non-bank financial institutions in total bank assets and newly issued WMPs



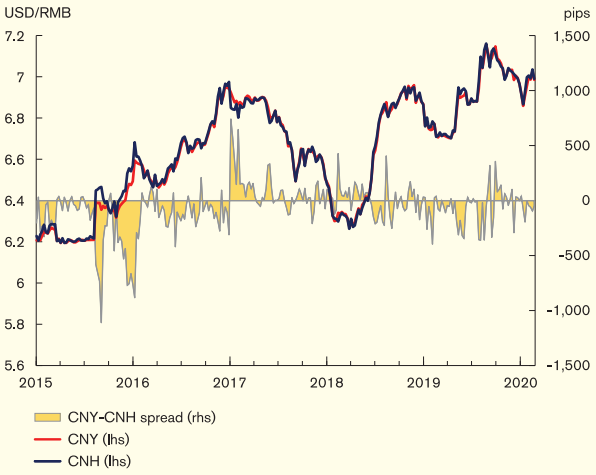
Sources: CEIC, Wind and HKMA staff estimates.

Exchange rate and cross-border capital flows

After depreciating by 3.8% in the first three quarters in 2019 on concerns over the US-China trade dispute and sluggish economic momentum, the onshore renminbi (CNY) strengthened by 2.7% in the final quarter amid improved sentiment as the two nations announced the "phase one" trade agreement. It further appreciated in early 2020 following the US removal of its "currency manipulator" label on Mainland China in mid-January. However, the renminbi weakened to 7.02 on 3 February from 6.86 on 17 January amid fears of the downward pressures on the Mainland economy brought by the coronavirus outbreak (Chart 2.27).

[20] "Four lines of defence" refers to four liquidity management tools of the central bank – central-bank discounts, central-bank lending to provide liquidity, the standing lending facility, and the required reserve ratio which may help contain liquidity risks facing smaller banks and prevent risks from spilling over to the whole banking system.

Chart 2.27
Mainland China: Onshore and offshore renminbi exchange rates

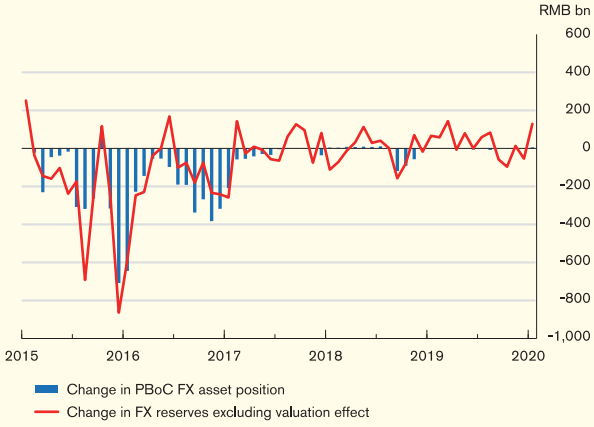


Sources: Bloomberg and HKMA staff estimates.

Compared with its counterpart in the onshore market, the offshore renminbi (CNH) was more volatile for most of the time during the review period. The latest Bloomberg consensus forecast expected the renminbi exchange rate against the US dollar for the second quarter of 2020 to be largely stable at around 7.0 amid the coronavirus outbreak.

Despite improved sentiment on the foreign exchange (FX) market in the second half of 2019, there were some signs of capital outflows, likely reflecting lingering concerns over an economic slowdown. Excluding the valuation effect, the foreign reserves are estimated to have declined slightly in the second half of 2019 after increasing notably in the first half. The PBoC FX asset position, another commonly used indicator for cross-border capital flows, also pointed to mild capital outflows in both the first and second half of 2019 (Chart 2.28). However, the outflow pressures were much smaller compared with earlier years when the CNY depreciated significantly. For the whole of 2019, the Mainland headline foreign reserves remained largely stable at above US$3 trillion.

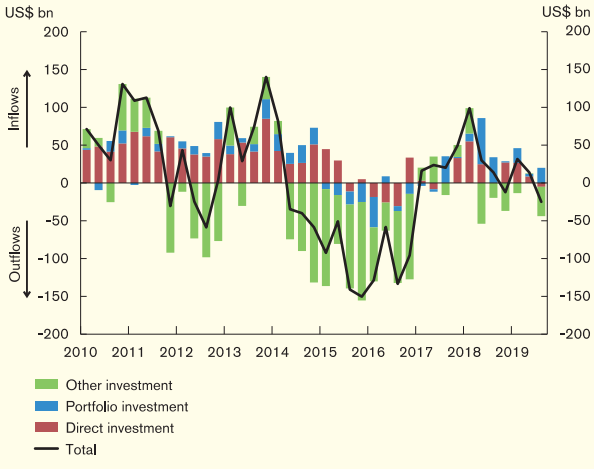
Chart 2.28
Mainland China: Changes in PBoC FX asset position and FX reserves



Sources: CEIC, SAFE and HKMA staff estimates.

The latest statistics on the balance of payments also indicated modest capital outflows in the third quarter (Chart 2.29). In particular, net outflows through other investment increased during the period, mainly due to the strong repayment of foreign loans by residents and the increased net outflows of trade credit. Direct investment also recorded net outflows for the first time after registering net inflows for eight consecutive quarters owing to stagnant inward investments by non-residents. In contrast, cross-border capital inflows through portfolio investments remained strong, as residents reduced overseas securities purchases while international investors increased holdings of Mainland equities.

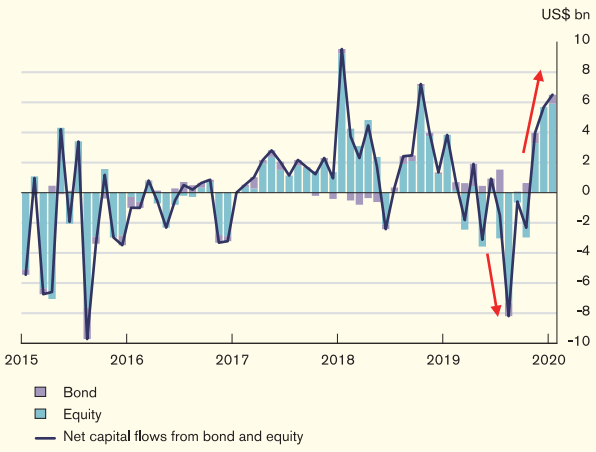
Chart 2.29
Mainland China: Net cross-border capital flows by type of flows



Sources: CEIC, SAFE and HKMA staff estimates.

Looking ahead, capital flows are likely to remain volatile over the short term. On the one hand, the "phase one" trade deal helped boost market confidence. In fact, based on more frequent and recent data, there were significant net inflows into the equity market in the last two months of 2019 and the first month of 2020, reversing the capital outflows trend amid the twists and turns of trade disputes earlier in 2019 (Chart 2.30). In addition, the increased weights of China A-shares in the MSCI indices announced in late February 2019 and the gradual inclusion of Mainland bonds in the Bloomberg Global Aggregate bond index starting from 1 April 2019, as well as the further opening-up of the Mainland financial markets will continue to provide support to capital inflows in the near term.[21] Nonetheless, uncertainties in the development of the coronavirus outbreak and the next stage of trade talks, the global economic slowdown and potential geopolitical risks remain a drag for investor sentiment.

Chart 2.30
Mainland China: Funds allocated to Mainland equities and bonds



Note: The figures also include those from the offshore markets such as investment in H-Shares.
Source: EPFR.

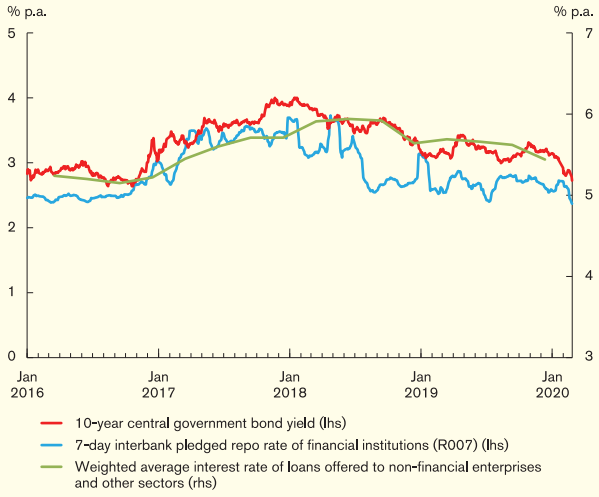
[21] The SAFE also removed investment quota for Qualified Foreign Institutional Investors and Renminbi Qualified Foreign Institutional Investors in September 2019 while the CSRC later announced the removal of the equity cap in foreign-invested securities and fund management firms which would take effect in phases starting from the beginning of 2020.

Fiscal and monetary policy

On the monetary policy front, while adopting a prudent stance, the PBoC continued to improve monetary transmission efficiency to lower the financing costs of the real sector especially for small and private firms amid the economic slowdown and the coronavirus outbreak. Following the refinement of the loan prime rate (LPR) formation mechanism on 17 August, the PBoC has lowered one-year LPR twice in September and November by five basis points each in 2019. As a result, the one-year LPR stood at 4.15% at the end of 2019, 16 basis points lower than before the refinement of the LPR formation. During the review period, the PBoC also announced several rounds of RRR cuts to release more liquidity to the banking system. In particular, the PBoC introduced a targeted RRR cut of 100 basis points for specific city commercial banks that primarily serve local businesses together with a broad-based RRR cut of 50 basis points in September. Another broad-based RRR cut of 50 basis points was announced in January 2020 to both ease liquidity conditions ahead of the Lunar New Year and further promote bank lending to corporates. In early February, the PBoC also net injected RMB550 billion into the banking system through open market operations and lowered the seven-day and 14-day reverse repo rates as well as the one-year LPR by 10 basis points each in response to the coronavirus outbreak.

Thanks to several rounds of interest rate and RRR cuts since the second half of 2019, the overall liquidity conditions in the banking system remained largely stable despite some credit events of smaller banks in 2019 and the coronavirus outbreak in 2020. Both the average seven-day interbank pledged repo rate of financial institutions (R007) and the 10-year central government bond yield came down during the review period (Chart 2.31).

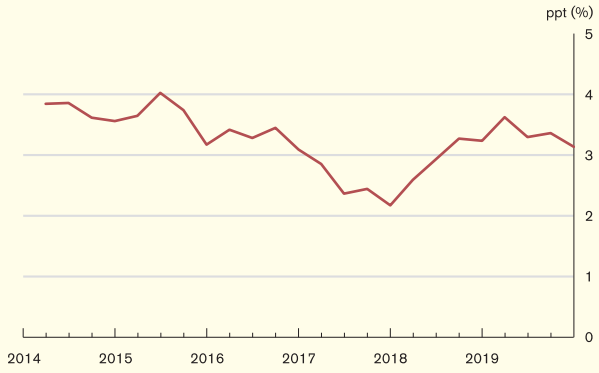
Chart 2.31
Mainland China: Major market interest rates



Sources: CEIC, PBoC and HKMA staff estimates.

Amid lowered interbank funding costs, the weighted average bank lending rate to the non-financial sector also decreased in the second half of 2019. The risk premium on corporate loans remained elevated despite narrowing somewhat during the period, in part reflecting lenders' concern over a potential deterioration in the repayment ability of corporate borrowers amid the recent economic slowdown and the US-China trade tensions (Chart 2.32).

Chart 2.32
Mainland China: Spread of the weighted average bank lending rate to the non-financial sector (general loans only) over one-year central government bond yield



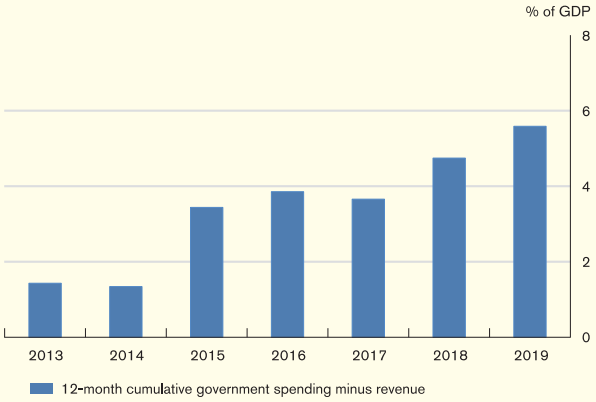
Note: General loans refer to bank loans excluding mortgages and bill financing, which are a proxy for corporate loans.
Sources: CEIC, PBoC and HKMA staff estimates.

In an effort to push ahead with interest rate liberalisation and lower financing costs for the real sector, Mainland financial institutions were instructed by the PBoC in December 2019 to gradually switch the reference rates of existing loans from the old benchmark lending rate to the LPR starting from 2020. This move expedited the process of the transition to a more market-based interest rate system, which was expected to improve monetary transmission and better channel policy rate cuts to the real sector.

On fiscal policy, the government continued to adopt a proactive stance. In 2019, the government cut a total of RMB2.3 trillion in tax and fees for Mainland corporates. As part of its anti-virus efforts, the government also announced the provision of interest subsidies to firms providing critical support to contain the coronavirus outbreak, as well as cuts in tax and fees especially for small businesses. Reflecting the government's efforts to reduce the fees and tax burden facing Mainland corporates, the growth in the overall government tax revenue eased from 8.3% year on year in 2018 to 1.0% in 2019.

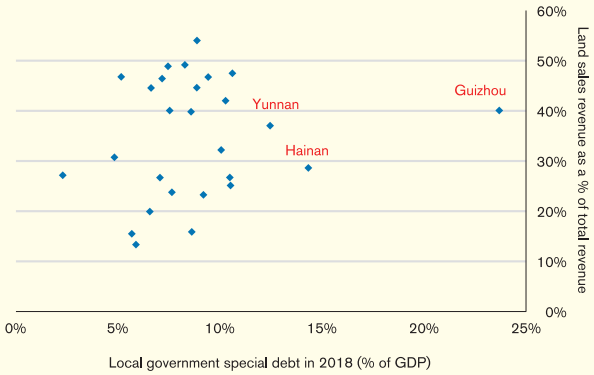
Despite a much slower expansion in tax revenue, growth in overall public expenditure remained high at 8.1% in 2019, although slightly slower compared with 8.8% in 2018. Reflecting the proactive stance, the 12-month cumulative gap between expenditure and revenue in the government's general public budget and government-managed funds widened further to 5.6% of GDP in 2019, after rising to 4.7% in 2018 (Chart 2.33).

Chart 2.33
Mainland China: Difference between public spending and public revenue



Sources: Wind, MoF and HKMA staff estimates.

Chart 2.34
Mainland China: Land sales revenue and local government special debt in 2018



Sources: Wind and HKMA staff estimates.

To finance the funding shortfall, local governments accelerated the issuance of special bonds. In particular, the newly issued special bonds reached RMB2.6 trillion in 2019 compared with about RMB2.0 trillion in 2018. The MoF also allowed the early issuance of RMB1 trillion local government special bonds in 2020 to further facilitate public spending.

Amid the accelerated bond issuance, the outstanding local government debt increased by 15% year on year to RMB21 trillion at the end of 2019, compared with a 12% increase in 2018. However, the overall risk of local government debt remains manageable as the local government debt-to-GDP ratio remains at a relatively low level, albeit edging higher to 21.5% at the end of 2019 from 20.4% at the end of 2018.

That said, some local governments may face refinancing pressures, given that revenue from land sales, a major source of local government income, decelerated significantly to 11% in 2019 from 25% in 2018. Indeed, our analysis suggests that some local governments, such as Guizhou, Hainan, and Yunnan, could be more sensitive to changes in property market conditions given their relatively higher indebtedness combined with a heavy reliance of their revenue on land sales in the past (Chart 2.34).

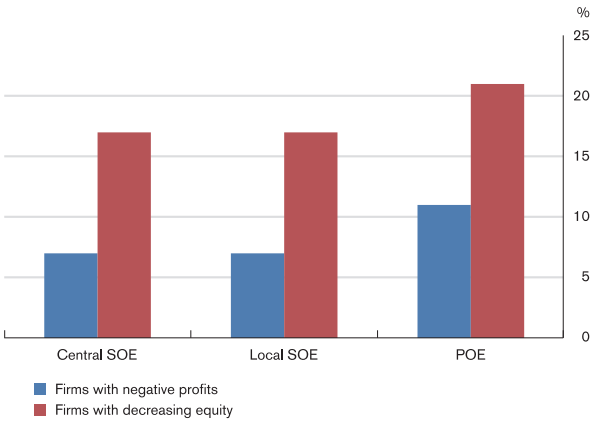
During the review period, Mainland authorities continued to roll out targeted monetary and fiscal policies to support the private sector especially smaller private business owners. Nevertheless, some media reports and market analysts have argued that despite the efforts, private industrial firms might have suffered equity declines. Box 2 examines the drivers of equity changes of Mainland industrial firms and finds that privately-owned enterprises or small firms were not intrinsically more likely to suffer shrinkage in size or a "retreat" (see more details in Box 2).

Box 2
What is behind the equity decline in Mainland Enterprises?

Introduction

2018 is perceived by many as a particularly difficult year for firms in Mainland China amid government efforts to deleverage the corporate sector, and the US-China trade tensions. Even listed firms, the "cream of the crop", faced a grim year. Data from firms' annual reports shows that a significant proportion of the firms made losses as well as experienced a decrease in equity in 2018[22] (Chart B2.1).

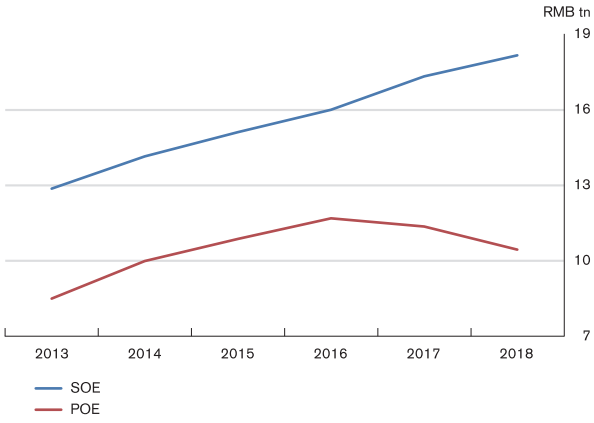
Chart B2.1
Percentage of loss-making firms and equity-decreasing firms in 2018



Sources: Wind and HKMA staff calculations.

Apart from the fact that a notable share of firms suffered losses, two observations emerge from Chart B2.1. First, notably more firms suffered declines in equity than recording losses. This suggests there should be other important reasons leading to the contraction in equity. Second, it seems that on average, more POEs made losses and experienced a drop in equity than SOEs. This finding appears to echo what has been documented by some studies using aggregate data, where the total equity of private industrial firms above designated size was found to have declined since 2017, while that of state-owned firms continued to increase[23] (Chart B2.2).

Chart B2.2
Changes in owner's equity by firm type



Source: CEIC.

Motivated by these observations, our study tries to answer the following questions, 1) What are the reasons behind this decline in equity for Mainland firms if loss-making is not the sole reason? 2) Does ownership or size explain the fact that more POEs suffer equity declines compared with SOEs? And 3) What are the implications of this decrease in equity of Mainland firms?

Equity composition from an accounting perspective

To answer these questions, we start by examining the major components affecting firms' equity. In particular, under the generally accepted accounting principles in Mainland China (PRC GAAP), the main components of owner's equity can be expressed as follows:

$$\begin{aligned} &Total\ equity \\ &= paid\ in\ capital + capital\ reserves \\ &+ retained\ earnings \\ &+ other\ comprehensive\ income\ (OCI) \end{aligned}$$

[22] In comparison, these figures were much smaller in 2017 especially for privately-owned enterprises (POEs). Specifically, the percentages of loss-making firms were 6%, 4%, and 3% respectively for central state-owned enterprises (SOEs), local SOEs, and POEs in 2017, while the percentages of equity-decreasing firms were 12%, 12%, and 7% respectively.

[23] See studies such as Tang (2018) and Zhang (2018), which showed that POEs were adding leverage passively in 2018 because POE assets decreased more quickly than liabilities.

Events that change these right-hand side components can in turn cause changes in equity[24]. For instance, making profits can improve owner's equity through adding to retained earnings. Indeed, many factors can affect total equity, and making a profit/loss is just one of them. A summary of key equity-changing events is shown in Table B2.1.

Table B2.1
Key events affecting equity components

	Paid-in capital	Capital reserves	Retained earnings	OCI
Issuing new shares	√	√		
Share buybacks	√	√		
Profit/Loss			√	
Dividend distribution			√	
M&A under common control		√		
Change in the fair value of available-for-sale financial assets				√

The first four factors listed in Table B2.1 are the most important – new share issuance, share buyback, current period profits or losses, and dividend distribution. For listed firms, new shares can still be issued on the secondary markets (seasoned equity offering, SEO), which increase both paid-in capital and capital reserves. Shares bought back become treasury stocks which offset owner's equity[25]. The current period net profits increase total equity, while net losses decrease total equity. Distributing dividends to shareholders decreases total equity.

Other events, though less common, can affect total equity as well. If a company acquires another company and both the acquiring and the acquired companies are controlled by the same third party, then the difference between the purchase price and the acquired company's identifiable net assets will be absorbed by other capital reserves. In other cases, if a company holds stocks of other listed companies and classifies these stocks as available-for-sale financial assets, then increases in the market value of these stocks will increase other comprehensive income (OCI) and thus total equity.

Note that the table does not cover all equity-changing events, especially those that are less common compared with the key events listed here[26]. In addition, events that only cause redistribution among equity components and do not affect total equity are not listed in the table.

Factors driving equity movement: empirical framework and results

We study how these equity-changing events affect total equity and whether ownership type matters, by conducting a firm level cross-sectional analysis. Our study uses listed industrial firm data in 2018. There are 2,158 firms in our final sample[27], of which 71% are POEs, 11% are central SOEs, and 18% are local SOEs[28]. The regression equation takes the following form:

$$\Delta Equity_i = \beta_0 + \beta_1 * Ownership_i + \beta_2 * Small\ Firm_i + \beta_3 * Equity\ Event_i + \beta_4 * Industry\ Dummies_i + e_i$$

where $\Delta Equity = (Equity_{2018} - Equity_{2017})/Equity_{2017} * 100$. *Ownership* is a vector of variables including the local SOE and the POE

[24] Strictly speaking, retained earnings correspond to two items under the PRC GAAP, undistributed profits and surplus reserves; here we use retained earnings for simplicity.

[25] Firms can buy back their own shares for various purposes such as rewarding shares to employees or cancelling these shares to boost share price and investor confidence. Regardless of the final purpose, shares bought back first become treasury stocks which decrease total equity, before further actions are taken towards these treasury stocks to fulfil the original purpose of the share buyback.

[26] Other events include donation from shareholders, reclassification among different types of financial instruments, share-based payments, reclassifying fixed assets to investment properties, equity changes in invested companies, issuing perpetual bonds or convertible bonds, incurring foreign currency translation differences.

[27] We exclude ST (special treatment) stocks because their indicators tend to have abnormal values and may skew the results. Also, data is winsored at 1% and 99% to minimise the influence of outliers.

[28] Ownership type may change across years for a small fraction of firms. The classification here is based on firms' ownership type at the end of 2017.

dummies. In this sense, the reference group is central SOEs. *Small Firm* is a dummy variable which equals to 1 for small firms[29]; it is included because small firms are usually viewed as more fragile and may suffer more in adverse conditions. *Equity Event* is a vector of variables including the four major factors (profits, dividend distribution, seasoned equity offering and share buybacks) in the baseline specification and two additional factors (OCI and related-party M&A dummy[30]) in alternative specifications. Except for the related-party M&A dummy, all equity-changing factors are scaled by total equity at end-2017. Industry fixed effects are controlled for in all specifications.

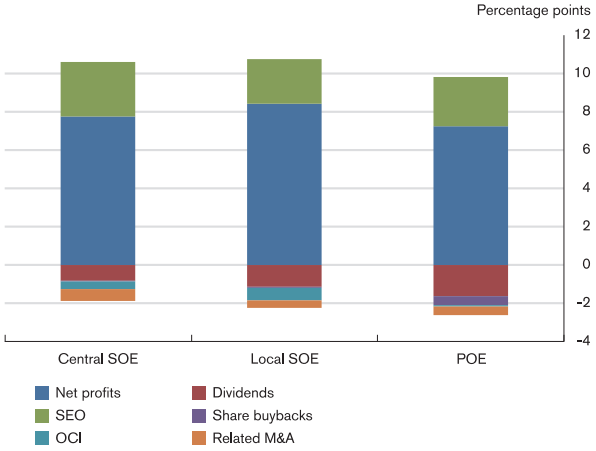
Table B2.2
Effects of equity-changing factors on total equity

	Baseline - full sample	With additional controls - full sample	With additional controls - equity losing firms
Small firm dummy	0.66	0.40	2.51***
	(1.37)	(0.85)	(3.30)
Local SOE dummy	0.89	0.97	-0.14
	(1.13)	(1.27)	(-0.12)
POE dummy	1.24*	0.87	-1.68
	(1.80)	(1.30)	(-1.61)
Profits	1.03***	1.03***	0.83***
	(58.90)	(60.80)	(40.38)
Dividends	-0.61***	-0.64***	-0.74***
	(-9.48)	(-10.17)	(-7.12)
SEO	0.71***	0.71***	0.09*
	(56.69)	(58.13)	(1.94)
Share buybacks	-0.89***	-0.82***	-0.46***
	(-5.61)	(-5.32)	(-2.67)
OCI		1.65***	0.68***
		(8.89)	(3.64)
Related party M&A		-3.57***	-3.84***
		(-6.06)	(-4.85)
Constant	-1.11	-0.51	-3.61**
	(-1.20)	(-0.56)	(-2.52)
Obervations	2158	2158	435
Adjusted R-squared	0.787	0.799	0.830

Note: t-statistics in parentheses.
* p<0.1 ** p<0.05 *** p<0.01

The main regression results are shown in Table B2.2. The coefficients of the small firm and POE dummies are either statistically insignificant or positive, suggesting that being a small firm or a POE does not negatively affect total equity. All coefficients of major equity events are statistically significant and have expected signs. Making profits or issuing new shares through SEO increases equity[31], while distributing dividends or buying back shares decreases equity. Less prominent factors such as OCI and related-party M&A also matter.

Chart B2.3
Contribution of major equity events – full sample



Sources: Wind and HKMA staff estimates.

Chart B2.3 shows the average contribution of each equity event based on the full sample estimation (second column of Table B2.2). The figure shows that similarly for all three types of firms, on average profit is the largest equity-influencing factor and the effect of SEO is also sizable. Dividend distribution is an important dragging factor for equity, and POEs seem to have distributed the most among all three types of firms. OCI is found to decrease equity as well, especially for SOEs, which may suggest that SOEs' investment portfolios performed worse. In comparison, share buybacks affect POEs more

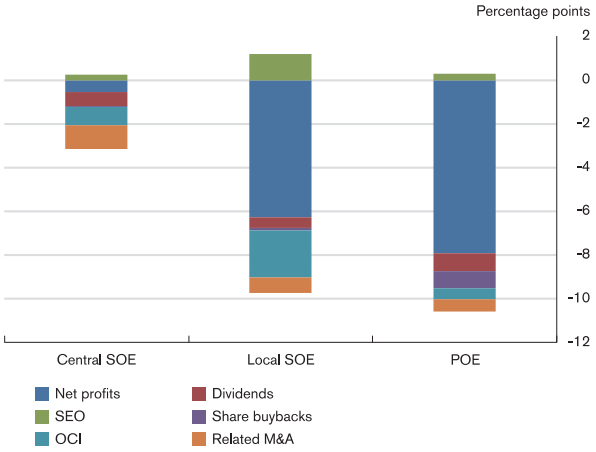
[29] The small firm dummy captures firms whose asset size is in the lowest 25% among all firms.

[30] Due to data limitation, we use related party M&A to proxy for M&A under common control.

[31] To be precise, there are three ways to conduct SEO: rights issues, public offerings, and private placements. The SEO in our regression is mainly private placements as the other two ways were rarely used by firms in the sample.

than SOEs, suggesting POEs bought back more shares. One plausible reason is that POEs did so to boost their stock price, if they had pledged shares as collaterals to obtain external funding.

Chart B2.4
Contribution of major equity events – equity-decreasing firm only



Sources: Wind and HKMA staff estimates.

The contribution of equity factors for a subgroup of our sample, firms that suffered an equity decrease in 2018, is presented in Chart B2.4 (results based on the third column of Table B2.2). In general, central SOEs experienced little equity decrease, and negative profits only played a minor role. By contrast, incurring losses is the biggest factor leading to equity decline for both local SOEs and POEs. Other than that, local SOEs suffered more from negative OCI, but enjoyed larger SEO funding. In comparison, POEs that suffered equity declines received little equity funding from SEO, while larger dividend distribution as well as share buybacks added to the decrease in equity.

Conclusion

2018 was a particularly difficult year for the Mainland corporate sector amid ongoing domestic restructuring and the trade disputes between the US and Mainland China. Using listed industrial firm data in 2018, we find that while on average Mainland listed firms continued to expand, an increasing share of firms suffered decreases in equity. When exploring factors affecting changes in the equity of firms, two observations emerge.

First, ownership or size of listed firms is found to have no significant marginal explanatory power over the recent declines in firms' equity. This means that POEs or small firms were not intrinsically more likely to suffer shrinkage in size or a "retreat" as declared by some media reports and market analysts.

Second, such decreases in equity were particularly significant for local SOEs and POEs, with the biggest contributing factor being negative profits. While the profitability of firms may improve on measures being introduced by government, such as interest or tax/fee cuts, factors resulting in equity declines due to more structural issues are worth noting. For instance, losses in OCI seem to be the second most important reason for local SOEs' equity decline, highlighting the inefficiency of these firms that invest beyond their primary operations. In comparison, share buybacks of equity-declining POEs, if done for the purpose of propping up the stock price to sustain credits from share pledging, could also be of concern.

One caveat to our study is that due to data limitation, we only include listed firms in our sample and the situation for non-listed firms could be different. For example, studies show that some POEs have dropped out of the above-designated-size group[32] and we cannot rule out the possibility that some went bankrupt, instead of only experiencing balance sheet contraction. In this light, our findings from listed firms presented in this study may not be able to be generalised to all Mainland industrial firms.

[32] For example, Ding (2019) documented that the number of enterprises above designated size has shrunk since 2017 and most of the firms that fall below the threshold are POEs.

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