



PEOPLE'S REPUBLIC OF CHINA— HONG KONG SPECIAL ADMINISTRATIVE REGION

December 2019

2019 ARTICLE IV CONSULTATION DISCUSSIONS— PRESS RELEASE; STAFF REPORT; STAFF STATEMENT AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR THE PEOPLE'S REPUBLIC OF CHINA—HONG KONG SPECIAL ADMINISTRATIVE REGION

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2019 Article IV consultation discussions with the People's Republic of China—Hong Kong Special Administrative Region, the following documents have been released and are included in this package:

- A **Press Release** summarizing the views of the Executive Board as expressed during its December 13, 2019 consideration of the staff report that concluded the Article IV consultation discussions with the People's Republic of China—Hong Kong Special Administrative Region.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on December 13, 2019, following discussions that ended on November 4, 2019, with the officials of the People's Republic of China—Hong Kong Special Administrative Region on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on November 25, 2019.
- An **Informational Annex** prepared by the IMF staff.
- A **Staff Statement** updating information on recent developments.
- A **Statement by the Executive Director** for the People's Republic of China—Hong Kong Special Administrative Region.

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IMF Executive Board Concludes 2019 Article IV Consultation Discussions with People's Republic of China—Hong Kong Special Administrative Region

On December 13, 2019, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation discussions¹ with the People's Republic of China—Hong Kong Special Administrative Region (SAR).

Economic activity in Hong Kong SAR weakened significantly in 2019 as rising trade tensions between the U.S. and China and heightened uncertainty took a toll on exports and investment while private consumption and visitor arrivals have declined due to the social unrest that started over the summer. As the cyclical downturn continues, GDP is expected to contract by 1.9 percent in 2019. Growth is projected to rise to 0.2 percent in 2020, led by private consumption, but the pace of recovery over the medium term is expected to be slower than in previous recoveries as increased trade barriers and disruptions to global supply chains would be a drag on trade-related activities.

Despite external and domestic headwinds, financial markets continue to function smoothly and the HK dollar has traded within the convertibility undertaking range since the last FX operations conducted by the Hong Kong Monetary Authority in March 2019. The interbank rates have remained stable, net capital outflows have been limited, and market expectations of the HKD/USD exchange rate have remained well anchored. However, with the slowdown in growth in Hong Kong SAR and Mainland China, credit growth has moderated to 6.3 percent in September 2019, from a peak of 21.4 percent in October 2017. Housing prices, which rose for

¹ Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.

the first five months of 2019 amid expectations of monetary easing in the U.S, also declined by about 4 percent between May and September.

Risks to outlook are tilted to the downside. On the external side, further escalation of trade tensions between the U.S. and China and a significant slowdown of Mainland China as well as additional barriers, including potential restrictions by the U.S. against China in technology and the financial sectors, could negatively affect growth in Hong Kong SAR. On the domestic side, a deterioration of the sociopolitical situation and delays in addressing structural challenges of insufficient housing supply and high income inequality could further weaken economic activity and negatively affect the city's competitiveness in the long term. A significant slowdown of the economy could trigger an adverse feedback loop between house prices, the real economy and the financial sector.

Executive Board Assessment²

Executive Directors noted that economic activity in Hong Kong SAR has deteriorated significantly on account of the global growth slowdown, U.S.-China trade tensions, and ongoing social unrest. While the balance of risks is tilted to the downside going forward, Directors agreed that Hong Kong SAR's robust policy frameworks and ample buffers will help the economy weather the challenges ahead. They welcomed the authorities' readiness to use these buffers as and when necessary.

Amid the growth slowdown and strong headwinds, Directors agreed that countercyclical fiscal support would continue to be essential. They welcomed the recently announced stimulus targeted at the most vulnerable households and small- and medium-sized enterprises. Directors recommended a comprehensive medium-term fiscal package to cope with the cyclical downturn and address longer-term structural challenges associated with housing market imbalances, population aging, and income inequality, while preserving fiscal sustainability. In light of the envisaged spending pressures, Directors encouraged the authorities to consider tax reform over the medium to long term to boost revenues and foster equity. On the expenditure side, they saw scope for improving budget planning and execution, as well as developing a long-term healthcare spending strategy.

² At the conclusion of the discussion, the Managing Director, as Chairman of the Board, Summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: <http://www.imf.org/external/np/sec/misc/qualifiers.htm>.

Directors supported the authorities' three-pronged approach to contain housing market risks and improve housing affordability, with priority given to increasing land allocation for residential housing. Noting the effectiveness of macroprudential measures, Directors concurred that any adjustment should be based on evolving financial stability risks. They encouraged the authorities to phase out the new residential stamp duty and replace it with alternative non-discriminatory macroprudential measures once systemic risks from nonresident inflows dissipate.

Directors underscored the importance of safeguarding financial stability amid rising global volatility. They commended the authorities for the progress in implementing the 2014 FSAP recommendations. Continued efforts would be needed to monitor vulnerabilities in the corporate sector, further strengthen the regulatory and supervisory framework, and facilitate innovation while managing risks. Directors noted that further development of green finance and the Greater Bay Area would help maintain Hong Kong SAR's competitiveness.

Directors observed that Hong Kong SAR's external position is broadly in line with medium-term fundamentals and desirable policies. They agreed that the Linked Exchange Rate System remains an appropriate anchor of stability. They stressed that preserving a track record of public communication would be key to the credibility of the currency board arrangement.

Hong Kong SAR: Selected Economic and Financial Indicators, 2015–24

	2015	2016	2017	2018	Proj.					
					2019	2020	2021	2022	2023	2024
NATIONAL ACCOUNTS										
Real GDP (percent change)	2.4	2.2	3.8	3.0	-1.9	0.2	4.7	2.8	2.6	2.5
Private consumption	4.8	2.0	5.6	5.5	-2.3	-0.7	4.3	2.3	2.3	2.3
Government consumption	3.4	3.4	2.8	4.2	5.2	5.8	4.1	3.5	3.2	3.2
Gross fixed capital formation	-3.2	-0.1	2.9	2.0	-10.2	-1.0	7.6	5.8	4.2	4.2
Inventories (contribution to growth)	-1.2	0.9	0.5	-0.1	-0.5	0.2	0.0	0.0	0.0	0.0
Net exports (contribution to growth)	0.8	-0.3	-1.2	-1.4	1.9	0.0	-0.1	-0.3	-0.2	-0.3
Output gap (in percent of potential)	-0.1	-0.7	0.2	0.3	-3.1	-4.6	-2.1	-1.6	-1.5	-1.5
Saving and investment (percent of GDP)										
Gross national saving	24.9	25.5	26.7	26.0	25.2	25.1	25.3	25.5	25.6	25.7
Gross domestic investment	21.5	21.5	22.0	21.7	19.7	20.0	20.6	21.1	21.4	21.7
Saving-investment balance	3.3	4.0	4.7	4.3	5.5	5.2	4.7	4.4	4.2	4.0
LABOR MARKET										
Employment (percent change)	0.9	0.2	0.9	1.4	0.5	0.5	1.1	0.8	0.8	0.7
Unemployment rate (percent, period average)	3.3	3.4	3.1	2.8	3.1	3.4	3.1	3.0	2.9	2.9
Real wages (percent change)	0.5	1.2	2.3	1.1	1.3	0.0	1.2	1.3	1.3	1.3
PRICES										
Inflation (percent change)										
Consumer prices	3.0	2.4	1.5	2.4	3.0	1.8	2.6	2.5	2.4	2.4
GDP deflator	3.6	1.6	3.0	3.6	1.4	1.1	2.2	2.0	2.0	2.0
GENERAL GOVERNMENT (percent of GDP)										
Consolidated budget balance	0.6	4.5	5.6	2.4	0.0	0.3	0.6	0.7	0.9	0.9
Revenue	18.8	23.0	23.3	21.1	20.7	20.8	21.0	21.0	21.0	21.0
Expenditure	18.2	18.6	17.7	18.7	20.7	20.6	20.4	20.3	20.2	20.2
Fiscal reserves (as of March 31)	35.1	38.3	41.4	41.2	41.4	41.1	39.0	37.9	37.1	36.1
FINANCIAL										
Interest rates (percent, period-average)										
Best lending rate	5.0	5.0	5.0	5.0	...	...	...	...	...	...
Three-month HIBOR	0.4	0.6	0.9	1.8	...	...	...	...	...	...
10-year Treasury bond yield	1.6	1.2	1.6	2.1	...	...	...	...	...	...
MACRO-FINANCIAL										
Loans for use in Hong Kong SAR (excl. trade financing)	6.3	8.0	16.1	6.5	5.0	5.5	8.5	7.5	7.4	7.2
House prices (end of period, percent change)	2.4	7.9	14.7	1.9	1.0	3.6	9.9	8.1	7.8	7.6
Credit-to-GDP gap 1/	15.3	11.5	19.3	9.8	10.6	9.4	8.1	6.2	4.8	2.8
Hang Seng stock index (percent change)	-7.2	0.4	36.0	-13.6	...	...	...	...	...	...
EXTERNAL SECTOR										
Merchandise trade (percent change)										
Export value	-1.8	-0.5	8.0	7.4	-3.9	2.8	3.8	3.5	3.4	3.4
Import value	-4.1	-1.0	8.7	8.4	-5.6	1.6	3.9	3.7	3.6	3.6
Current account balance (percent of GDP) 2/	3.3	4.0	4.7	4.3	5.5	5.2	4.7	4.4	4.2	4.0
Foreign exchange reserves 2/										
In billions of U.S. dollars (end-of-period)	358.8	386.3	431.4	424.7	425.3	425.9	427.0	428.5	429.9	430.5
In percent of GDP	116.0	120.4	126.2	117.1	117.7	116.4	109.2	104.5	100.2	96.0
Net international investment position (percent of GDP)	324.2	359.2	417.0	356.7	363.8	364.4	345.3	333.7	323.1	313.1
Exchange rate										
Market rate (HK\$/US\$, period average)	7.752	7.762	7.793	7.838	...	...	...	...	...	...
Real effective rate (period average, 2010=100)	110.4	115.2	115.3	113.1	...	...	...	...	...	...

Sources: BIS, CEIC; HKSAR Census and Statistics Department; and IMF staff estimates.

1/ Based on loans for use in Hong Kong SAR, including trade financing.

2/ Data published using the Balance of Payments Statistics Manual 6 (BPM6) format.



PEOPLE'S REPUBLIC OF CHINA—HONG KONG SPECIAL ADMINISTRATIVE REGION

STAFF REPORT FOR THE 2019 ARTICLE IV CONSULTATION DISCUSSIONS

November 25, 2019

KEY ISSUES

- **Overview.** Hong Kong SAR economy has been hit hard by both external and domestic shocks and fell into a technical recession in the third quarter. The economy is projected to start recovering next year, but the pace is expected to be gradual and both near- and medium-term risks have increased significantly, including from trade and technology tensions, ongoing social unrest, and structural challenges of insufficient housing supply and high income inequality. Hong Kong SAR is well placed to address both cyclical and structural challenges with its significant buffers thanks to its long history of prudent macroeconomic policies.
- **Policies.** Securing sustainable growth and maintaining the city's long-term competitiveness requires stabilizing the economy with short-term stimulus while addressing underlying structural challenges through a comprehensive policy package. The policy strategy should include:
 - **Fiscal and structural policy.** Given that the fiscal framework permits deficits during economic downturns, government spending should be increased significantly in the areas of social safety nets, education/retraining, and infrastructure to cope with the cyclical downturn and address structural challenges of insufficient housing and high income inequality. This should be complemented with measures to ensure fiscal sustainability and greater equity.
 - **Housing market.** The three-pronged approach—boosting housing supply, macroprudential measures, and stamp duties—should continue, but housing supply should be accelerated by increasing land allocation for residential housing to resolve the structural supply-demand imbalance.
 - **Financial sector.** The robust regulatory and supervisory framework should be further strengthened to maintain financial sector's resilience and safeguard financial stability amid rising global financial volatility and increasing links with Mainland China.
 - **Exchange rate.** The Linked Exchange Rate System remains appropriate and should be maintained as an anchor for economic and financial stability.

Approved By
**Kenneth Kang and
 Petya Koeva Brooks**

Discussions took place in Hong Kong SAR during October 23–November 4, 2019. The team comprised Joong Shik Kang (head), Fei Han, Emilia Jurzyk (all APD), and Sally Chen (Resident Representative, MCM). Kenneth Kang (APD) joined the concluding meetings. The mission met Financial Secretary Paul Chan, HKMA Chief Executive Eddie Yue, and other senior officials. Zhongxia Jin and Georgina Lok (OED) joined the official meetings. Naihan Yang, Connor Kinsella (all APD), Daisy Wong (COM), Atis Lee, and Kevin Chow (Resident Representative Office) provided support to the mission.

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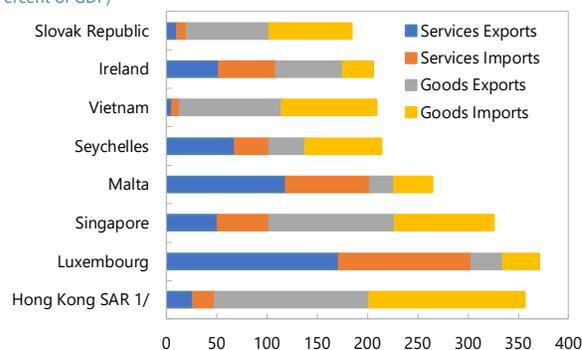
CHALLENGES AHEAD BUT WITH AMPLE BUFFERS

1. Hong Kong SAR is a regional trading hub and a global financial center.¹ The “one country, two systems” principle, adopted at the time of its handover to China in 1997, has allowed the city to retain its own government and legislative and administrative system. Hong Kong SAR's competitiveness has depended on its sound rules and regulations, grounded in the common law and adapted to international best standards. Hong Kong SAR consistently ranks very high in international competitiveness, due to its high-quality regulatory framework, stable macroeconomic environment, transparent and efficient institutions, and flexible goods, labor, and financial markets.

2. Hong Kong SAR is one of the most open economies in the world. Conveniently situated next to one of the largest manufacturing centers in the world, Hong Kong SAR has long served as an entrepot for Mainland China, an important gateway for its exports to the world, and a processing and distribution center for other countries linked through the global value chains. External trade amounted to about 360 percent of GDP (not including the offshore trade, which amounted to another 167 percent in 2017). Trade and logistics, servicing re-exports as well as offshore trade, are one of the city's key sectors, contributing around 20 percent to both GDP and employment. Tourism also contributes around 4½ percent to GDP and 6⅔ percent to employment.

Exports and Imports of Goods and Services

(Percent of GDP)



1/ Data for Hong Kong SAR are as of 2019Q3.

Sources: C&SD, WEO, and IMF staff calculations

3. Hong Kong SAR is a global financial center, with increasing links with Mainland China. The free movement of capital and information, a simple tax system, a sound regulatory system, rule of law, and quality professional services have provided solid foundation for competitiveness in its financial sector. Benefiting from the city's open capital account, it has become a leading financing center for Mainland China's firms through banking, bond, and stock markets, and is also a gateway for FDIs in and out of Mainland China. Financial, professional and other producer services account for about 30 percent of GDP and 20 percent of employment.

4. Trade tensions between the U.S. and China and social unrest have sent waves through the economy. Underpinned by the currency board arrangement—Linked Exchange Rate System (LERS)—Hong Kong SAR's overall business cycle has traditionally been closely in sync with the U.S. business cycle, although Mainland China's influence has gradually increased. Since the eruption of trade tensions between the U.S. and China, the value of Hong Kong SAR's re-exports has been significantly affected, with ripple effects through the trade-related services sector (Annex 1). In

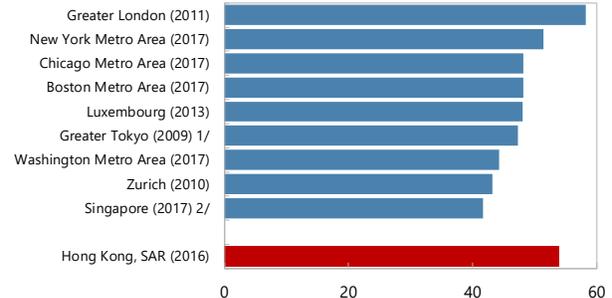
¹ These consultation discussions form part of the Article IV consultation with the People's Republic of China.

addition, social unrest that has persisted since this summer has adversely affected the domestic economy.

5. Hong Kong SAR also faces structural challenges brought by deteriorating housing affordability, high income inequality, and aging population. With housing prices almost

quadrupling since the Global Financial Crisis (GFC), the property boom has left the city with one of the least affordable housing markets in the world. High real estate-related revenues have helped boost the city's coffers but increases in social spending have not been enough to address high levels of income inequality that are above that of its peers. A quarter of the city's population is projected to be aged 65 and over by 2030, thus posing a challenge to productivity and competitiveness in the long run.

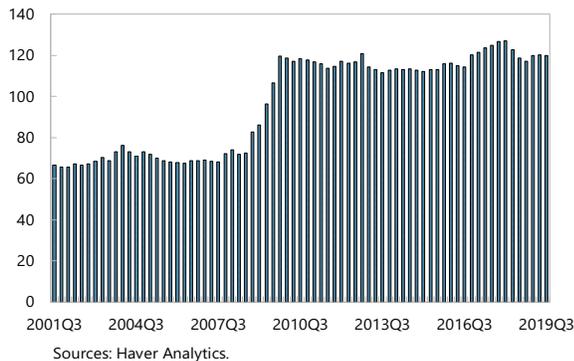
Market Gini Index: Hong Kong SAR and Other Cities with Sizable Financial Industry
(Household Gini; Percentage points)



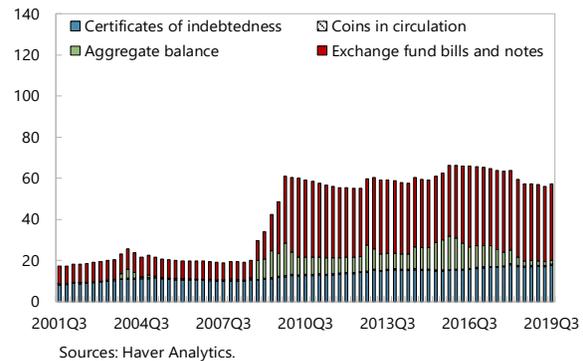
Sources: U.S. Census, Statistics Singapore, HKSAR C&SD, OECD.
1/ Southern Kanto region; 2/ Singapore's Gini coefficient is reported based on household income from work per household member.

6. A history of sound macroeconomic and prudential policies left Hong Kong SAR with significant buffers to address both cyclical and structural challenges. FX reserves at around 120 percent of GDP or twice the monetary base, together with a large net international investment position of about 390 percent of GDP, provide a strong buffer against external shocks. Enhanced regulatory and supervisory frameworks have built up banks' strong capital and liquidity buffers, with both capitalization and liquidity levels well above international standards.² Prudent fiscal management under the balanced budget principle and strong revenue growth during the real estate market boom have helped accumulate large fiscal reserves of about 40 percent of GDP.

Foreign Exchange Reserves
(Percent of GDP)



Monetary Base by Component
(Percent of GDP)

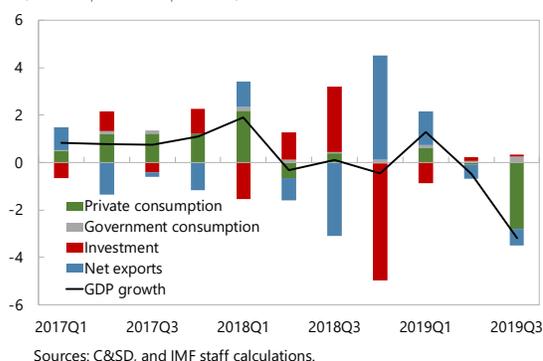


² The Common Equity Tier 1 ratio stood at 16.3 percent in 2019Q2, significantly above Basel III standards. Banks' significant holdings of high-quality liquid assets—a cushion against funding pressures—kept the liquidity coverage ratio at 153 percent in 2019Q2, well above the international requirement of 100 percent. Overall asset quality remains high, with the NPL ratio below 1 percent.

SLOWING GROWTH AMID RISING UNCERTAINTY

7. After robust growth of 3 percent in 2018, economic activity weakened significantly in 2019 and the economy fell into a technical recession in Q3. GDP contracted by 0.5 and 3.2 percent (q/q, sa) in the second and third quarters, respectively. Rising trade tensions between the U.S. and China and heightened uncertainty took a toll on exports and investment while private consumption and visitor arrivals have declined significantly due to the social unrest that started this summer. With slowing economic activity, core inflation fell to 2.6 percent in September, with headline inflation rising to 3.3 percent driven by food prices. The seasonally adjusted unemployment rate has edged up to 3.1 percent in August–October as displaced workers from trade-related sectors continued to be absorbed by other industries. The current account balance widened to 5 percent of GDP in the first half 2019 compared to 2018 due to a sharp decline in imports amid weakened domestic demand.

Real GDP Growth and Contributions
(Percent, quarter-on-quarter SA)



8. Slowing growth in Hong Kong SAR and Mainland China has moderated demand for credit. Hong Kong SAR provides funding through banks and financial markets not only to domestic households and firms, but also to foreign firms, mostly from Mainland China. As escalating trade tensions and weakening global economic activity have lowered demand for credit, its growth slowed to 6.3 percent (y/y) in September 2019, from a peak of 21.4 percent in October 2017. The moderation was broad based, including trade finance and domestic loans as well as Mainland-related lending. Slower credit has helped narrow the domestic credit-to-GDP gap to 11.2 percent in 2019Q2, from a peak of 20.6 percent in 2017Q4. Together with the decline in stock prices and increase in Hibor rates, overall financial conditions have tightened accordingly.

Financial Conditions Index



9. The economy is expected to start recovering next year. As the cyclical downturn continues, GDP is expected to contract by 1.9 percent in 2019. Growth is projected to rise only to 0.2 percent in 2020 led by a recovery of private consumption but remain well below the potential growth of about 2½ percent. Key assumptions underpinning the baseline projections are: (i) the current tariffs between the U.S. and China stay in place and no new tariffs are imposed; (ii) ongoing social unrest stabilizes in the first quarter of 2020 although underlying factors persist; (iii) growth in Mainland China softens further in 2020, with some effects of tariffs countered by additional stimulus measures; (iv) the global economy expands at a moderate pace; and (v) interest rates fall in line with

a U.S. rate loosening cycle and credit conditions improve gradually while house prices stabilize. The slowing economy is expected to shed jobs, thus raising unemployment, though the flexible labor market should allow for a significant share of affected workers to be absorbed by the public and other services sector.³ With an estimated negative output gap of about 4½ percent of GDP in 2020, inflation is projected to fall to about 2½ percent in 2020 as food prices stabilize.

10. The pace of recovery is expected to be gradual with a negative output gap over the medium term. Increased trade barriers and disruptions to global supply chains would be a drag on Hong Kong SAR's trade-related activities for a prolonged period, lowering potential output by about 1 percent over the medium term, compared to the level projected before the eruption of the trade tensions.⁴ As growth is expected to recover toward its potential rate at a slower pace than in previous recoveries, partly due to large uncertainty and its negative impact on confidence and investment, the negative output gap that opened in 2019 is projected to persist over the medium term at around 1.5 percent.

11. Risks to outlook are tilted to the downside (Annex 2).

- **Downside.** On the *external* side, further escalation of trade tensions between the U.S. and China could dampen global trade and lower the volume of trade passing through the city, with negative spillovers for business and employment in trade-related industries. Staff analysis suggests that real GDP in advanced Asia could decline by about 0.3 percent over the next two years if trade-related uncertainty remains at peak levels as in May 2019, with the impact on Hong Kong SAR likely bigger, given the importance of international trade for its economy.⁵ Additional barriers, including potential restrictions by the U.S. against China in technology and the financial sectors, could reduce growth through adverse confidence effects and greater financial market volatility. A significant slowdown of Mainland China or a disorderly adjustment in its financial markets could exert significant impact on Hong Kong SAR given the close

External Merchandise Trade

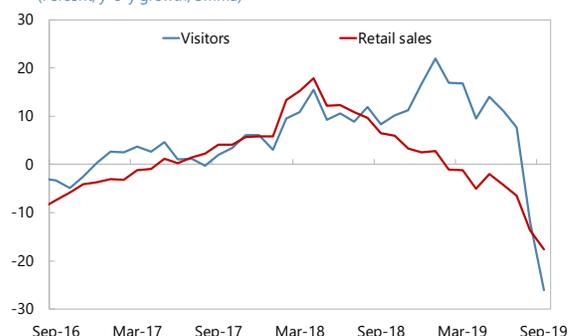
(Year-on-year growth, 3mma)



Sources: CEIC, and IMF staff calculations.

Retail Sales and Visitor Arrivals

(Percent, y-o-y growth, 3mma)



Sources: CEIC, and IMF staff calculations.

³ See "Price and Wage Flexibility in Hong Kong SAR" in 2017 People's Republic of China—Hong Kong SAR Selected Issues.

⁴ See Scenario Box 2 on "Trade Tensions—Update Scenario" in Chapter 1 of the World Economic Outlook (Oct 2019).

⁵ See Box 1 on "Caught in Prolonged Uncertainty: Challenges and Opportunities for Asia", Regional Economic Outlook: Asia and Pacific (October 2019), Washington, DC. International Monetary Fund.

connectedness through both real and financial channels. On the *domestic* side, a deterioration of the sociopolitical situation and delays in addressing structural challenges of insufficient housing supply and high income inequality could further weaken economic activity and negatively affect the city's competitiveness in the long term. As house prices are highly procyclical, a significant slowdown of the economy could trigger an adverse feedback loop between house prices, the real economy and the financial sector. Staff's growth-at-risk analysis indicates that, as of 2019Q3, GDP could contract by 1.8 percent or more over the next four quarters under a severely adverse scenario (5th percentile of the distribution), with a similar downside risk of 1.7 percent or more over the next three years.⁶

- **Upside.** An easing of trade tensions between the U.S. and China could lift global trade and spur confidence and investment, including in Hong Kong SAR. Comprehensive structural reforms in Mainland China and addressing the economic factors behind the social unrest could improve medium-term growth outlook. The development of the Greater Bay Area (GBA) could further improve medium- and long-term growth prospects.

Authorities' Views

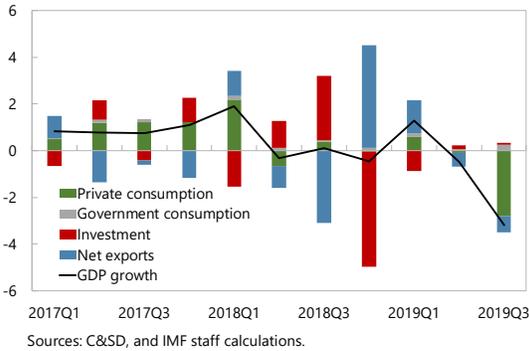
12. The authorities broadly agreed with the mission's assessment of the macroeconomic outlook. They noted that the economy was facing both external and domestic headwinds. Although the value of re-exports involving the U.S. and China only accounted for about 8-9 percent of Hong Kong SAR's total exports of goods, uncertainties stemming from the U.S.-China trade tensions, softening global economic growth, and deteriorating business sentiment have taken a toll on exports and investment while tourism-related sectors were hard hit by the ongoing social incidents. The authorities underscored that the financial markets as well as the LERS continued to function smoothly and that the Hong Kong SAR continued to fulfill its role as a leading banking and financial center. They were confident that the sizable fiscal and FX buffers, the strong capital and liquidity position of the banking sector, and robust policy frameworks enjoyed by the city would help it navigate these challenges. The authorities agreed that an easing of the trade tensions would help improve business sentiment and the growth outlook, and the development of the GBA could lift potential growth over the medium and long term.

⁶ The growth-at-risk analysis looks at tail risks for growth based on the evolution of financial conditions and the current growth rate. Specifically, it assesses the impact of changes in financial conditions on future growth—based on quarterly growth rate—and financial stability. See "Is Growth at Risk?" Global Financial Stability Report (October 2017), Washington, DC. International Monetary Fund.

Figure 2. Weakening of the Economy Accelerates

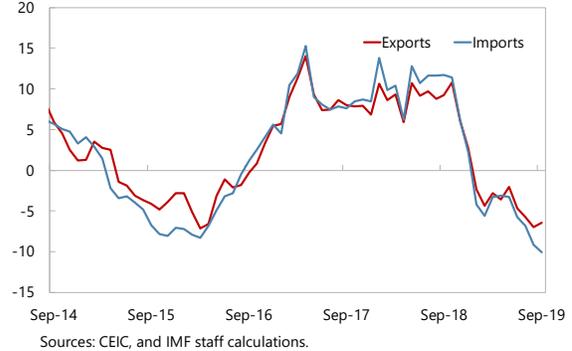
The economy fell into a technical recession in 2019Q3...

Real GDP Growth and Contributions
(Percent, quarter-on-quarter SA)



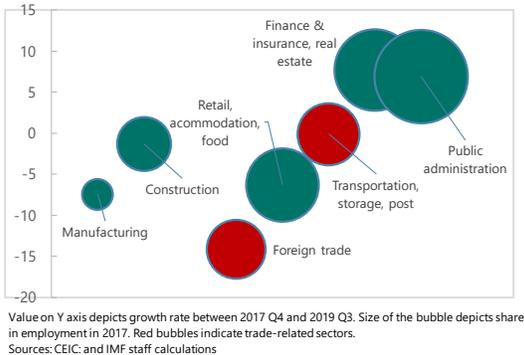
...due to declining trade flows...

External Merchandise Trade
(Year-on-year growth, 3mma)



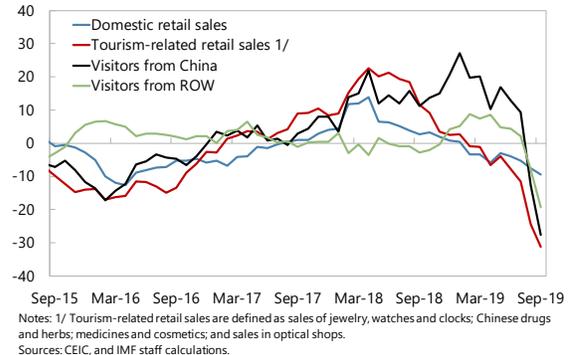
...which prompted layoffs in trade-related sectors.

Developments in Employment by Sector
(Percent)



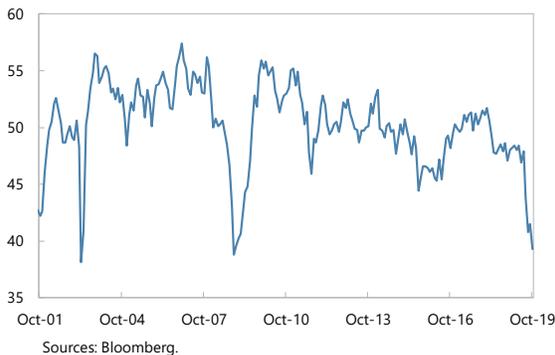
Lower visitor arrivals, especially from Mainland China, exacerbated the decline in retail sales.

Retail Sales and Visitor Arrivals
(Year-on-year growth, percent, 3mma)



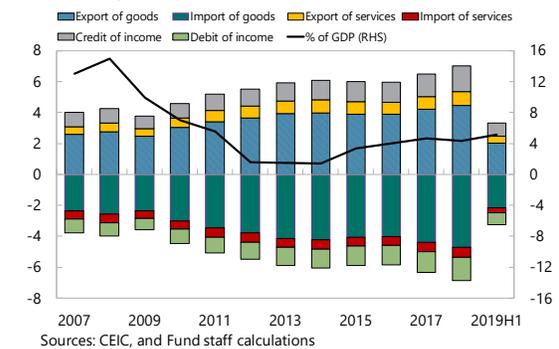
Business sentiment declined to contractionary levels.

Purchasing Managers Index (SA, 50+ = Expansion)
(Index)



Current account remained in surplus.

Share of Current Account
(Trillions of HKD; percent)



FISCAL SUPPORT FOR MACROECONOMIC STABILITY

13. Public fiscal management has been prudent, following a balanced budget principle.

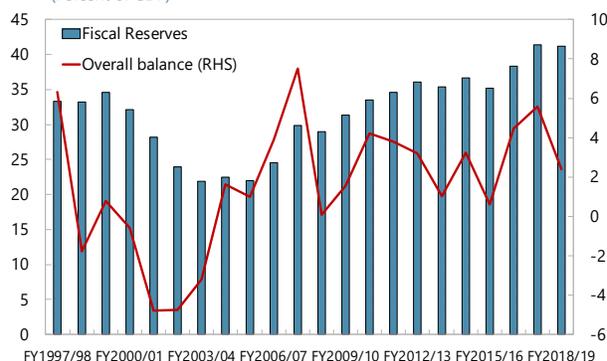
The Basic Law of Hong Kong SAR stipulates that the government is to keep "...expenditure within the limits of revenues in drawing up its budget, and strive to achieve a fiscal balance, avoid deficits and keep the budget commensurate with the growth rate of its gross domestic product." Hong Kong SAR experienced fiscal deficits in the late 1990s and early 2000s after the Asian Financial Crisis (AFC). However, adherence to a balanced budget principle, combined with consistent revenue overperformance and expenditure underperformance, has resulted in fiscal surpluses in every year since 2004 and accumulation of fiscal reserves of about 40 percent of GDP (Annex 3). While it has helped build a strong buffer to maintain the currency board arrangement, it has also resulted in mostly a-cyclical fiscal policy in part due to weak expenditure-side automatic stabilizers.

14. The fiscal surplus narrowed in 2018 and 2019, providing some fiscal impulse to the economy.

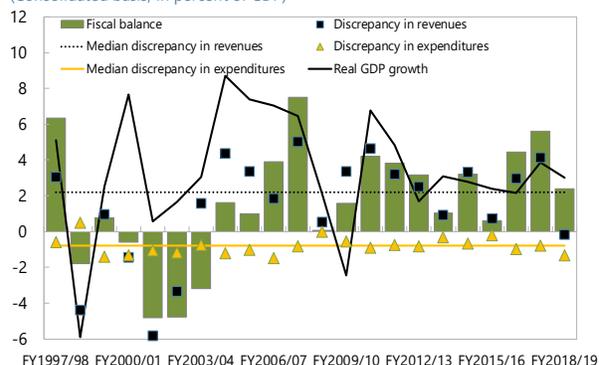
- 2018.** With moderating growth, fiscal surplus more than halved to 2.4 percent of GDP but was higher than budgeted as revenue underperformance (0.2 percent of GDP) was more than offset by lower-than-budgeted expenditures (1.3 percent) on some planned infrastructure initiatives and public works projects.
- 2019.** In addition to one-off relief measures in the budget, the authorities announced new fiscal stimuli of around 0.8 percent of GDP in August and October to help the slowing economy, including support for the small and medium enterprises (SMEs), additional social security allowances, electricity subsidies, and further reductions in salaries and profit taxes, fees, and charges. Lower growth, combined with increased spending and lower revenues under the modest stimuli, are expected to bring fiscal balance to zero.

Fiscal Reserves and Fiscal Balance

(Percent of GDP)



Fiscal Variables: Discrepancy Between Budget and Outturn
(Consolidated basis; in percent of GDP)



15. Going forward, the fiscal surplus is expected to widen over the medium term. The government's medium-term budget announced in February 2019 envisages a surplus of around 0.9 percent of GDP in 2020, narrowing to around 0.2 percent of GDP in the medium term. With slower growth, staff projects the overall fiscal surplus of 0.3 percent of GDP in 2020, widening to around

1 percent over the medium term as actual expenditures are expected to underperform, in line with developments over the last two decades (expenditures underperformed by a median of 0.8 percent of GDP). Barring another round of property market boom or a sharp correction, revenues are expected to remain relatively stable.

16. Greater countercyclical fiscal policy, coupled with the existing fiscal buffers, would help the economy navigate through negative shocks while maintaining long-term sustainability.

As monetary policy is determined through the direct link to U.S. interest rates through the currency board arrangement, fiscal policy needs to support economic stabilization when there is a sizeable output gap and external demand is weak. With a comfortable level of fiscal reserves and the existing flexibility of the budgetary framework that permits deficits during economic downturns, expansionary fiscal policy is needed to support the slowing economy in the near term. However, the near-term need of boosting aggregate demand should be balanced against longer-term weakening of the structural fiscal position arising from rapid population aging and the corresponding increase in social expenditure. This can be achieved by aligning short-term measures with long-term goals and shifting spending forward (e.g., on identified infrastructure projects) in a manner that helps ensure long-term sustainability.

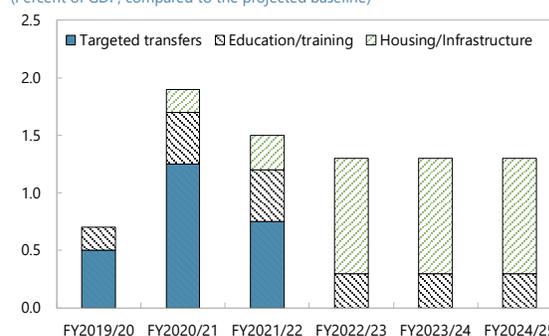
17. In the near-term, government spending should be increased significantly, including additional fiscal stimulus in the current fiscal year, to cope with the cyclical downturn and address structural challenges of insufficient housing supply and high income inequality.

(Annex 4).

- *Targeted transfers.* Additional fiscal spending of about 2½ ppt of GDP over two years, with significantly frontloaded spending in the current fiscal year, would help those severely affected by the cyclical downturn. As overall tax rates are already low, fiscal stimulus could be better delivered by targeted spending to vulnerable households and SMEs, including through extra allowances, rent relief, and subsidies for low-income students.

Recommended Fiscal Package

(Percent of GDP, compared to the projected baseline)



Sources: Fund Staff calculations.

- *Housing/infrastructure.* Given the urgent need to increase housing supply, additional spending on housing and related infrastructure developments is warranted. Bringing forward planned spending on infrastructure projects and scaling it up after the above-mentioned targeted transfers are unwound would not only expedite the supply of land and housing but would avoid an early withdrawal of the fiscal impulse needed to close the negative output gap over the medium term. Cumulative increase in spending of 3½ ppt of GDP over the next five years would increase real GDP by about 2¼ ppt during this period.

- *Education/training.* Despite the very flexible labor market, unemployment would increase given the significant slowdown of the economy and the persistence of external headwinds, highlighting the urgency of retraining affected workers. As Hong Kong SAR also faces increased competition from other financial centers, it is also important to upgrade “soft” infrastructure through education and R&D to further improve competitiveness. Increasing spending on education and job training, cumulatively by 2 ppt of GDP over the next five years, would increase real GDP by about 2½ ppt in the long run through higher productivity and increased labor supply.
- In sum, staff analysis suggests that fiscal spending increases of around 1½ percent of GDP per year (8 ppt of GDP in total over 2019–24) on the above areas, relative to the projected baseline, would help close the negative output gap over the medium term with a drawdown of fiscal reserves of about 5½ ppt of GDP.⁷

18. If growth falters more than expected, the authorities should provide more near-term fiscal support. Additional targeted spending to vulnerable households and SMEs could help cushion the negative impact of a more severe economic downturn. Retraining programs as well as housing and infrastructure projects could be scaled up further to support the displaced workers and expedite the supply of land and housing.

19. In the medium term, the authorities should also consider measures to ensure fiscal sustainability and greater equity. The economy faces rapid population aging and the corresponding increase in social expenditures in the medium to long term, with one in six people currently 65 or above rising to about one in four by 2034. Therefore, the authorities could consider the following measures to avoid scaling back social safety net, which would incur undesirable social costs and hinder inclusive growth.

- *Raising revenues.* The current taxation regime of a narrow tax base and low tax rates has supported the city’s competitiveness in the financial and service industries but resulted in a low tax revenue-to-GDP ratio of less than 15 percent. International benchmarking of other global financial centers suggests that there is room to introduce VAT, raise excise taxes, and increase the top personal income tax (PIT) rate and tax rate under personal assessment while maintaining competitiveness.⁸ The lowering of the effective PIT rates through changes to the tax bands since 2018 should also be reversed once macroeconomic conditions improve. Any tax relief measures should be carefully designed to be well targeted to the most vulnerable and not to undermine the progressivity of personal income taxation. Introducing a carbon tax for some sectors (e.g., energy, building, and transportation) may help reach the 2030 carbon intensity target laid out in the government’s Climate Action Plan 2030+ and raise revenues in the long run.⁹

⁷ Even with higher spending, fiscal reserves are estimated to remain above 30 percent of GDP in the medium-term.

⁸ See “People’s Republic of China-Hong Kong Special Administrative Region: Selected Issues,” Country Report No. 18/17 for more details.

⁹ See “Fiscal Policies for Paris Climate Strategies—From Principle to Practice,” IMF Policy Paper, May 2019.

- *Optimizing spending.* Regular comprehensive expenditure reviews would help identify any wasteful spending and ensure that long-term goals of increasing productivity, raising labor force participation, and tackling income inequality are addressed. The authorities should also prepare a long-term healthcare spending strategy. Proceeds from issuance of green bonds could be used for investment in environmentally-friendly projects.
- *Improving the effectiveness of budget planning and execution.* Reducing reliance on property-related revenues and avoiding systematic under-execution of operating expenditures would help increase the countercyclicality of fiscal policy and ensure the effectiveness of the fiscal response to the economic downturn.
- *Increasing labor force participation.* Measures to increase the number of childcare services, especially for children below two years of age and at subsidized rates for poor/single parent families, in line with the findings of the 2019 Report of the Research Office of the Legislative Council, would help encourage female labor force participation. The authorities could also expand programs to raise elderly employment, in line with findings of the 2018 Research Office of the Legislative Council report.

Authorities' Views

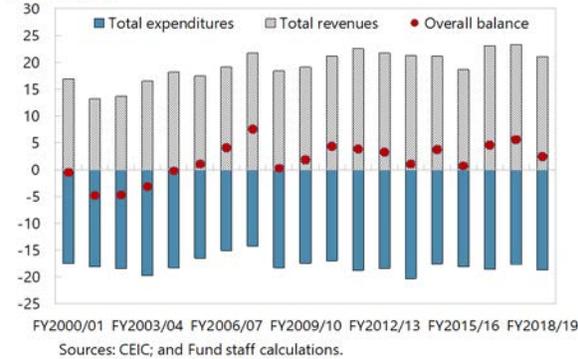
20. The authorities agreed that additional fiscal support was needed to counter the effects of the economic slowdown as well as to address longer-term challenges.

- *Near-term support.* The authorities noted that the measures already announced aimed to protect the most vulnerable members of society, as well as to provide relief to SMEs affected by the significant slowdown so as to preserve jobs. As the economic downturn deepened, the government stood ready to roll out additional fiscal measures in the current fiscal year ending next March and noted that the size and composition would be carefully determined to maximize their effectiveness. The authorities also agreed that the accumulated fiscal buffers should be put to good use, and that sizable additional fiscal measures might be necessary in the coming years to counter the effects of the economic slowdown. The authorities noted that the overarching requirement of a balanced budget in the Basic Law allowed some degrees of flexibility and fiscal deficits indeed took place during economic downturns as in the case of the late 1990s and early 2000s. The key was in ensuring fiscal balance over a sustained period of time.
- *Longer-term challenges.* The authorities agreed that higher revenues would be needed in the long term to ensure fiscal sustainability amid population aging. However, public consultation would be needed to enlist broad support for any proposed tax-generating measures. Given the existing large fiscal buffers, no tax increases were planned in the immediate future.

Figure 3. Strong Fiscal Position Remains

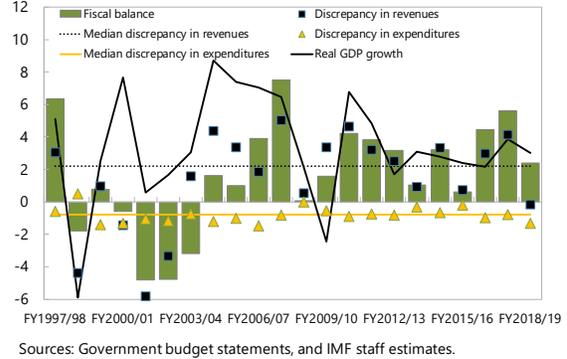
Fiscal balance remained in surplus in 2018/19...

Fiscal Revenues, Expenditure, and Balance
(Percent of GDP)



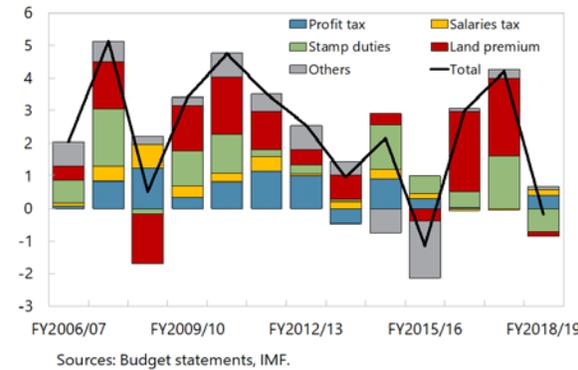
...similar to the outturns in the past 14 years.

Fiscal Variables: Discrepancy Between Budget and Outturn
(Consolidated basis; in percent of GDP)



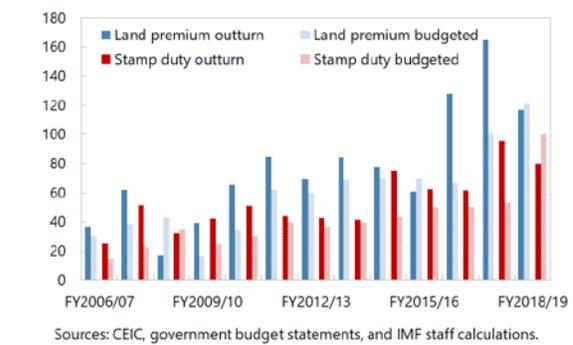
Budget revenues declined...

Discrepancy between Actual and Budgeted Revenues
(Percent of GDP)



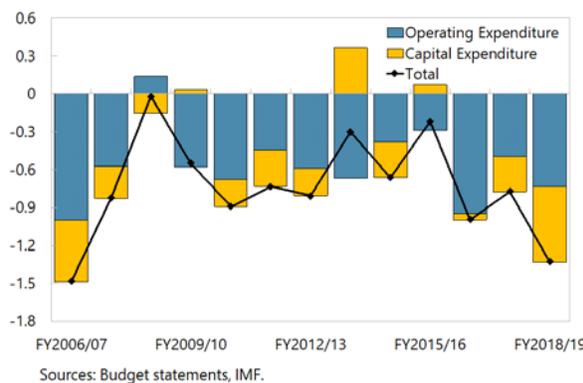
...driven by lower-than-budgeted real estate revenues.

Fiscal Revenues: Real Estate-Related
(HKD billions)



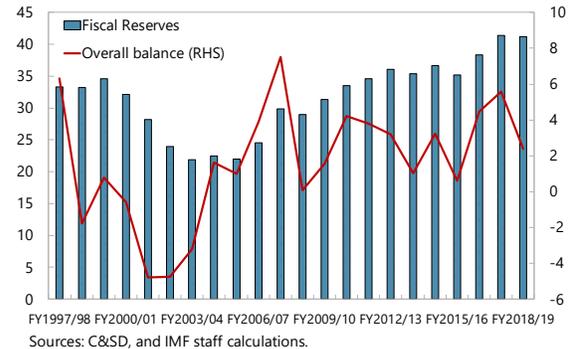
Expenditures fell below budgeted levels.

Discrepancy between Actual and Budgeted Expenditures
(Percent of GDP)



Fiscal reserves remained high at about 40 percent of GDP.

Fiscal Reserves and Fiscal Balance
(Percent of GDP)



CONTAINING HOUSING MARKET RISKS

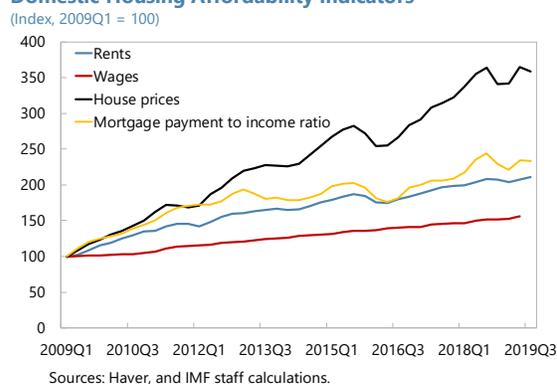
21. After resuming their upward trend, housing prices have softened recently. Property price growth resumed for the first five months of 2019 amid expectations of monetary easing in the U.S, erasing the previous decline in the second half of 2018. However, more recently, property prices declined by about 4 percent between May and September 2019. From a longer perspective, residential property prices have almost quadrupled since the GFC, and even more in mass market segments.

Property Prices and Transactions



22. Hong Kong SAR's housing market remains the least affordable in the world due in part to the demand-supply imbalance. Subdued housing production amid rising demand due to low interest rates, increasing household formation, and immigration has resulted in large supply-demand imbalances over the last decade. House price-to-income and house price-to-rent ratios have increased rapidly and remain well above international peers. Staff analysis indicates that house prices exceeded fundamentals by around 15-30 percent as of 2019Q3. Around 30 percent of households live in public rental housing and another 15 percent live in subsidized sale flats.

Domestic Housing Affordability Indicators



23. A sharp adjustment in the property market could pose a risk to the economy. Despite recent signs of stabilization, property price outlook remains uncertain, as the effects of the U.S. monetary policy easing plays out against slowing economic activity. Systemic risks from housing market remain elevated given the high house price overvaluation and rising household debt. Staff analysis suggest that the probability of a price correction has grown over the past few months amid greater downside risks to growth and rising uncertainty.¹⁰ A disorderly house price correction could trigger an adverse feedback loop between house prices, debt service ability, and lower consumption, with weakening growth leading to second-round effects on banks' balance sheets. A recent stress test by the Hong Kong Monetary Authority (HKMA) found that a 50 percent drop in house prices in one year could result in a credit loss of about 2.3 percent of total loan portfolio, about half of the loan losses sustained during the AFC.¹¹

¹⁰ Staff's house prices-at-risk analysis as of 2019Q2 indicate that, real house prices in Hong Kong SAR could fall by 6¼ percent over the next four quarters with a 5 percent likelihood (Box 1).

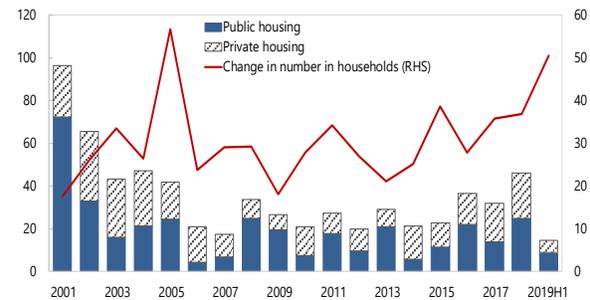
¹¹ "Half-Yearly Monetary and Financial Stability Report", September 2019, HKMA.

24. The three-pronged approach to containing housing market risks and increasing housing affordability remains valid and should continue. The authorities' three-pronged approach involves boosting housing supply to match demand, macroprudential measures to limit stability risks, and stamp duties to contain speculative activity and external demand. The authorities have implemented and progressively tightened a mix of macroprudential policies and stamp duties to limit household vulnerabilities and contain risks to the financial sector. While these policies helped build buffers and contain demand, a sustained supply increase remains the most needed course of action to alleviate price pressures and improve affordability.

25. Increasing housing supply is critical to resolving the structural supply-demand imbalance and should be accelerated by increasing land allocation for residential housing.

- Housing supply increases declined* to an annual average of 25,000 units between 2006 and 2015, compared to more than 50,000 units in the previous decade, contributing to strong house price growth. While housing production has increased to around 30,000 units on average over 2015–18 with the implementation of the government's Long Term Housing Strategy and the Hong Kong 2030+ Strategy, it has been falling short of target by around 30 percent on average. Given the difficulties in increasing land supply, meeting the revised housing supply target may prove challenging.

Housing Production
(Thousand)



Sources: R&VD, C&SD.

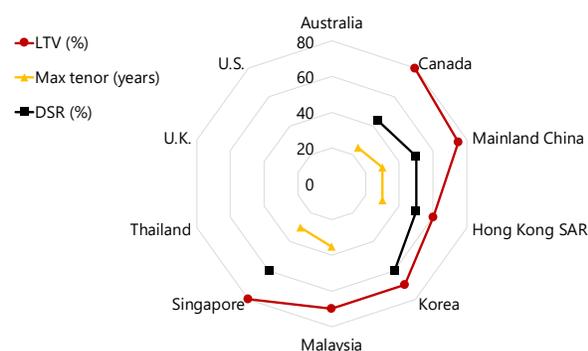
Note: 1) Public Housing includes both rental and subsidized sale flats completed under Hong Kong Housing Authority (HKHA) and Hong Kong Housing Society (HKHS), and does not include the 322 subsidised sale flats provided by the Urban Renewal Authority on a one-off basis in 2015/16. 2) Private flats from 2003 onwards exclude village houses; 2004 figures include subsidized flats converted to private during the year; 2015 figures include flats completed and designated as subsidised sale flats in the year but sold to the public in the open market at prevailing market prices in 2017.

- Measures have been taken to increase housing supply.* The government has scaled up the public share of new housing supply from 60 to 70 percent for the next 10 years. The authorities have also announced new initiatives to increase the transitional housing by a total of 10,000 units within the next three years. The proposed vacant property tax ("Special Rates" tax) on unsold new private residential units is expected to be passed at the Legislative Council around early 2020.
- Land supply for residential housing should be increased.* The shortage in housing supply was mainly due to increasing difficulties in securing land. The Task Force on Land Supply noted in their December 2018 report that the government's estimated land shortage in the long run is too conservative and supported building a land reserve by creating more land than the estimated shortfall. The government announced to invoke the Lands Resumption Ordinance to resume privately-owned land to increase supply of housing, aiming to resume 400 hectares in the next five years, compared to 20 hectares resumed in the last five years. Staff welcome the newly announced measures to boost land supply for residential housing, including development of brownfield sites, re-zoning of land, land sharing, and the Lantau Tomorrow Vision, and encourage the authorities to implement these initiatives as planned. It is also urgent to expedite the process for identifying land and building sites, together with streamlining the environmental, transport, and other relevant assessments.

26. The macroprudential stance should stand ready to adjust to address financial stability risks. Policies in place have helped contain vulnerabilities in the banking system, and any changes should be data-dependent with due attention to the emerging risk of regulatory leakages.

- Since 2009, the authorities have introduced a series of *demand-side* macroprudential measures, including: (i) ceilings on loan-to-value (LTV) ratio; (ii) caps on debt service-to-income ratio (DSR); and (iii) stress testing of the DSR against interest rate increases (Annex 5). These measures have helped limit banks' exposure to the housing boom without impeding intermediation of credit to the real economy. For example, the average LTV ratio for newly approved mortgages has declined to 46 percent in September 2019 from 64 percent before the imposition of the measures in 2009. Staff analysis finds that macroprudential policies were effective in containing leverage but played a limited role in containing house price appreciation.¹²
- However, amid tight macroprudential regulations for banks, some property developers started offering mortgage financing to borrowers not able to secure credit from banks. While the total amount of such financing remains small compared to regular mortgage financing, it has been growing much faster than banks' mortgage lending. In response, the authorities introduced *supply-side* macroprudential measures, such as: (i) financing caps for lending to property developers by authorized financial institutions; and (ii) floors on risk weights for credit exposures to property developers that offer high LTV mortgages.
- Despite weak economic activity and some signs of housing market stabilization, adjustments to macroprudential measures should be based on evolving financial stability risks. If housing prices and mortgage lending start to increase rapidly again, further tightening of the macroprudential measures would be warranted, with due attention paid to the emerging risk of regulatory leakages to the non-bank financial sector (e.g., mortgage financing by property developers). International experience suggests that regulators should apply the same macroprudential policies to all mortgage providers to prevent leakages and strengthen effectiveness of the measures.

Macroprudential Measures: International Comparison 1/



Source: IMF's Annual Macroprudential Policy Survey.
 1/ For Mainland China, the average LTV limit on first-home buyers is shown. Data as of end-November 2018 for Hong Kong SAR, and latest data available for the other countries.

27. Stamp duties have helped contain house price growth by curbing excess demand, especially by cash buyers and, consequently, helped contain household leverage and systemic risks.

¹² See "An Estimated DSGE Model to Analyze Housing Market Policies in Hong Kong SAR," IMF WP 18/90.

- The government has introduced three types of stamp duties to curb excess demand by limiting speculative transaction (Annex 5): (i) Special Stamp Duty (SSD) on resale of residential properties within 36 months of purchases; (ii) Buyers' Stamp Duty (BSD) on purchases by nonresidents; and (iii) New Residential Stamp Duty (NRSD) on all residential property purchases except for primary residences of permanent residents who do not own any other residential property in Hong Kong SAR at the time of purchase.¹³ Staff analysis indicates that these stamp duties have been effective in curbing house price increases and, consequently, helped contain household leverage and systemic risks.¹⁴
- As NRSD is levied at a higher rate on non-residents than on first-time resident home buyers, it is assessed to be a capital flow management measure and a macroprudential measure (CFM/MPM) under the IMF's Institutional View on capital flows. Staff continues to assess the NRSD as appropriate because: (i) it was introduced amid a surge of capital flows into the property market; (ii) it was not used to substitute for necessary macroeconomic adjustment; (iii) additional tightening of macroprudential policies would not apply to cash buyers; and (iv) systemic risks remain elevated given the highly overvalued house prices and continued inflows from non-residents. Going forward, staff recommends phasing out and replacing the stamp duties with alternative non-discriminatory macroprudential measures when systemic risks from the non-resident inflow dissipate.

28. The eligibility criteria of the mortgage insurance program (MIP) were adjusted. While the LTV limit without the MIP remains unchanged at 60 percent, the maximum property values eligible for higher LTV ratios with the MIP in respect of completed properties were raised from HKD 4 to 8 million (LTV ratio of 90 percent) for first-time home buyers and from HKD 6 to 10 million (LTV ratio of 80 percent) for all home buyers considering recent appreciation of property prices. While this could also help reduce mortgage financing by non-banks, given that a significant portion of new mortgages are financed with this insurance (about 9 percent for the first nine months of 2019), the authorities should carefully monitor and assess the overall impact of the policy changes on the housing market and household leverage, and stand ready to adjust the policy mix of macroprudential policies and the MIP.

Authorities' Views

29. The authorities agreed that increasing land supply remained the key to fundamentally resolve the structural imbalance between housing demand and supply. They noted that various measures to boost land supply for residential housing, including the land resumption initiatives announced in the 2019 Policy Address, would significantly increase land supply within the next ten years. The authorities viewed the current macroprudential stance as appropriate and noted that they stood ready to make adjustment based on evolving financial stability risks. While mortgage lending

¹³ Buyer's Stamp Duty differentiates based on residency but has not been included in the IMF Taxonomy of Capital Flow Management Measures because the BSD has been introduced before the adoption of the Institutional View on Capital Flows in November 2012 and has not been adjusted since.

¹⁴ See "An Estimated DSGE Model to Analyze Housing Market Policies in Hong Kong SAR," IMF WP 18/90.

by non-banks (e.g., property developers) remained small and was monitored closely, the authorities were studying international experiences with a view to strengthening regulation if necessary. The authorities noted that the recent MIP adjustment was meant to promote housing affordability for those with stable and sufficient income but without enough funds for down payments, and that the recent softening in the housing market provided an opportunity for the adjustment. They emphasized that this was a targeted scheme with the adjustment confined to completed units and subject to debt-to-income ratio caps.

Box 1. House Prices at Risk

House Prices-at-Risk methodology quantifies downside risks to house price growth at various horizons.

Similar to the growth-at-risk framework, house prices-at-risk uses a statistical technique known as quantile regression and assesses changes in real house prices in response to changes in conditions that affect housing prices over different horizons, including changes in macroprudential policies, funding costs, and capital flows.¹

Downside risks to Hong Kong SAR's house prices appear related to property price valuations, ease of funding, income growth and indebtedness.

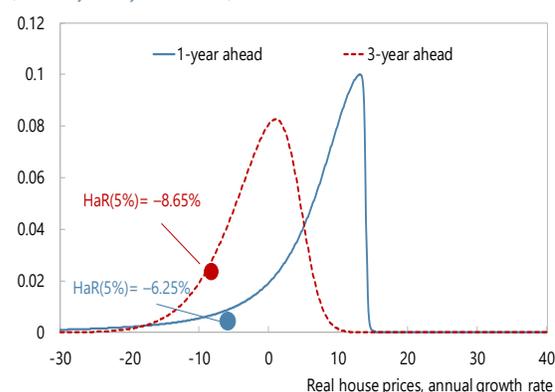
Based on a study from IMF (2019) comprising 22 advanced economies over the period 1990–2017, five main factors were identified that affect house prices: past price growth, economic growth, credit booms, overvaluation², and financial conditions. The results suggest that in a scenario where financial conditions tighten, households are loaded up on debt, and house prices are stretched, very large declines in home prices become more likely.

Staff analysis indicates that downside risks to house prices in Hong Kong SAR have increased over the past few quarters.

Conditional on 2019Q2 economic conditions, the above model predicts that real house prices in Hong Kong SAR could fall by 6¼ percent over the next year with a 5 percent likelihood, which is around the historical average for this downside risk measure for the 22 advanced economies. Over a three-year horizon, house prices-at-risk (with a 5 percent likelihood) would be about 24 percent (cumulatively). As real house prices could fall even more substantially with worsening economic conditions in the second half of 2019, careful monitoring of house price risk is warranted.

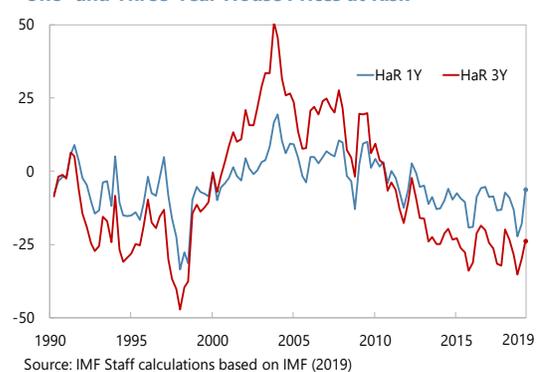
House Prices at Risk

(Probability density as of 2019Q2)



Sources: Bloomberg, L.P., and IMF staff calculations

One- and Three-Year House Prices at Risk



Source: IMF Staff calculations based on IMF (2019)

¹ Prepared by Sally Chen and Andrea Deghi.

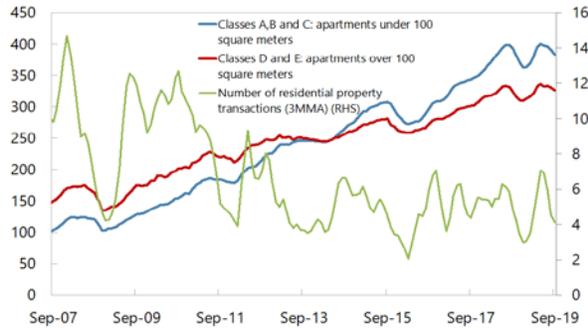
² International Monetary Fund (IMF). 2019. "Downside Risks to House Prices." Global Financial Stability Report (April 2019), Washington, DC.

Figure 4. Worsened Housing Affordability Amid Tight Supply

House prices and transactions rebounded in early 2019 but softened more recently.

Property Price

(Index, 1999=100 unless otherwise specified; Thousands of Units (RHS))

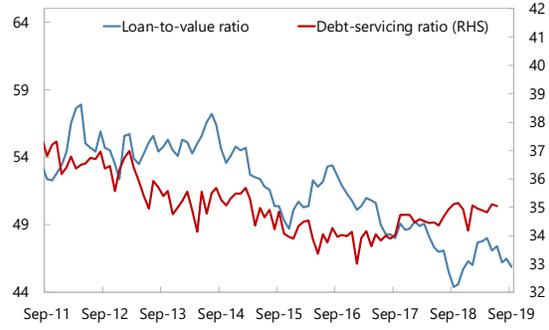


Sources: CEIC, and IMF staff calculations.

LTV and DSR for new mortgages remained low due to tight macroprudential settings.

New Loans Approved

(Percent)

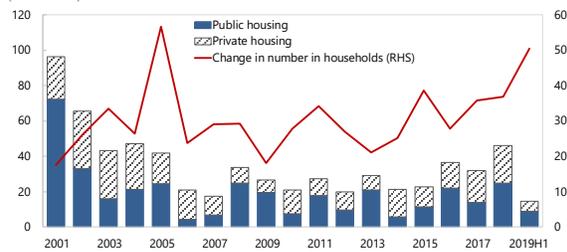


Sources: Haver Analytics, and IMF staff

Tight supply continues to be the main bottleneck amid upward trending household formation...

Housing Production

(Thousand)



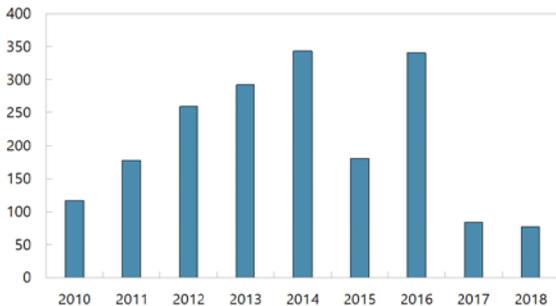
Sources: R&VD, C&SD.

Note: 1) Public Housing includes both rental and subsidized sale flats completed under Hong Kong Housing Authority (HKHA) and Hong Kong Housing Society (HKHS), and does not include the 322 subsidised sale flats provided by the Urban Renewal Authority on a one-off basis in 2015/16. 2) Private flats from 2003 onwards exclude village houses; 2004 figures include subsidised flats converted to private during the year; 2015 figures include flats completed and designated as subsidised sale flats in the year but sold to the public in the open market at prevailing market prices in 2017.

...as land volume auctioned by the government for residential use declined in recent years.

Land Area of Private Housing Sites Disposed by Government Land Sale

(Thousand square meters)

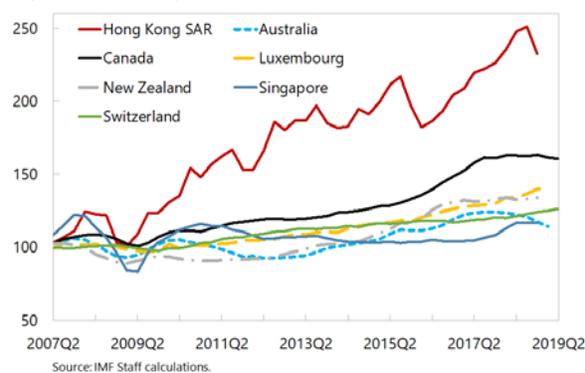


Sources: CEIC, and IMF staff calculations.

Hong Kong SAR's house price-to-rent ratio has deteriorated notably relative to peer economies...

House Price-to-Rent Ratio

(Index; 2007Q1 = 100)

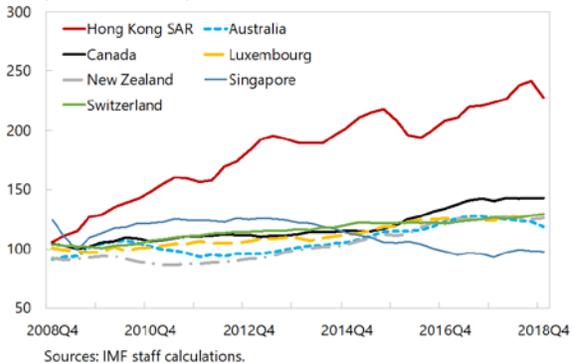


Source: IMF Staff calculations.

...so did house price-to-income ratio.

House Price-to-Income Ratio

(Index; 2007Q1 = 100)



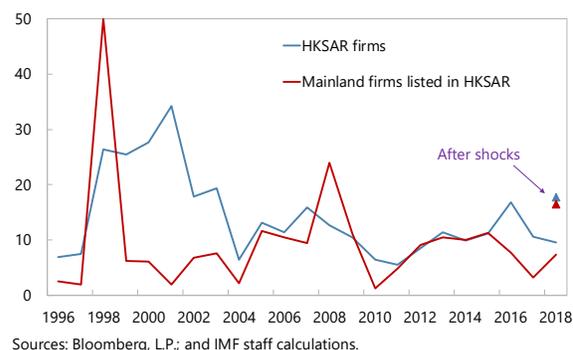
Sources: IMF staff calculations.

SAFEGUARDING FINANCIAL STABILITY

30. Unanticipated tightening of global financial conditions could pose a risk to the economy due to the elevated level of private sector credit. During the prolonged low interest rate period after the GFC, private non-financial sector debt (both households and non-financial corporates) increased from 184 percent of GDP in 2009 to 295 percent in 2019Q1, increasing vulnerability of the economy and the financial system. However, strong regulatory and supervisory frameworks have helped build large buffers, which should help mitigate the impact of potential negative shocks.

- Households.* Household debt has steadily increased from about 50 percent of GDP in 2007 to 79 percent in 2019Q3, a level higher than the average of advanced economies. While two-thirds of household debt are mortgages, the average LTV ratio and debt services-to-income ratio were low at 46 and 35 percent on new mortgages in July 2019, respectively, due to increasingly tight macroprudential policies. Households also have relatively high gross savings (26 percent of GDP in 2018) and the ratio of deposits to liabilities was 3.2 times in 2018, providing another buffer for household balance sheets.¹⁵ However, international experience suggests that rapidly rising household debt could threaten macroeconomic and financial stability in the medium term.¹⁶
- Corporates.* Debt-to-GDP ratio of non-financial corporates peaked at 235 percent of GDP in 2018Q1 and has declined to about 222 percent in 2019Q1. However, it remains substantially higher than the average of other advanced economies and key financial centers. Less than half of that borrowing was intended for use in Hong Kong SAR, with the remainder being cross-border credit, mostly to Mainland China's firms. Staff's analysis suggests that the overall debt-at-risk for listed firms was below 10 percent at end-2018 and it would remain relatively low even with adverse shocks compared to levels registered during the AFC or in other major economies (Annex 6). However, pockets of vulnerability exist in certain corporate sectors, and higher interest rates could increase financing costs, reduce investment and potentially weigh on bank balance sheet growth. Sectoral macroprudential measures (e.g., caps on total sectoral exposures or sectoral risk weights) could be considered to limit concentration risk of financial institutions.

Non-Financial Corporates: Debt at Risk
(Debt with interest coverage ratio < 1 in percent of total debt)



¹⁵ "Understanding Household Indebtedness in Hong Kong" by L. Cheung, E. Wong, Haichun Ye, P. Ng and S. Chan, Research Memorandum 2018/07, Hong Kong Monetary Authority.

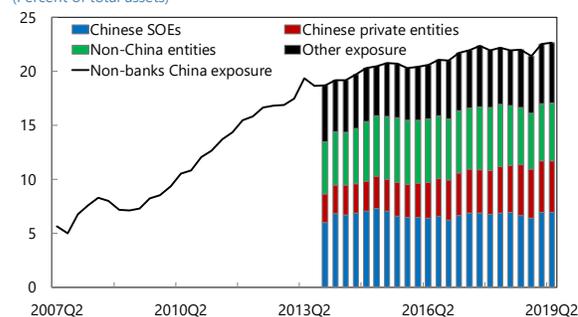
¹⁶ See "Household Debt and Financial Stability," IMF Global Financial Stability Report, October 2017.

31. Financial linkages with Mainland China have deepened in recent years. Thus, a significant growth slowdown or disorderly adjustment of financial system in Mainland China could have large impact on Hong Kong SAR.

- *Hong Kong SAR's gross claims on onshore Chinese banks* have fallen by HKD0.6 trillion from end-2018 to HKD1.7 trillion in August 2019 (59 percent of GDP). The decline reflected weaker loan demand from slowing economic activity in Mainland China as well as reduction in trade financing due to lower trade flows.

- *Total exposure to Mainland non-banks* has further increased from HKD 5.6 trillion at end-2018 to HKD 6.1 trillion in June 2019 (210 percent of GDP or 23 percent of total bank assets). But NPL exposures to non-bank Mainland corporates remained low with the NPL ratio of 0.7 percent, lower than that of onshore Chinese banks (1.8 percent).

Banking Sector's Mainland Non-bank Exposures
(Percent of total assets)



Note: The breakdown is only available from 2013Q4.
Source: HKMA, CEIC, and IMF staff calculations.

- *Capital market exposures.* Total equity raised by Mainland China's firms in Hong Kong SAR reached USD 60 billion in 2018, equivalent to 86 percent of total equity fund raised through the stock exchanges. USD bonds issuance amounted to USD 94 billion in 2018 or around $\frac{2}{3}$ of total offshore issuance by Mainland China's firms. Net equity fund flows under the Stock Connect Schemes have remained stable, and foreign purchases of onshore renminbi bonds through Bond Connect, China Interbank Bond Market Direct, Qualified Foreign Institutional Investor and RMB Qualified Foreign Institutional Investor continued to expand. The number of mutually recognized funds also continue to increase with cumulative net investment flows of RMB 13 billion.
- *Offshore RMB business.* Hong Kong SAR remained the largest offshore renminbi center, with stable renminbi deposit pool at around RMB 644 billion in August 2019. Active trading in renminbi reflected the role of Hong Kong SAR as a platform for raising and investing renminbi funds, and as an intermediary channeling renminbi funds between offshore and onshore markets.

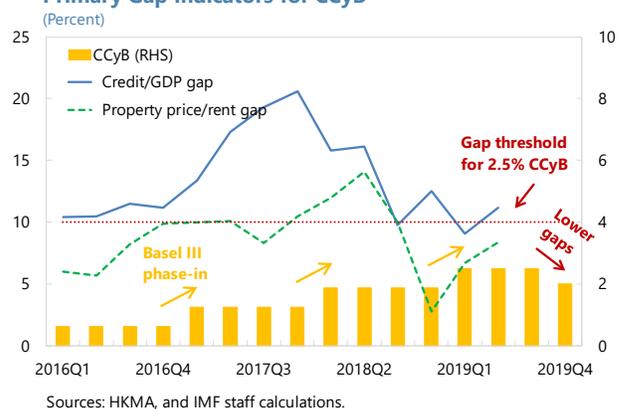
32. Strong regulatory framework and prudential supervision should help maintain financial sector's resilience and safeguard financial stability. Key recommendations from the 2014 FSAP have been implemented (Annex 7).

- *Key Basel III standards*, including minimum capital and liquidity requirements (liquidity coverage ratio and net stable funding ratio requirements for category 1 institutions), capital buffers, disclosure requirements, and leverage ratio requirements have been implemented.
- The *countercyclical capital buffer (CCyB)*, which had been raised to its maximum rate of 2.5 percent during the credit cycle upswing, was lowered to 2.0 percent in October 2019 to support bank lending. Staff view this as appropriate given that credit growth has declined sharply since

the second half of 2018 and remains subdued, but recommend that the authorities stand ready to adjust the CCyB, if needed, as the credit-to-GDP gap and private leverage remain high.

- Hong Kong SAR has established a *resolution regime for financial institutions* which is in line with international standards and made a good start on its implementation. The resolution authorities should maintain close coordination with home country authorities of Hong Kong SAR-based subsidiaries or branches of global banks, including in the areas of resolution planning and the roll-out of loss-absorbing capacity requirements.
- The HKMA updated both its *business-as-usual* and *emergency liquidity facilities*, including those for banks in resolution, in August 2019. These revisions aim to reduce stigma and provide more flexibility for banks accessing business-as-usual facilities. A new resolution facility was also introduced.
- The Securities and Futures Commission (SFC) issued *guidelines, including capping total margin lending to clients by brokers for stock purchases* at five times of the brokers' capital since October 2019. Staff view this as a positive move in managing margin lending risk, which is important for safeguarding financial stability, as high margin lending could amplify stock price declines and hence losses for ordinary shareholders when facing adverse shocks. The current regulatory and supervisory framework for securities market and trading systems has also been strengthened.
- The Insurance Authority is on track to implement a risk-based capital regime for insurance companies. Detailed rules for quantitative requirements are expected to be drafted after the third quantitative impact study, which was launched in August 2019.

Primary Gap Indicators for CCyB



Margin Lending and the Market



33. Anti-money laundering/combating the financing of terrorism (AML/CFT). The recently-concluded assessment of the Financial Action Task Force found that Hong Kong SAR has a solid AML/CFT system that is delivering good results. Hong Kong SAR has a strong legal and institutional framework. The authorities generally have a good understanding of the money laundering and terrorist financing risks they are exposed and actively prosecute money laundering from domestic offences. They should enhance prosecution of money laundering involving crimes committed abroad and strengthen supervision of certain non-financial businesses. Implementation of the

priority actions identified in the Mutual Evaluation Report on AML/CFT, including with respect to transparency of corporates and trusts, would be crucial in helping to sustain Hong Kong SAR's reputation as a leading global financial center.

34. In light of the growing role of fintech in the banking sector, the HKMA stepped up the supervision of technology risk management and operational resilience. The HKMA granted eight banking licenses to virtual banking operators, which are expected to become operational between late 2019 and the first half of 2020 (Box 2). At the same time, the HKMA requires virtual banks to meet the same set of supervisory requirements as conventional banks, and to establish appropriate risk management. Given that virtual banks may focus on lending to small borrowers, their underwriting standards and asset quality should be closely monitored by regulators. The authorities aim to achieve a balance between innovation and regulation, including by implementing the Cybersecurity Fortification Initiative. Close collaboration across regulatory agencies should help the Council of Financial Regulators and the Financial Stability Committee identify and close potential regulatory loopholes in a timely manner.

35. Development of green finance and the GBA offers opportunities to maintain Hong Kong SAR's competitiveness as a global financial center. The three green finance initiatives launched in May 2019, including promoting Green and Sustainable Banking, aim to address the climate change-related risks facing the banking sector and achieve sustainable green financing. The Outline Development Plan for the GBA was released in February, with a plan to develop it into an innovation hub and a competitive industrial system with an enhanced infrastructural connectivity. In coordination with the Mainland, Hong Kong SAR's authorities have announced new measures to improve cross-border cooperation. These include allowing city's residents working in high-tech sectors and living in the GBA to pay Hong Kong SAR's taxes, establishing start-up hubs in each of the Guangdong's province cities to attract Hong Kong SAR's entrepreneurs, new rules allowing Hong Kong SAR's universities obtain funding from Guangdong government. To promote financial integration, the HKMA has worked with the Mainland authorities to allow the use of e-wallets in Hong Kong SAR for cross-border payments, and to streamline the process of opening Mainland bank accounts by Hong Kong SAR's residents on a pilot basis.

Authorities' Views

36. The authorities underlined the resilience of the financial sector and ample buffers in financial institutions. They noted that, despite the slowing economy, both the banking sector and capital markets had been functioning smoothly, and capital outflows had been limited. They added that regulatory agencies had strengthened market surveillance through enhanced collaboration to monitor financial sector developments closely and ensure that no regulatory gaps existed. The HKMA noted that it lowered the CCyB in October as a series of quantitative indicators and qualitative information, including the indicative buffer guide (credit-to-GDP gap and residential property price-to-rental gap), suggested that the economic environment had deteriorated significantly since 2019Q2 and there was a need to allow greater flexibility for banks to support businesses which were hit by the economic downturn.

Box 2. Virtual Banking as a Catalyst to Promote Innovation and Financial Inclusion¹

Virtual banking is a new initiative to promote inclusive banking and financial innovation in the banking sector. In 2019, the HKMA granted eight banking licenses to virtual banking operators, including joint-venture of traditional banks with fintech firms, or companies with proven experience and capacity in providing internet-based financial services.² They are expected to become operational between late 2019 and the first half of 2020. Given their low overhead costs, such as staffing and maintaining bank branches, virtual banks are likely to attract new customers by offering higher deposit rates and innovative online banking services that improve customer experience. Provision of services via electronic channels would improve efficiency and reduce costs to customers like the travelling cost to go to a physical banking service point. This should in particular be beneficial to customers in remote areas. As virtual banks are required not to impose minimum account balance requirements and low balance fee, small depositors could receive basic banking services regardless of their financial background and location.

Traditional banks are already adjusting their business strategy in anticipation of increased competition. Major retail banks, including the three note-issuing banks, removed their minimum balance requirements and the related low-balance fees on banking accounts with small balances since the third quarter of 2019. In recent years, traditional banks have made good progress in expanding the scope of internet e-payments and transactions to provide one-stop online/mobile retail banking services to their customers. With the launch of the Faster Payment System (FPS) by the HKMA, customers can easily make real time P2P payments by entering the recipients' mobile phone number and email address registered with FPS and linked with a bank or Stored Value Facility (SVF) account.

Introduction of virtual banks may facilitate cross-border payments and money transfer. Virtual bank operators may introduce services to facilitate the cross-border transfer between banking accounts of Hong Kong SAR residents and their accounts opened with Mainland banks which are parents of virtual banks. They may also explore ways to facilitate local citizens to settle payments in Mainland China using their balances with virtual banks in Hong Kong SAR, offering an alternative option of cross-border payments with e-wallet. Given that capital control measures remain in place in Mainland China, cross-border payments and transactions at retail level could be limited to certain amounts or certain areas in Mainland China. Even with such restrictions, this bodes well for enhancing financial infrastructure and linkages within the GBA.

From the regulator's perspective, cyber security and risk management are key to the success of virtual banking. The HKMA announced that virtual banks are subject to the same supervisory framework as traditional banks. This means virtual banks are required to meet the Basel standards on capital adequacy, liquidity coverage, and risk management. While virtual banks help promote inclusive banking and applications of fintech to serve a wider range of customers, they may also increase competition for deposits and exert downward pressure on overall net interest margins. Given that virtual banks may focus on lending to small borrowers, their underwriting standards and asset quality should be closely monitored by regulators.

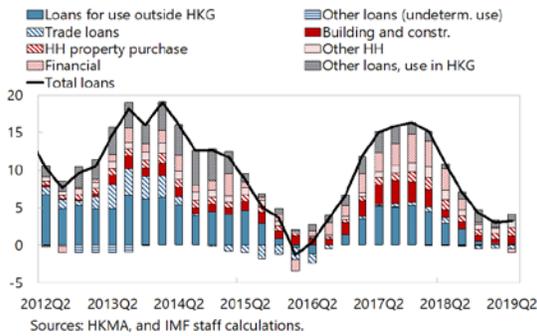
¹ Prepared by Kevin Chow.

² Virtual banking licenses have been granted to Livi VB Limited, SC Digital Solutions Limited, ZA Bank Limited, Welab Bank Limited, Ant Bank (Hong Kong) Limited, Fusion Bank Limited, Airstar Bank Limited, and Ping An OneConnect Bank (Hong Kong) Limited.

Figure 5. Credit Growth Slowing but Debt Remains High

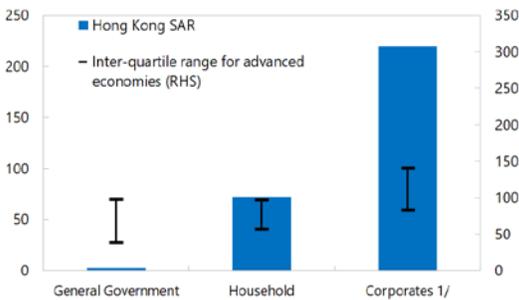
Credit growth moderated across all categories.

Contribution to Loan Growth
(Percent, year-on-year growth)



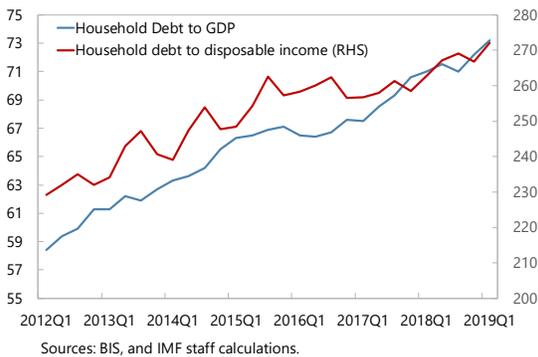
Nonetheless, Hong Kong SAR is still a low public debt/high private debt economy.

Hong Kong SAR Debt
(Percent of GDP, as of end-2018)



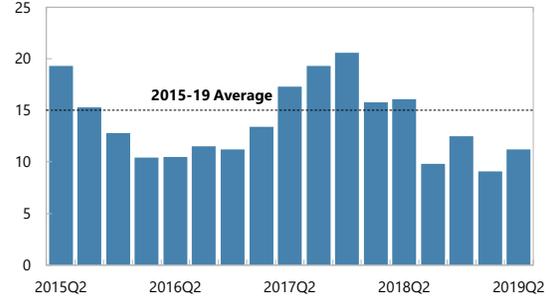
Households have also become more indebted.

Household Debt and Leverage
(Percent)



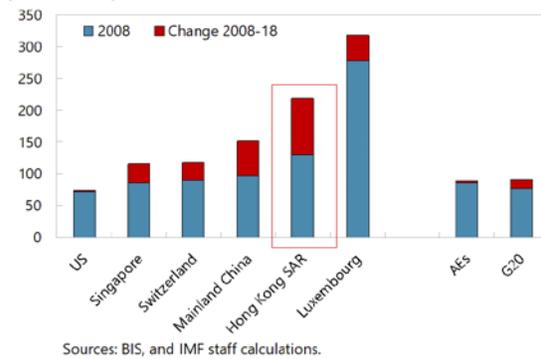
Slower credit growth helped narrow credit-to-GDP gap.

Credit-to-GDP Gap Based on Loans for Domestic Use 1/
(Percent)



Corporate debt is still relatively high compared to peers.

Non-financial Corporate Debt in Selected Economies
(Percent of GDP)



Household debt excluding mortgages and credit card debt continues to grow rapidly.

Household Debt: Loans and Advances to Households
(Percent of GDP)

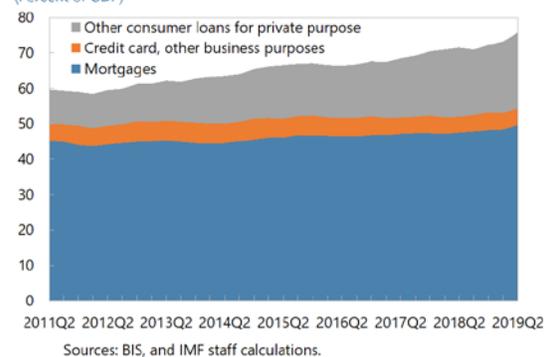
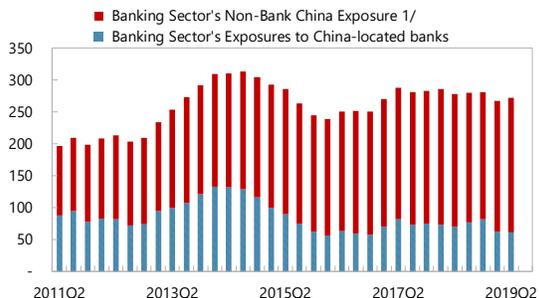


Figure 6. Financial Linkages with Mainland China

Hong Kong SAR's banking sector is highly exposed to the Mainland ...

Banking Sector Exposure to the Mainland

(Percent of GDP)



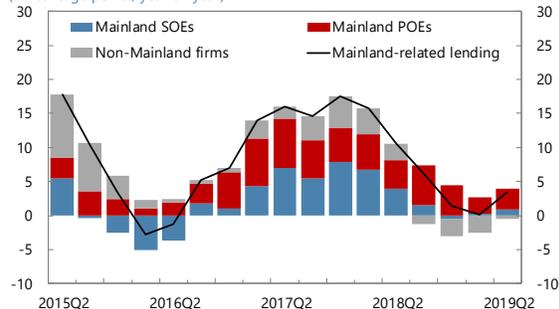
1/ Non-Bank China exposure refers to the sum of Mainland-related lending and other non-bank exposure.

Sources: HKMA, and IMF staff calculations.

Mainland-related lending slowed more recently due to lower demand amid slowed growth in total credit.

Contribution to Mainland-related Lending by Type of Borrower

(Percentage points, year on year)

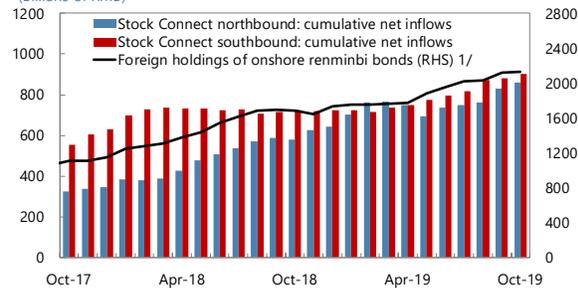


Sources: CEIC, and IMF staff calculations.

Hong Kong SAR's role as a gateway to China's financial markets has strengthened despite heightened uncertainty

Cross-border Fund Flows between Hong Kong SAR and Mainland China

(Billions of RMB)



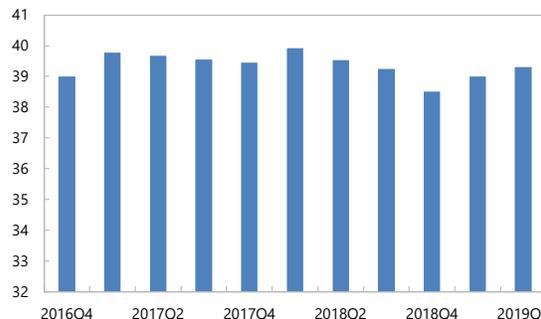
1/ Investment through Bond Connect, CIBM Direct and QFII/RQFII.

Sources: WIND.

... with close to 40 percent of total loans being Mainland-related.

Banks' Mainland Related Lending

(Percent share of total loans)

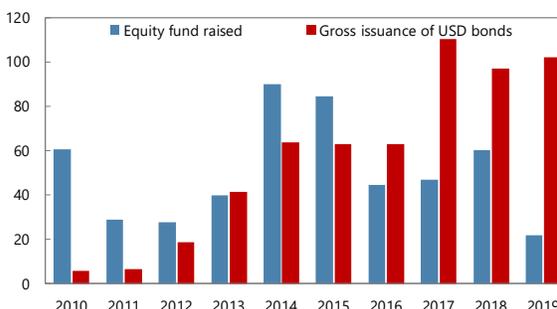


Sources: Hong Kong SAR Authorities, and CEIC.

Hong Kong SAR remains a major fund-raising platform for Mainland companies through capital markets.

Fund Raised by Mainland Firms in Hong Kong SAR

(Billions of USD)



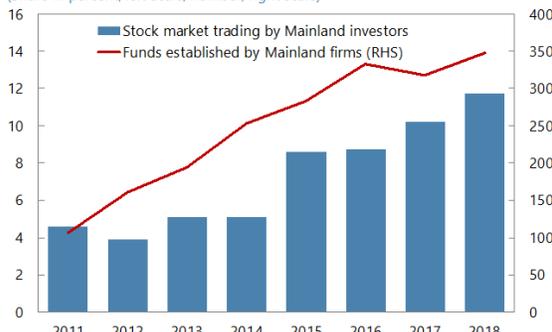
Note: 2019 refer to January to October figures.

Sources: HKEx, and WIND.

Domestic financial sector also benefits from greater participation of Mainland investors and companies.

Increasing Investment Activities by Mainland Investors

(Share in percent, left scale; number, right scale)



Sources: HKEx, and Hong Kong SAR Authorities.

37. The authorities noted that fintech and GBA development would boost innovation in the Hong Kong SAR and help cement Hong Kong SAR's status as a global financial hub. The recent introduction of virtual banks had already prompted its traditional banks to lower banking access barriers. Moreover, the introduction of lower-cost, innovative virtual banking platforms—as well as the recent granting of licenses to virtual insurers—was expected to broaden and enrich the fintech ecosystem, providing impetus for the introduction of other fintech products in the Hong Kong SAR. Meanwhile, the GBA developments would help reinforce the Hong Kong SAR's global financing role as international investors increasingly make use of Hong Kong SAR to access the onshore capital markets, and businesses including high-tech firms in the area leverage the Hong Kong SAR's funding platform for expansion.

PRESERVING AN ANCHOR OF STABILITY

38. The Linked Exchange Rate System anchors the stability of Hong Kong SAR's highly-open economy with its large and globally integrated financial services industry. After its first introduction in 1983 and some refinements since then to adapt to changing economic environment, the LERS has anchored the city's monetary and financial stability against external shocks, including the AFC and GFC. The U.S. dollar is still the most commonly used international currency in trade and financial transactions and Hong Kong SAR's economic cycles and financial conditions are, to a large extent, influenced by the U.S. and the global economic/financial environment. The credibility of the currency board arrangement has been ensured by a transparent set of rules governing the arrangement, ample fiscal and FX reserves, strong financial regulation and supervision, the flexible economy, and a prudent fiscal framework. In this regard, the LERS remains the appropriate arrangement for Hong Kong SAR.

39. The currency board arrangement continues to function well despite increased global financial market volatility. After trading close to the strong side of convertibility undertaking for a prolonged period following the GFC, the HK dollar began to depreciate against the U.S. dollar as ample liquidity in the domestic interbank market slowed the upward adjustment of the Hibor despite interest rate increases by the Federal Reserve. As the HK dollar further depreciated to the weak side of convertibility undertaking, the HKMA conducted FX operations as part of the currency board operations, selling USD2.8 billion in March 2019. As Hibor rates have gradually caught up with Libor rates since then, the spread has narrowed, and the HK dollar has traded within the convertibility undertaking range (Annex 8). The interbank rates have remained stable amid ample liquidity, and market expectations also remain well anchored. The authorities should continue to implement policies aimed at supporting smooth functioning of the LERS. In particular, maintaining the strong track record of public communication on the functioning of the arrangement and the corresponding HKMA's FX

HKD/USD Spot and Interest Rate Differentials
(HKD/USD, left scale; basis points, right scale)



Sources: Bloomberg, and IMF staff calculations.

operations as well as enhanced communication on overall FX and money market developments will help ensure credibility of the arrangement.

40. Staff assesses that the external position in 2018 was broadly in line with the level implied by medium-term fundamentals and desirable policies (Annex 9). The current account (CA) surplus declined to 4.3 percent of GDP in 2018 from 4.7 percent in 2017, mainly driven by a larger trade deficit in goods on the back of higher oil prices and robust domestic demand. The cyclically adjusted 2018 CA surplus of 4.5 percent is assessed to be in the midpoint of the range of the norm between 3.0 and 6.0 percent of GDP. The real effective exchange rate (REER) is also assessed to be broadly in line with fundamentals, with the estimated REER gap between -5 and 5 percent. The CA surplus is expected to widen to 5.5 percent of GDP in 2019, mainly driven by a large decline in imports amid weakened domestic demand and lower oil prices. Staff's preliminary assessment for 2019 suggests that the estimated CA in 2019 remains broadly in line with the level implied by medium-term fundamentals and desirable policies, mainly due to larger cyclical adjustment and lower adjustment for measurement issues relative to 2018 (Annex 9).

Authorities' Views

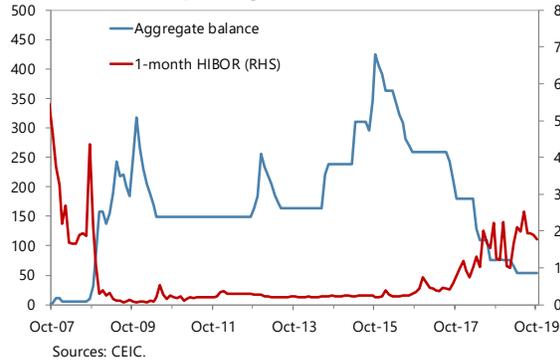
41. The authorities underscored that the LERS continued to function smoothly and remained the appropriate arrangement for the Hong Kong SAR. They noted that the HKD continued to trade within the convertibility undertaking range notwithstanding the HKMA's latest FX operation in March, with a modest increase in Hibor rates and a narrowing Hibor-Libor spread. Banks have adapted well to the smaller Aggregate Balance, which gradually shrank during April 2018 to March 2019, and had become more efficient in managing their excess liquidity. Despite occasional increases in demand for HKD funding triggered by seasonal factors and initial public offerings, which caused Hibor to become more volatile than before, there had been no abrupt or major outflow of funds from the HKD or from the banking sector.

Figure 7. The Linked Exchange Rate System

Aggregate balance shrank and interbank interest rates picked up in recent years.

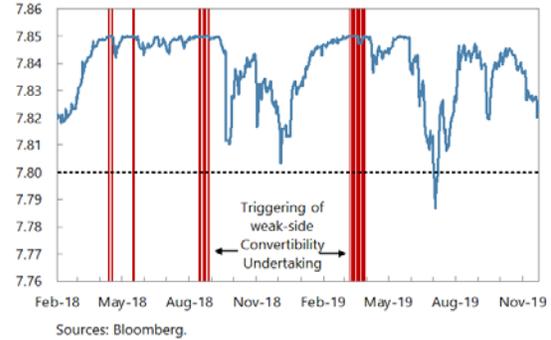
Aggregate Balance and Interbank Interest Rate

(Billions of HKD, left scale; percent, right scale)



Weak-side Convertibility Undertaking was triggered several times in March 2019, prompting a sale of USD by the HKMA.

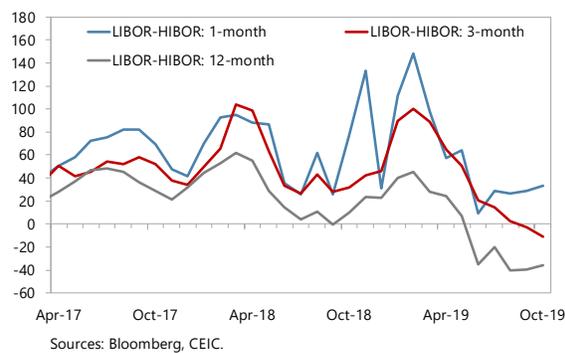
USD/HKD Spot Exchange Rate



Narrowing LIBOR-HIBOR spread helped ease downward pressure on HKD.

USD-HKD Interest Rate Differentials

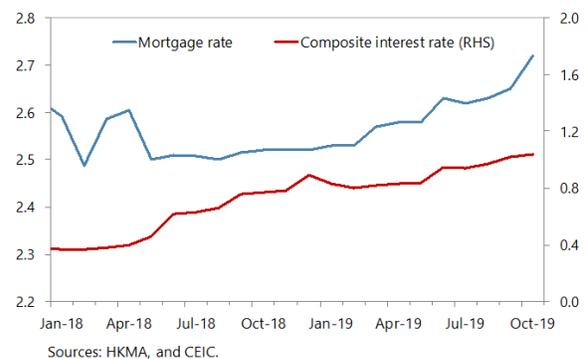
(Basis points)



Higher bank funding costs have been passed through to retail lending rates...

Mortgage Rate and Composite Interest Rate

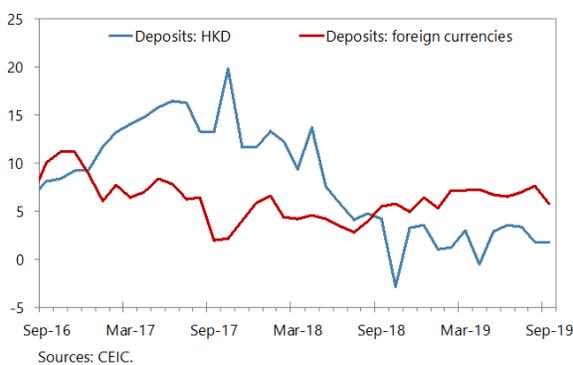
(Percent)



...but little signs of funding strain as customer deposits continued to expand...

Customer Deposits by Currency

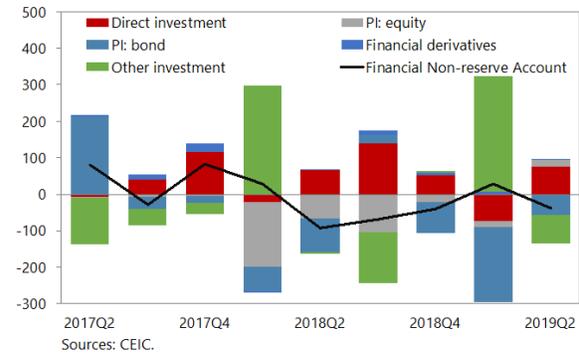
(Percent, year-on-year change)



...and direct investment and portfolio outflows were offset by banking sector inflows in 2019H1.

Financial Non-reserve Account by Key Component

(Billions of HKD)



STAFF APPRAISAL

42. Outlook. Economic activity weakened significantly in 2019 and the economy fell into a technical recession in Q3 as a result of trade tensions between the U.S and China, and the social unrest that started this summer. The economy is expected to start recovering next year but, with increased trade barriers and disruptions to global supply chains as a persistent drag on trade-related activities, the pace is expected to be gradual with a negative output gap over the medium term.

43. Risks. Risks are tilted to the downside. Risks arise from further escalation of trade tensions between the U.S. and China, potential restrictions by the U.S. against China in technology and the financial sectors, and a significant slowdown of Mainland China. A deterioration of the sociopolitical situation and delays in addressing structural challenges of insufficient housing supply and high income inequality could further weaken economic activity and negatively affect the city's competitiveness in the long term. Conversely, an easing of trade tensions between the U.S. and China, and the development of the GBA would improve growth prospects.

44. Buffers. A history of sound macroeconomic and prudential policies has left Hong Kong SAR with significant buffers to address both cyclical and structural challenges. Sizable FX reserves and a large net international investment position provide a strong buffer against external shocks. Enhanced financial regulatory and supervisory frameworks have helped banks build up strong capital and liquidity buffers. Prudent fiscal management under the balanced budget principle has helped accumulate large fiscal reserves.

45. Fiscal policy. Greater countercyclical fiscal support would help the economy navigate through negative shocks while maintaining long-term sustainability. A comprehensive medium-term fiscal package, including additional fiscal stimulus in the current fiscal year targeted to vulnerable households and SMEs, is needed to cope with the cyclical downturn and to address structural challenges of insufficient housing supply and high income inequality. Spending increases of around 1½ percent of GDP per year, relative to the projected baseline, in the areas of targeted transfers, housing/infrastructure, and education/training, would help close the negative output gap over the medium term. If growth falters more than expected, the authorities should provide more near-term fiscal support.

46. Medium-term fiscal challenges. The economy faces challenges of rapid population aging and the corresponding increase in social expenditures in the medium to long term. Thus, the authorities should consider structural measures to ensure fiscal sustainability and greater equity. International benchmarking with other global financial centers suggests that there is room to introduce a VAT, raise excise taxes, increase the top PIT rate and the tax rate under personal assessment. Regular comprehensive expenditure reviews would help ensure that long-term goals of increasing productivity, raising labor force participation, and tackling income inequality are addressed. Effectiveness of budget planning and execution should be improved by reducing reliance on property-related revenues and avoiding systematic under-execution of operating expenditures.

47. Housing policies. The three-pronged approach to containing housing market risks and increasing housing affordability remains appropriate and should continue. Increasing housing supply is critical to resolving the structural supply-demand imbalance and should be accelerated by increasing land allocation for residential housing. The macroprudential stance should stand ready to adjust to address financial stability risks. The NRSD is assessed to be a CFM/MPM under the IMF's Institutional View on capital flows and should be phased out when systemic risks from the non-resident inflows dissipate. The authorities should carefully monitor the overall impact of the adjustment of the MIP and stand ready to adjust the policy mix of macroprudential policies and the MIP.

48. Financial sector policies. The authorities have strengthened the regulatory and supervisory framework, including the key Basel III standards. Continued efforts are necessary to maintain financial sector resilience and safeguard financial stability amid rising global financial volatility. As private non-financial sector debt remains high, with pockets of vulnerability in certain corporate sectors, sectoral macroprudential measures could be considered to limit concentration risk of financial institutions. In light of the growing role of fintech in the banking sector, the authorities stepped up the supervision of technology risk management and operational resilience. The development of green finance and the GBA offers opportunities to maintain Hong Kong SAR's competitiveness as a global financial center, and efforts in this regard should continue.

49. Exchange rate regime and external position. The LERS anchors the stability of Hong Kong SAR's highly-open economy with its large and globally integrated financial services industry. The credibility of the currency board arrangement has been bolstered by a set of transparent rules governing the arrangement, ample fiscal and FX reserves, strong financial regulation and supervision, the flexible economy, and a prudent fiscal framework. Thus, the LERS remains the appropriate arrangement for Hong Kong SAR. The external position remains broadly in line with medium-term fundamentals and desirable policy settings.

50. It is recommended that the next Article IV consultation discussions take place on the standard 12-month cycle.

Table 1. Hong Kong SAR: Selected Economic and Financial Indicators, 2015–24

	2015	2016	2017	2018	Proj.					
					2019	2020	2021	2022	2023	2024
NATIONAL ACCOUNTS										
Real GDP (percent change)	2.4	2.2	3.8	3.0	-1.9	0.2	4.7	2.8	2.6	2.5
Private consumption	4.8	2.0	5.6	5.5	-2.3	-0.7	4.3	2.3	2.3	2.3
Government consumption	3.4	3.4	2.8	4.2	5.2	5.8	4.1	3.5	3.2	3.2
Gross fixed capital formation	-3.2	-0.1	2.9	2.0	-10.2	-1.0	7.6	5.8	4.2	4.2
Inventories (contribution to growth)	-1.2	0.9	0.5	-0.1	-0.5	0.2	0.0	0.0	0.0	0.0
Net exports (contribution to growth)	0.8	-0.3	-1.2	-1.4	1.9	0.0	-0.1	-0.3	-0.2	-0.3
Output gap (in percent of potential)	-0.1	-0.7	0.2	0.3	-3.1	-4.6	-2.1	-1.6	-1.5	-1.5
Saving and investment (percent of GDP)										
Gross national saving	24.9	25.5	26.7	26.0	25.2	25.1	25.3	25.5	25.6	25.7
Gross domestic investment	21.5	21.5	22.0	21.7	19.7	20.0	20.6	21.1	21.4	21.7
Saving-investment balance	3.3	4.0	4.7	4.3	5.5	5.2	4.7	4.4	4.2	4.0
LABOR MARKET										
Employment (percent change)	0.9	0.2	0.9	1.4	0.5	0.5	1.1	0.8	0.8	0.7
Unemployment rate (percent, period average)	3.3	3.4	3.1	2.8	3.1	3.4	3.1	3.0	2.9	2.9
Real wages (percent change)	0.5	1.2	2.3	1.1	1.3	0.0	1.2	1.3	1.3	1.3
PRICES										
Inflation (percent change)										
Consumer prices	3.0	2.4	1.5	2.4	3.0	1.8	2.6	2.5	2.4	2.4
GDP deflator	3.6	1.6	3.0	3.6	1.4	1.1	2.2	2.0	2.0	2.0
GENERAL GOVERNMENT (percent of GDP)										
Consolidated budget balance	0.6	4.5	5.6	2.4	0.0	0.3	0.6	0.7	0.9	0.9
Revenue	18.8	23.0	23.3	21.1	20.7	20.8	21.0	21.0	21.0	21.0
Expenditure	18.2	18.6	17.7	18.7	20.7	20.6	20.4	20.3	20.2	20.2
Fiscal reserves (as of March 31)	35.1	38.3	41.4	41.2	41.4	41.1	39.0	37.9	37.1	36.1
FINANCIAL										
Interest rates (percent, period-average)										
Best lending rate	5.0	5.0	5.0	5.0	...	...	...	...	...	...
Three-month HIBOR	0.4	0.6	0.9	1.8	...	...	...	...	...	...
10-year Treasury bond yield	1.6	1.2	1.6	2.1	...	...	...	...	...	...
MACRO-FINANCIAL										
Loans for use in Hong Kong SAR (excl. trade financing)	6.3	8.0	16.1	6.5	5.0	5.5	8.5	7.5	7.4	7.2
House prices (end of period, percent change)	2.4	7.9	14.7	1.9	1.0	3.6	9.9	8.1	7.8	7.6
Credit-to-GDP gap 1/	15.3	11.5	19.3	9.8	10.6	9.4	8.1	6.2	4.8	2.8
Hang Seng stock index (percent change)	-7.2	0.4	36.0	-13.6	...	...	...	...	...	...
EXTERNAL SECTOR										
Merchandise trade (percent change)										
Export value	-1.8	-0.5	8.0	7.4	-3.9	2.8	3.8	3.5	3.4	3.4
Import value	-4.1	-1.0	8.7	8.4	-5.6	1.6	3.9	3.7	3.6	3.6
Current account balance (percent of GDP) 2/	3.3	4.0	4.7	4.3	5.5	5.2	4.7	4.4	4.2	4.0
Foreign exchange reserves 2/										
In billions of U.S. dollars (end-of-period)	358.8	386.3	431.4	424.7	425.3	425.9	427.0	428.5	429.9	430.5
In percent of GDP	116.0	120.4	126.2	117.1	117.7	116.4	109.2	104.5	100.2	96.0
Net international investment position (percent of GDP)	324.2	359.2	417.0	356.7	363.8	364.4	345.3	333.7	323.1	313.1
Exchange rate										
Market rate (HK\$/US\$, period average)	7.752	7.762	7.793	7.838	...	...	...	...	...	...
Real effective rate (period average, 2010=100)	110.4	115.2	115.3	113.1	...	...	...	...	...	...

Sources: BIS, CEIC; HKSAR Census and Statistics Department; and IMF staff estimates.

1/ Based on loans for use in Hong Kong SAR, including trade financing.

2/ Data published using the Balance of Payments Statistics Manual 6 (BPM6) format.

Table 2. Hong Kong SAR: Balance of Payments, 2015–24

	2015	2016	2017	2018	Proj.					
					2019	2020	2021	2022	2023	2024
(In billions of U.S. dollars)										
Current account	10.3	12.7	15.9	15.6	19.8	18.9	18.3	18.1	18.1	18.0
Goods balance	-22.9	-16.7	-22.9	-32.4	-20.8	-14.7	-15.7	-17.0	-18.5	-20.5
Services balance	30.3	24.1	26.6	32.7	26.0	19.6	20.1	20.6	21.3	22.9
Income balance	2.9	5.4	12.2	15.3	14.7	14.0	13.9	14.5	15.3	15.6
Primary income balance	5.7	8.1	14.8	18.1	17.6	17.1	17.2	18.1	19.1	19.7
Secondary income balance	-2.9	-2.7	-2.6	-2.7	-2.9	-3.1	-3.3	-3.5	-3.8	-4.1
Transfer balance										
Capital and financial account 1/	-16.6	-13.0	-9.8	-23.5	-19.8	-18.8	-18.2	-18.0	-17.9	-17.8
Capital account	0.0	0.0	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
Financial account	-16.6	-13.0	-9.7	-23.3	-19.6	-18.6	-18.0	-17.8	-17.7	-17.6
Net direct investment	102.5	57.7	24.0	30.5	24.9	20.5	21.2	20.1	18.5	16.7
Assets	-78.5	-75.5	-101.7	-56.0	-60.4	-65.0	-70.3	-76.0	-82.1	-88.6
Liabilities	181.0	133.2	125.7	86.5	85.3	85.5	91.5	96.0	100.6	105.3
Portfolio investment	-125.2	-60.5	33.9	-75.0	-73.0	-68.8	-70.5	-70.8	-71.0	-71.7
Assets	-85.3	-68.3	-7.1	-83.9	-91.9	-87.9	-91.0	-92.3	-93.5	-95.3
Liabilities	-39.9	7.8	41.0	8.9	18.9	19.2	20.5	21.5	22.6	23.6
Financial derivatives	12.8	4.7	7.9	2.0	2.1	2.3	2.5	2.7	2.9	3.1
Assets	72.8	95.1	83.0	76.2	82.3	88.5	95.6	103.4	111.7	120.6
Liabilities	-60.0	-90.4	-75.0	-74.2	-80.1	-86.2	-93.1	-100.7	-108.8	-117.5
Other investment	29.7	-13.7	-43.4	20.2	27.4	28.5	29.7	31.1	32.6	34.1
Assets	36.8	-41.5	-192.7	-70.4	-63.5	-66.0	-68.9	-72.1	-75.5	-79.1
Liabilities	-7.0	27.8	149.3	90.6	91.0	94.5	98.6	103.2	108.0	113.2
Reserve assets (net change)	-36.4	-1.1	-32.1	-1.0	-1.1	-1.1	-1.0	-0.8	-0.8	0.1
Net errors and omissions	6.3	0.3	-6.1	7.9	0.0	0.0	0.0	0.0	0.0	0.0
Memorandum item:										
Nominal GDP	309.4	320.9	341.7	362.7	361.3	365.8	391.2	410.1	429.1	448.5
(In percent of GDP)										
Current account	3.3	4.0	4.7	4.3	5.5	5.2	4.7	4.4	4.2	4.0
Goods balance	-7.4	-5.2	-6.7	-8.9	-5.8	-4.0	-4.0	-4.1	-4.3	-4.6
Services balance	9.8	7.5	7.8	9.0	7.2	5.4	5.1	5.0	5.0	5.1
Income balance	0.9	1.7	3.6	4.2	4.1	3.8	3.6	3.5	3.6	3.5
Capital and financial account	-5.4	-4.1	-2.9	-6.5	-5.5	-5.2	-4.7	-4.4	-4.2	-4.0
Capital account	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Financial account	-5.4	-4.0	-2.8	-6.4	-5.4	-5.1	-4.6	-4.3	-4.1	-3.9
Net direct investment	33.1	18.0	7.0	8.4	6.9	5.6	5.4	4.9	4.3	3.7
Portfolio investment	-40.5	-18.9	9.9	-20.7	-20.2	-18.8	-18.0	-17.3	-16.5	-16.0
Financial derivatives	4.1	1.5	2.3	0.5	0.6	0.6	0.6	0.7	0.7	0.7
Other investment	9.6	-4.3	-12.7	5.6	7.6	7.8	7.6	7.6	7.6	7.6
Reserve assets (net change)	-11.8	-0.4	-9.4	-0.3	-0.3	-0.3	-0.2	-0.2	-0.2	0.0
Net errors and omissions	2.0	0.1	-1.8	2.2	0.0	0.0	0.0	0.0	0.0	0.0

Sources: CEIC and HKSAR Census and Statistics Department.

1/ Sign convention as per BPM5: Negative = net lending (net outflow); Positive = net borrowing (net inflow).

Table 3. Hong Kong SAR: Consolidated Government Account, 2015–2024 1/

	2015	2016	2017	2018	Proj.						
					2019	2020	2021	2022	2023	2024	
	(In percent of GDP, unless stated otherwise)										
Consolidated revenue	18.8	23.0	23.3	21.1	20.7	20.8	21.0	21.0	21.0	21.0	
Operating revenue	15.9	16.5	16.6	16.0	15.8	15.9	15.9	15.9	15.9	15.9	
Capital revenue	2.9	6.5	6.6	5.1	4.9	4.9	5.0	5.1	5.1	5.1	
Taxes	14.4	14.0	14.3	13.7	12.8	12.8	12.9	12.9	12.9	12.9	
Direct taxes	...	...	...	...	...	...	...	...	...	...
Nontax	4.4	9.0	8.9	7.4	8.0	8.0	8.1	8.1	8.1	8.1	
<i>Of which:</i>											
Land premium	2.5	5.1	6.2	4.1	3.8	3.9	3.6	3.6	3.8	3.9	
Investment income	0.0	0.8	0.8	1.4	1.3	1.3	1.3	1.3	1.3	1.3	
Consolidated expenditure	18.2	18.6	17.7	18.7	20.7	20.6	20.4	20.3	20.2	20.2	
Operating expenditure	14.5	14.2	13.9	15.2	17.3	16.9	16.2	16.1	16.0	16.0	
<i>Of which:</i>											
Personnel related (including pensions)	4.3	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.5	4.5	
Capital expenditure	3.7	4.4	3.8	3.5	3.4	3.7	4.1	4.2	4.2	4.2	
Overall balance	0.6	4.5	5.6	2.4	0.0	0.3	0.6	0.7	0.9	0.9	
Memorandum items:											
Operating balance 2/	1.4	2.3	2.7	0.8	-1.5	-1.0	-0.3	-0.2	-0.1	-0.1	
Primary balance 3/	0.6	3.6	4.8	1.0	-1.2	-1.0	-0.7	-0.6	-0.4	-0.4	
Fiscal impulse 4/	2.3	-1.3	1.0	2.0	0.2	-0.9	0.7	0.0	0.0	0.0	
Fiscal reserves	35.1	38.3	41.4	41.2	41.4	41.1	39.0	37.9	37.1	36.1	
(Months of spending)	23.2	24.8	28.1	26.4	24.0	24.0	23.0	22.4	22.1	21.5	
Government debt	0.1	0.1	0.1	0.1	0.3	0.3	0.3	0.2	0.2	0.0	
Government debt including Bond Fund 5/	4.9	5.1	4.6	4.8	5.0	5.0	5.0	5.0	5.0	4.8	
Assets of the Government Bond Fund	5.4	5.7	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	
Net general government debt 6/	-35.6	-38.8	-42.0	-41.6	-41.6	-41.3	-39.3	-38.2	-37.3	-36.6	

Sources: CEIC; and IMF staff estimates.

1/ Using medium-range forecast as a starting point to make staff adjustments. Fiscal year begins April 1.

2/ Operating balance, as defined by the authorities, is akin to the current balance.

3/ Balance excluding investment income and interest expenditure.

4/ Change in structural primary balance adjusted for one-off factors, non-inflationary output and house price gaps. A positive value corresponds to an expansionary fiscal stance.

5/Bond Fund comprises of securities issued under the Government Bond Fund Programme

6/ Negative sign indicates net assets.

Table 4. Hong Kong SAR: Monetary Survey, 2015–20

	2015	2016 3/	2017	2018	Proj.	
					2019	2020
(In billions of Hong Kong dollars)						
Net foreign assets	4991	6552	7475	7855	8108	8408
Monetary authorities	3051	2995	3372	3326	3433	3560
Banks	1940	3558	4103	4529	4675	4848
Domestic credit 1/	4800	5185	6019	6408	6729	7101
Other items (net)	1827	772	262	85	85	85
M2	11618	12508	13755	14348	14922	15593
<i>Of which:</i>						
Deposits in HKD 2/	5416	5890	6572	6796	...	...
Deposits in foreign currencies 2/	5853	6228	6745	7086	...	...
Notes and coins in circulation	349	390	439	467	...	...
(Annual percentage change)						
Domestic credit	6.3	8.0	16.1	6.5	5.0	5.5
M2	5.5	7.7	10.0	4.3	4.0	4.5
(Contribution to M2 growth, in percent)						
Net foreign assets	-0.7	13.4	7.4	2.8	1.8	2.0
Domestic credit	2.6	3.3	6.7	2.8	2.2	2.5
Other items (net)	3.6	-9.1	-4.1	-1.3	0.0	0.0
(In percent of GDP)						
Net foreign assets	208.1	263.1	280.7	276.3	277.5	278.6
Domestic credit	200.1	208.2	226.0	225.4	230.4	235.3
Other items (net)	76.2	31.0	9.8	3.0	2.9	2.8
M2	484.4	502.2	516.9	504.7	510.8	516.8
Sources: IMF, <i>International Financial Statistics</i> ; Haver Analytics, and staff calculation.						
1/ Domestic credit measures loans for use in Hong Kong SAR (excluding trade financing).						
2/ Includes savings, time, demand, and negotiable certificates of deposits.						
3/ From 2016 onwards, data on net foreign assets adopted IFS new presentation.						

Table 5. Hong Kong SAR: Vulnerability Indicators, 2015–19

	2015	2016	2017	2018	2019Q2
Banking sector					
Regulatory capital to risk-weighted assets	18.3	19.2	19.1	20.3	20.6
Regulatory tier 1 capital to risk-weighted assets	15.3	16.4	16.6	17.9	18.3
Nonperforming loans net of provisions to capital	1.9	2.0	1.6	1.4	1.2
Nonperforming loans to total gross loans	0.7	0.9	0.7	0.5	0.6
Sectoral distribution of total loans: residents	69.7	70.3	69.9	69.7	69.9
Sectoral distribution of total loans: other financial corporations	6.7	7.6	9.8	9.5	9.4
Sectoral distribution of total loans: nonfinancial corporations	55.9	55.7	53.0	52.6	52.4
Sectoral distribution of total loans: other domestic sectors	7.1	7.0	7.2	7.6	8.1
Sectoral distribution of total loans: nonresidents	30.3	29.7	30.1	30.3	30.1
Return on assets	1.0	1.1	1.0	1.0	1.1
Return on equity	13.2	16.0	12.6	13.1	12.9
Interest margin to gross income	46.5	42.6	51.2	56.2	55.7
Noninterest expenses to gross income	48.0	42.8	45.7	44.7	43.0
Liquid assets to total assets (liquid asset ratio)	21.5	21.6	19.6	20.4	19.7
Liquid assets to short-term liabilities 1/	164.3	180.8	182.2	187.5	166.4
Net open position in foreign exchange to capital	5.9	4.1	0.5	0.0	-0.8
Public sector					
Fiscal surplus (in percent of calendar year GDP)	0.6	4.5	5.6	2.4	...
Fiscal reserves (in percent of calendar year GDP)	35.1	38.3	41.4	41.2	...
External sector					
Gross official reserves (in billions of U.S. dollar)	358.8	386.1	431.5	424.5	...
In percent of GDP	116.0	120.3	126.3	117.0	...
In months of retained imports	32.1	36.0	36.8	33.0	...
In percent of monetary base	174.6	183.0	199.9	203.6	...
In percent of broad money 2/	23.9	23.9	24.5	23.2	...
In percent of Hong Kong dollar M3	48.1	47.6	47.9	45.7	...
Short-term debt (in billions of U.S. dollar)	901.7	916.3	1,052.8	1,130.2	...
In percent of gross reserves	251.3	237.3	244.0	266.2	...
Financial sector					
Hang Seng index (percent change, end-year)	-7.2	0.4	36.0	-13.6	...
House prices (percent change, end-year)	2.4	7.9	14.7	1.9	...
Sources: CEIC; Hong Kong SAR authorities; Bank for International Settlements; Bloomberg; IFS; and IMF staff estimates.					
1/ Composition of liquid assets and short term liabilities changed in January 2015 after the implementation of a new liquidity regime in accordance with the Basel III framework.					
2/ Broad Money refers to M2. □					

Annex I. Impact of Trade Tensions on the Economy of Hong Kong SAR¹

- 1. The economy of Hong Kong SAR is highly dependent on external trade and trade-related services.** Hong Kong SAR is one of the most open economies in the world, with trade amounting to almost 360 percent of GDP (not including 167 percent of GDP in offshore trade). The city is a major trading and processing hub for Mainland China and other countries linked through the global value chains with more than 95 percent of goods passing through its ports produced elsewhere. Instead, domestic value added comes from the trade and logistics sectors that process re-exports and offshore trade. Trade-related services contribute around 20 percent to employment and GDP.
- 2. Mainland China and the U.S. are the city's two largest trading partners, although their relative importance has changed over time.** Accession of Mainland China into the WTO and its subsequent investment in various ports along the Mainland's eastern seaboard has gradually led to a decline in share of re-exports between Mainland China and the U.S. routed through Hong Kong SAR. However, expansion of a high-tech manufacturing base in the Guangdong province of Mainland China that neighbors Hong Kong SAR contributed to closer trade links between the city and the Mainland. Hong Kong SAR's exposure to Mainland China's final demand is second only to Taiwan Province of China.²
- 3. Trade tensions between China and the U.S. have adversely impacted Hong Kong SAR.** Since July 2018, the U.S. and the Mainland authorities have imposed several rounds of tariffs on each other's exports. As a result, by 2020 the average tariffs are expected to raise from below 2 percent to around 21 percent on Mainland China's exports to the U.S., and from around 3.5 percent to 15 percent on U.S. exports to Mainland China. Initially, re-exports through Hong Kong SAR held up, likely due to pre-orders by importers. However, as the trade conflict showed no signs of abating and global sentiment began to worsen, from November 2018, re-exports began to decline at around 4.9 percent (y/y) on average. While only about 7.5 percent of Hong Kong SAR's re-exports was directly affected by the four rounds of tariffs implemented by September 2019, other re-exports were falling as well, likely because producers scaled back purchases of intermediate goods embedded in products covered by tariffs. If all goods re-exported between Mainland China and the U.S. were subject to tariffs as announced by the end of 2019, the share of Hong Kong SAR's re-exports directly affected by these tariffs would increase to around 9 percent. Staff analysis based on a gravity model confirms the negative impact of additional tariffs between the U.S. and China on export growth of Hong Kong SAR.
- 4. Trade-related industries have been hit hard by the trade tensions.** Employment in the trade-related industries has declined by 14.2 percent (y/y) in 2019Q3 while business receipts

¹ Prepared by Emilia Jurzyk.

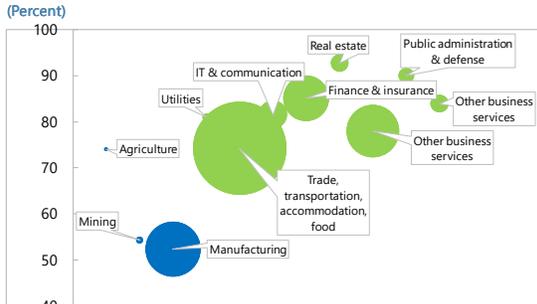
² OECD TiVA Database, 2015 vintage.

in the import-export sector fell by 6 percent in Q2 2019 (y/y). The seasonally adjusted overall unemployment rate edged up, but remained low at 3.1 percent in August-October 2019, due to still-tight labor market conditions.

Figure 1. Economy Dependent on Trade

Hong Kong SAR's economy is highly dependent on export-oriented service sectors.

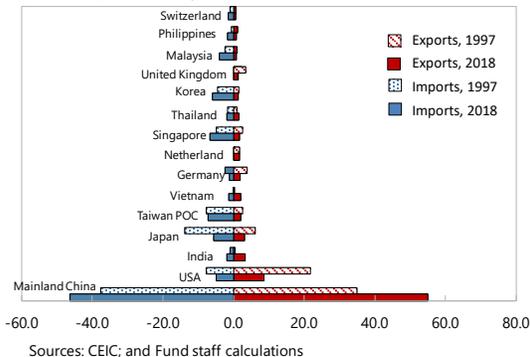
Share of Domestic Value Added in Exports by Sector



Position on the vertical axis indicates share of domestic value added, size of the bubble indicates share in total exports. Green color denotes services. Sources: OECD TIVA database; and IMF staff calculations

Mainland China and the U.S. remain the city's two biggest trading partners...

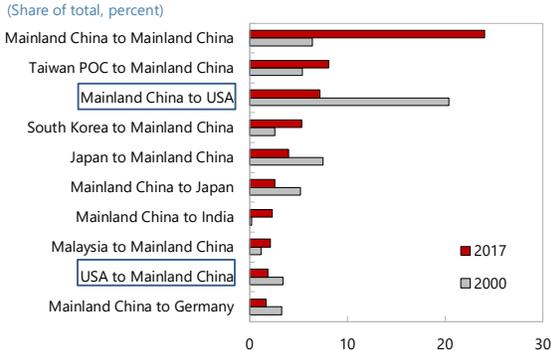
Hong Kong SAR Main Export and Import Destinations



Sources: CEIC; and Fund staff calculations

...although re-exports between Mainland and the U.S. flowing through Hong Kong SAR declined over time.

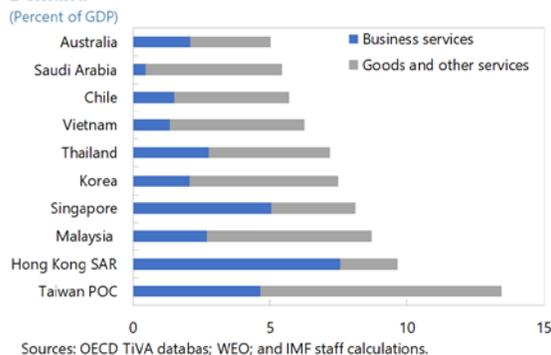
Re-exports via Hong Kong SAR by Origin and Destination



Sources: CEIC; and Fund staff calculations

Hong Kong SAR is highly exposed to final demand of Mainland China.

Exposure by Value Added to Mainland China's Final Demand



Sources: OECD TIVA databases; WEO; and IMF staff calculations.

Implementation of tariff rounds 1-4 lead to some pre-orders, and inventory buildup for other goods...

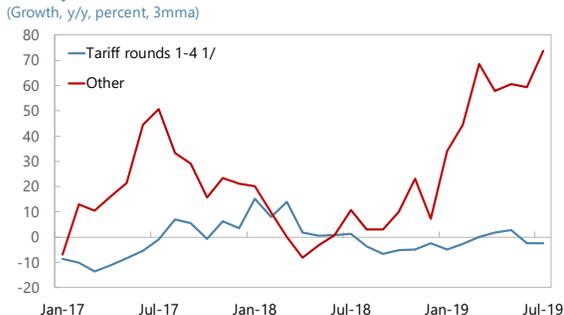
Re-exports of Mainland China's Goods to the U.S.



1/Refers to U.S. tariffs on Mainland China's goods announced on June 15, 2018, August 7, 2018, September 17, 2018, and August 23, 2019. Sources: C&SD; and IMF staff calculations

...also for the re-exports of Mainland goods to the U.S.

Re-exports of U.S. Goods to Mainland China



1/Refers to Mainland China's tariffs on U.S. goods announced on June 16, 2018, August 8, 2018, September 18, 2018, and August 23, 2019. Sources: C&SD; and IMF staff calculations

Annex II. Risk Assessment Matrix¹

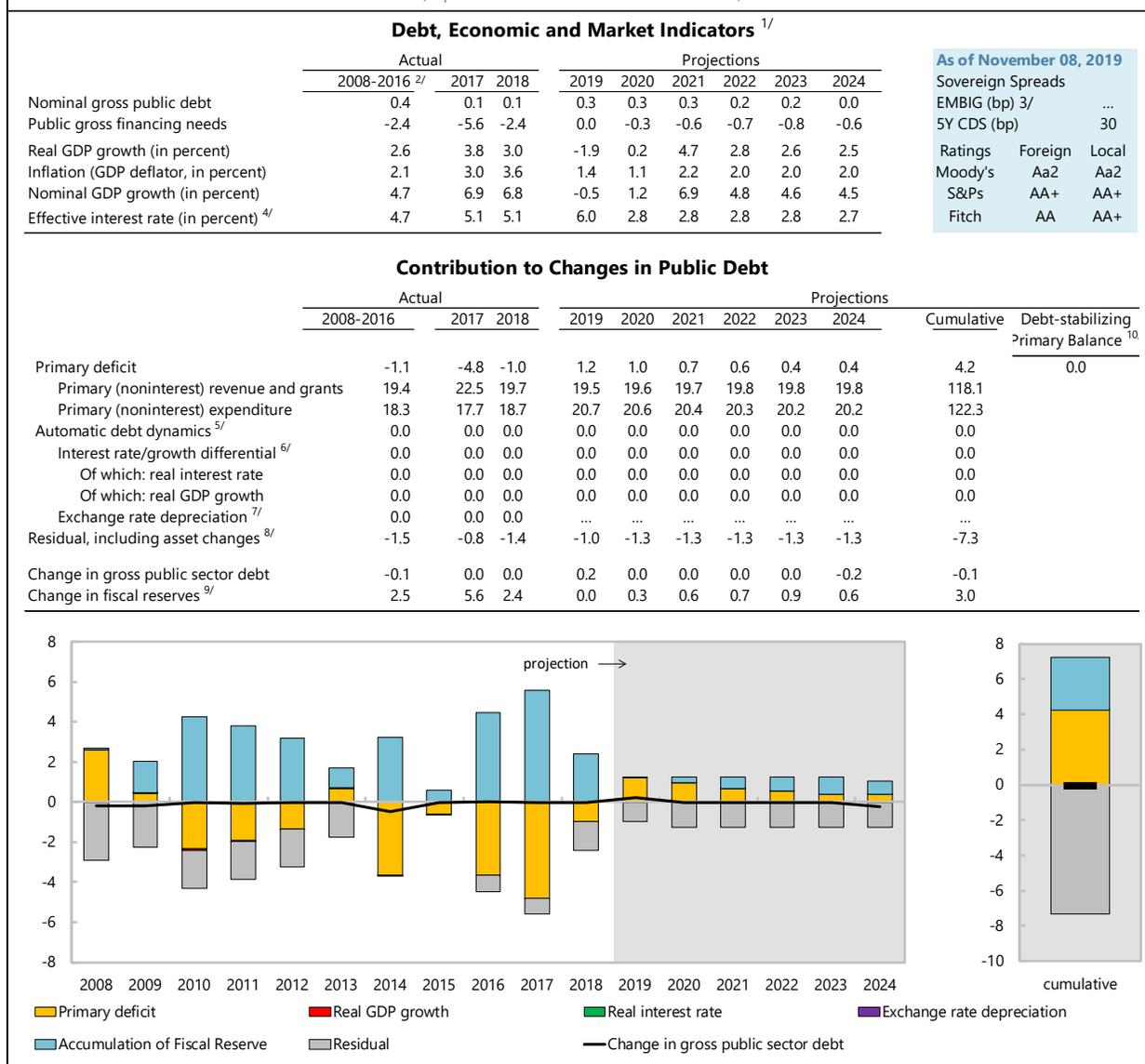
<i>Source of risk</i>	<i>Likelihood</i>	<i>Impact</i>	<i>Policy Advice</i>
<i>External</i>			
1. Rising protectionism and retreat from multilateralism. Escalating trade tensions and imposition of additional barriers on investment and trade in technology could reduce global growth both directly, and through adverse confidence effects and financial market volatility. Trade flowing through Hong Kong SAR would fall, and its financial markets follow international financial markets down.	High	High	Counter the adverse impact on growth through a temporary fiscal stimulus centered on vulnerable households. Continue to actively monitor financial stability.
2. Sharp rise in risk premia. An abrupt deterioration in market sentiment could trigger risk-off events such as recognition of underpriced risk. Higher risk premia cause higher debt service and refinancing risks; stress on leveraged firms, households, and vulnerable sovereigns; disruptive corrections to stretched asset valuations; and capital account pressures—all depressing growth.	High	High	Provide targeted fiscal support as needed. Safeguard financial stability through macro-prudential measures and liquidity provision.
3. Weaker than expected global growth, especially in Mainland China. Further escalation in trade tensions could disrupt supply chains, and depresses confidence and investment, thus reducing growths. In the medium-term, weaker external demand, the potential reversal of globalization, and the increasing role of the state could weigh on growth prospects. Moreover, excessive policy easing—reversing progress in deleveraging and rebalancing—increases risks over time of a disruptive adjustment or a marked growth slowdown.	High	High	Should domestic demand weaken substantially, temporary and targeted fiscal stimulus needs to be provided with continued efforts on medium-term reforms. Safeguard financial stability through macro-prudential measures and liquidity provision. Work closely with Mainland counterparts to facilitate an orderly resolution of distressed assets and address any weaknesses in bank balance sheets.
<i>Domestic</i>			
4. Intensification of social unrest. Prolonged social unrest and heightened uncertainty could further weaken economic sentiment, leading to larger-than-expected housing market correction, which would have a negative impact on private consumption and financial stability through a higher debt servicing burden and negative wealth effects.	Medium	High	Deploy temporary and targeted fiscal stimulus with emphasis on low-income and vulnerable households. Continue to adopt policies to ease housing supply constraints by ensuring an adequate supply of land and public housing. Safeguard financial stability through macro-prudential measures and liquidity provision.
5. Disorderly correction of house prices. The effect of easing of the U.S. monetary policy could be countered by the impact of recent slowdown in economic activity and rising external and domestic uncertainty. A disorderly house price correction could trigger an adverse feedback loop between house prices, debt service ability of households, and lower consumption, with weakening growth leading to a second-round effects on banks' balance sheets.	Medium	High	Adjust macro-prudential measures and provide targeted fiscal support if needed. Safeguard financial stability and stand ready to provide liquidity through existing facilities.

¹ The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path (the scenario most likely to materialize in the view of IMF staff). The relative likelihood is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10-30 percent, and "high" a probability between 30-50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly. "Short-term (ST)" and "medium-term (MT)" are meant to indicate that the risk could materialize within one year and three years, respectively.

Annex III. Debt Sustainability Analysis

Figure 1. Hong Kong SAR. Public Sector DSA - Baseline Scenario

(In percent of GDP unless otherwise indicated)



Source: IMF staff.

1/ Public sector is defined as general government.

2/ Based on available data. Public debt includes debt identified in the consolidated financial statement. It excludes debt issued through the bond fund.

3/ Not available for Hong Kong SAR

4/ Defined as interest payments divided by debt stock (excluding guarantees) at the end of previous year.

5/ Derived as $[(r - \pi(1+g) - g + ae(1+r))/(1+g+\pi+grt)]$ times previous period debt ratio, with r = interest rate; π = growth rate of GDP deflator; g = real GDP growth rate; a = share of foreign-currency denominated debt; and e = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

6/ The real interest rate contribution is derived from the numerator in footnote 5 as $r - \pi(1+g)$ and the real growth contribution as $-g$.

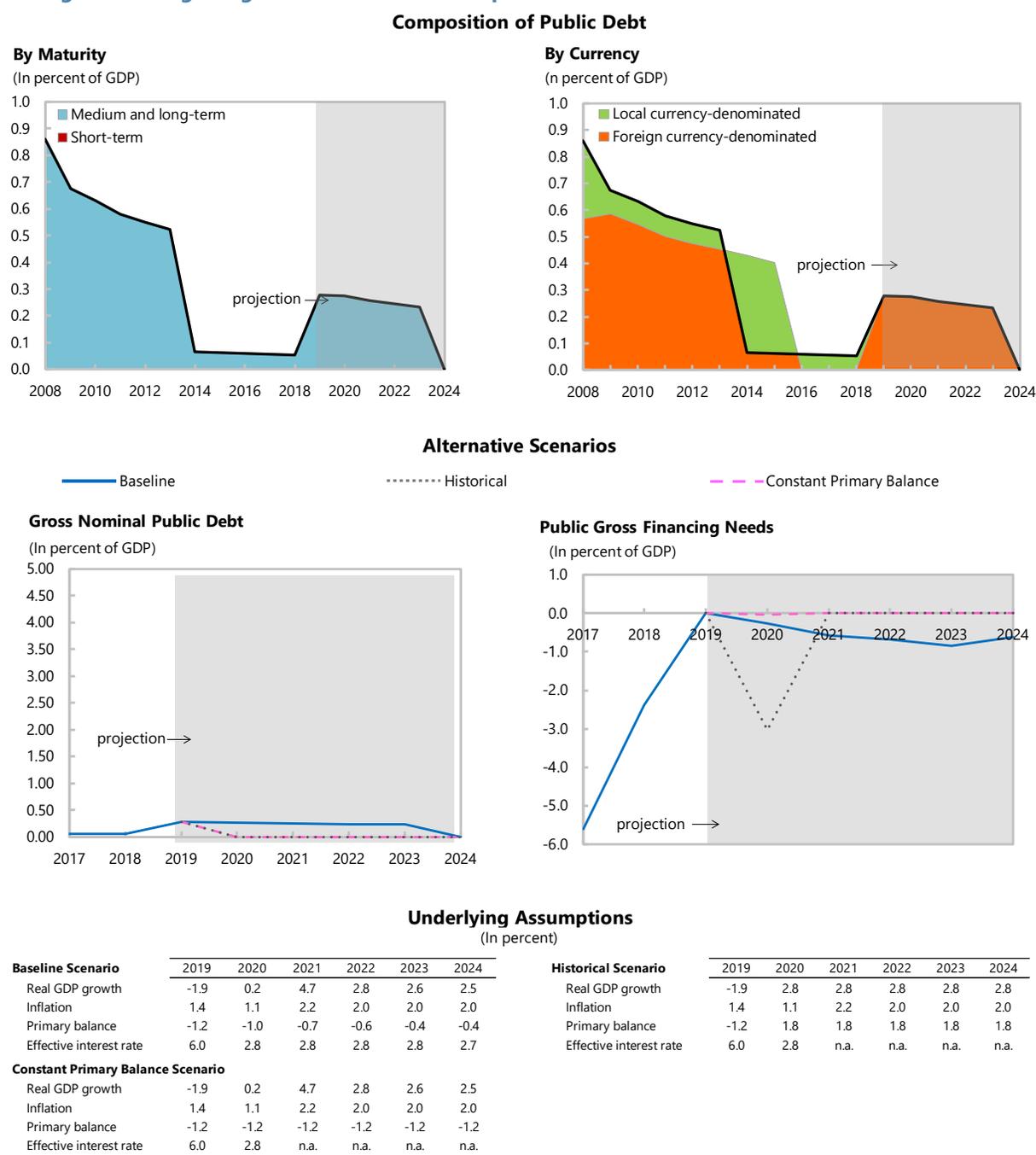
7/ The exchange rate contribution is derived from the numerator in footnote 5 as $ae(1+r)$.

8/ Includes asset changes and interest revenues (if any). For projections, includes exchange rate changes during the projection period.

9/ Defined as a difference in nominal level of reserves between years t and $t-1$, divided by nominal GDP in year t . Assumes a buildup of reserves in nominal terms under the baseline scenario.

10/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

Figure 2. Hong Kong SAR. Public DSA - Composition of Public Debt and Alternative Scenarios



Source: IMF staff.

Annex IV. Macroeconomic Impact of Fiscal Measures to Foster Inclusion¹

1. The macroeconomic effects of fiscal measures in Hong Kong SAR are estimated using the IMF's Flexible System of Global Models (FSGM).² The simulations assess the macroeconomic impact of three different measures that aim to: (i) increase expenditure on social welfare; (ii) promote education and job training for low-skilled workers; and (iii) boost investment in public housing and infrastructure programs. It is assumed that additional spending is financed through a drawdown of accumulated reserves.³

2. Social welfare spending. We assume a cumulative 2.5 percent of GDP increase in targeted transfers over 2019–21. The simulations show that real GDP exceeds the baseline by about 0.1 percent in 2019, 0.3 percent in 2020, falling to 0.2 percent in 2021, and 0.1 percent thereafter.⁴ Private consumption is bolstered in the short term by higher targeted transfers. A drawdown of fiscal reserves would be about 2 percentage points of GDP over the medium term.

3. Higher education/training. We consider implications of government support for education and job training for low skill workers. The initial skill gap between low-skill (lower secondary education) and high-skill labor is assumed to be 75 percent, in line with the wage gap.⁵ Such policy is expected to cost about 0.4 percent of GDP annually over five years. We assume that the initial skill-gap between low skill and high skill labor would be reduced by 5 percentage points over 10 years. Considering their share in the total labor force (35 percent, proxied by the share of workers with at most lower secondary education), the training of low skill workers would boost gradually but permanently overall productivity by 1.75 percent. The policy measure boosts real GDP, consumption, investment and real wages, reflecting higher productivity and labor supply. Overall, the impact on real GDP is significant with the level of real GDP above the baseline by 2½ percent after five years while a drawdown of fiscal reserves would be only 1.1 percentage points of GDP.

4. Public housing/infrastructure. The simulations evaluate the macroeconomic impact of increasing efforts to provide public housing. Such policy would cost 3.5 percentage points of GDP over five years. The public infrastructure push leads to output gains in the short and medium term. Real GDP expands by about 0.3 percent after one year and almost 2.2 percent after five years when

¹ Prepared by Olivier Bizimana.

² See Andrieu et al. 2015, "The Flexible System of Global Models - FSGM", IMF Working Paper No. 15/64.

³ Given Hong Kong SAR's almost inexistent indebtedness and the temporary nature of the fiscal stimulus measures, borrowing costs are unlikely to be affected. Hence, the experiments do not incorporate an assumption of a risk premium associated with the public debt-to-GDP ratio in the deficit-financing scenario.

⁴ Fiscal multiplier is estimated to be small given high openness of the economy and the small share of liquidity-constrained households assumed in the model (35 percent). It could be higher given the negative output gap and fixed exchange rate arrangement in place.

⁵ The skill-gap of 75 percent is motivated by the wage gap between low-skilled (lower secondary education and below) and high-skilled workers (higher education) from the June 2017 Thematic Report: Household Income Distribution in Hong Kong (about 74 percent).

the policy is fully phased in. Higher public investment raises the public capital stock, which boosts the economy's overall productivity. The resulting rise in marginal productivity of capital and labor stimulates private investment and raise labor demand, bolstering private consumption. A drawdown of fiscal reserves would be about 2.3 percentage points of GDP after five years.

5. Overall, the scenario analysis suggests substantial growth and macroeconomic effects in the short and medium term from inequality reduction policies. The government's overall spending package of 8 percentage points of GDP spread over five years is aimed to increase welfare spending, upgrade low skill workers through education and training, and bolster public housing programs/infrastructure. The fiscal measures would boost both aggregate demand and potential output in the medium run, raising GDP level by around 4.3 percent with a drawdown of fiscal reserves of about 5.4 percentage points of GDP.⁶

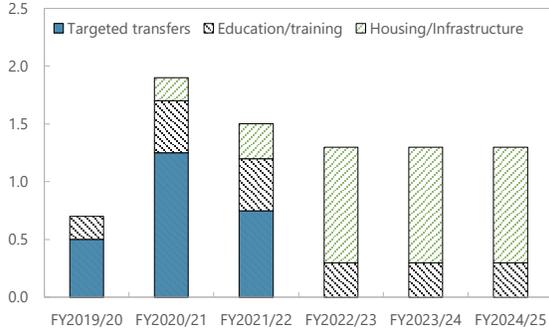
⁶ The effect of fiscal spending on output could be even higher given positive spillovers from further easing of U.S. monetary policy.

Figure 1. Impact of Additional Fiscal Spending

A fiscal package of around 8 ppt of GDP over 2019–24

Recommended Fiscal Package

(Percent of GDP)

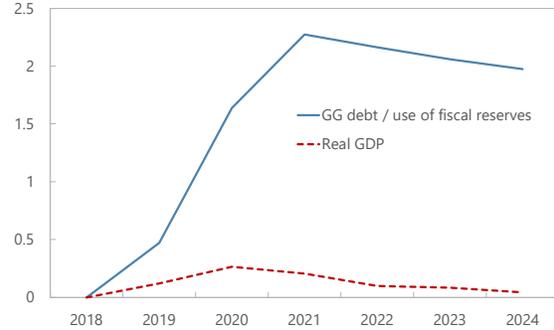


Sources: Fund Staff calculations.

...consisting of additional spending on targeted transfers...

Impact of Spending on Targeted Transfers

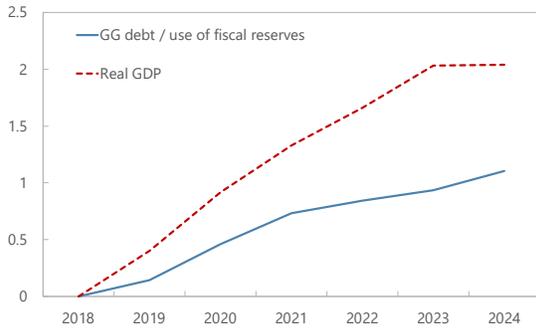
(Percentage points deviation from the baseline)



...education and training...

Impact of Spending on Education

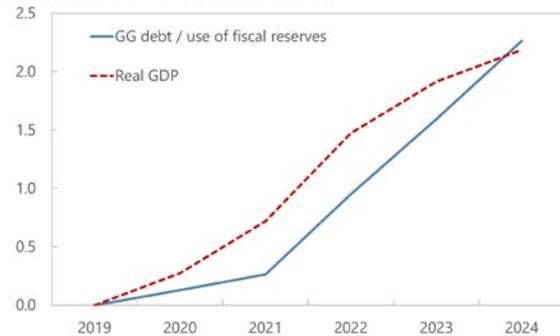
(Percentage points deviation from the baseline)



...and housing and infrastructure...

Impact of Spending on Housing and Infrastructure

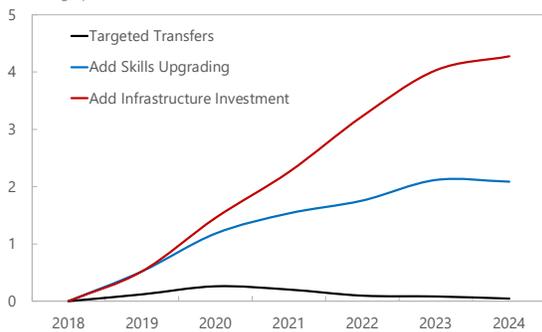
(Percentage points deviation from the baseline)



...would raise GDP level by around 4.3 percent in the medium term...

Impact of Fiscal Measures on Output

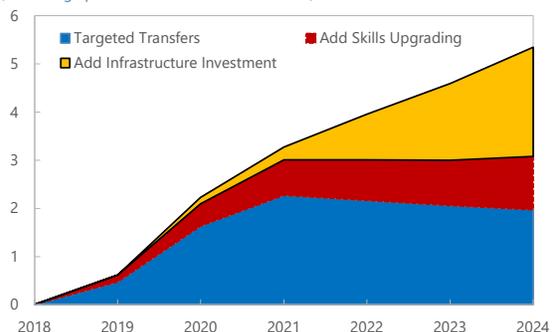
(Percentage point deviation from the baseline)



...and would lower fiscal reserves by about 5.4 ppt of GDP.

Impact of Fiscal Measures on GG Debt / Fiscal Reserves

(Percentage point deviation from the baseline)



Sources: Fund Staff calculations.

Sources: Fund staff calculations.

Annex V. Summary of Property Market Measures Introduced Since 2009

Date	Price Range	LTV CAP	Max Loan Amount	Other
Oct 2009	Greater than or equal to HK\$20mn	60 percent (previously 70 percent)		
Aug 2010	Less than HK\$20mn	Remains 70 percent	HK\$12mn	Debt-service-to-income ratio (DSR) capped at 50 percent for all income groups; previously was 60 percent for high income groups; also must be set such that were mortgage rates to go up by 2 percentage points, the stressed DSR would not exceed 60 percent Special Stamp Duty set at 15 percent for residential properties resold within first six months of purchase, 10 percent if resold between six and 12 months, 5 percent if resold between 12 and 24 months LTV cap for industrial and commercial properties mortgage loans at 50 percent
	Greater than or equal to HK\$12mn	60 percent (previously 70 percent for properties valued between HK\$12mn and HK\$20mn)		
	Less than HK\$12mn	Remains 70 percent	HK\$7.2mn	
	Not owner-occupied, any price range	60 percent (previously 70 percent)		
Nov 2010	Greater than or equal to HK\$12mn	50 percent (previously 60 percent)		
	Greater than or equal to HK\$8mn and less than HK\$12mn	60 percent (previously 70 percent)	HK\$6mn	
	Less than HK\$8mn	Remains at 70 percent	HK\$4.8mn	
June 2011	Not owner-occupied, any price range	50 percent (previously 60 percent)		LTV cap lowered by further 10 percentage points for borrowers with main income from outside Hong Kong SAR; LTV cap for net-worth based mortgage loans lowered from 50 percent to 40 percent, irrespective of property value
	Greater than or equal to HK\$10mn	50 percent		
	Greater than or equal to HK\$7mn and less than HK\$10mn	60 percent (previously 70 percent for properties valued between HK\$7mn and HK\$8mn)	HK\$5mn	
	Less than HK\$7mn	Remains at 70 percent	HK\$4.2mn	

Date	Price Range	LTV CAP	Max Loan Amount	Other
Sep 2012	Greater than or equal to HK\$10mn	Remains at 50 percent		For borrowers with multiple properties under mortgages,
	Greater than or equal to HK\$7mn and less than HK\$10mn	Remains at 60 percent	HK\$5mn	(i) LTV cap lowered by further 20 percentage points for borrowers with main income from outside Hong Kong SAR;
	Less than HK\$7mn	Remains at 70 percent	HK\$4.2mn	(ii) LTV cap for net-worth based mortgage loans lowered from 40 percent to 30 percent, irrespective of property value
	Not owner-occupied, any price range	Remains at 50 percent		DSR ratio capped at 40 percent for all income groups; previously was 50 percent; also must be set such that were mortgage rates to go up by 2 percentage points, the DSR would not exceed 50 percent; previously was 60 percent; mortgage applicants without outstanding mortgages were not subject to the DSR limits reduction
Oct 2012				Maximum tenor of all new property mortgage loans capped at 30 years Buyer's Stamp Duty set at 15percent for all residential property transactions except local (i.e. Hong Kong SAR permanent resident) buyer
				Special Stamp Duty raised to 20 percent for residential properties resold within first six months of purchase, 15 percent if resold between six and 12 months, 10 percent if resold between 12 and 36 months

Date	Price Range	LTV CAP	Max Loan Amount	Other
Feb 2013	Greater than or equal to HK\$10mn	Remains at 50 percent		LTV cap for standalone car park spaces set at 40 percent with maximum tenor at 15 years; LTV cap for industrial and commercial properties mortgage loans at 40 percent; previous was 50 percent
	Greater than or equal to HK\$7mn and less than HK\$10mn	Remains at 60 percent	HK\$5mn	
	Less than HK\$7mn	Remains at 70 percent	HK\$4.2mn	
	Not owner-occupied, any price range	Remains at 50 percent		<p>DSR ratio capped at 40 percent for all income groups; the stressed DSR would not exceed 50 percent were mortgage rates to go up by 3 percentage points; previously was by 2 percentage points; mortgage applicants without outstanding mortgage were not subject to the DSR limits reduction</p> <p>Risk weight floor of 15 percent introduced on new residential mortgages for banks using IRB approach</p> <p>Ad valorem Stamp Duty raised from the scale of \$100 to 4.25 percent to the scale of 1.5 percent to 8.5 percent except local buyers who do not own any other residential property in Hong Kong SAR at the time of purchase or whose purchase is to replace their only residential property in Hong Kong SAR</p>

Date	Price Range	LTV CAP	Max Loan Amount	Other
Feb 2015	Greater than or equal to HK\$10mn	Remains at 50 percent		DSR ratio capped at 40 percent for all income groups, irrespective of loan purpose; the stressed DSR would not exceed 50 percent were mortgage rates to go up by 3 percentage points; self-occupied or replacement and without outstanding mortgage were exempted
	Greater than or equal to HK\$7mn and less than HK\$10mn	Remains at 60 percent	HK\$5mn	
	Less than HK\$7mn	60 percent (previously 70 percent)	HK\$4.2mn	
	Not owner-occupied, any price range	Remains at 50 percent			Risk weight floor of 15 percent introduced on all new and existing residential mortgages for banks using IRB approach by Jun 2016; 10 percent for existing mortgage by Jun 2015; previously risk weight only introduced on new mortgages
Nov 2016				Ad valorem Stamp Duty on residential properties raised to a flat rate of 15 percent (also known as the New Residential Stamp Duty) except local buyers who do not own any other residential property in Hong Kong SAR at the time of purchase or whose purchase is to replace their only residential property in Hong Kong SAR

Date	Price Range	LTV CAP	Max Loan Amount	Other
Apr 2017				New Residential Stamp Duty applied to purchases of multiple residential properties under a single instrument
May 2017	Greater than or equal to HK\$10mn	Remains at 50 percent		LTV cap lowered by 10 percent points for borrowers with one or more pre-existing mortgages.
	Greater than or equal to HK\$7mn and less than HK\$10mn	Remains at 60 percent	HK\$5mn	For self-occupied or without outstanding mortgage, DSR ratio capped at 50 percent for all income groups, irrespective of loan purpose; the stressed DSR would not exceed 60 percent were mortgage rates to go up by 3 percentage points; DSR ratio caps lowered by 10 percent points for pre-existing mortgages or non-self-occupied.
	Less than HK\$7mn	Remains at 60 percent	HK\$4.2mn	DSR ratio caps lowered by 10 percent points for borrowers whose income is mainly derived from outside Hong Kong SAR.
	Not owner-occupied, any price range	Remains at 50 percent		Risk weight floor of 25 percent (previously 15 percent) for all new residential mortgages and 15 percent for all existing residential mortgages for banks using IRB approach

Date	Price Range	LTV CAP	Max Loan Amount	Other
June 2018				<p>Required developers to offer no less than 20 percent of the total number of flats subject to the same pre-sale consent at each turn of sale.</p> <p>Proposed to introduce “Special Rates” on unsold or unleased first-hand private flats at 200 percent of the flat’s rateable value (roughly 5 percent of the property value). The bill to implement the “Special Rates” was introduced into the Legislative Council for scrutiny in October 2019.</p>

Annex VI. Assessment of Corporate Vulnerabilities¹

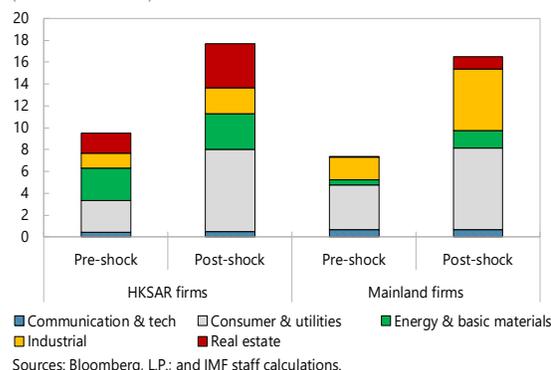
1. Given the fundraising role of Hong Kong SAR for Mainland China, vulnerabilities in both Hong Kong SAR and Mainland corporates are important for financial stability in Hong Kong SAR. Mainland companies listed in the Hong Kong SAR stock market accounted for about half of the total market capitalization at end-2018. Also, banking sector's Mainland non-bank exposures, mostly to Mainland firms, accounted for about 23 percent of total banking assets as of end-June 2019. As a result, deteriorations in Mainland corporate balance sheets could reduce asset prices and increase credit risk for Hong Kong SAR banks. We consider two types of listed non-financial firms in the analysis: firms listed and domiciled in Hong Kong SAR (HKSAR firms) and those listed in Hong Kong SAR but domiciled in Mainland China (Mainland firms). Leverage in both types of firms has increased on average after the GFC until recently, particularly for firms in energy and real estate sectors. Staff carried out two related analyses to assess corporate sector vulnerabilities in Hong Kong SAR. First, a sensitivity analysis was applied to debt-at-risk, a vulnerability metric defined as the share of debt owned by companies with interest coverage ratio below 1. Staff also carried out a scenario-based stress analysis of the probability of default (PD) provided by the bottom-up default analysis (BuDA) model.

2. Staff's analysis suggests that debt-at-risk could increase significantly under adverse shocks to firms' earnings and borrowing costs.

Following Chow (2015), we assume a 20-percent decline in firms' earnings before interest and tax (EBIT) and a 150 bp increase in firms' average borrowing costs. Under this scenario, overall debt-at-risk of HKSAR firms and Mainland firms would double from 9 to 18 percent and from 7 to 16 percent, respectively, but still well below the levels during the AFC and relatively low compared to other major economies.² Firms in energy/basic materials sector are the most vulnerable among HKSAR firms, as this sector's debt-at-risk is already well above the other sectors and also relatively high compared to other major economies. However, systemic vulnerability from this sector is significantly reduced by the sector's low share of debt (only 7 percent of the total debt of all sectors). The largest contributions to the post-shock total debt-at-risk come from consumer services/utilities and real estate sectors for HKSAR firms and consumer services/utilities and industrial sectors for Mainland firms, respectively.³ The debt-at-risk in the consumer services/

Debt at Risk: Sectoral Contributions

(Percent of total debt)



¹ Prepared by Fei Han and Shiyuan Chen.

² The overall debt-at-risk levels under this scenario is below the 40th-percentile of the debt-at-risk in eight major economies presented in IMF (2019).

³ Since firms in the real estate sector have the highest volatility in EBIT among all sectors, the contribution of real estate sector to total debt-at-risk would be significantly higher with sector-specific shocks.

utilities sector is very sensitive to the adverse shocks, for both HKSAR and Mainland firms, as some large firms in this sector have low earnings relative to their interest payments.

3. Staff also analyzes firms' PD in an adverse macroeconomic scenario with slower growth, tightened financial conditions, and housing market corrections.⁴ In particular, the adverse scenario features a decline in real GDP growth of 15 ppts over 2020–22 (about 2.5 standard deviations) compared to the baseline. Given the significant linkages with Mainland China, we also assume that the Mainland's real GDP growth slows to about 3 percent over the three-year period. It is also assumed that stock prices would decline by 40 percent in both Hong Kong SAR and Mainland China, and the three-month HIBOR would increase by 150 bps. House prices are assumed to decline by 40 and 20 percent in Hong Kong SAR and the Mainland, respectively.

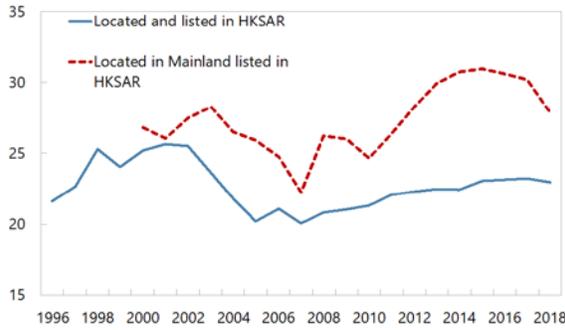
4. The PD would increase sharply under the adverse scenario but still remain lower than levels seen during AFC and GFC. The median PD is projected to remain stable in the baseline for HKSAR firms and increase gradually for Mainland firms. Under the adverse scenario, the median PD is projected to increase from 0.8 percent in June 2019 to 1.3 percent for HKSAR firms and from 1.0 percent to 1.7 percent for Mainland firms, exceeding their levels in the 2015–16 period of Chinese stock market turbulence but below their AFC and GFC peaks. The relative resilience was mostly due to lower interest rates compared to the AFC/GFC periods as PDs are very sensitive to changes in interest rates. Firms in energy and basic materials sector are the most vulnerable among HKSAR firms—in line with the debt-at-risk result. Among Mainland firms, those in real estate and industrial sectors are the most vulnerable under the adverse scenario. In particular, the median PD of Mainland real estate firms would almost double to 3.3 percent (significantly higher than the other sectors), implying that many relatively small Mainland firms in the real estate sector are highly vulnerable to growth and housing shocks.

⁴ This analysis is conducted using the BuDA model following Duan *et al.* (2019).

Figure 1. Non-Financial Corporate Vulnerabilities

Leverage has increased on average until recently...

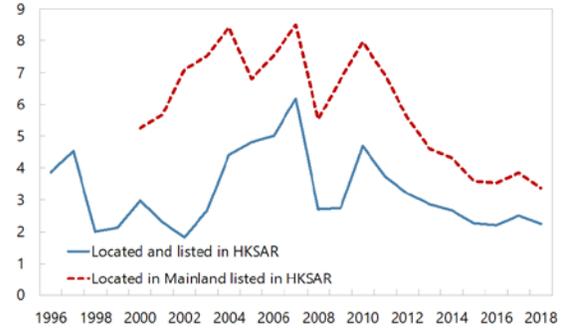
Non-Financial Corporate Leverage: Debt-to-Asset Ratio
(Percent, weighted average by total assets)



Sources: BIS, CEIC, and IMF staff calculations.

...while profitability has declined since the GFC.

Non-Financial Corporate Profitability: Return on Assets
(Percent, median across firms)

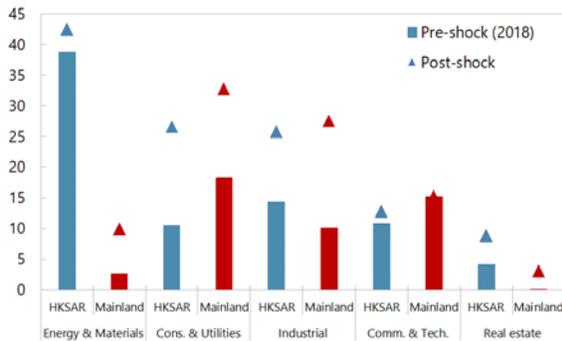


Sources: BIS, CEIC, and IMF staff calculations.

Debt-at-risk is particularly high in energy/materials sector.

Debt at Risk: By Sector

(Debt with ICR below 1 in percent of total debt)

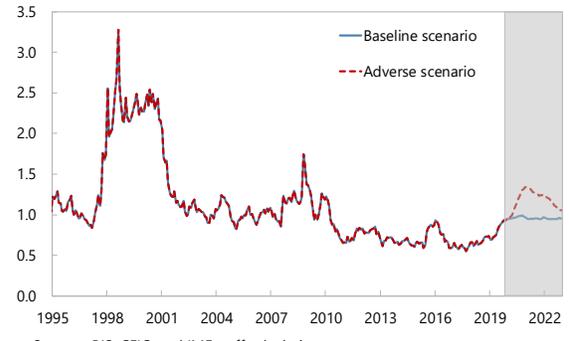


Sources: BIS, CEIC, and IMF staff calculations.

PD in HKSAR firms would increase sharply under the adverse scenario but remain below AFC/GFC levels...

PD: HKSAR Firms

(PD in percent, median across firms)

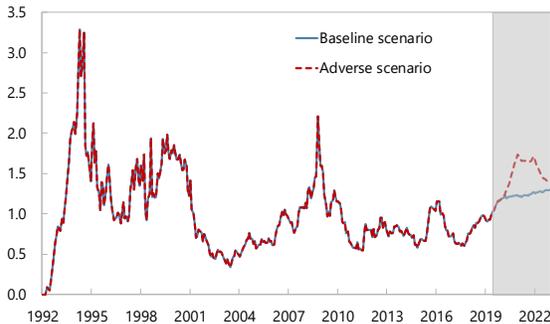


Sources: BIS, CEIC, and IMF staff calculations.

PD in Mainland firms would also increase...

PD: Mainland Firms

(PD in percent, median across firms)

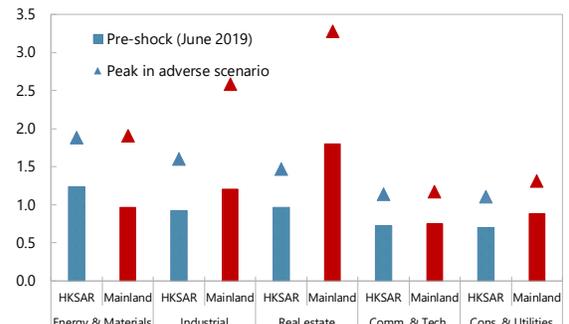


Sources: BIS, CEIC, and IMF staff calculations.

...particularly for firms in real estate and industrial sectors.

PD in Adverse Scenario: By Sector

(Percent, median across firms)



Sources: BIS, CEIC, and IMF staff calculations.

Annex VII. Implementation of the 2014 FSAP Recommendations¹

Area	Recommendation	Progress
Crisis management and resolution	<p>Establish a fully comprehensive framework for recovery and resolution, in line with emerging international best practices; and</p> <p>Establish recovery and resolution plans for all systemic financial institutions, including financial market infrastructures.</p>	<p>Framework for resolution and resolution planning for banks</p> <p>Implemented</p> <ul style="list-style-type: none"> • The Financial Institutions (Resolution) Ordinance (Chapter 628 of the Laws of Hong Kong) (“FIRO”) was enacted by the Legislative Council (“LegCo”) in June 2016 and came into effect on 7 July 2017, with the exception of certain non-core provisions in relation to clawback of remuneration, winding up petition process, etc. which will commence operation pending the making of the relevant rules. The FIRO provides the statutory backing for a cross-sectoral resolution regime in the Hong Kong SAR. • The cross-sectoral regime applies to all authorized institutions (“AIs”) (including all banks), certain securities firms, insurers and financial market infrastructures (“FMIs”), holding companies and non-regulated operating entities of within scope financial institutions (“FIs”), and extends to branches of foreign FIs. The Monetary Authority (“MA”), the SFC and the Insurance Authority (“IA”) are resolution authorities (“RAs”) under the FIRO with responsibility for the planning for and execution of resolution in respect of those within scope FIs operating under their respective purviews (e.g. the MA is the RA for all AIs). In 2017, the Financial Stability Board (“FSB”) conducted a peer review of the Hong Kong SAR and the review report published in 2018 confirms that the Hong Kong SAR has legal powers and safeguards related to resolution that are consistent with the requirements of the FSB’s <i>Key Attributes of Effective Resolution Regimes for Financial Institutions</i> and notes that the Hong Kong SAR is “one of the few FSB jurisdictions with a fully cross-sectoral resolution regime”. • The MA is designated by the Financial Secretary under the FIRO as the lead resolution authority (“LRA”) for each of the existing cross-sectoral globally systemically important bank (“G-SIB”) groups which include both banking sector entities and securities and futures sector entities. This constitutes 26 cross-sectoral groups of which the MA is designated as the LRA. • The Financial Institutions (Resolution) (Protected Arrangements) Regulation (Chapter 628A of the Laws of Hong Kong), which was made by the Secretary for Financial Services and the Treasury under the FIRO, came into effect on 7 July 2017. The Regulation is intended to provide legal certainty on the treatment of certain financial arrangements that are crucial to the daily functioning of financial markets, if an RA under the FIRO were to exercise its resolution powers to manage the orderly failure of a non-viable systemically important FI in the Hong Kong SAR. • The Financial Institutions (Resolution) (Loss-absorbing Capacity Requirements – Banking Sector) Rules (Chapter 628B of the Laws of Hong Kong) (“LAC Rules”), which were made by the MA under the FIRO, came into effect on 14 December 2018. The LAC Rules prescribe minimum LAC requirements for AIs and their Hong Kong holding companies and Hong Kong affiliated operational entities which have been classified under the LAC Rules as a resolution entity or a material subsidiary. The LAC Rules are closely aligned to international standards on LAC requirements, as set out in the FSB’s Total Loss-absorbing Capacity (“TLAC”) Term Sheet.

¹ Information provided by the authorities.

Area	Recommendation	Progress
		<ul style="list-style-type: none"> • Further necessary work is underway to make the FIRO regime operational. The HKMA organises such work in the following three broad areas, which is informed by international guidance and best practices: <ul style="list-style-type: none"> ○ defining clear resolvability standards for AIs through the setting of resolution policies and making of relevant subsidiary legislation; ○ conducting resolution planning for AIs, in particular working with AIs to implement the necessary changes to enhance resolvability; and ○ establishing resolution-specific institutional arrangements and developing the operational capabilities for the MA as the RA for performing the relevant resolution functions. <p>The following summarises the key progress made by the HKMA since the 2014 FSAP in the above-mentioned three areas.</p> <p><u>Development of resolution policies and standards</u></p> <ul style="list-style-type: none"> • On resolution policies, the Resolution Office (“RO”) (which was established within the HKMA on 1 April 2017) issued three FIRO Code of Practice Chapters in July 2017 providing guidance on the MA’s functions under the FIRO, namely: (i) the HKMA’s approach to resolution planning for AIs; (ii) resolution planning core information requirements for AIs; and (iii) operational independence of the MA as the RA. • As mentioned, the MA has made the LAC Rules which came into effect on 14 December 2018. • The MA also issued, in March 2019, a code of practice chapter LAC-1 “Resolution Planning - LAC Requirements” to provide guidance on how the MA intends to exercise certain discretionary powers under the LAC Rules and on the operation of certain provisions of the LAC Rules. • The HKMA has been developing its policy thinking on regulating stays on early termination rights and working with the International Swaps and Derivatives Association, Inc. (“ISDA”) on addressing this barrier to resolvability locally. To this end, an important step towards removing this barrier locally was achieved with the ISDA’s publication of the Hong Kong Country Annex to the ISDA 2015 Universal Resolution Stay Protocol in December 2017. In addition, the HKMA is currently developing a policy proposal for rules (to be made under the FIRO) which will require contractual recognition in certain financial contracts of stays on early termination rights which may be imposed by an RA in a resolution under the FIRO. The HKMA expects to release in the coming months a consultation paper on the policy proposal for these rules. • The HKMA intends to issue, for industry consultation, a draft code of practice chapter in 2H 2019 on Operational Continuity in Resolution (“OCIR”). The draft code of practice will aim to set out the MA’s expectations on an AI’s OCIR arrangements and provide guidance to AIs on the manner in which the MA exercises certain aspects of the MA’s functions under the FIRO in relation to resolvability assessment, resolution planning and information gathering with regard to OCIR. • The HKMA has been working with the FMI in Hong Kong SAR to update the relevant scheme rules with an aim to support continuity of access to FMIs for a bank in resolution. The Clearing House Rules of each of the HKD, USD, Euro and Renminbi Real Time Gross Settlement systems were updated in 2018 to clarify that, in line with the FIRO, resolution is not an event of default. Update of the Central Moneymarkets Unit (“CMU”) rules has also been completed in November 2019. <p><u>Resolution planning for AIs</u></p>

Area	Recommendation	Progress
		<ul style="list-style-type: none"> • The HKMA has advanced resolution planning for domestic systemically important AIs (“D-SIBs”) via structured bilateral resolution planning programmes. The HKMA has developed resolution plan for each of the six D-SIBs in the Hong Kong SAR including devising and communicating the respective preferred resolution strategies and indicative LAC requirements to all six D-SIBs. • Based on the preferred resolution strategy determined, the HKMA has conducted resolvability assessments to identify impediments to the orderly resolution of the D-SIBs and has been working with the D-SIBs to implement the necessary changes to their legal, financial and operational structure or arrangements to address barriers to resolvability identified. The work programmes cover a comprehensive range of areas including LAC requirements, operational continuity, USD clearing, solvent wind-down, resolution valuation, resolution funding, etc. • All D-SIBs are expected to be subject to institution-specific LAC requirements no earlier than 1 January 2022. D-SIBs that have been classified under the LAC Rules and are part of G-SIBs headquartered in non-emerging market economies have also started meeting additional external or internal LAC requirements that are in line with the minimum requirements set out in the FSB TLAC standard from 1 July 2019. As for the other AIs that are not D-SIBs, none of them will be subject to LAC requirements earlier than 1 January 2023. • Going forward, the HKMA will continue to advance the resolution planning work for D-SIBs in coordination with the relevant home and host authorities. In addition, there is plan to prioritise the roll-out of resolution planning to non D-SIBs that are more likely to have a systemic impact on failure. • The current plan is to require, within 2019, the six locally incorporated AIs (that are not D-SIBs) with total consolidated assets above HKD 300 billion to provide core information to the HKMA for resolution planning, and to require five other locally incorporated AIs (that are not D-SIBs) with total consolidated assets above HKD 150 billion to do so in due course. Resolution planning for the remaining locally incorporated AIs (that are not D-SIBs) will be conducted as and when needed depending on circumstances. <p><u>Resolution-specific institutional arrangements and operational capabilities</u></p> <ul style="list-style-type: none"> • In order to support the MA in the discharge of his functions as an RA under the FIRO, the RO, headed by a Commissioner, was established within the HKMA on 1 April 2017. The focus of the RO’s work is to ensure that the Hong Kong SAR resolution regime is operational for banking sector entities. Its priorities include establishing resolution standards for AIs, devising resolution strategies for AIs, conducting resolvability assessments of AIs, working with AIs to remove impediments to their orderly resolution, and developing the operational capabilities of the HKMA necessary to execute orderly resolution. • In order to provide the basis for enhanced cooperation and coordination across relevant departments with different responsibilities for bank crisis preparedness and management, the HKMA established a new HKMA-wide Crisis Management Framework (“CMF”) and Crisis Management Coordination Group (“CMCG”) in 2018. The CMF provides an overview of the statutory powers available to the MA in handling a crisis involving a failing AI and how these powers might be exercised at different stages of

Area	Recommendation	Progress
		<p>an AI's life cycle, from business-as-usual to non-viability. The CMF, supported by a "Watchlist Framework", also sets out the roles and responsibilities of individual departments in facilitating the execution of those powers as well as the decision-making processes and preferred approach in managing at-risk AIs experiencing liquidity and/or solvency stress. The CMCG is a senior management body with two key roles. First, it is responsible for overseeing the development of cross-departmental crisis management capabilities in business-as-usual times. Second, where an at-risk AI is identified and its status escalated, it ensures that a comprehensive analysis of coordinated options is provided to the MA to support the effective handling of the AI and the exercise of statutory powers as needed. The standing members of the CMCG include the two Deputy Chief Executives responsible for banking and monetary management, the Commissioner of the RO and the General Counsel.</p> <ul style="list-style-type: none"> • Following the commencement of the FIRO, the RAs in Hong Kong SAR and the Financial Services and the Treasury Bureau ("FSTB") recognize that there is merit to further enhance the existing crisis preparedness and management coordination frameworks by taking into consideration the specific requirements for inter-agency cooperation throughout the lifecycle of an FI, or a cross-sectoral group, both in peacetime and in crisis (including preparation for and in the run up to resolution). The current priority is given to the establishment of a resolution-specific coordination framework amongst the RAs within 2020, followed by arrangements for coordination with the FSTB and the other safety-net participants who do not have resolution responsibilities under the FIRO but whose work has synergies with the resolution work. • The HKMA has developed a bespoke Resolution Facility as part of its updated Liquidity Facilities Framework ("LFF"). As part of the work on operationalising the resolution funding arrangements provided under the FIRO, the HKMA has completed its review of the framework for the provision of liquidity to AIs. As a result, a new Resolution Facility within the ambit of the resolution funding arrangements under the FIRO is introduced. A Resolution Facility may be provided, at the discretion of the MA, having regard to systemic stability, for the purpose of ensuring that an AI which has gone into resolution in Hong Kong SAR has sufficient liquidity to meet its obligations until such time as the AI is able to transition back to market-based funding. The HKMA will work with AIs with a view to establishing information requirements and preparedness in respect of the use of the facilities under the LFF going forward. • The MA as the RA for banking sector entities and as the LRA for cross-sectoral groups (which contain a banking sector entity) has provided some initial views, in the form of a Quarterly Bulletin article in September 2019, on the imposition of an ex-post resolution levy on the industry in order to help underscore the intent to recoup public money. The Quarterly Bulletin covers issues on the background of resolution levy, overview of how the provisions in the FIRO provide powers for an RA to support orderly resolution and protect public money, how public money may be used temporarily in a resolution, how the resolution levy may operate to recoup the public money used and not repaid, and the implications on cross-sectoral groups. • The HKMA is currently establishing a resolution advisory framework with an aim to enable the MA to appoint external advisors in a swift manner in business-as-usual and resolution scenarios. These advisors are expected

Area	Recommendation	Progress
		<p>to cover different areas of expertise including financial and valuation analysis, corporate financial advisory, operational review and analysis, restructuring analysis and legal.</p> <p>Recovery planning for banks</p> <p>Implemented</p> <ul style="list-style-type: none"> • The supervisory recovery planning framework for AIs is set out in the HKMA's Supervisory Policy Manual module on Recovery Planning (RE-1), which was issued in June 2014. • To provide for greater certainty and transparency in respect of the recovery planning requirements, and to better align with the Key Attributes set by the FSB, the Banking Ordinance was amended in 2018 with specific provisions added in relation to recovery planning requirements (see Part XIIA of the Ordinance). These provisions have come into operation since 2 February 2018. • To date, all locally incorporated AIs in the Hong Kong SAR with substantial businesses in Hong Kong, including the six domestic systemically important banks, have already submitted their recovery plans to the HKMA for rounds of review. Other AIs, which are foreign bank branches and other smaller banks, have also submitted their recovery plans to the HKMA. The 11 AIs which are authorized this year have been requested to submit their plans as soon as practicable. <p>FIMs under the purview of SFC</p> <p>On Track</p> <ul style="list-style-type: none"> • All four existing recognised clearing houses ("RCH") of Hong Kong Exchanges and Clearing Limited ("HKEX"), namely Hong Kong Securities Clearing Company Limited ("HKSCC"), HKFE Clearing Corporation Limited ("HKCC"), the SEHK Options Clearing House Limited ("SECH"), and OTC Clearing Hong Kong Limited ("OTC Clear") have reviewed and enhanced their existing recovery plans taking into account the latest guidance on development of recovery plans for FIMs; and the report on "Resilience and recovery of central counterparties ("CCPs"): Further guidance on the Principles for Financial Market Infrastructures ("PFMI")" jointly published by the Committee on Payments and Market Infrastructures and the International Organisation of Securities Commissions. Changes to the clearing rules to implement those enhancements were approved by the SFC in late September 2018 and implemented in mid-October 2018. • The SFC continues to advance resolution planning for RCHs. It has developed a paper on the possible resolution strategies to resolve an RCH under different scenarios and the associated issues to be considered. As the next step, the SFC plans to use the paper as the reference to solicit comments and input from external stakeholders with a view to determining the appropriate resolution strategy.

		<p>FMI under the purview of HKMA</p> <p>Implemented</p> <ul style="list-style-type: none"> For FMIs under the purview of the HKMA, the requirement to establish a comprehensive framework for recovery and resolution only applies to the settlement institution and system operator of the three foreign-currency Real Time Gross Settlement (“RTGS”) systems, namely the US Dollar Clearing House Automated Transfer System (“CHATS”), Euro CHATS and Renminbi CHATS. Each of the parties mentioned above has developed its own recovery plan based on PFMI requirements. The recovery plans are updated annually and approved by the respective Boards of the parties concerned. Other FMIs under the purview of the HKMA, namely the Hong Kong Dollar CHATS, the CMU, and the Hong Kong Trade Repository, are FMIs owned and operated by the HKMA. According to a note issued by CPMI-IOSCO on application of the PFMI to central bank FMIs, the requirement to develop a recovery and resolution plan does not apply to central bank-operated FMIs. <p>On Track</p> <ul style="list-style-type: none"> FSB issued the ‘Guidance on Continuity of Access to Financial Market Infrastructures for a Firm in Resolution’ on 6 July 2017. The Guidance is also applicable to FMIs. The HKMA is working with the applicable FMIs to ensure that they continue to meet the relevant FSB requirements.
Insurance sector	The authorities should ensure implementation of the independent Insurance Authority as scheduled in 2015.	<p>Implemented</p> <ul style="list-style-type: none"> The IA, a statutory body established under the Insurance Ordinance (“IO”), is a new insurance regulator independent of the Government. It has replaced the Office of the Commissioner of Insurance to regulate insurance companies with effect from 26 June 2017.
	In addition, the legal and regulatory framework should be strengthened.	<p>Implemented</p> <ul style="list-style-type: none"> Enhancements made to the legal and regulatory framework have been in operation since 26 June 2017. These include: (i) the requirement to seek the IA’s approval for appointment is extended beyond controllers, to include directors, key persons in control functions, and appointed actuaries by authorized insurers; (ii) the provision of the definitions of control functions, such as risk management, financial control, compliance, internal audit, actuarial, and intermediary management functions, in the IO; and (iii) the power of the IA to revoke the appointment of senior management and key persons on fit and proper grounds. Shareholder controllers of authorized insurers, on the other hand, are required under the IO to report their disposals of shareholding interests in the insurers to the IA as well. Risk management requirements on insurers as set out in related guidelines are also updated. Insurers are now required under the Guideline on the Corporate Governance of Authorized Insurers (GL10) to have, among others, business continuity planning which covers detailed actions and procedures, including contingency plan, identification of critical business activities, roles and responsibilities of different parties, etc.
	(i) establish a regulatory regime for insurance groups;	<p>On Track</p> <ul style="list-style-type: none"> The IA: (i) leads the supervisory college of three insurance groups; (ii) co-leads a regional supervisory college of a global systemically important insurer with the home regulator; and (iii) actively participates in the supervisory colleges of other insurance groups. The IA is developing legislative amendments for a Group-wide Supervision (“GWS”) framework. Under the proposed framework, the IA will be

		empowered to designate an insurance holding company to be subject to GWS by the IA. The IA will carry out supervision over the entire group (including material non-regulated entities) via the control that the designated holding insurance company may exercise over the group. Supervisory tools over the designated holding company will include approval for shareholder controllers and key personnel; information submission; inspection and investigation; intervention and disciplinary action, etc. The amendment bill for GWS is expected to be introduced into LegCo in early 2020.
(ii) implement an RBC regime; and	On Track	<ul style="list-style-type: none"> • A consultation on the proposed RBC framework was conducted in Q3 2015. • Taking into account feedback from stakeholders, the IA has started Phase 2 development of the RBC regime on the development of detailed rules for quantitative requirements (i.e. Pillar 1 requirements under the RBC framework). • The IA completed the first and second quantitative impact studies (“QIS”) in December 2017 and 2018 respectively, and the third QIS (“QIS3”) was launched in August 2019. • Detailed rules will be drafted and consultation on detailed rules will be conducted after QIS 3. The implementation of the RBC regime will be rolled out in phases. Subject to further consultation with stakeholders, legislative amendments will be introduced. The whole process is expected to take about two to three years. • Regarding the qualitative requirements (i.e. Pillar 2 requirements under the RBC framework), the IA issued the Guidelines on Enterprise Risk Management (GL 21) on 5 July 2019, which set out the requirements on enterprise risk management and own risk and solvency assessment (“ORSA”). It will take effect on 1 January 2020, with the first ORSA Report to be submitted to the IA for the financial year ending on or after 31 December 2020. • For disclosure requirement (i.e. Pillar 3 requirements under the RBC framework), the IA kick-started the study in 2018 and plans to consult the industry in 2020.
(iii) strengthen supervision of intermediaries.	Implemented	<ul style="list-style-type: none"> • On 23 September 2019, the IA took over the regulatory functions of the three self-regulatory industry bodies for insurance intermediaries, namely the Insurance Agents Registration Board established under the Hong Kong Federation of Insurers, the Hong Kong Confederation of Insurance Brokers and the Professional Insurance Brokers Association and implemented the new statutory licensing and regulatory regime for insurance intermediaries. Under the new regime, the IA has statutory powers to conduct inspection, initiate investigation, and impose a range of disciplinary sanctions (including revocation of licence, issuance of reprimand and imposition of pecuniary penalty of up to HK\$10 million) on licensed insurance intermediaries. • The IA is responsible for promoting and encouraging proper standard of conduct of insurance intermediaries and is empowered to make rules and issue codes and guidelines for insurance intermediaries to facilitate their compliance with the conduct requirements. Licensed insurance intermediaries are required to comply with the statutory conduct requirements set out in the IO. The IA has issued two separate codes of conduct (one for agents and one for brokers) on the fair treatment of

		<p>clients in accordance with the standard of conduct of business regime issued by the International Association of Insurance Supervisors.</p> <ul style="list-style-type: none"> • In addition, the IA has issued five sets of rules and guidelines in relation to financial requirements, fit and proper criteria, continuing professional development requirements and pecuniary penalty on licensed insurance intermediaries. • As regards the conduct of business requirements for insurers, the IA has issued two guidelines (viz. Guideline on Underwriting Class C Business (GL 15) and Guideline on Underwriting Long Term Business (Other than Class C Business) (GL 16)) for insurers on the underwriting of unit-linked policies and life insurance policies respectively, which are based on Insurance Core Principle 19 on Conduct of Business promulgated by the International Association of Insurance Supervisors. Both guidelines adopt a “cradle-to-grave” approach and treat-customer-fairly principle by requiring insurers to meet regulatory requirements on product design, disclosure of key product features, suitability and affordability assessment as well as sales and post-sale control measures to ensure that the products being recommended to clients do suit their needs. On 23 September 2019, the IA further issued six sets of guidelines relating to the sales conduct and sales practices of long-term insurance products in respect of offering of gifts, financial needs analysis, sale of investment-linked assurance products, policy replacement and cooling off period, etc.
Securities market	Strengthen the oversight regime of the Hong Kong Exchanges and Clearing Limited.	<p>Implemented</p> <ul style="list-style-type: none"> • The SFC enhanced its supervisory approach in early 2014 following the announcement by HKEX in 2013 of its strategic plan which would change its business model as it expands into new markets, asset classes and infrastructures. Supervision focused on HKEX’s capability to adequately identify, assess, and manage conflicts, business and regulatory compliance risks across the markets in which HKEX operates, and on conducting on-site inspections of the non-listing operations of HKEX. In this regard – <ol style="list-style-type: none"> (i) The SFC has imposed a gearing ratio requirement and financial resources requirement on HKEX and its subsidiary recognised exchanges (“REC”) and RCH. The financial resources requirement for RCH was first introduced in the fourth quarter of 2013, when OTC Clear was recognised as an RCH. This was followed by the other three recognised clearing houses in 2014: HKSCC, HKFE, and SEOCH. HKEX and its subsidiary exchanges and clearing houses have fully complied with the requirements. (ii) In order for HKEX to strengthen its compliance function, the Regulatory Compliance Department was established and it has put in place a compliance monitoring programme. • The SFC has put in place a programme for regular on-site inspections of HKEX. Each inspection will focus on a specific aspect of HKEX’s operations depending on oversight priorities. Two reviews under the programme have been completed to date, both with respect to HKEX’s cash market. The third review, which focuses on the trading and clearing operations of the exchange traded derivatives market, is about to complete. • The Risk Management Committee (“RMC”) was established to focus on cross-market risks relating to HKEX in the aftermath of the Asian Financial Crisis in light of the interface between the securities market and the money market. The SFC and the HKMA continue to stay on RMC to provide inputs from the macroprudential and financial stability angles. • HKEX instituted an appeal process for the admission of participants in 2017.

	Further develop clear and transparent requirements for the recognition of exchanges and the authorisation of automated trading services.	<p>Implemented</p> <ul style="list-style-type: none"> The SFC has amended its Guidelines for the Regulation of Automated Trading Services (“ATS Guidelines”) to clarify the factors relevant to the consideration of whether a particular operator is more suited to be regulated as an REC or an authorised ATS provider. The revised ATS Guidelines came into effect on 1 September 2016. The clarification will facilitate understanding of the regulatory differences between the REC and ATS regimes (which are reflected in the Securities and Futures Ordinance) and guide potential applicants who wish to operate a futures market in the Hong Kong SAR.
	Improve the oversight of auditors of listed entities.	<p>Implemented</p> <ul style="list-style-type: none"> With general support from the audit profession and the relevant stakeholders, the Government introduced an amendment bill into LegCo in January 2018 to implement the audit regulatory reform. The amendment bill was enacted by LegCo on 30 January 2019 and came into operation on 1 October 2019. Under the new regime, the Financial Reporting Council (“FRC”) is the independent auditor oversight body vested with direct inspection, investigation and disciplinary powers with regard to listed entity auditors. The enforcement powers vested with the FRC are stronger as compared with the previous regime. Without compromising the independence of the new auditor regulatory regime, the authorities will continue to leverage on the experience of the Hong Kong Institute of Certified Public Accountants in handling matters pertaining to registration, standard-setting and continuing professional development with regard to listed entity auditors by entrusting the Institute with these statutory functions while being subject to the oversight by the FRC.
	Strengthen enforcement.	<p>Implemented</p> <ul style="list-style-type: none"> The SFC has been using criminal prosecutions, market misconduct proceedings, civil restitutionary proceedings and disciplinary proceedings to tackle different types of financial crimes and market misconduct. In these proceedings, the SFC sought the imposition of punitive, deterrent sanctions and restitutionary orders, which have proved effective in ensuring that the Hong Kong SAR markets remain safe, fair and efficient. The SFC has taken rigorous actions against licensed corporations and registered institutions for breaches of the SFC Code of Conduct. Some recent examples of these actions include: <ul style="list-style-type: none"> In February 2018 – reprimanded Credit Suisse (Hong Kong) Limited, Credit Suisse Securities (Hong Kong) Limited and Credit Suisse AG and fined them a total of HK\$39.3 million for internal control failures. Credit Suisse AG would also fully compensate the affected clients; In April 2018 – reprimanded Instinet Pacific Limited and fined it HK\$17.3 million for failures concerning its electronic and algorithmic trading systems and alternative liquidity pool; In May 2018 – reprimanded Citigroup Global Markets Asia Limited and fined it HK\$57 million for sponsor failures; In July 2018 – reprimanded HSBC Broking Securities (Asia) Limited and fined it HK\$9.6 million for systemic deficiencies in its bond selling practices; reprimanded CCB International Capital Limited and fined it \$24 million for sponsor failures; In March 2019 – sanctioned the following firms for IPO sponsor failures: reprimanded UBS AG and UBS Securities Hong Kong Limited, fined them a total of \$375 million and partially suspended UBS Securities Hong

		<p>Kong's licence to advise on corporate finance for one year; reprimanded Standard Chartered Securities (Hong Kong) Limited and fined it \$59.7 million; reprimanded and fined Morgan Stanley Asia Limited \$224 million and Merrill Lynch Far East Limited \$128 million; and</p> <ul style="list-style-type: none"> ○ In August 2019 – reprimanded and fined Sincere Securities Limited \$5 million for deficiencies across 14 areas of its business operations and internal controls. • The SFC and the Department of Justice (“DOJ”) entered into a memorandum of understanding (“MOU”) on 4 March 2016. • The MOU sets out: (i) the type of cases that will be referred to the DOJ; (ii) the documents that will accompany each referral; (iii) a fast-track referral process where the cases are to be prosecuted summarily by the SFC in the Magistrates’ Courts; (iv) the target DOJ response times; (v) procedures to deal with reviews and appeals; (vi) procedures for starting Market Misconduct Tribunal proceedings; (vii) line and format of communications; (viii) consensus and procedures for use of expert evidence; (ix) procedures for requests for granting immunity; and (x) procedures for review of DOJ decisions. • The relationship between the SFC and the DOJ has improved since the MOU was signed and the turnaround time for cases submitted to the DOJ for advice has been reduced.
Financial market infrastructure	Develop a clear timetable for each FMI for compliance with the Principles for FMIs.	<p>FMI under SFC purview</p> <p>On Track</p> <ul style="list-style-type: none"> • The SFC and HKEX have agreed on a timetable for the RCHs in the HKEX Group to comply with the PFMI in respect of areas where improvements are required. All of the areas identified have been addressed except for two longer-term projects. The first relates to settlement finality of transactions between brokers (other than those guaranteed by the RCH which already has settlement finality) and involves legislative amendments. The SFC is preparing for the amendments. The second relates to the use of central bank money for settlement. The SFC is in discussion with HKEX and the HKMA on the operational details for the RCHs to open a Hong Kong dollar RTGS account. HKEX is now working with the HKMA to finalise the account opening process for HKSCC, the cash market RCH. HKEX will explore opening RTGS account by its other RCHs based on experience gained from operating an RTGS account for HKSCC. Taking into account system development, testing, operational changes and approval, HKEX targets to complete the RTGS account opening process for HKSCC before the end of Q1/2020. • OTC Clear has implemented a comprehensive risk management framework and has appropriate policies, procedures and controls in place to control and manage the additional risks. OTC Clear's approaches to observing each applicable principle (except three of 24 principles not applicable) in the PFMI are summarised in a disclosure document issued in June 2017. • In light of the PFMI Further Guidance published in July 2017, HKEX has reviewed the compliance of the RCHs and has identified some areas for further improvement. While some of those improvements have been implemented, others require system change and their completion is targeted for 2020/2021.

		<p>FMI under HKMA purview</p> <p>Implemented</p> <ul style="list-style-type: none"> • The HKMA required the FMIs under its purview to make changes in accordance with the relevant PFMI requirements and be generally observant of the PFMI by end-December 2015. Such requirement is stated in the HKMA policy statement on oversight of FMIs, which is available on the HKMA's website.² • The HKMA has completed PFMI assessments on all the FMIs under its purview, with the assessment summaries published on the HKMA's website.³ All FMIs under the purview of the HKMA are considered to be generally observant of the PFMI. The HKMA will continue monitoring the observance of the PFMI by the FMIs under its purview on an ongoing basis. • The CMU, Hong Kong dollar CHATS and Trade Repository have all completed a self-assessment on their compliance with the PFMI, and the disclosure framework for each was first published in October 2014, July 2014 and September 2015 respectively and updated regularly.
Systemic risk analysis	Strengthening the capacity for systemic risk analysis at the SFC and Insurance Authority would help ensure that cross-sectoral interconnections are adequately captured and brought to the attention of the Financial Stability Committee.	<p>On Track</p> <ul style="list-style-type: none"> • The SFC has formed a cross-divisional Risk Review Group coordinated by the Supervision of Markets Division ("SOM") to identify risks across the SFC and coordinate intra- and cross-divisional risk mitigation strategies. In addition, SOM continues to conduct analysis on latest market trends and emerging patterns to identify and manage systemic risks arising from exchanges, OTC markets and clearing. The Intermediaries Division has systems in place to collect financial data to identify and mitigate prudential risks posed by licensed corporations. Examples of the SFC's strategies in identifying and monitoring systemic risks are as follows: <ul style="list-style-type: none"> ○ Identifying interconnected parties: The Market Intelligence Programme uses the latest technologies to enhance the SFC's capacity to identify conduct risks in our markets, including potential misconduct by interconnected parties. Data collected from the SFC's operations and public sources are combined and visualised on one single graph database to more efficiently identify connections between individuals, companies and transactions. An Intelligence Relationship Identification System was implemented in March 2019. ○ To apply new data science technologies and techniques to complex issues, the Data Analytics Group was established in January 2018 to allow the SFC to carry out more effective market surveillance as well as to monitor and address prudential and systemic risks in a comprehensive manner. • To enhance existing macroprudential surveillance and support policymaking, the IA is taking steps to improve its data infrastructure by requiring insurers to provide the IA with additional information on risk exposures and interconnections, which will facilitate the assessment of the build-up of risks or vulnerabilities to the industry. For example, with the G20/FSB recommendations and initiatives on macroprudential oversight on shadow banking, the IA has been working towards the development of

² The policy statement is available at

http://www.hkma.gov.hk/media/eng/doc/key-functions/banking-stability/oversight/FMI_oversight.pdf

³ The assessment summaries are available at

<https://www.hkma.gov.hk/eng/key-functions/international-financial-centre/financial-market-infrastructure/oversight-of-financial-market-infrastructure-fmi/assessment-of-fmis-against-international-standards>

		<p>more robust quantitative indicators for assessing the systemic risk of insurers. In this annual exercise, the IA collects from insurers data about their financial assets by categories and their shadow banking activities. There is also new data collection for credit exposure conducted by the HKMA, the SFC and the Mandatory Provident Fund Schemes Authority at the same time, with specific shadow banking indicators pertinent to their respective businesses.</p> <ul style="list-style-type: none"> • Life insurers are required to conduct periodic industry-wide standardised scenario testing plus compound scenario testing (customized according to insurers' own situations) at least annually to enable the IA to assess the existence of any vulnerabilities within the industry. Insurers are required to submit the results of Dynamic Solvency Testing under adverse scenarios to the IA for ongoing monitoring purpose. In addition, the IA uses information contained in quarterly returns from insurers to perform industry-wide resilience tests on a quarterly basis. The IA also performs analyses on the asset mix of life insurers to assess their concentration risks and exposure to different sectors. On the information exchange front, the IA provides the HKMA with statistics of insurers associated with banking groups to enable the latter to perform its role in macroprudential surveillance. • Besides, the IA has been collecting business statistics from insurers and calculating industry-wide claims ratios for specified lines of business. The IA also collects burning cost data from the industry. Such information would be used as the reference to test the adequacy of technical provisions for specific lines of business of individual insurers. • As for the macroprudential surveillance from a cross-sectoral perspective, the IA liaises with other local financial regulators (such as the HKMA and the SFC) regularly via the Council of Financial Regulators ("CFR") and the Financial Stability Committee ("FSC") on supervisory and regulatory issues with cross-market implications. The CFR and FSC deliberate on events, issues and developments with possible cross-market and systemic implications. A review would be taken by the financial regulators if any significant risk area of the financial markets is identified.
Cross-border regulatory coordination	Continued active participation in the supervisory colleges and crisis management groups of Globally Systemically Important Financial Institutions.	<p>Implemented</p> <ul style="list-style-type: none"> • The HKMA continues its active participation in the supervisory colleges and Crisis Management Groups ("CMGs") for cross-border banking groups including a number of G-SIBs to discuss their risk profiles, business strategies and developments, supervisory concerns and priorities as well as recovery and resolution plans in accordance with the Key Attributes established by the FSB. • The HKMA has been participating in cross-border resolution planning work via CMGs and resolution colleges. The HKMA is a member of each of the CMGs for 12 G-SIBs attended by the relevant home and host authorities. On the regional level, the HKMA is a member of the Asia-Pacific Recovery and Resolution Planning College for two other G-SIBs where resolution related topics are discussed. The HKMA also leads the regional resolution planning for a G-SIB with its Asia-Pacific headquarters in Hong Kong SAR, including through the organization of an annual CMG meeting for the relevant home and host authorities in the region.

	<p>Strong cooperation with regulatory counterparts in mainland China.</p>	<p>Implemented</p> <ul style="list-style-type: none"> • The HKMA has been maintaining close communication with the People's Bank of China to exchange views and enhance cooperation on macroeconomic and financial stability surveillance, financial markets supervision, among other things. There are regular and ad hoc meetings throughout the year between the two sides from senior to working levels to keep each other abreast of the relevant regulatory development and take forward cooperation where appropriate. There are also secondment and training programmes in place to enhance personnel exchange between the two parties. The HKMA maintains close cooperation with the China Banking and Insurance Regulatory Commission ("CBIRC") on supervisory matters relating to the Mainland bank subsidiaries and branches of the Hong Kong SAR banks. In addition to the bilateral meetings held twice a year between the HKMA and the CBIRC, working-level meetings are held in form of scheduled meetings, teleconference calls or whenever the two sides meet as part of the on-site examinations arranged by either regulator. As before, there are cooperation in respect of on-site examination, mutual consultations and sharing of information on a range of regulatory and supervisory matters (e.g. licensing of AIs, appointment of AIs' senior management). The secondment programme established with the CBIRC is in place to enhance understanding of banking issues and supervisory approaches of both places. The HKMA also participates in the annual core supervisory college and crisis management group meetings organised by the CBIRC in respect of the four Chinese G-SIBs. • The SFC has been maintaining constant dialogue with various Mainland authorities including the China Securities Regulatory Commission ("CSRC") on different regulatory matters. The SFC worked closely with different Mainland authorities to launch the Shanghai-Hong Kong Stock Connect in November 2014 and the mutual recognition of funds in July 2015, and the launch of the Shenzhen-Hong Kong Stock Connect in August 2016. In addition, an investor identification regime for Northbound trading under Stock Connect was implemented on 26 September 2018 based on an agreement reached between the SFC and CSRC whilst the Southbound model is being finalised for implementation shortly. • The IA has been maintaining close dialogue with the CBIRC on supervisory matters relating to the Mainland insurers' subsidiaries and branches operating in the Hong Kong SAR, as well as the Mainland shareholders and business partners (e.g. reinsurers) of the Hong Kong SAR insurers. The IA has entered into two MOUs with the CBIRC on cooperation of insurance supervision and anti-insurance fraud. There are regular meetings between the IA and CBIRC to enhance understanding of the insurance market of the other side and to enhance regulatory cooperation on cross-border insurance business activities.
	<p>Continued active participation in international regulatory fora is also needed to mitigate potential effects from global regulatory developments.</p>	<p>Implemented</p> <ul style="list-style-type: none"> • The relevant regulators continue to participate actively in international regulatory fora including G20, IOSCO, and FSB to ensure that financial regulation in the Hong Kong SAR is on par with the international standards, taking into account the unique background and needs of the financial sectors. • To meet the G20 commitments on over-the-counter ("OTC") derivatives regulatory reform, the Hong Kong SAR has implemented mandatory reporting, mandatory clearing and mandatory platform trading as follows:

		<ul style="list-style-type: none"> (i) after the implementation of two phases of mandatory reporting in July 2015 and July 2017 respectively, the Hong Kong SAR requires the reporting of OTC derivative transactions in five main asset classes (namely interest rate derivatives, FX derivatives, equity derivatives, credit derivatives and commodity derivatives) to the HKMA's Trade Repository; (ii) the first phase of mandatory clearing was implemented on 1 September 2016, which requires certain standardised interest rate swaps denominated in Hong Kong dollar or one of the G4 currencies (i.e., USD, EUR, GBP or JPY) to be centrally cleared through central counterparties designated by the SFC; and (iii) in June 2018, the trading determination process and criteria for introducing a platform trading obligation were adopted and are being used to determine products appropriate for the Hong Kong SAR to introduce a platform trading obligation in future. The HKMA and the SFC continuously make use of the trade data in the Hong Kong Trade Repository to conduct studies and analysis of the liquidity (market depth and breadth) of certain standardised interest rate swaps in order to determine how best to implement the trading mandate. <ul style="list-style-type: none"> • The HKMA and the SFC continue to enhance the OTC derivatives reporting and clearing regime – <ul style="list-style-type: none"> (i) in June 2018, the HKMA and the SFC concluded a consultation to expand the clearing obligation. Subject to legislative process, the scope of the products will be expanded subject to clearing obligation to include certain standardised Australian Dollars interest rate swaps. The HKMA and the SFC are monitoring developments in the market and factors which may affect the clearing landscape before confirming the effective day of expanding the product scope for clearing obligation; (ii) in April 2019, the use of Legal Entity Identifiers in OTC derivatives trade reporting was mandated. The obligation is applicable to certain entities and the reporting of new transactions and daily valuation information beginning 1 April 2019; and (iii) in April 2019, the HKMA and the SFC jointly issued a consultation paper and proposed to mandate the use of Unique Transaction Identifier in OTC derivatives trade reporting to align with global standards and proposed to remove 17 jurisdictions from the list of designated jurisdictions for the masking relief of the reporting obligation in view of the clarification by the FSB. • The status of the Hong Kong SAR in meeting the requirements of the U.S. and EU OTC regulatory reforms relating to OTC derivatives that are applicable to CCPs is as follows: <ul style="list-style-type: none"> (i) On 21 December 2015, the U.S. Commodity Futures Trading Commission ("CFTC") issued an order of exemption from registration as a derivatives clearing organisation to OTC Clear which permits it to clear proprietary trades for its U.S. clearing members or affiliates of such clearing members subject to certain terms and conditions. The SFC and the CFTC signed an MOU on 21 December 2015 regarding cooperation and the exchange of information in the supervision and oversight of regulated entities that operate on a cross-border basis in the Hong Kong SAR and the U.S. The scope of the MOU covers OTC Clear. (ii) On 30 October 2014, the European Commission adopted an equivalence decision for the regulatory regime of CCPs in the Hong
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		<p>Kong SAR. The SFC then worked with the European Securities and Markets Authority (“ESMA”) on an MOU to establish cooperation arrangements, as it was a pre-condition for the recognition of a non-EU CCP. The MOU was signed and took effect on 19 December 2014. These steps culminated in the ESMA’s recognition of the four CCPs in the Hong Kong SAR (HKSCC, HKFE, OTC Clear and SEOCH) as third country CCPs to offer services and activities to entities established in the EU in accordance with the European Market Infrastructure Regulation on 29 April 2015. The recognition was granted without conditions. Another MOU was entered between the SFC and the ESMA and became effective on 19 November 2015 to facilitate the SFC’s indirect access to the EU trade repositories via ESMA.</p> <ul style="list-style-type: none"> • There are no outstanding requirements of any other overseas regulators on the four CCPs in order to continue providing clearing services. • To meet the G20 commitment on margin requirements for non-centrally cleared OTC derivatives, the HKMA implemented global margin and risk mitigation standards, published by BCBS/IOSCO and IOSCO respectively, by issuing a new Supervisory Policy Manual (SPM) module (CR-G-14) on 27 January 2017. In order to achieve a workable cross-border framework, the HKMA actively participated in discussions in the BCBS-IOSCO Working Group on Margin Requirements and followed a closely coordinated approach with other Asia-Pacific jurisdictions, notably Australia and Singapore, with regard to the start of the phase-in schedule and necessary transitional arrangements. Following a six-month transitional period, the margin requirements under the new SPM module were fully implemented on 1 September 2017 according to the phase-in schedule. One key element of the regime is “substituted compliance”. This allows AIs to follow foreign margin standards instead of those set out in the HKMA’s SPM module, thereby ensuring that cross-border transactions are not subject to duplicative or inconsistent requirements. As a general principle, substituted compliance is available if the HKMA has issued a comparability determination in relation to a foreign jurisdiction’s margin and/or risk mitigation standards. However, all other member jurisdictions of the BCBS-IOSCO Working Group on Margin Requirements are deemed comparable from the day the respective standards entered into force in their jurisdictions, because of their implementation of, or general intention to implement, the BCBS-IOSCO margin framework. In July 2019, the BCBS and IOSCO announced a one year extension on the final implementation phase of initial margin requirements for non-centrally cleared derivatives. The HKMA has informed all AIs that the HKMA will adopt the revised implementation schedule and amend the SPM module CR-G-14 accordingly before the end of 2019.
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Annex VIII. Drivers of HIBOR-LIBOR Spread¹

1. The spread between the Hong Kong Hibor and US Libor widened persistently before narrowing recently, driven by both domestic and external factors. Although Libor rose as the Federal Reserve tightened its policy, Hibor had been slow to catch up in 2018 amid abundant interbank liquidity. In 2018, the Libor-Hibor spread widened to over 100 basis points at the one and three-month tenors on multiple occasions, resulting in capital outflow pressure as carry traders looked to benefit from the interest rate differential. Accordingly, the HKD weakened against the USD, triggering weak-side Convertibility Undertaking for a total of 27 times and resulted in outflows totaling HK\$103.5 billion. As the Federal Reserve unwound its policy tightening in the second half of 2019 and with banks more actively managing their excess liquidity, Hibor-Libor spreads narrowed. During this period, the aggregate balance (a measure of interbank liquidity) shrank and liquidity conditions tightened. Amid a narrowed Hibor-Libor spread, the HKD has been trading within the range established by HKMA's Convertibility Undertaking.

2. Ample supply of HKD liquidity contributed to Hibor's sluggish response to Libor rate increases. Large capital inflows into Hong Kong SAR after the GFC resulted in ample banking sector liquidity. Capital inflows into Hong Kong SAR between 2008 and 2015 increased the city's monetary base by HK\$1.3 trillion. This led to large expansion of the aggregate balance from HK\$5 billion in early 2008 to HK\$400 billion in late 2015. Meanwhile, banks increased their holdings of Exchange Fund Bills and Notes (EFBNs) to meet increased liquidity requirements following the GFC. To meet greater demand, new EFBNs issuance increased by about HK\$900 billion since end-2008. As banks can use EFBNs to obtain liquidity from the HKMA or sell them to other financial institutions to meet their daily settlement needs, their funding needs in the interbank market declined. On net, overall banking sector liquidity increased, reduced demand for Hibor funding even after Libor increases, leading to a widening in the Hibor-Libor spreads.

3. Foreign banks' limited demand for Hibor funding in recent years also contributed to Hibor's limited sensitivity to Libor rate changes. Foreign banks, with their limited deposit base, were major borrowers in Hibor market in the past. However, following the GFC and QE operations from the Federal Reserve, ultra-low US interest rates and ample USD liquidity made it more cost effective for foreign banks to use FX swaps for their HKD funding needs—banks would borrow USD from their overseas headquarters and convert USD into HKD. This led to a marked expansion in interbank liabilities denominated in foreign currencies since 2009, and a sharp increase in HKD swap turnover during the same period. As US dollar liquidity became less abundant and with higher USD funding costs amid tightening US policy, foreign banks switched their HKD funding to the Hibor market, helping to narrow the Hibor-Libor spread.

¹ Prepared by Kevin Chow.

Figure 1. HKD/USD Exchange Rate and LIBOR-HIBOR Spread

LIBOR-HIBOR spread has narrowed after weak-side convertibility undertaking was triggered several times.

Spread between LIBOR and HIBOR

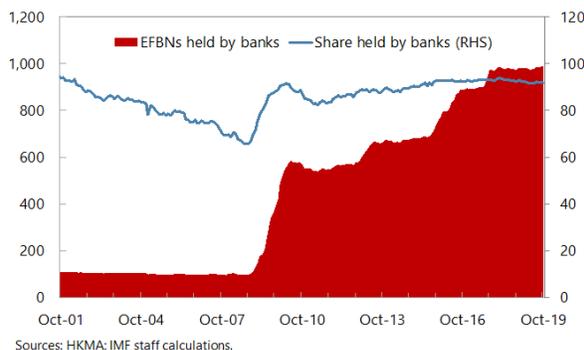
(Basis points)



Banks increased holding of EFBNs as they carry positive yields and are highly liquid assets.

EFBNs Held by Commercial Banks

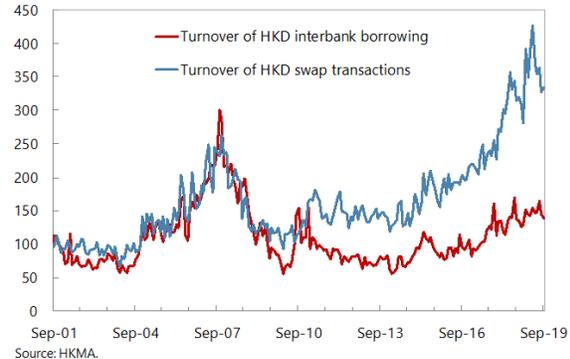
(Billions of HKD, left scale; percent, right scale)



Banks converted USD into HKD using FX swap, propelling the turnover of swap involving HKD.

Average Daily Turnover of HKD Interbank Transactions

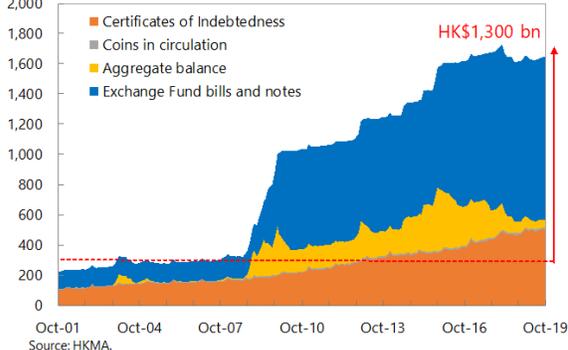
(Billions of HKD)



Sizable capital inflows boosted monetary base by some HK\$1.3 trillion after the GFC

Monetary Base by Component

(Billions of HKD)



Banks increased borrowing of USD in interbank market given the abundant supply after GFC.

Interbank Liabilities by Currency

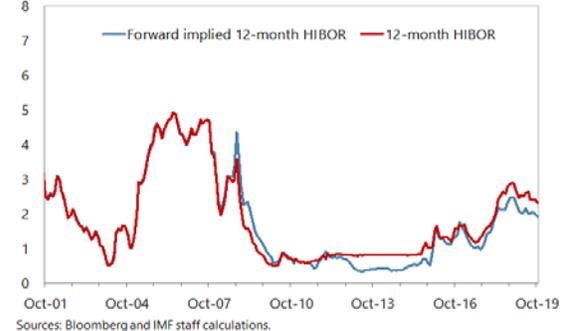
(Billions of HKD, 3-month moving average)



With ample HKD liquidity, banks may borrow HKD at lower costs using FX swap.

Forward Implied HKD Interest Rate and HIBOR

(Percent)



Annex IX. External Sector Assessment

<p>Overall Assessment: <i>The external position in 2018 was broadly in line with the level implied by medium-term fundamentals and desirable policies.</i> The CA surplus has declined relative to its pre-2010 level on account of structural factors, including opening of the mainland capital account and changes in offshore merchandise trade activities. As a result of Hong Kong SAR's LERS, short-term movements in the REER largely reflect U.S. dollar developments. Hong Kong SAR's flexible goods, factor, and asset markets continue to support the LERS.¹</p> <p>Potential Policy Responses: Macroeconomic policies are broadly appropriate. Maintaining policies that support wage and price flexibility is crucial to preserving competitiveness. Robust and proactive financial supervision and regulation, prudent fiscal management, flexible markets, and the LERS have worked well, and continuation of these policies will help keep the external position broadly in line with medium-term fundamentals.</p>						
Foreign Asset and Liability Position and Trajectory	<p>Background. The net international investment position (NIIP) reached around 357 percent of GDP as of end-2018, up from 275 percent in 2012. Gross assets (about 1,510 percent of GDP) and liabilities (about 1,154 percent of GDP) are high, reflecting Hong Kong SAR's status as a major international financial center. Valuation changes have been sizable and positive, partly reflecting measurement biases, as the change in NIIP during 2014–18 (150 percent of 2018 GDP) far exceeded the cumulated financial account balances (20 percent of 2018 GDP). On the other hand, income accrued to the large NIIP has been modest despite some increase in the last two years, due to relatively low yields on assets and, even more importantly, substantially higher payments on liabilities.</p> <p>Assessment. Vulnerabilities are low given the positive NIIP and its favorable composition. Reserve assets are large and stable (117 percent of GDP at end-2018), direct investments account for a large share of total assets and liabilities (38 and 53 percent, respectively, in 2018), and portfolio liabilities accounted for only 13 percent of total liabilities at end-2018.</p>					
	2018 (% GDP)	NIIP: 356.7	Gross Assets: 1,510.3	Debt Assets: 515.2	Gross Liab.: 1,153.6	Debt Liab.: 394.2
Current Account	<p>Background. The current account (CA) surplus, after peaking at about 15 percent of GDP in 2008, reached 4.3 percent of GDP in 2018, down from 4.7 percent in 2017. The decline was driven by a larger trade deficit in goods on the back of higher oil prices and robust domestic demand, which was partially offset by higher services and income balances. From a sectoral perspective, the gradual decline in private saving (from the peak of 34.4 percent of GDP in 2006 to 22.9 percent of GDP in 2018), driven by robust consumption growth, a tight labor market, and wealth effects related to strength in the housing market, accounted for most of the drop in the CA surplus. The CA balance increased to 5 percent of GDP in Q2 2019 and is estimated to increase to 5.5 percent of GDP in 2019, primarily driven by a large decline in imports on the back of weakened domestic demand and lower oil prices. The CA surplus is projected to be around 4.0 percent of GDP over the medium-term.</p> <p>Assessment. Staff's quantitative assessment finds that the cyclically adjusted 2018 CA, at 4.5 percent of GDP, is in the midpoint of the CA norm range of 3.0 to 6.0 percent of GDP. The CA gap range is hence $-1\frac{1}{2}$ to $1\frac{1}{2}$ percent of GDP. Given the large valuation effects in the NIIP and the resulting discrepancies between stocks and flows, the CA needs to be adjusted for measurement issues.² Staff's preliminary assessment based on the estimated 2019 CA suggests that the cyclically adjusted 2019 CA, estimated to be 4.2 percent of GDP, remains in the midpoint of the estimated CA norm range of 2.7 to 5.7 percent of GDP.</p>					
	2018 (% GDP)	Actual CA: 4.3	Cycl. Adj. CA: 4.5	EBA CA Norm: —	EBA CA Gap: —	Staff Adj.: —	Staff CA Gap: 0.0
Real Exchange Rate	<p>Background. REER dynamics are largely determined by the HKD/USD peg and subdued inflation in Hong Kong SAR. In line with the USD, after appreciating in real effective terms by about 16 percent between 2012–18, the HKD continued to appreciate by 3.7 percent in 2019 throughout August compared to the 2018 average. The weak side of the convertibility undertaking was triggered several times in March 2019, prompting the HKMA to sell USD in the market.</p> <p>Assessment. Based on elasticity estimates for similar economies and factoring in the uncertainties and variability of an offshore trading and financial center, the REER gap is assessed by staff to be between -5 and 5 percent.*</p>					

Capital and Financial Accounts: Flows and Policy Measures	<p>Background. As a financial center, Hong Kong SAR has an open capital account. Non-reserve financial flows moved from sizable net inflows in 2017 to outflows of similar magnitude in 2018. The financial account is typically very volatile, reflecting financial conditions on the mainland, transmitted through growing cross-border financial linkages,³ as well as shifting expectations of U.S. monetary policy and related arbitraging in the FX and rates markets.</p> <p>Assessment. Large financial resources and proactive financial supervision and regulation limit the risks from potentially volatile capital flows, as do deep and liquid markets. The greater financial exposure to Mainland China could pose risks to the banking sector if mainland growth slows sharply and financial stress emerges in some key sectors, such as export-oriented manufacturing or real estate. However, given the high origination and underwriting standards that Hong Kong SAR banks have maintained, the credit risk appears manageable.</p>
FX Intervention and Reserves Level	<p>Background. Hong Kong SAR has a currency board arrangement. International reserves have been built up as the HKD was often pushed to the strong side of its trading range, particularly following the global financial crisis. The stock of reserves at end-July 2019 was equivalent to around 124 percent of 2018 GDP, higher than in end-2018. In March 2019, the HKD hit the lower range of the convertibility undertaking of 7.85 a few times, prompting the HKMA to sell USD in the market under the normal functioning of the LERS. As liquidity is drained from the system, short-term HKD money market interest rates rose gradually closing the gap with the USD LIBOR and reducing HKD depreciation pressures.</p> <p>Assessment. Currently, reserves are adequate for precautionary purposes and should continue to evolve in line with the automatic adjustment inherent in the currency board system. Hong Kong SAR also holds significant fiscal reserves built up through a track record of strong fiscal discipline.</p>
Technical Background Notes	<p>* <i>The midpoint of the staff assessed REER gap is within the (\pm 5 percent) interval generally described as broadly in line with fundamentals.</i></p> <p>1/ See SIP in the 2016 Article IV staff report and IMF WP17/09.</p> <p>2/ Hong Kong SAR is not in the EBA sample as it is an outlier along many dimensions of EBA analysis, thus one possibility—though with obvious drawbacks—is to use EBA estimated coefficients and apply them to Hong Kong SAR. Following that approach, the CA norm in 2018 is estimated to be about 16 percent of GDP, implying a CA gap of about -11½ percent, which is almost entirely explained by the model residuals. However, the EBA gap is overstated, since it does not properly reflect the measurement issues that are relevant for Hong Kong SAR. As such, several adjustments are made. First, an adjustment of 5-7 percentage points is made to EBA's implied contribution of the NIIP position. This is because the positive NIIP contribution in EBA captures average income effects that are less relevant for Hong Kong SAR since the income balance relative to its NIIP is systematically lower than other economies. Second, the opening of the Precious Metals Depository has resulted in a decline of 4-4½ percentage points in the gold trade balance that does not reflect changes in wealth but rather the increased physical settlement of gold futures contracts. Third, Mainland China's increased onshoring has led to a decline in logistics and trading activities in Hong Kong SAR (1-1½ percent of GDP in CA), which did not result in lower consumption because it is viewed as temporary and to be replaced with increased provision of high value-added services as Hong Kong SAR's own economy rebalances in response to changes in Mainland demand. Adjusting for these factors, staff assesses the CA gap to be close to zero. See SIP in the 2016 Article IV staff report for more details. The EBA CA norm, EBA CA gap, and staff adjustments are omitted in the table on the previous page.</p> <p>3/ The financial linkages with the Mainland have deepened in recent years with the increase in cross-border bank lending, securities issuance in Hong Kong SAR by mainland entities and the internationalization of the RMB. As of end-June 2019, banking system claims, including those of foreign banks, on mainland nonbank entities amounted to HK\$6.1 trillion, or about 210 percent of GDP, up by about 11 percentage points from end-2018.</p>

Annex X. Main Recommendations of the 2018 Article IV Consultation Discussions

Fund Recommendations	Policy Actions
Fiscal policy:	
<ul style="list-style-type: none"> The FY2018/19 fiscal stimulus is not necessary given the economy's cyclical position but higher spending in some areas (social welfare and healthcare, education, public housing) is consistent with past staff advice in view of structural headwinds. Tax relief measures could have been more progressive, and the authorities should consider reversing the tax cuts. In the long-term, measures will be needed to ensure fiscal sustainability by increasing revenues and ensuring continued high quality of fiscal spending. 	<ul style="list-style-type: none"> With moderating growth, a fiscal surplus more than halved to 2.4 percent of GDP in 2018 but was higher than projected in the budget as revenue underperformance of around 0.2 percent of GDP (mostly due to lower stamp duties and land premium) was more than offset by lower-than-budgeted expenditures of about 1.3 percent of GDP on some planned infrastructure initiatives and public works projects. As a result, fiscal reserves increased further to around 40 percent of GDP or 26 months of government expenditures.
Property market policy:	
<p>The authorities' strategy to contain the housing boom using tight macroprudential measures and stamp duties remains appropriate, but more needs to be done to raise housing supply.</p> <ul style="list-style-type: none"> The authorities should cautiously await more signs of a sustained decline in house prices before considering loosening macroprudential and demand-side measures. Stamp duties should remain in place in the near-term but should be phased out once risks dissipate. Sustained increases in housing supply are needed to reduce the structural supply-demand imbalance. The authorities should also review and—where possible—expedite the procedures guiding the process of identifying land and building sites, zoning, and conducting the necessary environmental, design, transportation, and other assessments to streamline the process. 	<ul style="list-style-type: none"> The authorities kept in place very tight macroprudential policies on LTVs and DSRs, as well as the stamp duties on the purchase of residential properties. The government has revised down the total housing supply target for the 10-year period from 2019–20 to 2028–29 in the Long Term Housing Strategy by 10,000 units to 450,000 units but has scaled up the public share of new housing supply from 60 to 70 percent. The authorities have also announced new initiatives to increase the transitional housing by a total of 10,000 units within the next three years. The Task Force on Land Supply noted in their December 2018 report that the government's estimated land shortage in the long run is too conservative and supported building a land reserve by creating more land than the estimated shortfall. The proposed vacant property tax ("Special Rates" tax) on unsold new private residential units is expected to be passed at the Legislative Council around early 2020. The government also announced to invoke the Lands Resumption Ordinance to resume privately-owned land to increase supply of public housing, aiming to resume 400 hectares in the next five years, compared to 20 hectares resumed in the last five years. The government has adjusted the mortgage insurance program by raising the maximum property values eligible for higher LTV ratios with the MIP from HKD 4 to 8 million (LTV ratio of 90 percent) for first-time home buyers and from HKD 6 to 10 million (LTV ratio of 80 percent) for all home buyers.
Financial sector policy:	
<ul style="list-style-type: none"> The rapid growth of household bank loans deserves continued intensified scrutiny. Margin lending by brokers has also risen rapidly and the Securities and Futures Commission's proposal to impose quantitative limits to their leverage and concentrated exposures is warranted. The HKMA and the SFC should continue to cooperate closely to monitor brokers' leverage through the banking system. 	<ul style="list-style-type: none"> To strengthen risk management of household bank loans, the HKMA required banks to adhere to prudent underwriting standards such as setting maximum loan tenor and debt-servicing ratio limits in extending personal loans; longer tenor loans are usually subjected to lower debt-servicing ratio limits.

<ul style="list-style-type: none">• Lending by property developers should continue to be monitored closely. The authorities should consider measures to extend the regulatory perimeter to reduce regulatory arbitrage.• Efforts in effectively implementing the recommendations of the Financial Action Task Force should be advanced to enhance effectiveness of AML/CFT measures.	<ul style="list-style-type: none">• The SFC issued guidelines to cap margin lending by brokers for stock purchases at five times of clients' capital, effective since October 4, 2019.• While mortgage lending by non-banks (e.g., property developers) remains small and is monitored closely, the authorities are studying international experiences to regulate such lending practices if needed.• Recently-concluded assessment from the Financial Action Task Force confirms that Hong Kong SAR has a solid AML/CFT system that is delivering good results, and a strong legal and institutional framework.
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PEOPLE'S REPUBLIC OF CHINA—HONG KONG SPECIAL ADMINISTRATIVE REGION

STAFF REPORT FOR THE 2019 ARTICLE IV CONSULTATION
DISCUSSIONS—INFORMATIONAL ANNEX

November 25, 2019

Prepared By

Asia and Pacific Department (in consultation with other
departments)

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FUND RELATIONS

Membership Status

As a Special Administrative Region of the People's Republic of China, Hong Kong SAR is not a member of the Fund. However, annual consultation discussions have been held with the Hong Kong SAR authorities since October 1990, and the staff also holds discussions with the authorities in connection with the Fund's *Global Financial Stability* reports. STA has provided Hong Kong SAR with technical assistance in the area of balance of payments statistics and Hong Kong SAR officials have attended IMF Institute courses on balance of payments and monetary statistics, and financial programming. The FSAP is currently underway, with a Board date tentatively planned for the first half of 2020.

Exchange Rate Arrangement

The Hong Kong dollar has been linked to the U.S. dollar under a currency board arrangement, the Linked Exchange Rate System (LERS), since October 1983 at a rate of HK\$7.8/US\$1. The Hong Kong Monetary Authority (HKMA) refined the operations of the LERS in May 2005—the first changes since September 1998. For the first time since the introduction of the LERS in 1983, the HKMA explicitly committed to sell Hong Kong dollar at a preannounced price (set at HK\$7.75/US\$), which is referred to as the strong-side convertibility undertaking. Previously, the HKMA had only committed to buy Hong Kong dollar at a preannounced rate (the weak-side convertibility undertaking introduced in September 1998) and could sell Hong Kong dollar at any price. Along with this two-way convertibility undertaking, the HKMA also introduced a symmetric trading band of 0.6 percent around a central parity of HK\$7.8/US\$. There are no restrictions on current or capital account transactions in Hong Kong SAR, and the Hong Kong dollar is freely convertible. The People's Republic of China accepted the obligations under Article VIII, Sections 2, 3, and 4 of the Articles of Agreement on December 1, 1996. The exchange regime is free of restrictions and multiple currency practices.

Resident Representative

The Hong Kong SAR sub-office of the Beijing Resident Representative's office was opened on September 23, 2000. Sally Chen is the current Resident Representative.

STATISTICAL ISSUES

(As of November 25, 2019)

I. Assessment of Data Adequacy for Surveillance	
General: The economic database is generally comprehensive and of high quality, and data provision is adequate for surveillance.	
National Accounts: Hong Kong SAR compiles and disseminates GDP statistics under the production and expenditure approaches. The expenditure measure of GDP which is more well established, is adopted as the single measure of GDP. The production and expenditure approaches are also compiled in chained volume terms. The statistical discrepancies are explicit under to the production approach in current terms. Quarterly GDP is available by expenditure components (current values and volume) as well as by industry value added (in volume only). GDP compilation closely follows the 2008 SNA.	
Price Statistics: The monthly CPI covers the "expenditure" of all households in Hong Kong SAR, excluding only: (i) marine population; (ii) households receiving public assistance; (iii) collective households such as those living in hospitals, prisons and homes for the aged; and (iv) households in the highest or lowest expenditure brackets which together accounted for some 10 percent of households. It includes 984 items. The weights are based on the Household Expenditure Surveys which is conducted once every five years. The index is disseminated with a lag no longer than 23 days after the end of the reference month. The national PPI covers the industrial sector (manufacturing industries and sewerage, waste management and remediation activities), including about 700 primary products. Weights are updated annually from the Annual Survey of Economic Activities. The index is compiled quarterly. Both price indices follow international standards.	
Government Finance Statistics: Hong Kong SAR reports both cash and accrual-based annual data for the general government according to the Fund's Government Finance Statistics Manual (GFSM 1986 and GFSM 2001, respectively). No sub-annual data are provided for publication in the IFS.	
Monetary and Financial Statistics: The HKMA reports monetary data for the central bank and banking institutions to STA on a regular monthly basis, which are published in the <i>IFS</i> . In late 2009, the HKMA submitted quarterly monetary data (test-data) using Standardized Report Forms (SRFs) that present data consistent with the Monetary and Financial Statistics Manual. However, the SRF data for Hong Kong SAR have not been published in the <i>IFS</i> , which requires monthly periodicity for monetary data. The HKMA has been encouraged to compile and submit monthly monetary data using SRFs for dissemination in the <i>IFS</i> .	
Financial Sector Surveillance: Hong Kong SAR participates in regular reporting of Financial Soundness Indicators (FSIs) to the IMF for dissemination on the FSI website. The reported data are quarterly and cover all core FSIs and 12 additional FSIs for the deposit takers sector.	
External sector statistics: Hong Kong SAR publishes comprehensive balance of payments data and international investment position statistics for 2000 onwards. Hong Kong SAR disseminates the international reserves and foreign currency liquidity data template, submits quarterly external debt statistics to the Quarterly External Debt Statistics (QEDS) database, and participates in the Coordinated Portfolio Investment Survey (CPIS) and the Coordinated Direct Investment Survey (CDIS).	
II. Data Standards and Quality	
Hong Kong SAR subscribes to the Fund's Special Data Dissemination Standard since 1996, and is fully compliant with its requirements.	A data ROSC was disseminated in 1999

Hong Kong SAR—Table of Common Indicators Required for Surveillance (As of Nov 25, 2019)					
	Date of Latest Observation	Date Received	Frequency of Data ⁵	Frequency of Reporting ⁵	Frequency of Publication ⁵
Exchange rates	Nov. 2019	Nov. 2019	D	D	D
International reserve assets and reserve liabilities of the monetary authorities ¹	Sep. 2019	Oct. 2019	M	M	M
Reserve/base money	Oct. 2019	Oct. 2019	M	M	M
Broad money	Sep. 2019	Nov. 2019	M	M	M
Central bank balance sheet	Sep. 2019	Oct. 2019	M	M	M
Consolidated balance sheet of the banking system	Sep. 2019	Nov. 2019	M	M	M
Interest rates ²	Nov. 2019	Nov. 2019	D	D	D
Consumer price index	Sep. 2019	Oct. 2019	M	M	M
Revenue, expenditure, balance and composition of financing ³ —central government	Sep. 2019	Oct. 2019	M	M	M
Stocks of central government and central government-guaranteed debt ⁴	Sep. 2019	Oct. 2019	M	M	M
External current account balance	Q2/19	Nov. 2019	Q	Q	Q
Exports and imports of goods and services	Q3/19	Oct. 2019	Q	Q	Q
GDP/GNP	Q3/19	Nov. 2019	Q	Q	Q
Gross external debt	Q2/19	Sep. 2019	Q	Q	Q
International investment position	Q2/19	Sep. 2019	Q	Q	Q
<p>¹ Any reserve assets that are pledged or otherwise encumbered should be specified separately. Also, data should comprise short-term liabilities linked to a foreign currency but settled by other means as well as the notional values of financial derivatives to pay and to receive foreign currency, including those linked to a foreign currency but settled by other means.</p> <p>² Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.</p> <p>³ Foreign, domestic bank, and domestic nonbank financing.</p> <p>⁴ Including currency and maturity composition.</p> <p>⁵ Daily (D); Weekly (W); Monthly (M); Quarterly (Q); Annually (A); Irregular (I); Not Available (NA).</p>					

**Statement by the IMF Staff Representative
December 13, 2019**

- 1. This statement contains information that has become available since the staff report was finalized on November 25, 2019.** It does not alter the staff's assessment of policy issues and recommendations contained in the report or the staff appraisal.

- 2. Data Releases for October are broadly in line with staff projections.**
 - Tourist arrivals and retail sales declined further in October by 43.7 and 24.3 percent (y/y), respectively, compared to 34.2 and 18.2 percent (y/y) in September.

 - Merchandise trade also declined further in October with exports and imports declining by 9.2 and 11.5 percent (y/y), respectively, compared to 7.3 and 10.3 percent in September.

 - House prices declined marginally in October by 0.3 percent (m/m, sa).

 - Banking sector buffers remained broadly unchanged in 2019Q3, with the Common Equity Tier 1 capital ratio at 16.3 percent and the liquidity coverage ratio at 153 percent.

- 3. The government announced a new fiscal stimulus** of HKD 4 billion (about 0.1 percent of GDP) on December 4, mainly aimed at helping small and medium-sized enterprises.

**Statement by Zhongxia Jin, Executive Director for China, Georgina Lok, Advisor to
Executive Director
December 13, 2019**

On behalf of the authorities of the Hong Kong Special Administrative Region (SAR), we would like to thank staff for the comprehensive and useful report. Our authorities appreciated the constructive dialogues during the mission visit, and broadly agree with staff's appraisal. The Hong Kong SAR economy is facing challenges on both external and domestic fronts. That said, the robust fundamentals and sound institutions continue to underpin the resilience of the economy, and the financial system continues to function in an orderly manner. The considerable buffers built up over the years will enable Hong Kong SAR to withstand possible shocks.

Latest economic developments and outlook

Economic activity has weakened notably as a result of both external and domestic factors. Growth has moderated since last year amid a slowing global economy and uncertainties surrounding US-China trade tensions, which have affected trade-related activities and investment globally. Local social incidents since the summer have weighed on inbound tourism and consumption. Real GDP contracted by 2.9 percent in the third quarter of 2019 from a year earlier, which moderated noticeably from the positive growth of 0.6 percent and 0.4 percent registered in the first and second quarters respectively. Considering the actual outturn of a 0.6 percent contraction in the first three quarters of 2019 and persistent downward pressures, the authorities project the economy to record -1.3 percent growth for 2019 as a whole.

Underlying consumer price inflation went up from 2.9 percent in the second quarter to 3.3 percent in the third quarter of 2019, largely due to a faster increase in pork prices. Price pressures on other major consumer price index components remained largely moderate. Looking ahead, modest global inflation and subdued economic conditions would help reduce price pressures in the rest of 2019.

Meanwhile, the financial systems in Hong Kong SAR have been holding up well. The monetary and financial markets in Hong Kong SAR continue to function in an orderly manner. The Linked Exchange Rate System operates smoothly according to its design, as it has for the past 36 years, weathering many turbulent periods. The capital and liquidity positions of banks in Hong Kong SAR remain well above international standards. The authorities will stay vigilant and closely monitor market vulnerabilities. So far, no sign of volatile capital outflows from the Hong Kong dollar or the banking system is observed. Free flow of capital will continue to be guaranteed under the Basic Law.

Hong Kong SAR's core competitiveness as one of the best places to do business remains well in place, and is still recognized by many international institutions. It includes a transparent and simple tax system, efficient infrastructure, sound regulatory regime, rule of law, and high-quality professional services. These strengths are cornerstones of Hong Kong SAR's success and will continue to underpin its competitiveness as an international financial center.

The authorities broadly share staff's assessment of the macroeconomic outlook. Externally, downside risks come from a soft global economic growth and uncertainties arising from US-China trade tensions, together with the related repercussions on global sentiment, trade and investment activities, and financial markets. The development of the domestic sociopolitical

situation would also have a significant bearing on the economy. In the face of these challenges, the authorities will continue to monitor developments closely. Four rounds of relief measures have already been rolled out to support the economy and the authorities stand ready to do more as needed. As recognized by staff, a history of prudent macroeconomic policies has left Hong Kong SAR with strong buffers to tackle both cyclical and structural challenges.

Fiscal Policy

Thanks to prudent fiscal management over the years, the authorities have built up ample fiscal space to help the economy navigate through negative shocks while maintaining long-term sustainability. The authorities will continue to make good use of its reserves to implement timely and appropriate countercyclical fiscal measures to stimulate the economy and relieve the economic burden of citizens. As of 4 December 2019, the authorities have rolled out four rounds of relief measures amounting HK\$25 billion (US\$3.2 billion) to support enterprises, especially small and medium enterprises, and residents. These measures, together with the package of one-off relief measures worth HK\$42.9 billion (US\$5.5 billion) in the 2019/20 Budget, are estimated to have a stimulus effect on the Hong Kong SAR economy of around 2 percent of GDP. Going forward, the authorities stand ready to roll out further measures as and when necessary.

In the longer term, the authorities recognize the challenges that population aging could pose to fiscal sustainability. But given large fiscal reserves and the challenging economic outlook, the authorities have no plan to introduce new taxes in the immediate future.

Linked Exchange Rate System

The authorities welcome staff's continued support for the Linked Exchange Rate System (LERS), which has been the anchor of Hong Kong SAR's monetary and financial stability. Despite the recent social unrest and rising global uncertainties, the LERS has continued to function smoothly, demonstrating once again its robustness and resilience. The authorities have the capability, resources, and determination to maintain the LERS and will continue to step up public communication to reinforce public confidence in the system. Meanwhile, the authorities also appreciate staff's balanced assessment of the external position of Hong Kong SAR.

Property Market

The authorities consider that the three-pronged approach—comprising macroprudential measures, demand-side management measures, and increase in housing supply—remains appropriate in containing housing market risks. The authorities share staff's view that their current macroprudential stance remains appropriate. The eight rounds of countercyclical macroprudential measures on property mortgage loans introduced by the Hong Kong Monetary Authority (HKMA) since 2009 have enhanced banks' resilience to risks associated with the property market. Adjustments to the current stance would only be made having regard to the evolving property market cycle and financial stability risks.

The property market has softened in the last few months. That said, the level of private residential property prices remains elevated and still out of line with economic fundamentals, and the authorities do not intend to relax or withdraw any demand-side management measures at this time. The authorities will remain vigilant and closely monitor the property market developments, and act in a timely manner when needed to help ensure the healthy development of the property market and to safeguard broader economic and financial stability.

The authorities remain committed to increasing land and housing supply to address the housing supply-demand imbalance. Continuous efforts are being made to increase both public and private housing. In her 2019 Policy Address, the Chief Executive of the Hong Kong SAR has announced a number of short- and medium-term support measures, such as exploring the feasibility of redeveloping factory estates for public housing use, making more flats available for sale under the subsidized home ownership schemes, making an additional residential site available for sale in 2020 for a second “Starter Homes” pilot project, etc.

Financial Sector

The authorities share staff’s assessment that Hong Kong SAR’s financial systems remain sound. The authorities will continue to strengthen regulatory and supervisory frameworks, having regard to international standards and financial stability risks. The 2019 Financial Sector Assessment Program (FSAP) on Hong Kong SAR is ongoing, and the authorities look forward to staff’s detailed assessment and policy recommendations. The recently completed Mutual Evaluation by the Financial Action Task Force and the Asia-Pacific Group on Money Laundering concluded that Hong Kong SAR has a sound regime to fight money laundering and terrorist financing that is delivering good results. The authorities will closely monitor any emerging risk areas in the financial systems. As noted by staff, the authorities will continue to strike a proper balance between facilitating innovation and managing associated risks, particularly arising from the rapid adoption of technology in the financial sector.

Promoting long-term competitiveness

As noted by staff, the authorities will step up efforts in maintaining Hong Kong SAR’s competitiveness by capitalizing on the opportunities from the development of fintech, green finance, and the Greater Bay Area (GBA). On fintech, significant progress has been made recently, such as the granting of virtual bank licenses, the launch of the Faster Payment System, and cross-border collaboration. Earlier this year, the authorities have announced a three-pronged strategy to encourage banks to take a proactive approach in managing climate-related risks, to promote responsible investment, and to build capacity in the green finance sector. On GBA, the authorities will work closely with their counterparts in Mainland China to ease the flow of capital and cross-border access of financial services within the area, including launching a wealth management connect scheme.