1. Summary and overview

Global economic conditions improved with a synchronous cyclical rebound in real activities. Nevertheless, optimism about the global economic outlook has driven asset market valuations to elevated levels as well as a pick-up in credit growth in many Asian economies, thereby increasing the vulnerability of global and regional economies to financial stability risks. In particular, the global economy is still subject to numerous uncertainties, including the sustainability of global growth momentum, the impact of monetary policy normalisation by the US Federal Reserve and possibly other major central banks, as well as heightened geopolitical tensions.

The Hong Kong dollar exchange rate eased gradually reflecting increased interest rate arbitrage activities amid widened negative spreads between the Hong Kong dollar interbank interest rates and their US dollar counterparts. Despite the US interest rate hikes in March and June, local interest rates remained soft in part reflecting ample liquidity, and there was broad-based growth in total loans. Housing affordability remained stretched, although the residential property market showed tentative signs of moderation after the prudential measures introduced in May.

Looking ahead, in view of the widened interest rate differential between Hong Kong and the US, banks should stay vigilant about the risks of significant capital outflows and their impact on local interest rates amid the Fed's ongoing rate hikes and the forthcoming balance sheet normalisation. Banks should also maintain prudent credit risk management as sharp rises in interest rates could test banks' asset quality given the rising levels of corporate leverage and increasing household debt-servicing burdens.

The external environment

The cyclical rebound in global economic activity, which emerged in the latter part of 2016 amid a synchronous upturn in global trade and production, has extended into the first half of 2017. Economic and political uncertainty in major advanced economies has also receded along with easing concerns over the rise of populist and anti-establishment sentiments in the run-up to elections in Europe. Against this background, global equity markets maintained their post US election rallies, propelling valuations to elevated levels in some markets, especially in the US.

Nonetheless, the current benign global macro-economic and financial market environment is still subject to numerous uncertainties, including the sustainability of global growth momentum, the impact of monetary policy normalisation by the US Federal Reserve (Fed) and possibly other major central banks, trade-off between containing financial risks and sustaining growth in Mainland China, and the recent escalation of geopolitical risks.

The US economy is showing signs of a maturing expansion. While the modest inflationary pressures and a pickup in growth in the second quarter are suggestive of an early-to-intermediate stage of recovery, developments in several other aspects of the economy more closely resemble the situation of a maturing expansion. Indeed, recent movements in financial market and labour market indicators, such as the flattening of the Treasury yield curve slope and the sustained drop in the unemployment rate, are indicative of the US economy entering the late-cycle phase of expansion. If this were indeed the case, the presently rich equity market valuation and the current cyclical recovery in global demand would likely be called into question. In this connection, Box 1 (see page 15) assesses the latest stage of the US economy's business cycle, by examining how various economic indicators behaved during different stages of the business cycles using a statistical classification technique known as cluster analysis.

Another development of significance is the Fed's intention to implement balance sheet normalisation in the near term. Given the measured pace of balance sheet reduction, it is likely the resulting rise in longer-term yields would be gradual. Yet, it remains to be seen how it would affect the US Treasury market and its spillover effects on domestic and international financial conditions.

In East Asia, although most economies seem to be benefitting from the synchronous improvement in global trade activities and renewed capital inflows for now, risk exists that tighter global financial conditions stemming from on-going interest rate hikes and balance sheet normalisation by the Fed could lead to capital flow reversals in the region going forward. Meanwhile, weaker-than-expected growth in the US could lead to a disruption of the region's recovery, and the recent pick-up in credit growth as well as the increasingly stretched financial asset valuation amid resumed portfolio inflows are increasing the vulnerability of the regional economies to shocks, particularly given the rise in Sino-US trade tensions amid protectionist sentiment and the heightening geopolitical tensions in the Korean Peninsula.

In Mainland China, growth momentum improved further in the first half of 2017. The better-than-expected economic performance was in part underpinned by better export performance amid greater external demand and a rebound in private investment growth amid buoyant property market conditions. While the near-term growth outlook for the Mainland economy remains positive, it also hinges on how the authorities strike a balance between supporting the economy and preventing systemic risks, such as those potentially associated with the exuberance in the property market and the increased exposure of banks to non-bank institutions. On the external front, capital outflow pressures continued to ease in tandem with improved economic conditions, but the uncertainties in monetary conditions among major economies as well as global market sentiment would still play an important role in shaping the near-term outlook for cross-border fund flows.

The soaring property prices in Mainland China have raised concerns, given the strong link between real estate cycles and financial stability. While the direct exposure of Mainland banks to the property market should be manageable, bank exposure to the property market through the collateral channel should not be ignored, given the key role played by the property market in the collateral-based lending system. Box 2 (see page 31) discusses the risk associated with banks' exposure to the property market by examining the effect of property prices on corporate borrowing through the collateral channel. Our analysis shows that property price changes have a positive effect on firms' debt growth, especially for financially constrained firms such as smaller and non-state-owned companies, suggesting that banks' heavy reliance on properties and land as collateral may lead to a pro-cyclical swing in the indebtedness of these firms.

The domestic economy

The Hong Kong economy maintained its sequential growth momentum during the first half of 2017. The quarter-on-quarter real Gross Domestic Product (GDP) growth was 0.7% in the first quarter and 1.0% in the second, similar to the average growth rate of 1% over the preceding two quarters. Compared with the second half of 2016, private consumption held up alongside favourable labour market conditions, and overall investment spending revived on improving business sentiment towards mid-2017. Externally, Hong Kong's exports of goods recorded four consecutive quarters of brisk growth before moderating somewhat in the second quarter. Exports of services fell back due in part to reduced demand for tourism-related services. Meanwhile, growth in imports of services continued amid strong travel interest among residents. Overall, net exports contributed positively to GDP growth in the first quarter but turned into a drag on growth in the second.

In the second half of the year, domestic economic growth is expected to sustain momentum, albeit at a slightly softer but still solid pace amid a higher comparison base in the first half. For 2017 as a whole, the Government has revised upward its range forecast of real GDP growth to 3–4% from 2–3% as announced earlier in February. That said, this growth outlook is subject to various uncertainties in the external environment as mentioned above, as well as Mainland's economic performance and the pace of recovery in inbound tourism.

Local inflationary pressures stayed moderate in the first half of 2017 despite a drop of unemployment rate to 3.2% from 3.4% in 2016. However, the sequential momentum has accelerated in recent months, mainly driven by the increases in the prices of tradables. Looking ahead, inflationary pressures are likely to be limited on the back of benign imported inflation and moderate rises in local costs.

Monetary conditions and capital flows

The Hong Kong dollar spot exchange rate has eased gradually since early 2017 driven by increased interest rate arbitrage activities amid widened negative spread between the Hong Kong dollar Interbank Offered Rate (HIBOR) and the US dollar London Interbank Offered Rate (LIBOR) after the two US rate hikes in March and June. The Convertibility Undertaking (CU) was not triggered during the review period, and the pace of Hong Kong dollar depreciation has been orderly so far.

Going forward, the ongoing US monetary policy normalisation process could widen the negative HIBOR-LIBOR spreads further. Interest rate arbitrage activities are expected to lead to the further easing of the Hong Kong dollar exchange rate. The possibility of triggering the weak-side CU, which is a normal process under the Currency Board system, should not be ruled out.

Despite the US interest rate hikes, the Hong Kong dollar interest rates remained soft in part reflecting ample liquidity in the banking system. Contrary to the increases in LIBOR, HIBOR decreased across-the-board over the first eight months of 2017, with the overnight and the three-month HIBOR fixings declining by 36 and 26 basis points respectively. Against the background of the widened negative HIBOR-LIBOR spreads, Box 3 (see page 49) discusses the fundamental drivers of the Hong Kong dollar-US dollar interest rate spreads. Meanwhile, in the mortgage market, intensifying competition among banks amid low funding costs also lowered the average mortgage rate to around 1.8% recently.

Amid the accommodative domestic liquidity conditions and the improved economic environment, growth in total loans accelerated to 10.2% in the first half of 2017. The faster expansion was underpinned by broad-based increases in domestic loans to most economic sectors, as well as loans for use outside Hong Kong to both domestic and multinational corporations.

Despite the strong credit growth, banks' funding conditions were broadly stable underpinned by a large deposit base. The Hong Kong dollar loan-to-deposit (LTD) ratio stayed unchanged at 77.1% at the end of June as Hong Kong dollar loans and deposits grew at a similar pace. The foreign-currency LTD ratio increased to 65.5% due to faster growth in loans than deposits.

The onshore (CNY) and offshore (CNH) renminbi exchange rates reversed their weakening trend to appreciate against the US dollar. This partly reflected the improved Mainland economy and a general weakening of the US dollar against other major currencies. Along with the renminbi exchange rate movements, there were signs of stabilisation in Hong Kong's offshore renminbi liquidity pool (including outstanding customer deposits and certificates of deposits), as renminbi customer deposits reverted to a modest increase in the second quarter. However, in the first half of 2017 as a whole, the renminbi liquidity pool still recorded a mild decrease. As for other renminbi banking business, the outstanding amount of renminbi bank loans and the renminbi trade settlements handled by banks in Hong Kong declined somewhat, while the average daily turnover of the renminbi real time gross settlement system remained high. Against

the background of continuing internationalisation of the renminbi, Box 4 (see page 54) analyses the extent to which the renminbi has been perceived as a safe-haven currency over the past few years. The empirical results found that the CNY and CNH ranked consistently quite high on the safe-haven currency scale by both dollar-based and eurobased investors. Within the Special Drawing Rights basket, they are regarded as riskier than the Japanese yen and the US dollar but safer than the euro and British pound.

Asset markets

The domestic equity market staged a strong rally alongside other major markets over the past six months, as a result of better-than-expected macroeconomic performances and corporate earnings. The review period saw a considerable net inflow of funds following two consecutive years of net outflow. Market volatility remained subdued despite geopolitical risk events, for example more frequent terrorist attacks in Europe and increasing tensions over the Korean Peninsula. Against this backdrop, the priceearnings ratio of local stocks climbed to a sixyear high, although it remained attractive in relative terms both globally and within the region. Nevertheless, this renders the market more vulnerable to shocks, especially since the current levels of the US SKEW index reflect a high level of tail risk.

The Hong Kong dollar debt market registered a steady expansion in the first half of the year, with credit spreads over US Treasury yields generally trending downwards. Like the stock market, it also experienced a net inflow of funds, partly attributable to the fact that the two US interest rate hikes were well anticipated. In contrast, the offshore renminbi debt market in Hong Kong shrank further, amid continued lower funding costs onshore. However, the uncertainty over the exchange rate and onshore-offshore funding cost gap is likely to cast a shadow over near-term market development. Over the longer term, the development will hinge on future offshore-onshore market interactions in view of more policy initiatives, such as the recent Bond Connect, and continuing market evolution with, for example, the inclusion of onshore bonds into benchmark global indices.

The residential property market has become buoyant again since March, with property prices in the secondary market surpassing the peak in September 2015. Transactions in the primary and secondary markets also picked up. The rising property prices stretched housing affordability further. Partly as a result, it is more common for recent homebuyers to receive financial support from their parents or to take up high-LTV mortgages provided by property developers. In response to the latter, on 12 May the HKMA introduced prudential measures to strengthen banks' credit risk management for exposures to property developers offering mortgages. On 19 May, the HKMA further announced the eighth round of prudential measures for property mortgage loans in view of rising property prices and intensifying competition for mortgage loan business among banks. Housing price growth showed signs of moderation following the prudential measures in May, while average transactions declined in July and August compared with the first half of the vear.

Looking ahead, the residential property market outlook remains highly uncertain. Low interest rates, perceived housing shortage, aggressive promotion and financing plans provided by property developers may continue to boost the demand for properties in the near term, but the expected increase in housing supply would narrow the housing supply-demand gaps and normalisation of domestic interest rates would raise the debt servicing cost of mortgage loans to contain property price appreciation pressure over a longer time horizon.

Banking sector performance

The profitability of retail banks improved, with the return on assets increasing to 1.17% in the first half of 2017 compared to 1.07% in the first half of 2016. The improvement was due to higher net interest income and non-interest income. The net interest margin of retail banks also widened to 1.43% in the second quarter of 2017 from 1.33% in the same period of 2016.

Banks maintained strong capital positions, with the consolidated capital adequacy ratio (CAR) of locally incorporated authorized institutions (AIs) staying at a high level of 18.7%. Although the CAR fell slightly by 0.5 percentage points, it remained well above the minimum international standards. To reinforce banks' resilience to systemic risks, the countercyclical capital buffer ratio for Hong Kong will rise to 1.875% with effect from 1 January 2018 from the current 1.25%.

Notwithstanding US interest rate hikes, the Hong Kong dollar interbank interest rates remained soft, reflecting ample liquidity in the banking sector. The Hong Kong dollar funding costs of retail banks, as reflected by the composite interest rate, also remained low and stable. Meanwhile, liquidity positions of AIs were generally sound as measured by Basel III standards. Both the average Liquidity Coverage Ratio for category 1 institutions and the average Liquidity Maintenance Ratio of category 2 institutions remained high at 144.2% and 49.7% respectively in the second quarter of 2017, which were significantly higher than their statutory minimums of 80% and 25% respectively.

While bank lending grew more rapidly by a rate of 10.2% in the first half of 2017 compared to 4.2% in the preceding six months, asset quality remained sound by historical standards and improved further during the review period.

However, the banking sector is expected to face various challenges ahead. In particular, policy uncertainties in major advanced economies are one important risk factor affecting the Hong Kong banking sector. Box 5 (see page 79) examines how changes in monetary policies by major central banks may affect foreign banks in Hong Kong. Our findings suggest that the negative spillover effects arising from the joint tightening of monetary policies in major advanced economies could exert significant pressure on US dollar credit availability in Hong Kong. Nevertheless, continuing regulatory reforms and prudential measures that encourage banks to develop more resilient capital and liquidity positions will help mitigate the adverse impact.

In view of the widened interest rate differential between Hong Kong and the US, banks should stay vigilant against the risks of significant capital outflows and their impact on local interest rates amid the Fed's ongoing rate hikes and the forthcoming balance sheet normalisation. Banks should also maintain prudent credit risk management as sharp rises in interest rates could put banks' asset quality under the test, given the rising levels of corporate leverage and increasing household debt-servicing burdens.

The *Half-yearly Report on Monetary and Financial Stability* is prepared by the staff of the Research Department of the Hong Kong Monetary Authority.