IMF Country Report No. 19/20

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

2018 ARTICLE IV CONSULTATION—PRESS RELEASE AND STAFF REPORT

January 2019

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 2018 Article IV consultation 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.**
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on a lapse-of-time basis. It is based on information available at the time it was completed on December 20, 2018.
- An **Informational Annex** prepared by the IMF staff.

The document listed below has been or will be separately released.

Selected Issues

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January 25, 2019

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IMF Executive Board Concludes 2018 Article IV Consultation with People's Republic of China—Hong Kong Special Administrative Region

On January 10, 2019, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with People's Republic of China—Hong Kong Special Administrative Region and considered and endorsed the staff appraisal without a meeting on a lapse-of-time basis.[2]

The Hong Kong SAR's economy is expected to grow 3.5 percent in 2018 resulting from a strong cyclical upswing in the first half of the year, continued global recovery, and buoyant domestic sentiment. In 2019, growth is expected to slow to 2.9 percent. Private consumption (aided by tight labor market) and investment (benefitting from projects currently in the pipeline) are expected to continue to support growth, with headwinds coming from the increased trade tensions, tighter global financial conditions, and slower growth in Mainland China. Over the medium-term, the economy is expected to grow at around 3 percent, close to its potential.

The authorities continued their track record of prudent macroeconomic policies. Financial regulation and supervision continued to be strengthened, including through the implementation of the Basel III requirements on capital, liquidity, and loss absorbing capacity of banks. Supervision of bank loans to property developers has been appropriately tightened, and Mainland China-related exposures have been closely monitored. Despite the fiscal stimulus in 2018/19, the budget is expected to deliver a surplus. While the property market showed initial tentative signs of softening in the recent months, the authorities thus far appropriately maintained their three-pronged approach of increasing housing supply and retaining tight macroprudential measures and demand side measures to guard financial stability.

Nevertheless, risks to Hong Kong SAR's outlook have increased. These include the further escalation of global trade tensions, possible disorderly tightening of global financial

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[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.

[2] The Executive Board takes decisions under its lapse-of-time procedure when the Board agrees that a proposal can be considered without convening formal discussions.

conditions, slower-than-expected growth in Mainland China, and a sharp housing market correction. In the long-term, population aging may weaken Hong Kong SAR's growth and fiscal position. Sizable buffers built over the years should help navigate this less favorable environment: at the end of 2017, fiscal reserves stood at 41 percent of GDP, or 28 months of government spending, while the FX reserves stood at around 127 percent of GDP or twice the monetary base. Banks have built strong capital and liquidity buffers, significantly above the international standards, and asset quality remains strong. The Linked Exchange Rate System continued to be the appropriate exchange arrangement for Hong Kong SAR.

Executive Board Assessment

In concluding the 2018 Article IV consultation with Hong Kong Special Administrative Region (SAR), Executive directors endorsed staff appraisal as follows:

Outlook. Growth is projected to remain robust in 2018 a result of the global recovery, continued solid growth in Mainland China, and increased consumer confidence, while a modest slowdown is expected in 2019 including as a result of ongoing trade tensions. Over the medium-term, Hong Kong SAR is expected to grow close to its potential growth of around 3 percent supported by sustainable (though gradually slowing) growth in Mainland China as rebalancing and financial sector reforms progress.

Risks. The balance of risks for Hong Kong SAR has shifted to the downside. Risks arise from further escalating U.S.-China trade tensions, possible disorderly tightening of global financial conditions, slower-than-expected growth in Mainland China, and a sharp housing market correction. These shocks are likely correlated and could materialize together, which would amplify their effects. At the same time, the development of the Greater Bay Area creates opportunities for Hong Kong SAR over the medium term, given its unique position as the gateway to Mainland China and as a global financial center with renowned professional services.

Buffers. Many years of sound macroeconomic and prudential policies have endowed Hong Kong SAR with significant buffers to weather these shocks. These include ample FX reserves, one of the strongest net International Investment Positions in the world, and fiscal reserves covering more than two years of government spending. Banks' capital buffers and liquidity positions remain strong, due to stringent regulatory standards.

Financial sector policies. Robust financial regulation and supervision should help weather domestic and external shocks. The implementation of Basel III requirements remains on track, and the countercyclical capital buffer has appropriately been increased further. The authorities have also introduced the net stable funding ratio, and rules on loss-absorbing capacity requirements for authorized institutions will be operationalized by year-end, ensuring that institutions have sufficient financial resources to absorb losses and be re-capitalized in case of failure. Supervision of bank loans to property developers has been appropriately strengthened through higher capital charges. Mainland China-related exposures are also closely monitored.

The authorities should also consider measures to extend the regulatory perimeter to reduce regulatory arbitrage from lending by property developers. The Securities and Futures Commission intends to impose quantitative limits on margin lending by brokers. The development of a risk-based capital regime for insurance companies is in the Phase-2, with a focus on detailed rules for quantitative requirements.

Housing policy. The combination of macroprudential measures and stamp duties currently in place remains appropriate, but more needs to be done to raise housing supply. While macroprudential measures have allowed for building buffers in the financial system against a correction, housing prices remain overvalued, and affordability has deteriorated. A significant increase in housing supply remains the most needed course of action. The DSD/NRSD is assessed to be a capital flow management measure and macroprudential measure under the IMF's Institutional View of Capital Flows and should be phased out once systemic risks dissipate.

Exchange rate regime and external position. The LERS remains the appropriate exchange rate arrangement for Hong Kong SAR. Since its introduction, the LERS has served as an anchor of stability, helping to ensure sustained growth, competitiveness, and the smooth functioning of the extensive financial services industry. The functioning of LERS is aided by Hong Kong SAR's flexible economy, ample fiscal buffers, and strong financial regulation and supervision. The credibility of the arrangement is further underscored by ample FX reserves. Hong Kong SAR's external position and the HK dollar remain broadly in line with medium-term fundamentals and desirable policy settings.

Fiscal policy. The FY2018/19 budget is expected to deliver a fiscal stimulus that is not needed given the economy's strong cyclical position. At the same time, increased expenditure on social welfare, health, and education is welcome, though some allowances could be better targeted, and spending on public housing should be raised. Other expenditure increases should be carefully analyzed as they may be difficult to reverse in the future, thus complicating long-term fiscal management when aging pressures arise. The authorities should also consider reversing the recent tax cuts. Furthermore, the authorities should strive for greater countercyclicality in the face of both positive and negative shocks.

Long-term fiscal challenges. Aging will lead to higher pension and healthcare spending and the housing market will likely normalize, which may lead to structural fiscal deficits. Therefore, the authorities will need to consider measures to ensure fiscal sustainability, unless the social safety net is scaled back. The Tax Policy Unit should study possible tax-broadening measures and their impact on long-term fiscal sustainability, competitiveness and growth. Options identified through international benchmarking include introducing/raising indirect taxes like sales tax or VAT and raising excise taxes to avoid overreliance on direct taxes. On the expenditure side, periodic expenditure reviews should continue to ensure adequate quality of fiscal spending. Hong Kong SAR's strong fiscal buffers afford it time to plan for meeting future needs.

Inequality. The authorities' efforts to reduce inequality and poverty through a combination of subsidies, allowances, social welfare payments, and public housing should continue. Introduction of the Annuity Scheme and the reverse mortgage can help ensure adequate retirement income. Going forward, additional steps would be welcome including: increasing progressivity of personal income taxation, ensuring adequate levels of spending on housing, health, education and social welfare, and better targeting existing benefits.

Competitiveness and long-term growth. Efforts to raise labor force participation of women and older workers should continue. The authorities' plan to abolish the arrangement for "offsetting" severance payment and long service payment with Mandatory Provident Fund benefits is welcome, and should proceed as planned. Plans to develop the bond market and further promote innovation and technology are steps in the right direction. Further expansion of the Hong Kong SAR's role as a leading financial center and as the gateway to Mainland China should also help.

Hong Kong SAR: Selected Economic and Financial Indicators, 2015-23

	2015	2016	2017	2018 Proj.	2019 Proj.	2020 Proj.	2021 Proj.	2022 Proj.	2023 Proj.
NATIONAL ACCOUNTS									
Real GDP (percent change)	2.4	2.2	3.8	3.5	2.9	3.0	3.1	3.1	3.1
Contribution									
Domestic demand	1.4	2.5	5.2	5.4	3.3	3.5	3.5	3.6	3.5
Private consumption	3.1	1.3	3.7	4.0	2.2	2.3	2.3	2.5	2.5
Government consumption	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3
Gross fixed capital formation	-0.7	0.0	0.7	0.9	0.8	0.9	0.8	0.7	0.8
Inventories	-1.2	0.9	0.5	0.1	0.0	0.0	0.0	0.0	0.0
Net exports	0.8	-0.3	-1.4	-1.9	-0.4	-0.5	-0.3	-0.5	-0.4
Output gap (in percent of potential)	-0.2	-0.8	0.0	0.5	0.3	0.2	0.2	0.1	0.1
Saving and investment (percent of GDP)									
Gross national saving	24.9	25.5	26.6	25.6	25.7	25.7	25.7	25.5	25.5
Gross domestic investment	21.5	21.5	22.3	22.3	22.2	22.3	22.3	22.2	22.1
Saving-investment balance	3.3	4.0	4.3	3.4	3.5	3.4	3.4	3.4	3.5
LABOR MARKET									
Employment (percent change)	0.9	0.2	0.9	1.0	0.4	0.4	0.3	0.3	0.3
Unemployment rate (percent, period average)	3.3	3.4	3.1	2.6	2.6	2.6	2.6	2.6	2.6
Real wages (percent change)	0.5	1.2	2.3	1.6	1.0	1.2	1.3	1.3	1.3
PRICES									
Inflation (percent change)									
Consumer prices	3.0	2.4	1.5	2.4	2.1	2.2	2.4	2.5	2.5
GDP deflator	3.6	1.7	2.9	3.1	2.0	2.0	1.7	1.9	1.9
GENERAL GOVERNMENT (percent of GDP)									
Consolidated budget balance	0.6	4.5	5.6	3.3	2.0	1.8	1.7	1.7	1.7
Revenue	18.8	23.0	23.3	22.2	21.0	20.9	21.2	21.2	21.2
Expenditure	18.2	18.6	17.7	18.9	19.0	19.1	19.5	19.5	19.5
Fiscal reserves as of March 31	35.1	38.3	41.4	42.2	42.1	41.9	41.6	41.3	41.0
FINANCIAL									
Interest rates (percent, period-average)									
Best lending rate	5.0	5.0	5.0	...	...	...	...	...	...
Three-month HIBOR	0.4	0.6	0.9	...	...	...	...	...	...
10-year Treasury bond yield	1.6	1.2	1.6	...	...	...	...	...	...
MACRO-FINANCIAL									
Loans for use in Hong Kong SAR (ex. trade financing)	6.3	8.0	16.1	14.6	8.4	7.4	9.1	8.1	9.3
House prices (end of period, percent change)	2.4	7.9	14.7	14.8	3.3	3.1	4.5	5.9	6.6
Credit Gap 1/	11.0	10.9	19.6	19.3	10.2	7.2	5.6	2.6	2.0
Hang Seng stock index (percent change)	-7.2	0.4	36.0	...	...	...	...	...	...
EXTERNAL SECTOR									
Merchandise trade (percent change)									
Export value	-1.8	-0.5	8.0	8.0	5.3	3.6	4.0	3.6	3.5
Import value	-4.1	-1.0	8.7	8.6	5.3	3.9	4.3	4.1	3.8
Terms of trade	0.5	0.0	-0.1	0.8	0.0	-0.1	-0.2	-0.2	-0.1
Current account balance (percent of GDP) 2/	3.3	4.0	4.3	3.4	3.5	3.4	3.4	3.4	3.5
Foreign exchange reserves 2/									
In billions of U.S. dollars, end-of-period	358.8	386.2	431.6	447.7	470.0	492.8	510.7	528.1	540.9
In percent of GDP	116.0	120.3	126.4	123.6	122.2	119.9	117.2	113.9	109.4
Net international investment position (percent of GDP)	324.2	359.2	409.4	387.0	372.1	357.6	344.4	331.3	318.7
Linked rate (fixed)									
Market rate (HK$/US$1, period average)	7.752	7.762	7.793	...	...	...	...	...	...
Real effective rate (period average, 2010=100)	113.9	118.3	118.2	...	...	...	...	...	...

Sources: BIS,CEIC; HKSAR Census and Statistics Department; and IMF staff estimates.
1/ Based on loans for use in Hong Kong SAR
2/ Data published using the Balance of Payments Statistics Manual 6 (BPM6) format

INTERNATIONAL MONETARY FUND

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

December 20, 2018

STAFF REPORT FOR THE 2018 ARTICLE IV CONSULTATION DISCUSSIONS

KEY ISSUES

- **Overview**. Hong Kong SAR's economy benefitted from a strong cyclical upswing through the first half of 2018, supported by the continued global recovery, buoyant domestic sentiment, and the booming property market. However, near-term risks have significantly increased – including those from trade tensions, tighter global financial conditions, and capital outflows from emerging markets. Also, long-term challenges, including from aging, elevated inequality, and the persistent housing shortage, need to be tackled. Prudent macroeconomic policies and ample buffers are in place to help smoothen the transition and ensure continued stability.

- **Policies**. While macroeconomic and financial policies have generally been appropriate and allowed for building of buffers, fiscal policy could have been more countercyclical. Going forward, the recommended policy strategy includes:

    - **Financial sector**. The robust regulatory and supervisory framework should continue to be strengthened to limit buildup of risks. Recent increases of household loans merit close monitoring. Fintech developments should also be carefully evaluated to balance efficiency gains against potential risks.

    - **Housing market**. The three-pronged strategy, comprised of macroprudential measures, stamp duties, and measures to boost housing supply, remains appropriate and should continue in place, and be adjusted as financial stability risks evolve. However, ultimately resolving the imbalances in the housing market requires expanding supply and further efforts are needed in this area.

    - **Exchange rate**. The Linked Exchange Rate Regime remains the appropriate arrangement for Hong Kong SAR and should remain as an anchor of economic and financial stability.

- **Fiscal**. Fiscal stimulus does not appear necessary in the short-term given the economy's cyclical strength, and while higher spending on social welfare and education is warranted given elevated income inequality, tax cuts should be reversed, and other expenditure carefully evaluated. In the long term, revenues will need to be raised to cope with aging-related fiscal pressures.
- **Long-term growth**. Increasing labor force participation of women and older workers could help stem labor force declines. Further regional integration, including in the context of the Greater Bay Area, could create growth opportunities.

Approved By
Kenneth Kang and Petya Koeva Brooks

Discussions took place in Hong Kong SAR during October 29 – November 9, 2018. The team comprised Sonali Jain-Chandra (head), Emilia Jurzyk, Rui Mano (all APD), and Sally Chen (Resident Representative, MCM). Markus Rodlauer (APD) joined the concluding meetings. The mission met Financial Secretary Paul Chan, HKMA Chief Executive Norman Chan, and other senior officials. Zhongxia Jin, Sun Ping, and Georgina Lok (OED) joined the official meetings. Ananya Shukla, Gabriel Alvim (all APD), Daisy Wong (COM), Atis Lee, and Kevin Chow (Resident Representative Office) provided support to the mission.

CONTENTS

CONTEXT: STRONG REBOUND AMID GROWING RISKS _____ 5

DEVELOPMENTS: THE ECONOMY OPERATING AT FULL EMPLOYMENT _____ 5

MANY RISKS SURROUND THE BASELINE _____ 9
A. Rising Trade Tensions _____ 10
B. Sharper-Than-Expected Tightening of Global Financial Conditions _____ 10
C. Sharp Slowdown in the Property Market _____ 11
D. Slowdown in Mainland China _____ 12
E. Amplification of Risks Scenario _____ 14

SIGNIFICANT BUFFERS IN PLACE _____ 15

POLICY CHALLENGES _____ 16
A. Ensuring Continued Financial Stability _____ 16
B. Containing the Housing Market Boom _____ 18
C. Preserving the Exchange Rate Arrangement _____ 21
D. Ensuring Fiscal Sustainability _____ 22
E. Bolstering Long-Term Growth Prospects _____ 26

STAFF APPRAISAL _____ 30

BOXES
1. Amplication of Risks Scenario for Hong Kong SAR _____ 33
2. Financial Conditions and Growth at Risk _____ 34
3. Greater Bay Area: Opportunities and Challenges _____ 35

FIGURES

1. Strong Rebound in Growth 6
2. Strong Fiscal Position but Spending Pressures Loom in the Medium-Term 36
3. Housing Boom Continues Despite Tight Macroprudential Settings 37
4. The Linked Exchange Rate System Has Operated Smoothly 38
5. Debt Vulnerabilities 39
6. Exposures of Hong Kong SAR 40

TABLES

1. Selected Economic and Financial Indicators, 2015-23 41
2. Balance of Payments, 2015-23 42
3. Consolidated Government Account, 2015-2023 43
4. Monetary Survey, 2013-19 44
5. Vulnerability Indicators, 2013-18 45

APPENDICES

I. Risk Assessment Matrix 46
II. Debt Sustainability Analysis 47
III. External Sector Assessment 49
IV. Implementation of the 2014 FSAP Recommendations 51
V. Summary of Macroprudential Measures Introduce Since 2009 64
VI. Main Recommendations of the 2016 Article IV Consultation 70

CONTEXT: STRONG REBOUND AMID GROWING RISKS

1. **The Hong Kong SAR economy benefited from a strong cyclical upswing and momentum continued through the first half of 2018…** Growth rebounded strongly in 2017 and the first half of 2018 as a result of the global recovery, continued momentum in Mainland China, and increased consumer confidence. Inflation remained subdued and unemployment fell to a 20-year low. The booming economy and the buoyant property market boosted fiscal revenues, resulting in a large fiscal surplus.

2. **…but challenges are increasingly clouding the horizon.** Risks, including the escalating trade tensions, a disorderly tightening of global financial conditions, slower-than-expected growth in Mainland China, and a sharp property market correction, could have a significant negative impact on Hong Kong SAR's economic prospects. At the same time, Hong Kong SAR should continue to benefit from its role as a global financial center, and growth opportunities could be generated from the development of the Guangdong-Hong Kong SAR-Macao SAR Bay Area (Greater Bay Area).

3. **Going forward, Hong Kong SAR will need new drivers of growth**. The property boom has left the city with one of the least affordable housing in the world and high commercial rents, amid elevated income inequality. Its services sectors face stiff competition from cities in Mainland China and elsewhere in Asia. That, together with the structural challenge of an aging population—likely to bring a decline in the labor force and productivity—may result in falling competitiveness, slower growth, and a deteriorating fiscal position. Fortunately, many years of prudent macro policies left Hong Kong SAR with ample buffers that should ease the transition and allow for policies to ensure continued stability and prosperity, and increased inclusion. The authorities' have taken a number of steps to address these challenges including efforts to increase housing supply and provide public housing to a large part of the population, and boosted spending on health and social welfare to increase inclusion, as well as maintaining robust financial regulation and supervision including for fintech.

DEVELOPMENTS: THE ECONOMY OPERATING AT FULL EMPLOYMENT

4. **Strong growth continued amid increased consumer confidence and the global recovery, slowing modestly in Q3**.

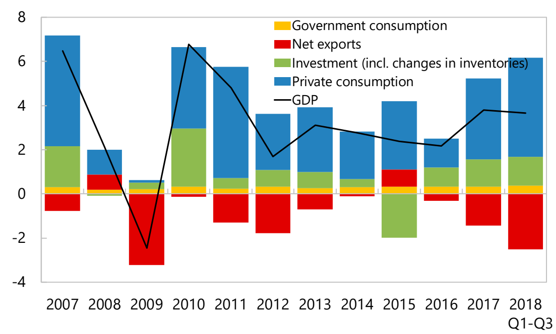
- **Domestic activity.** Growth remained strong in 2017 and through 2018:Q1, and started to moderate since 2018:Q2. Private consumption was the main contributor, supported by a tight labor market (unemployment stood at 2.8 percent in the three months ending October, the lowest in over 20 years), continued growth in real wages, and tourism inflows from Mainland

China (which account for 40 percent of retail sales). The output gap is estimated to be 0.5 percent and inflation remains subdued, although picked up slightly to 2.7 percent in October.

Figure 1. Hong Kong SAR: Strong Rebound in Growth

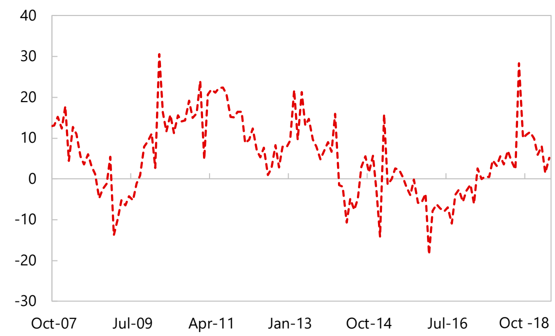
The economy expanded 3.7 percent y/y in Q1-Q3 2018…

Contribution to Real GDP Growth by Major Expenditure Components
(percent)



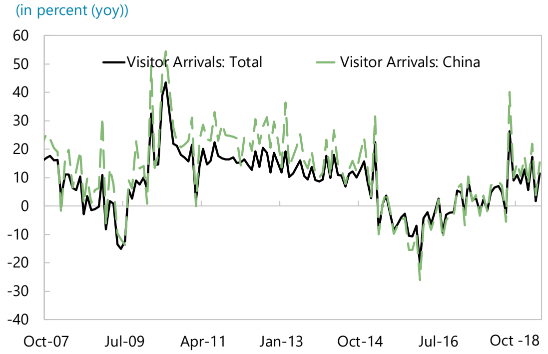
…driven by strong private consumption….

Retail Sales Volume
(in percent (yoy))



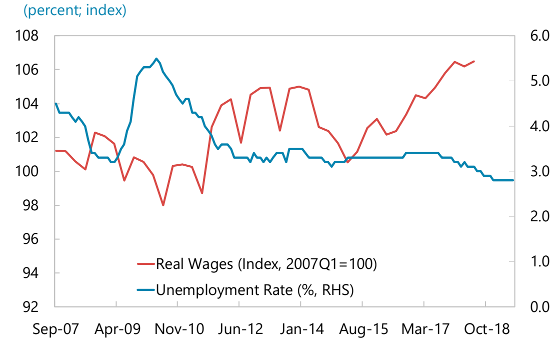
…strong tourist arrivals, especially from Mainland China

Visitor Arrivals
(in percent (yoy))



…and very tight labor market conditions.

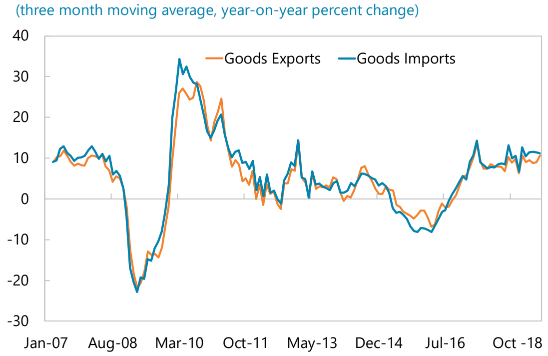
Unemployment and Wage Developments
(percent; index)



Note: Unemployment series is a seasonally adjusted, 3 month average; Real Wages series is a non-seasonally adjusted, 3 month average.

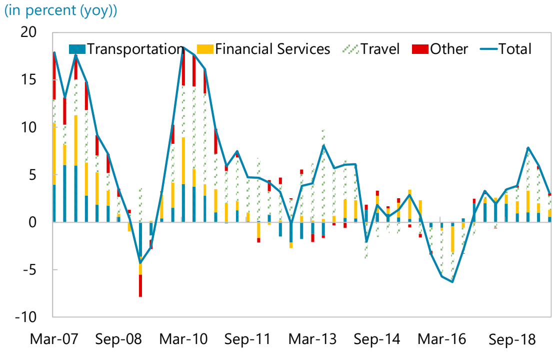
Trade activity held steady …

Exports and Imports of Goods
(three month moving average, year-on-year percent change)



…and services exports continued to expand.

Exports of Services
(in percent (yoy))

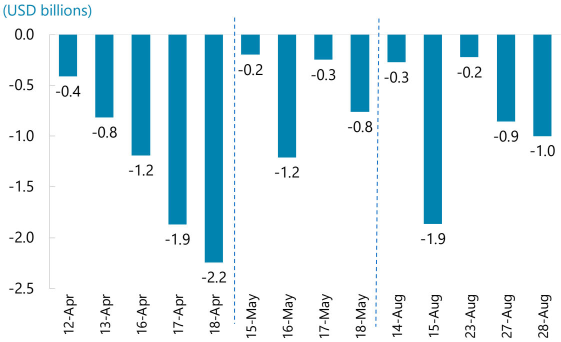


Sources: CEIC, Haver, and IMF staff calculations.

- **External sector**. Despite rising trade tensions between Hong Kong SAR's two major trading partners, exports expanded 8 percent y/y in 2018Q1-Q3 (compared to the average of 1.6 percent during 2015-2017), with 5 percent increase in volumes. Amid strong domestic demand, imports edged up even more: net exports continued to subtract from growth and the current account surplus moderated from 4.3 percent of GDP in 2017 to 2.4 in H1 2018. Capital outflows resumed in Q2, after large inflows in 2017, driven by portfolio investment.

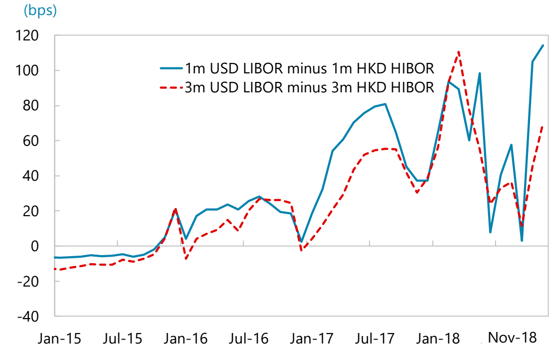
- **Exchange rate.** The Linked Exchange Rate System (LERS) has continued to anchor exchange rate developments. Ample liquidity in the domestic interbank market slowed the upward adjustment of the HIBOR despite interest rate increases by the U.S. Fed. The resulting HIBOR-LIBOR differential widened in April, leading to HK dollar depreciation to 7.85 per U.S. dollar, the floor of the convertibility undertaking. The Hong Kong Monetary Authority (HKMA) intervened as part of the currency board, selling US$13 billion between April and August. These operations drained liquidity from the banking system and raised the HIBOR closer to the LIBOR, which led to the recent strengthening of the HKD closer to midpoint of the band.

US Dollar Sold by HKMA under Weak-side Convertability Undertaking
(USD billions)



Source: HKMA.

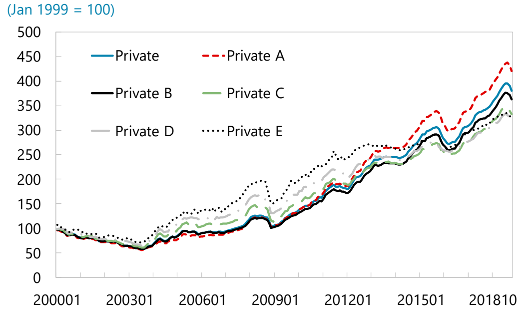
Spread between USD LIBOR and HKD HIBOR
(bps)



Sources: CEIC, and IMF Staff Calculations.

- **Property prices**. Housing prices continued their upward trend, but softened recently. Trough-to-peak (March 2016 to July 2018), house prices grew 45 percent, and even more for the smallest, and thus most affordable, apartments. House prices declined 3.7 percent between July and October, and transactions declined from the robust figures seen in the first half of the year.

Residential Property Price Indices per Apartment Class /1
(Jan 1999 = 100)

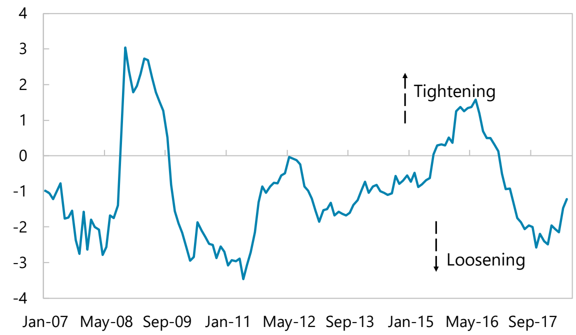


Sources: Haver and IMF staff calculations.
1/ Class A denotes apartments of less than 40 m2, class B: 40 m2 to 69.9 m2, class C: 70m2 to 99.9m2, class D: 100m2 to 159m2, class E: above 160 m2.

- **Financial conditions**. Financial conditions remained accommodative in the first half of 2018 and then started to move towards neutral. Local interest rates rose modestly from historically low levels, equity prices fell 20 percent from the peak in January to end-November, capital outflows resumed and domestic lending moderated.

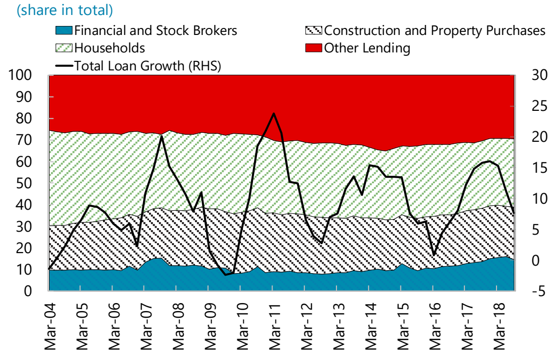
- **Credit.** Credit growth slowed to 7.2 percent y/y in Q3 2018 vs. 16.1 percent in 2017, particularly among loans for use outside Hong Kong SAR, especially in Mainland China. The growth of domestic loans moderated as well, with growth in consumer lending easing to 9.9 percent, driven by 13 percent y/y growth in other household lending (including credit cards and other unsecured loans) and continued robust mortgage lending. The household debt-to-GDP ratio dropped slightly from 71.2 percent in Q2 to 70.7 percent in Q3 2018, while corporate debt also came down from 177 percent of GDP to 170 percent over the same period.[1] With a moderation in credit growth, the domestic credit-to-GDP ratio stabilized at 240 percent in Q3 and the credit gap, defined as the credit-to-GDP ratio relative to trend, fell to 16.1 percent in Q2 from 20.6 percent in Q4 2017, but remains elevated.

Financial Conditions Index



Sources: Bloomberg, and IMF Staff Calculations.
Note: FCI is based on principal component analysis of data on funding costs and quantity from 1980 to Q2 2018.

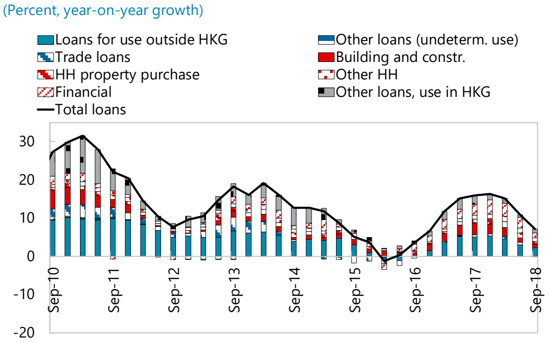
Loans for use in Hong Kong SAR by type
(share in total)



Sources: Haver Analytics, and IMF Staff Calculations.

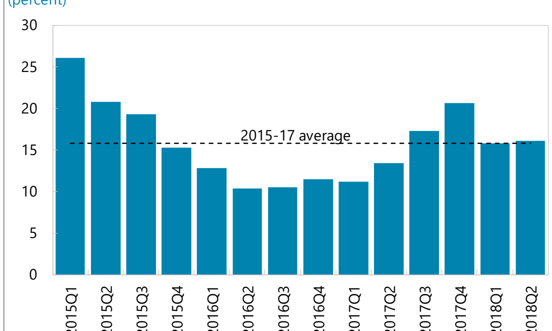
- **Fiscal.** The FY2017/18 surplus came in at 5.6 percent of GDP, much stronger than budgeted (0.6 percent of GDP). Land premia and stamp duties were the main contributors, amid the

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



Sources: HKMA, and IMF staff calculations.

Credit-to-GDP Gap based on Loans for Domestic Use
(percent)



Sources: HKMA.

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[1] Household debt is estimated based on bank lending to households, including residential mortgage loans, credit card advances and loans for other private use. It does not cover mortgage loans extended by property developers to home buyers, which is small relative to outstanding mortgage loans extended by banks.

booming property market. As a result, fiscal reserves rose to about 41 percent of GDP or 28 months of government spending by end-2017.

5. Baseline projections. Growth is projected to slow moderately in the second half of 2018 and through 2019. The annual growth rate is projected to be 3.5 percent in 2018, and 2.9 percent in 2019. The forecast relies on the following assumptions:

- Tariffs announced until end-September 2018 come into effect, but trade tensions do not escalate further, and global trade grows at 4.4 percent in 2019-2020.
- Mainland China's economic growth slows slightly but remains robust at 6.2 percent over the next two years.
- Rising global interest rates are transmitted to Hong Kong SAR, gradually reducing the credit gap and cooling the property market.
- Private consumption remains robust, supported by tight labor market conditions.
- Government spending rises significantly in 2018, delivering a positive fiscal impulse.

6. Medium-term growth. Over the medium-term, Hong Kong SAR is expected to grow close to its potential growth of around 3 percent and the positive output gap is expected to gradually close. Hong Kong SAR's growth prospects are projected to be supported by sustainable (though gradually declining) growth in Mainland China, as rebalancing and financial sector reforms progress.

Authorities' Views

7. The authorities broadly agreed with mission's assessment. They noted that the short-term outlook for Hong Kong SAR remained strong until the third quarter of 2018 on the back of robust private consumption aided by tight labor market conditions and investment, as well as still-strong exports. Some of the negative effects of some external downside risks started to materialize at the end of Q3. Overall, the authorities believe that Hong Kong SAR's strong buffers and robust policy frameworks will enable it to navigate through the challenges. Some softening in the property market should have only a limited impact on growth given the strong financial position of both households and banks. Hong Kong SAR is expected to benefit from further development of the Greater Bay Area, as well as its position as the gateway to Mainland China and a global financial center.

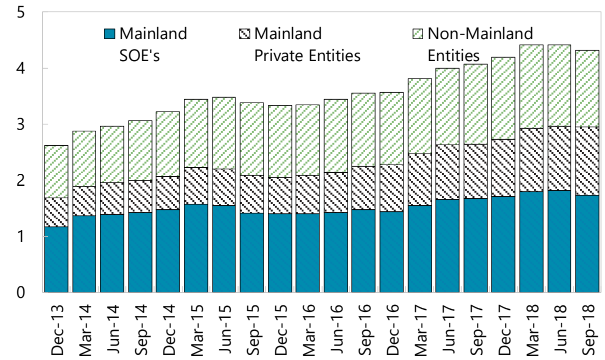
MANY RISKS SURROUND THE BASELINE

Risks have shifted to the downside. Hong Kong SAR remains vulnerable to further escalating U.S.-China trade tensions, possible disorderly tightening of global financial conditions, slower-than-expected growth in Mainland China, and a sharp housing market correction. GDP could be knocked down by 2½ percent over two years and remain lower in the medium-term in a scenario in which multiple shocks, including escalating trade tensions and turmoil in emerging markets, materialize.

A. Rising Trade Tensions

8. Rising trade tensions would have a significant impact on Hong Kong SAR's highly-open economy. China and the U.S. are its major trading partners, and the city's economy and labor market are highly dependent on a range of trade-related industries, including logistics, wholesale and retail. While tariff actions thus far have not weighed on trade through Hong Kong SAR, the impact of further escalation could lower its GDP by 1 percent in 2019, with the effects likely larger once the full impact on consumer confidence and financial markets is factored in (see Box 1). The transmission would operate through real economy channels—chiefly trade, logistics and tourism—and financial channels, through re-pricing of risk in equity markets, higher corporate spreads and possible deterioration of the quality of the large Mainland-related loan portfolio.

Hong Kong SAR Banks' Mainland China Exposure
(Trillions of HKD)



Sources: HKMA.

B. Sharper-Than-Expected Tightening of Global Financial Conditions

9. After a decade of "easy money", Hong Kong SAR remains vulnerable to faster-than-expected tightening of global financial conditions. Several factors are at play:

- **Monetary policy surprises by the Fed or the ECB**. Robust growth in the U.S., aided by fiscal stimulus, raises the prospect of faster-than-anticipated interest rate hikes. Also, the ECB has announced that the bond purchase program will end in December 2018. Higher rates in the U.S. and the Euro-area, in turn, could lead to a rise in global rates, term premia, and U.S. dollar appreciation, which would feed directly into HK dollar appreciation and increase local funding rates.

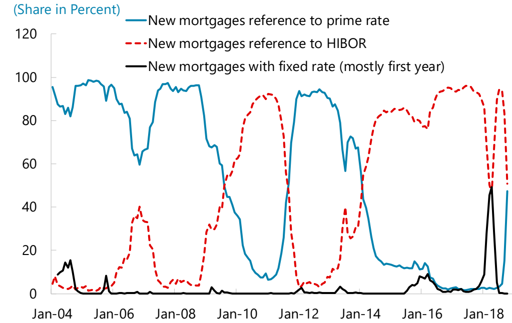
- **"Bumpy" financial and local government reforms in China**. If further reforms are not managed well, they could bring about increased volatility and disorderly repricing of credit risks, resulting in investor losses and a reduced risk appetite.

10. Tighter liquidity conditions would have a broad-based impact.

- **Households**. HIBOR-based mortgages accounted for 50.8 percent of new mortgages in October. While most HIBOR-based mortgages are capped by the prime rate that prevents rates from rising too sharply, if banks decide to increase prime rates, mortgage payments would rise.

Staff analysis suggests that for every 1 percentage point increase in interest rates, household debt service rises by about 5 percentage points. Moreover, analysis by the HKMA indicates that a 1 percentage point increase in the outstanding mortgage debt service ratio would reduce household consumption by around ¾ percent in the long-run.

New Mortgage Pricing Scheme
(Share in Percent)



Sources: HKMA.

- **Corporates.** The leverage of nonfinancial corporates has also been rising, with corporate debt increasing from 125 percent of GDP in 2010 to 170 percent in Q3 2018. Higher interest rates would increase refinancing costs, reduce investment and potentially weigh on bank balance sheet growth. Staff analysis suggests that a 3 percentage point interest rate increase would reduce investment by ½ - 1 percent.

- **Global financial market volatility and capital flows.** As a financial center, Hong Kong SAR is highly vulnerable to shifts in risk sentiment. Already, high-frequency data suggests that capital outflows have increased in recent months.

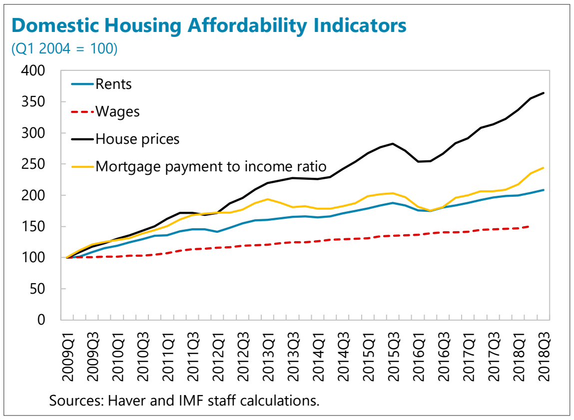
11. The end of a prolonged period of easy financial conditions is expected to dampen growth over the medium term. Easy financial conditions in the recent past are tightening amid rising interest rates, equity market losses, capital outflows, and an increase in market volatility. With financial conditions moving to neutral, the near-term impact on growth is expected to be limited. However, a dramatic tightening in financial conditions could have a large negative impact on growth (see Box 2).[2]

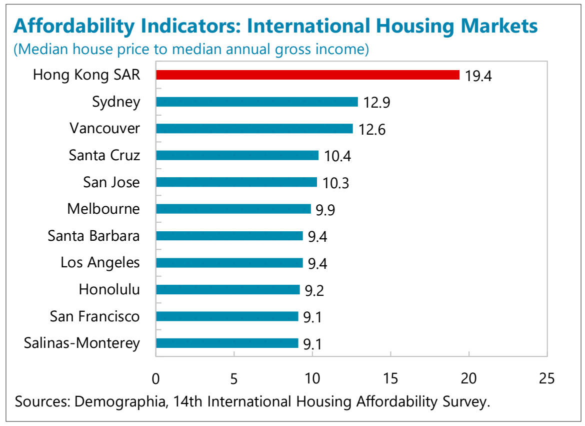
C. Sharp Slowdown in the Property Market

12. The property market remains one of the least affordable in the world due in part to supply shortages, although it has recently started to show signs of cooling. Staff analysis suggests that as of Q2 2018, house prices exceeded those suggested by fundamentals by around 20-35 percent. Housing affordability deteriorated further: since 2009, house prices increased more than 260 percent and rents doubled, while average wages grew less than 50 percent. The average mortgage payment-to-income ratio for owners of small and medium-sized units stood at 74 percent in Q2 2018 (based on government estimates). As a result, Hong Kong SAR remains one of the least

[2] The growth-at-risk (GaR) exercise links current financial conditions to the distribution of future growth outcomes. Specifically, it assesses the impact of changes in financial conditions on future growth - based on quarterly growth rate - and financial stability. "Near term" refers to the one-year horizon; "medium term" refers to the three-year horizon out to 2021.

affordable housing market in the world. More recently, prices retreated from their July peak by 3.7 percent to October, indicating that the housing market may be starting to soften.





13. **Gradual interest rate increases have the potential to cool the market in an orderly way, but sharper-than-expected increases would pose a risk.** A sharper-than-expected increase in interest rates, particularly if accompanied by weaker growth in trading partners, could weigh on consumption. The direct impact on the banking sector would likely be limited given that the share of mortgages in bank portfolios has fallen to 20 percent, loan-to-value (LTV) ratios on new mortgages fell to 45 percent in October, and banks are well capitalized. Instead, adverse impacts on banks' balance sheets would materialize through second-round effects of lower consumption and reduced business profitability and investment via the wealth effects channel.

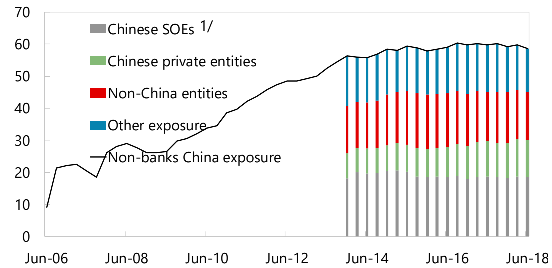
D. Slowdown in Mainland China

14. **The degree of interconnectedness between Hong Kong SAR and Mainland China is high and continues to rise**. Hong Kong SAR benefits from close ties to Mainland China through trade, tourism, and financial sector linkages (Figure 6). Thus, a significant slowdown in Mainland China either due to insufficient/not-well-managed domestic reforms or further trade tensions could significantly impact Hong Kong SAR.

- **Real sector**. Trade linkages between Mainland China and Hong Kong SAR remain strong and Mainlanders account for over ¾ of all tourism spending. Domestic consumption also likely captures some of their spending. A slowdown in Mainland China would impact the trade, logistics and tourism sectors.

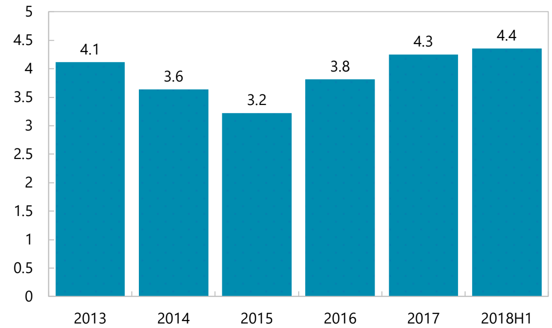
- **Banking system**. Financial exposure to Mainland China remains high, with around 39 percent of loans extended for Mainland-related purposes. Asset quality of that lending remained sound, with an NPL ratio at 0.64 percent in Q3 2018. Also, the average interest coverage ratio of A-share firms improved and the debt-at-risk ratio fell from 6.9 percent in Q2 2017 to 5.0 percent in Q3 2018, reflecting stronger earnings and moderation in leverage. Softer growth in Mainland China combined with a weaker global trade environment could lower growth of Mainland-related lending and dent the quality of existing loans.

Hong Kong SAR Banks: Non-Bank China Exposure by Borrower Type
(percent of total loans)



Source: HKMA, CEIC, and IMF staff calculations.
Note: The breakdown is only available from 2013Q4.
1/ Loans used onshore, thus exposed to Mainland China's economic cycle.

Interest Coverage of Non-Financial A-share Firms
(Times of earnings over interest expenses)



Sources: WIND, and IMF staff calculations.

- **Hong Kong SAR is a regional financial center and a gateway to Mainland China.** Cross-border flows between the Mainland and Hong Kong SAR have increased in recent years, boosting the prospects of Hong Kong SAR's financial sector. Its role as a fundraising platform for Chinese firms has expanded from equity fundraising through IPOs to bank borrowing and bond financing.

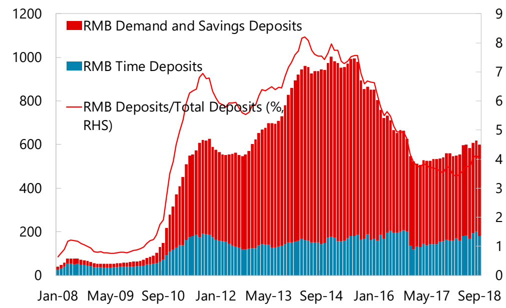
  - **Bank financing.** A downturn in the investment and financing needs of Mainland corporates could negatively weigh on Hong Kong SAR banks' balance sheet growth and profit outlook.

  - **Capital market financing.** In 2017, total equity raised by Mainland firms listed in Hong Kong SAR amounted to US$47 billion, and offshore bonds issued by Mainland firms increased by almost 60 percent to US$66 billion. Much of this expansion is dependent on China's growth prospects and is sensitive to RMB exchange rate expectations. Anticipating greater fund flows between the Mainland and Hong Kong SAR, the daily quota for Stock Connect Schemes was increased: the southbound daily quota into Hong Kong SAR increased from RMB 10.5 billion to RMB 42 billion for both the Shanghai-Hong Kong and Shenzhen-Hong Kong Schemes since May 2018. Usage remains limited, however, with net inflows averaging no more than 3 percent of the new quota in 2018.

  - **Asset management business.** The asset management business has grown rapidly, with total asset under management reaching HK$31.6 trillion in mid-2018 from HK$18.3 in 2016. Overseas investors make up two-thirds of the funding. The industry's growth reflects Hong Kong SAR's highly-regarded regulatory framework and position as a preferred gateway to the Mainland, where the number of high-net-worth individuals has increased rapidly.

  - **RMB internationalization**. RMB deposits edged higher relative to a year ago in 2018, reflecting stabilization of RMB expectations in 2017 and 2018:H1. However, the escalation of trade tensions and recent RMB depreciation could weigh on the demand for renminbi assets in the near term and have a negative impact on RMB deposits and trade settlement conducted through Hong Kong SAR.[3] Over the medium to long term, this market is expected to continue growing with ongoing RMB internationalization and further opening-up of Mainland China's capital account.

RMB Deposits in Hong Kong SAR
(RMB Billions)



Sources: CEIC, and IMF Staff Calculations.

E. Amplification of Risks Scenario

15. GDP could fall by 2½ percent over two years under a scenario of rising trade tensions and turmoil in emerging markets. Rising trade tensions could come in conjunction with a generalized re-pricing of risks in emerging markets and tighter global financial conditions, leading to capital outflows and dollar appreciation. These external shocks could be amplified as sharp corrections in Hong Kong SAR's asset markets dampen consumption and investment through sizable wealth effects (see Box 1).

Authorities' Views

16. The authorities broadly agreed with the mission's assessment of risks and are carefully monitoring risks and exposures. They agreed that near-term risks have increased, but underscored that Hong Kong SAR's strong buffers and robust policy frameworks, including ample fiscal reserves, the smoothly operating Linked Exchange Rate System underpinned by sizeable Exchange Fund, strong regulatory and supervisory frameworks and a well-capitalized banking system, will enable Hong Kong SAR to navigate through these challenges. They underscored that the Government and the financial regulators will continue to closely monitor developments and financial markets, with a view to ensuring financial stability.

- **Trade tensions**. The authorities generally share the mission's view that a further escalation in trade tensions between the US and Mainland China, together with its repercussions on global economic sentiment, trade and investment activities, and financial markets, could be a major source of downside risk to the Hong Kong SAR's economic outlook. The direct impact of tariffs through the trade channel is not expected to be large, however indirect impacts through confidence effects and financial markets and those affecting the Asian value chain could be much larger, but are highly uncertain.

- **Faster-than-expected U.S. monetary policy normalization** could potentially trigger sizeable outflows from Hong Kong SAR after years of easy monetary policy globally. Fed rate hikes, combined with the uncertainties associated with the economic and financial market impacts of the trade disputes, have already affected investor sentiment and contributed to some capital

[3] Despite increased uncertainty surrounding the RMB's outlook, the average daily turnover in renminbi Real Time Gross Settlement system remains high at about RMB1trillion, in part underpinned by active forex transactions in the CNH market and cross-border investment flows through the Stock and Bond Connect schemes.

outflows. That said, contagion to Hong Kong SAR from emerging markets' outflows has been limited.

- **Disruptive correction in the property market.** Eight rounds of macroprudential measures left banks well prepared for the first-round impact of a correction in house prices. Even accounting for second-round effects, stress tests indicate that banks' solvency positions would not breach safe regulatory thresholds.

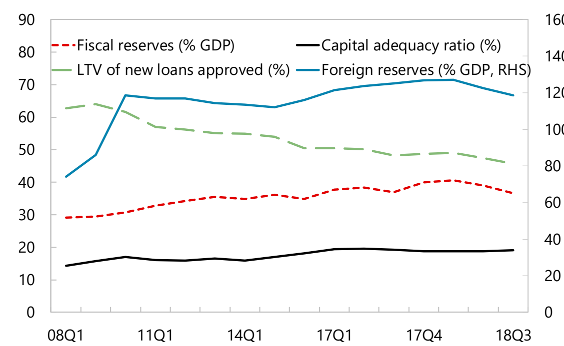
- **Mainland exposures.** Tight underwriting standards have been maintained, and the NPL ratio for this lending remained below 1 percent during the 2015-16 episode of market stress in Mainland China. The HKMA also pays close attention to credit mitigation actions, like guarantees or collateral, to make sure they are enforceable. While the share of exposures to POEs has risen, these remain to less risky sectors.

SIGNIFICANT BUFFERS IN PLACE

17. Many years of prudent macroeconomic policies left Hong Kong SAR with significant buffers to weather these shocks.

- **External**. Despite the recent interventions as part of the operation of the currency board, FX reserves currently stand at around 126 percent of GDP, or twice the monetary base. The current account is in surplus and the net international investment position is equivalent to 409 percent of GDP, one of the largest in the world, and a strong buffer against external shocks.

Various Buffers



Sources: Haver Analytics, and IMF Staff Calculations.

- **Fiscal**. Prudent fiscal management and the strong real estate market allowed Hong Kong SAR to accumulate fiscal reserves of 41.4 percent of GDP. Budgetary debt remains negligible at 0.1 percent of GDP, 4.6 percent if considering the wider General Government, and are more than offset by the official assets. Staff and the authorities project fiscal surpluses in the coming 5 years, and staff estimates that fiscal reserves will increase to HK$1.5 trillion (41 percent GDP) by 2023.

- **Banks**. Banks' capital buffers and liquidity positions remain strong. The Common Equity Tier 1 capital ratio stood at 15.3 percent in Q2 2018, significantly above Basel III standards. Banks' significant holdings of high-quality liquid assets—a cushion against funding pressures—kept the liquidity coverage ratio at 158 percent in Q3, well above the international requirement of 90 percent. Asset quality remained high, and net interest margin widened to 1.6 percent, boosting profitability. However, systemic risks arise from banks' high and increasing exposure to Mainland China and to the overvalued property market, amid rising household leverage.

POLICY CHALLENGES

The authorities' macroeconomic policies continue to be guided by the principles of a lean and efficient government and a reliance on market forces with flexible and efficient markets for goods, labor and capital, all of which have served Hong Kong SAR well. The main policy lever is fiscal policy, with monetary and exchange rate policies constrained by the Linked Exchange Rate System, which has served as an anchor of stability. The main fiscal policy challenge is to guard the economy against near-term shocks while preparing for longer-term challenges. Going forward, preserving financial stability, increasing housing supply to contain the housing price boom, increasing spending to combat elevated inequality and impending aging pressures will be key to securing growth.

A. Ensuring Continued Financial Stability

18. Robust financial regulation and supervision should help weather domestic and foreign shocks.

- **Banking, securities and insurance sectors**. The authorities have implemented all the main recommendations from the 2014 FSAP (See Appendix IV). The next FSAP is scheduled for 2019.
    - The implementation of Basel III requirements remains on track. Given the large credit gap and the overvalued housing market, the countercyclical capital buffer has been appropriately set at 1.875 percent and is planned to increase to 2.5 percent in 2019. To ensure stability of banks' liquidity positions, the authorities have introduced the net stable funding ratio.
    - Detailed implementation of the resolution framework has progressed with new loss-absorbing capacity requirements for authorized institutions becoming operational by year-end. These ensure that systemic institutions hold sufficient financial resources to absorb losses and can be re-capitalized in case of failure.
    - Supervision of bank loans to property developers has been appropriately strengthened through higher capital charges for those exposed to developers offering high-LTV mortgages. Mainland China-related exposures are also closely monitored.
    - The development of a risk-based capital regime for insurance companies is in the Phase-2, with a focus on detailed rules for quantitative requirements.
    - Stock exchange listing rules have been eased to allow dual class stocks with the aim to attract more IPOs.
- **Anti-Money Laundering/Combating the Financing of Terrorism (AML/CFT).** The enactment of the Anti-Money Laundering and Counter-Terrorist Financing (Amendment) Ordinance and the Companies (Amendment) Ordinance in 2018 is an important step to better align Hong Kong SAR's AML/CFT legal framework with Recommendations of the Financial Action Task Force (FATF) including with respect to the risk-based approach. Their effective implementation is

crucial to preserve Hong Kong SAR's reputation as a leading global financial center, in particular in light of the ongoing FATF evaluation. Some progress has been made[4] and these efforts should be advanced to enhance effectiveness of AML/CFT measures.

19. …but continued efforts are necessary to counter potential risks.

- The rapid growth of household bank loans deserves continued intensified scrutiny. To strengthen risk management of this type of lending, 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. In general, banks have maintained prudent credit limits, conservative collateral valuation and prompt margin call mechanisms for personal lending.

- 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 Securities and Futures Commission should continue to cooperate closely to monitor brokers' leverage through the banking system.

- Lending by property developers should continue to be monitored closely. The authorities should consider measures to extend the regulatory perimeter to reduce regulatory arbitrage.

20. Continued efforts to support healthy development of the fintech sector will be key to bolster Hong Kong SAR's standing as a regional financial center. A number of initiatives are currently underway:

- The HKMA launched an Open Application Programming Interface Framework for the banking sector in July 2018 to encourage greater banking sector competition and innovation[5]; all retail banks will be required to have open API at the end of the implementation, which will take place over four phases.

- The revised Guidelines on Authorization of Virtual Banks was issued in May 2018.

- The Faster Payment System, allowing the use of emails and mobile phones for payments in Hong Kong dollars and RMB across 21 banks and ten e-wallets, was launched in September 2018 and supports instant, multi-currency payments on a 24/7 basis.

- The HKMA is strengthening collaboration with authorities in other jurisdictions to support innovation and information sharing. A distributed ledger technology-based trade finance platform – eTradeConnect – was launched in October 2018. Meanwhile, the Enhanced Fintech

[4] Banks improved their AML/CFT frameworks to target high-risk areas, resulting in a 25 percent increase in the number of reported suspicious transactions in 2017. The Fraud and Money Laundering Intelligence Taskforce, comprising representatives of the police, the HKMA, and the banking sector, was established on a pilot basis.

[5] An open API is a publicly-available application programming interface that provides public access to software applications.

Supervisory Sandbox, in operation since September 2017, helps to enhance communications between regulators and financial institutions on ongoing Fintech projects.

Authorities' Views

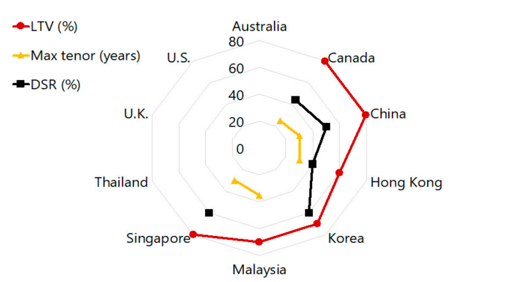
21. The authorities welcomed the favorable assessment of the regulatory framework. Hong Kong SAR's financial system is still largely bank-centric and thus bank buffers and robust bank regulation guard against financial stability risks. Lending by nonbanks, including mortgage lending by money lenders and developers, is monitored closely and remains limited. Were it to become systemic, new regulations could be considered. The SFC and the HKMA will continue to coordinate closely, including on margin lending by brokers. The Insurance Authority is proceeding with the implementation of the new risk-based capital regime and is soon launching new initiatives concerning policyholders protection schemes and group-wide supervision. Tech risks and cybersecurity continue to be a focus, with the aim to achieve a balance between innovation and regulation.

B. Containing the Housing Market Boom

22. 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. The authorities' three-pronged approach relies on a mix of macroprudential policies, stamp duties to contain excessive demand, and measures to increase housing supply. While macroprudential measures have allowed for building buffers in the financial system against a correction, housing prices rose until recently, and affordability deteriorated. A significant increase in housing supply remains the most needed course of action. Given affordability concerns, the authorities could also consider increasing spending on public housing and allocating a larger share of new housing stock for public housing.

23. Tight macroprudential regulations have helped contain systemic risks and should remain in place. These include: LTV and debt service-to-income (DSR) ratios that vary with the residence type (primary vs. other) and the source of borrower's income (originating in vs. outside of Hong Kong SAR); stress tests on the DSR to ensure affordability if interest rates increase; and floors on risk weights on property loans.[6] These measures, together with stringent regulation and supervision, allowed banks to build significant buffers that should help cushion the impact of house price declines. While the mix should be reassessed on a regular basis, the authorities should cautiously await more signs of a sustained decline before considering loosening macroprudential and demand-

Macroprudential Measures: International Comparison 1/



Source: IMF's Annual Macroprudential Policy Survey.
1/ There are no LTV limits for Australia, the U.S., the U.K., and Thailand. For Hong Kong SAR, the highest LTV ratio of 60 percent is shown.

[6] See Appendix V.

side measures. At the same time, if prices rebound, further tightening of macroprudential measures would likely result in leakages to unregulated non-bank financial institutions as borrowers secure mortgage financing outside regular bank channels (e.g., property developers offering financing to potential buyers).

24. Stamp duties on real estate have helped contain systemic risks and should be retained for now but phased out when these risks dissipate.

- The government maintains three types of stamp duties on purchase of residential properties: Ad Valorem Stamp Duty on all purchases except of primary residences of permanent residents who do not have any other local residential property at the time of purchase (called previously Doubled Ad Valorem Stamp Duty/currently New Residential Stamp Duty), Special Stamp Duty (SSD) on resale of residential properties within 36 months, and Buyer's Stamp Duty (BSD) on purchases by non-residents.[7] Staff analysis indicates that stamp duties have been effective in curbing house price increases by as much as 9 percent, and, consequently, helped limit household indebtedness and the buildup of systemic risks in the banking sector.[8]

- The DSD/NRSD is levied at a higher rate on non-residents and is assessed to be a capital flow management measure and macroprudential measure under the IMF's Institutional View of Capital Flows. It continues to be assessed as appropriate given that it: i) was imposed to stem the inflow of capital into the property market; ii) was not used to substitute for the appropriate macroeconomic adjustment; and iii) was imposed because macroprudential measures did not apply to cash buyers, and their further tightening could have resulted in leakages to less-regulated non-bank financial institutions. Moreover, the systemic financial risk remains elevated. Stamp duties should be phased out once systemic risks dissipate.

25. Efforts to further increase supply will be key to resolving the demand-supply imbalance and moderating further price increases.

- After a significant increase in the number of housing units in the early 2000s, the average annual housing production between 2006-2013 fell below 25,000 units. In 2014 the authorities adopted the Long-Term Housing Strategy, which aimed to provide 460,000 housing units over ten years. This was complemented by the Hong Kong 2030+ Strategy—a guide to long-term planning and development of land and infrastructure. While housing production has increased to around

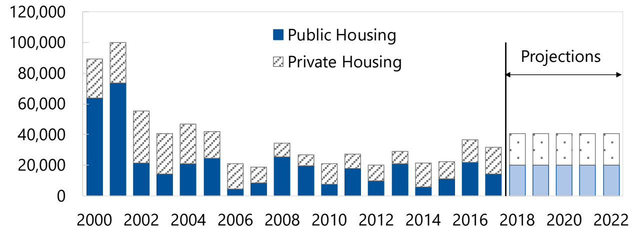
[7] Buyer's Stamp Duty differentiates based on residency but has not been included in the IMF Taxonomy of Capital Flow Management Measures because the BSD has been introduced before the adoption of the Institutional View on Capital Flows in November 2012 and has not been adjusted since.

[8] See 2017 People's Republic of China-Hong Kong Special Administrative Region Article IV Staff Report.

30,000 units on average over 2015-17, it has been falling short of target by around 40 percent on average.

Housing Production

(Units)

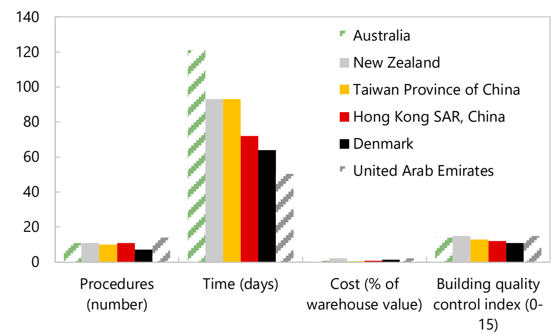


Source: Housing Department, Hong Kong SAR.

Note: 1) Public Housing includes both rental and subsidized sale flats; Rental flats include those completed under Hong Kong Housing Authority (HKHA); Subsidised sale flats include those completed under HKHA and Hong Kong Housing Society, 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. Data from 2018 on from the 2018 Budget Speech by the Financial Secretary.

- The authorities are implementing new measures to boost housing supply. In April 2018, the Task Force on Land Supply presented options to increase the availability of land for residential housing, including reclaiming land in Victoria Harbor, and potential development of two strategic areas in East Lantau Metropolis and New Territories North. The "Lantau Tomorrow" reclamation project, as well as further development of brownfield sites, land sharing, and revitalization of existing buildings have been proposed in the 2018 Policy Address. Furthermore, the authorities announced plans to reform the pricing of subsidized housing, initiate a starter homes project, and set up a task force to assist with provision of transitional housing. In addition, a vacant property tax ("Special Rates" tax) of 200 percent of a flat's "ratable" value (rental value estimated by the Rating and Valuation Revenue Department, roughly 5 percent of the property value) was proposed for unsold new residential units, and a requirement on developers to offer no less than 20 percent of flats during each sale to prevent the accumulation of unsold flats.

Dealing with Construction Permits



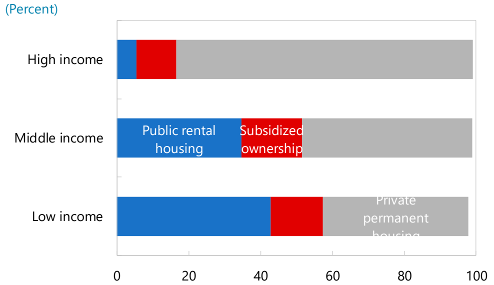
Sources: World Bank Doing Business Indicators.

- 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.

26. Frequent reviews of eligibility for social housing could potentially help alleviate social pressures. Around 30 percent of households currently live in public rental housing, with eligibility based on income and wealth, and additional 15 percent of households live in subsidized sale flats. Wait time for public rental housing have increased significantly, from 1.8 years for general applicants and 1.1 years for the elderly in 2008, to 5.1 years and 2.8 years, respectively, in 2017 to ensure proper allocation of benefits, frequent reviews of eligibility should be conducted: in 2016, around 5½ percent of households in the highest income quantile lived in public rental housing.

Distribution of Households by Income and Housing type 1/

(Percent)



Sources: 2016 Household Survey, and IMF staff calculations.

1/ Low, middle, and high-income refer to households in respectively 1st-2nd, 3rd-8th, and 9th-10th income decile.

Authorities' Views

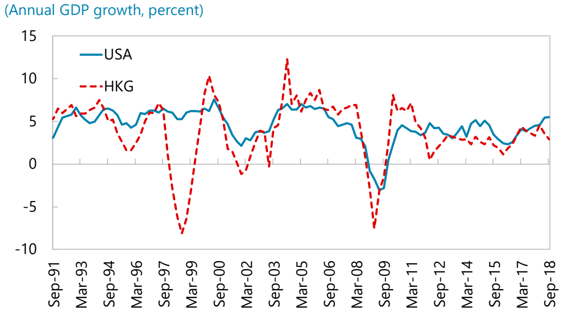
27. The authorities agreed that increasing land and housing supply was fundamental to resolving the housing problem facing the community. Challenges in achieving the ten-year housing supply targets under the Long-Term Housing Strategy remain, tied to insufficient land for development and the necessary time to carry out due procedures. The authorities re-iterated that no efforts are being spared, as evidenced by the Government's vision for the development of Lantau as outlined in the 2018 Policy Address, which should greatly increase land supply in the long-term. Macro-prudential and demand-side measures in the form of stamp duties have been conducive to a healthy development of the property market and will be maintained at this juncture. The authorities added that they could revisit measures as needed if warranted by changes in conditions. They underscored that the current state of the housing market is very different from that pre-Asian Financial Crisis: LTVs are much lower as are debt service burdens, supply is tighter, and banks, developers and households are much less leveraged now.

C. Preserving the Exchange Rate Arrangement

28. The Linked Exchange Rate System remains the appropriate exchange rate arrangement for Hong Kong SAR.

- Since its introduction in 1983, the LERS has served as an anchor of stability for the Hong Kong SAR's economy, helping to ensure smooth functioning of the extensive financial services industry. The functioning of LERS is aided by Hong Kong SAR's flexible economy, ample fiscal and foreign reserve buffers, and strong financial regulation and supervision. The peg to the US dollar remains appropriate given that Hong Kong SAR's business cycle, and trade and financial linkages, remain closely synchronized with those of the U.S. and other advanced economies, not that just of Mainland China.

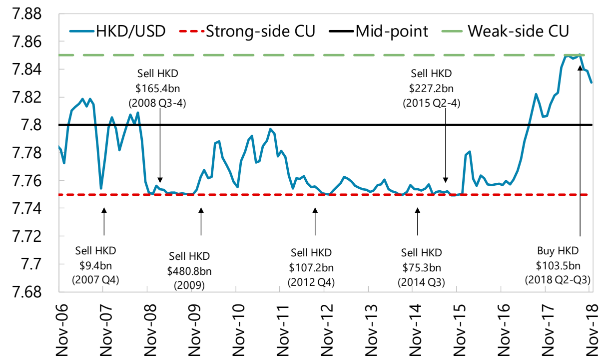
Hong Kong SAR Business Cycle remains highly correlated with the US
(Annual GDP growth, percent)



Sources: Haver and IMF staff calculations.

- FX intervention by the HKMA in 2018 was in line with the regular functioning of the currency board. Under the Convertibility Undertaking, the HK dollar moves against the U.S. dollar within a range of 7.75–7.85, and the authorities intervene if the exchange rate touches these bands. Such interventions are rare: prior to 2018, the HKMA intervened last in 2015 to prevent the currency from breaching the strong side of the band, while operations in 2018 aimed to keep the currency from breaching the weak side. The credibility of the arrangement is further underscored by ample FX reserves, which, at 126 percent of GDP, fully cover the monetary base—another requirement for a successful currency board. Enhanced and frequent public communications were key to educate the public on such infrequent operations and helped maintain orderly market conditions.

Exchange rate and FX reserves developments



Sources: HKMA.

- **The external position remains broadly in line with medium-term fundamentals and desirable policy settings**. The current account surplus is projected to stabilize at 3.4 percent of GDP in 2018, roughly unchanged in cyclically-adjusted terms from 2017. Staff assesses that the cyclically-adjusted current account is roughly in the mid-point of the norm range of 2.1 to 5.1 percent of GDP. The real effective exchange rate—largely determined by the HKD/USD movement—was essentially unchanged in 2017 and remained broadly consistent with medium-term fundamentals and desirable policies.

Authorities' Views

29. The authorities underscored that the Linked Exchange Rate System (LERS) has continued to provide an anchor to the Hong Kong dollar and remains appropriate for Hong Kong SAR. The LERS has performed as designed this year, as widened negative Hibor-Libor interest rate spreads earlier in the year encouraged outflows from HKD and moved the HKD to the weak-side of the Convertibility Undertaking—which eventually triggered an increase in domestic interest rates.

D. Ensuring Fiscal Sustainability

30. The booming economy, coupled with conservative fiscal management, helped deliver another large fiscal surplus in FY2017/18, which the authorities partially redistributed through a mix of retroactive tax cuts and additional spending.

- **The preliminary FY2017/18 surplus was much higher than expected,** at 5.6 percent of GDP vs. the 0.6 percent of GDP budgeted. As in previous years, very strong revenues, especially land premia and stamp duties, accounted for most of the overperformance. Public expenditure underperformed by around 4.2 percent (or 0.8 percentage points of GDP), with spending in most areas except for health and education lower than planned.

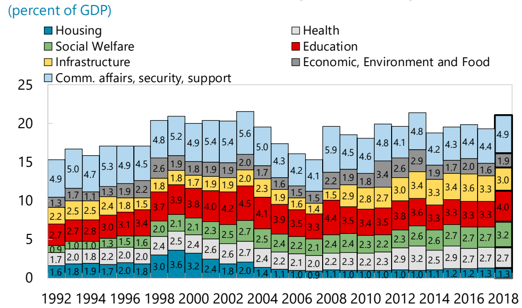
- **Part of the surplus has been redistributed through retroactive tax cuts and cash transfers**. Similar to the previous year, the authorities reduced salaries and profit taxes, and provided additional grants to social security recipients and students. They also intend to distribute one-off cash transfers to eligible residents. These measures are expected to lower revenues by 1.6 percent of GDP, with extra spending of 0.5 percent of GDP.

31. The FY2018/19 budget is expected to deliver a fiscal stimulus through a combination of modest revenue cuts and significant spending increases. Revenues are expected to fall by around 1.1 percent of GDP, as a result of lower personal income tax rates, increased child and parent allowances, a new disability allowance, a one-off reduction in the recurrent property tax, and property-related revenues coming down from a historically high level. At the same time, the authorities intend to significantly increase spending (staff estimate puts it at 14 percent). The primary fiscal balance is projected to fall by 1.2 percentage points of GDP. Nonetheless, even with higher spending, Hong Kong SAR will continue to operate a very lean government.

32. The fiscal stimulus is not necessary given the economy's cyclical position but higher spending in some areas is consistent with past staff advice in view of structural headwinds. Going forward, authorities should strive for greater countercyclicality in the face of both positive and negative shocks.

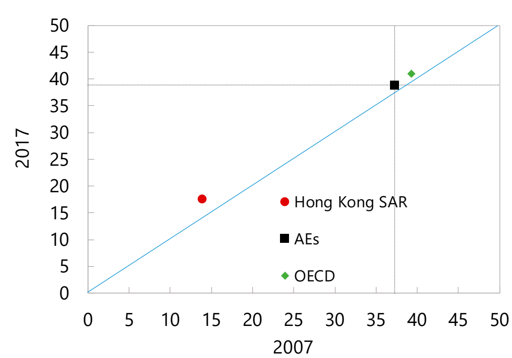
- Expenditure on *social welfare and healthcare* will increase by 0.6 and 0.1 p.p. of GDP respectively.
- Higher *education* spending—while still contained—should help preserve competitiveness, though the authorities should study spending efficiency.
- Spending on *public housing* is expected to remain constant as a share of GDP (despite being below historical levels and amid a significant unmet demand for public housing) and should be raised in future.
- On *other expenditure*, the authorities should carefully consider spending plans on technology and other industries to ensure that there is adequate demand for planned facilities and services that could not be met by private sector initiatives. More broadly, other increases in recurrent spending should also be carefully analyzed as they may be difficult to reverse in the future, thus complicating long-term fiscal management when aging pressures arise.

Public Expenditure Breakdown by Main Policy Areas 1/
(percent of GDP)



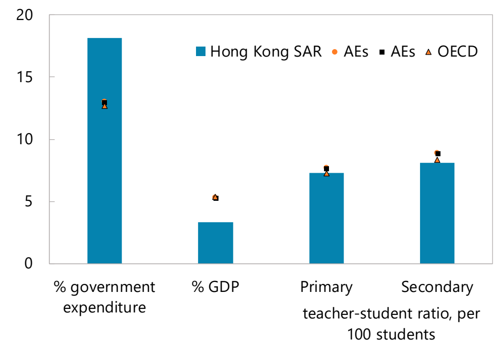
Sources: CEIC, and IMF staff calculations.
1/ 2018 expenditures estimates from the 2018/19 Budget.

General Government Spending
(in percent of GDP)



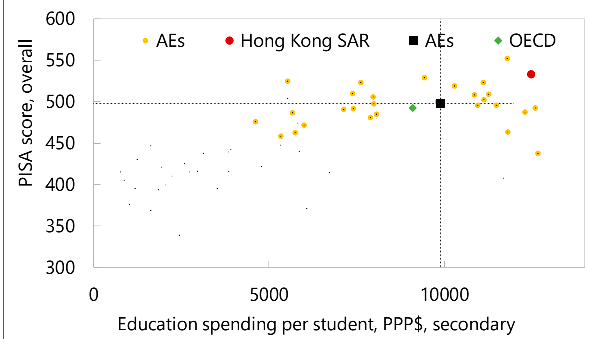
Source: IMF FAD Expenditure Assessment Tool.

Government Education Expenditure
(latest value available)



Source: IMF FAD Expenditure Assessment Tool.

Government Education Spending and Outcome, secondary
(Latest Value Available)

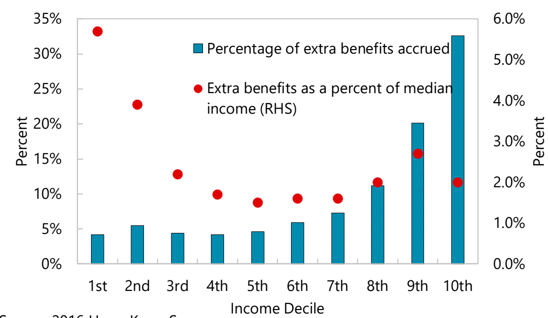


Source: IMF FAD Expenditure Assessment Tool.

33. ...but tax relief measures could have been more progressive, and the authorities should consider reversing the tax cuts.

- **Tax relief measures could have better targeted to the most vulnerable.** With a relatively flat tax scale and high tax deductions, taxes are paid mostly by the wealthy (91 percent of income and property taxes are paid by the citizens in the two highest income deciles). When similar measures were implemented in 2016, over 50 percent of relief accrued to the two highest income deciles. Higher allowances to help the vulnerable should have been better targeted. The Old Age Allowance is not means-tested above the age of 70 and its benefits are relatively low. Merging it with the means-tested Old Age Living Allowance and increasing its level would be more beneficial to the elderly poor.

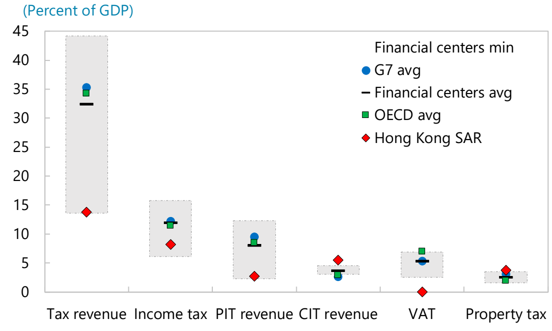
Distribution of Extra Benefits by Income Decile
(Percent)



Source: 2016 Hong Kong Survey.

- **Personal and corporate income tax cuts will further reduce non-property revenues and increase reliance on a narrow and volatile tax base.** Hong Kong SAR's tax revenue as a share of GDP is relatively low, even when compared to other financial centers. Over 30 percent comes from real estate-related transactions, and another 30 percent from corporate income taxes, both subject to volatile property and business cycles. Such a revenue structure, combined with a low contribution of personal income taxes and no sales tax, may lead to a significant revenue underperformance if the property market turns or the economy slows. Further tax cuts in response to tax cuts elsewhere should also be avoided as they would likely result in significant revenue losses.

Comparing Tax Revenues in 2016
(Percent of GDP)



Source: OECD, and IMF staff calculations.
1/ Range for Belgium, Luxembourg, Netherlands, Singapore (2015) and Switzerland.

34. In the long term, measures will be needed to ensure fiscal sustainability. Aging will lead to higher pension and healthcare spending, leading to structural fiscal deficits. Therefore, measures will be needed to ensure fiscal sustainability, unless the social safety net is scaled back (which would have undesirable social and economic costs).

- **Increase revenues**. Amid impending aging pressures and the likely normalization of the housing market, options should be considered to raise revenues while maintaining competitiveness. Options identified through international benchmarking include introducing/raising indirect taxes like sales tax or VAT and raising excise taxes to avoid overreliance on direct taxes. The authorities should also consider reversing the PIT tax cuts and raising the top personal income tax rate. Relief on the recurrent property taxes should also be avoided, and its administration and collection strengthened, given that it that property tax is considered to be an efficient revenue measure. The Tax Policy Unit should study possible tax-broadening measures and their impact on competitiveness and growth.

- **Ensure continued high quality of fiscal spending**. In the medium-term, aging will likely result in structural deficits—expected within about a decade—due to higher spending on healthcare, pensions, and social welfare. Periodic expenditure reviews should continue to ensure adequate prioritization of fiscal spending.

Authorities' Views

35. The authorities noted that the 2018/19 budget was based on a new fiscal philosophy of the administration of Hong Kong SAR.

- **Expenditures**. Higher expenditures on social welfare, health, and housing are to ensure high level of services to the Hong Kong SAR's population to fulfill the "caring and sharing" pledge of the government. The authorities also highlighted that they viewed increased spending on education and innovation and technology as investment to secure future growth in Hong Kong SAR. They also noted that they stand ready to support the Housing Authority, which presently still has not fully utilized the HKD $78.8 billion (balance as of end-2017) set aside a few years ago as the Housing Reserve. The Housing Authority will continue to monitor its funding position and discuss with the Government if injections are required.

- **Revenues**. The authorities noted that one-off tax concessions instituted in the 2018/19 budget aimed to return part of the significant revenue overperformance to the population. Reduced marginal tax rates for salaries tax, as well as the two-tier profits tax aim to reduce the tax burden on the middle class and SMEs. No tax increases have been planned for the immediate future given the strong fiscal position of the government and its sizable fiscal reserves.

E. Bolstering Long-Term Growth Prospects

Preserving growth in the medium- to long-term will require addressing the issues of expected shrinking of the labor force, high inequality, as well as ensuring competitiveness of financial and other industries.

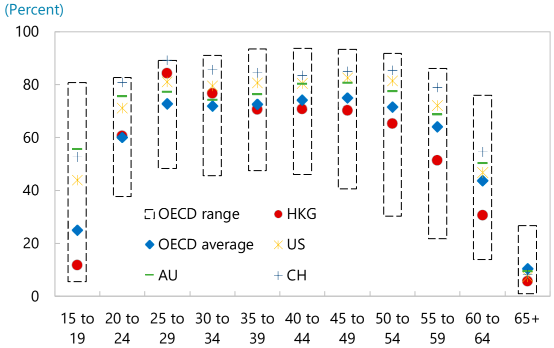
Labor Market

36. **Hong Kong SAR is facing a structural challenge of an aging population that may soon impinge on growth prospects**. UN projections indicate that over a quarter of the city's population will be aged 65 years or above by 2030. The dependency ratio (the number of adults aged 65 and over supported by 100 working-age adults) is expected to rise from 21 in 2015 to 41 by 2030, while the labor force will shrink by over 10 percent. While the "open door" policy and willingness to integrate foreign workers helps, these demographic shifts are expected to lower potential GDP growth by ¾ percent between 2020-2050 on average, while higher healthcare and pension spending, combined with lower revenues, is projected to generate structural deficits by around 2025-30, and deplete fiscal reserves by 2035-40.

37. **Raising female labor force participation (LFP) could help alleviate labor market pressures.**

- **Participation rates.** While the male LFP rate stands at over 80 percent (broadly in line with the OECD average), the ratio for women is almost 15 percentage points lower. Women are increasingly participating in the work force: higher female employment accounted for over 80 percent of the overall increase in employment since 2000. However, while young women enter the labor force in significant numbers, they start dropping out in their mid-thirties. Insufficient government childcare facilities and the very high cost of private childcare—exceeding half of the monthly average wage for children under 2—are hurdles for working mothers. Moreover, women (including foreign domestic helpers) tend to hold lower-paying jobs (their median wage is only 2/3 of a man), and rarely work part-time. These factors (plus caring for the elderly) make it much more probable that women drop out of the labor force.

Female Labor Force Participation by Age Cohort
(Percent)



Sources: CEIC, OECD, and IMF staff calculations.

Part-time female employment
(Percent of total employment)

Sources: OECD, Hong Kong SAR C&SD, and IMF staff calculations.

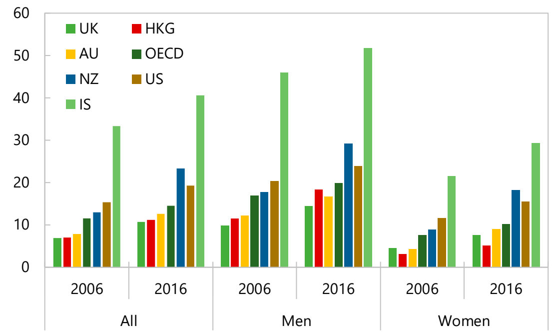
- **Policies.** Additional expenditure in the FY2018/19 budget aimed at improving child care is a step in the right direction. The authorities could study whether more affordable child care is needed, with possibly extended hours to accommodate working parents, as well as after-school care.

Promoting flexible work arrangements and part-time employment would also help, as well as improving care for the elderly.

38. Retaining older workers could be another avenue to stop labor force depletion.

- **Participation rates**. While LFP of elderly workers increased from 6 percent in 2006 to 10 percent in 2016, it remains below the OECD average. The participation rate is especially low for women: in 2016, only around 5 percent of women over 65 remained in the labor force, compared with about 16 percent of men. Retaining older workers longer should help them stay longer in the labor force and alleviate elderly poverty by providing additional income and boosting retirement savings.

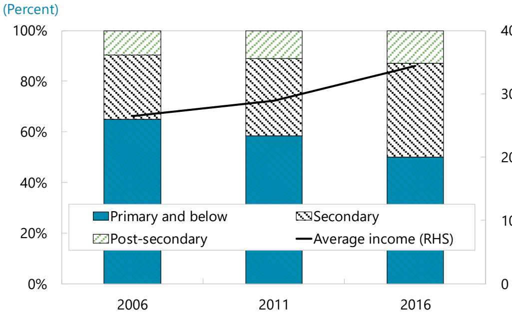
Labor Force Participation, age 65+
(Percent)



Sources: CEIC, OECD, and IMF staff calculations.

- **Policies**. The authorities have enhanced their Employment Program for the Middle Aged by providing higher incentives for employers hiring jobseekers or retirees over-60. The Research Office of the Legislative Council identified numerous policies currently in place in Japan and Singapore—economies with rapidly aging populations—that could be usefully considered in Hong Kong SAR. These include legislating mandating re-employment of older workers up to a certain age, employer subsidies, support for short-term and flexible job creation, and statutory protection against age discrimination. The authorities' plans to abolish the arrangement for "offsetting" severance payments and long-service payments in the Mandatory Provident Fund are welcome and should also proceed as planned.

Elderly Population: Education and Average Income 1/
(Percent)



Sources: CEIC and IMF staff calculations.
1/ As a percent of average household income.

Inequality

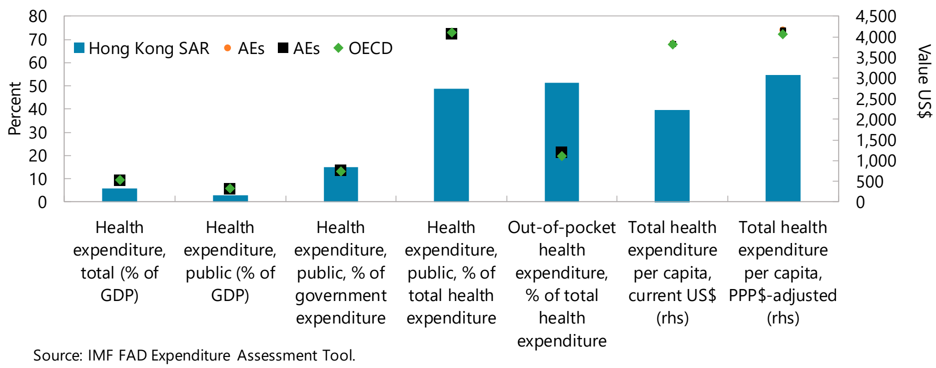
39. Inequality remains high despite government's efforts to alleviate it. Since 2010, the authorities introduced several policies aimed at increasing inclusion, including introducing and enhancing the Statutory Minimum Wage, the Working Family-, the Old Age Living-, and the Personal Disability Allowances, transport subsidies, and subsidized housing. Introduction of the Annuity Scheme with a guaranteed internal rate of return, as well as reverse mortgages that could help "income-poor but asset-rich" households could also help ensure adequate retirement income. Tax deductions for contributions to the Mandatory Provident Fund and for medical insurance layouts are also steps in the right direction. However, despite significant redistributive policies, inequality remains high.

40. A number of policies could increase inclusion.

- **Increasing progressivity of personal income taxation**, as discussed above.

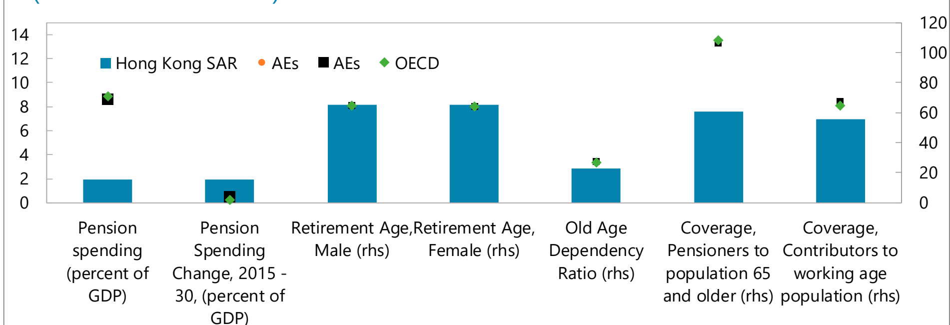
- **Ensuring adequate levels of spending on housing, health, education and social welfare**.

Health Indicators
(different metrics, 2015)



Source: IMF FAD Expenditure Assessment Tool.

Pension Indicators
(latest value available)

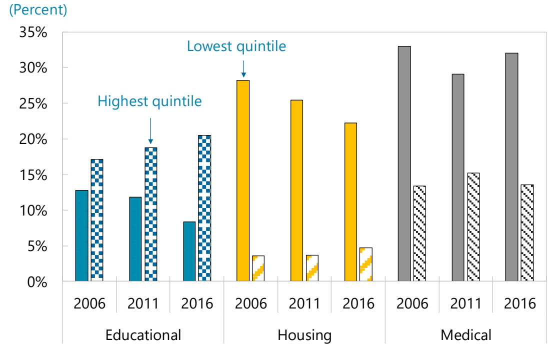


Source: IMF FAD Expenditure Assessment Tool.

Health and pension spending are currently below levels of other advanced economies, in part due to the current demographic structure, but required expenditure will increase given impending aging.[9]

- **Better targeting existing benefits**. While benefits and transfers are designed to foster progressivity, the share of housing and education benefits allocated to Hong Kong SAR's low-income citizens has also been

Distribution of Benefits by Household Income Quintile
(Percent)



Sources: Hong Kong SAR C&SD and IMF staff calculations.

[9] See "Medium-Term Fiscal Prospects and Implications" in the 2017 "People's Republic of China-Hong Kong Special Administrative Region: Selected Issues".

declining, and, for education, has not been progressive (though differences in household composition may explain some of these results).

Competitiveness

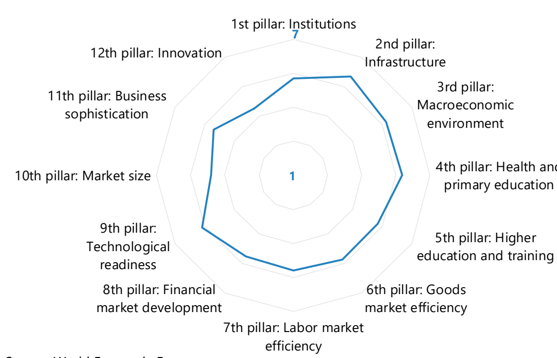
41. While one of the most competitive economies in the world, Hong Kong SAR faces increased competition from other financial centers in Asia.

- For many years Hong Kong SAR has been considered one of the most competitive economies in the world. It continues to be recognized for the high-quality regulatory framework based on the common law tradition and adapted to reflect international standards, transparent and efficient institutions, high-quality infrastructure, stable macro environment, and highly efficient and flexible markets for goods, labor, and financial markets.

- Going forward, Hong Kong SAR faces growing competition from cities in Mainland China and other financial centers. With support from Mainland's State Council, the development of the Guangdong-Hong Kong SAR-Macao SAR Bay Area, initiated in March 2017, could help increase the flow of people, capital, goods and services between Mainland China's Guangdong province and Hong Kong SAR and Macao SAR. Given the development of Shenzhen and other cities in Southern China into a new technology cluster, with leading firms and significant human resources located there, greater integration could bring significant economic opportunities. At the same time, new risks will likely emerge, including greater exposure to the economic cycles in Mainland China.

- Increased spending on education and R&D in the 2018-19 budget is a step in the right direction. Additional steps could include continued evaluation of university programs to ensure that the education system responds to industry needs, ensuring sufficient research funding, and promoting university-industry collaboration. R&D tax concessions could also help, though their effectiveness should be re-evaluated in future given upcoming fiscal pressures.

Global Competitiveness Index, 2018
(Score, from 1 (worst) to 7 (best))



Source: World Economic Forum.

42. The authorities remain committed to further expanding Hong Kong SAR's role as a leading financial center. Taking advantage of rising demand for bond financing in Asia, in part from the Belt and Road Initiative, in May 2018 the authorities launched a Pilot Bond Grant Scheme that will cover half of the issuance expenses of first time bond issuers (subject to a cap). The green bond program is also being actively developed by the HKMA and the Hong Kong Quality Assurance Agency, with the latter launching a Green Finance Certification Scheme to provide third-party certification for potential issuers. Given the relatively limited fixed income trading in Hong Kong SAR thus far, policies to help raise bond issuance appear warranted. The authorities have also further amended tax laws to improve the city's attractiveness as a hub for treasury centers of multinational companies. Over the medium-term, the development of the Greater Bay Area will provide new economic impetus to Hong Kong SAR, including improved connectivity, industrial development, financial services, and freer flows of capital and talent (see Box 3).

Authorities' Views

43. The authorities agreed that boosting labor force participation and helping the most vulnerable are key to ensuring strong and inclusive growth in the medium-term.

- **Long-term growth**. The authorities underscored their commitment to increasing labor force participation of women and older workers and intend to further study policies that could help. In a separate context, they noted that immigration requirements for skilled workers have been relaxed, allowing companies to bring in three foreign employees if they hire one local person and provide internships to two local students. They are also studying options to increase supply of local labor in the construction and elderly care sectors.

- **Inequality**. The authorities noted that their policies focus on the most vulnerable through a combination of tax allowances, social welfare payments, and public housing. High-quality education, including high school, is also free, and post-secondary education is subsidized, providing quality education to students regardless of parents' wealth and promoting upward mobility. At the same time, a low and simple tax regime has long underpinned Hong Kong SAR's growth model, and there are no plans to change that.

STAFF APPRAISAL

44. Outlook. Growth is projected to remain robust in 2018 a result of the global recovery, continued solid growth in Mainland China, and increased consumer confidence, while a modest slowdown is expected in 2019 including as a result of ongoing trade tensions. Over the medium-term, Hong Kong SAR is expected to grow close to its potential growth of around 3 percent supported by sustainable (though gradually slowing) growth in Mainland China as rebalancing and financial sector reforms progress.

45. Risks. The balance of risks for Hong Kong SAR has shifted to the downside. Risks arise from further escalating U.S.-China trade tensions, possible disorderly tightening of global financial conditions, slower-than-expected growth in Mainland China, and a sharp housing market correction. These shocks are likely correlated and could materialize together, which would amplify their effects. At the same time, the development of the Greater Bay Area creates opportunities for Hong Kong SAR over the medium term, given its unique position as the gateway to Mainland China and as a global financial center with renowned professional services.

46. Buffers. Many years of sound macroeconomic and prudential policies have endowed Hong Kong SAR with significant buffers to weather these shocks. These include ample FX reserves, one of the strongest net International Investment Positions in the world, and fiscal reserves covering more than two years of government spending. Banks' capital buffers and liquidity positions remain strong, due to stringent regulatory standards.

47. Financial sector policies. Robust financial regulation and supervision should help weather domestic and external shocks. The implementation of Basel III requirements remains on track, and the countercyclical capital buffer has appropriately been increased further. The authorities have also introduced the net stable funding ratio, and rules on loss-absorbing capacity requirements for authorized institutions will be operationalized by year-end, ensuring that institutions have sufficient financial resources to absorb losses and be re-capitalized in case of failure. Supervision of bank loans to property developers has been appropriately strengthened through higher capital charges. Mainland China-related exposures are also closely monitored. The authorities should also consider measures to extend the regulatory perimeter to reduce regulatory arbitrage from lending by property developers. The Securities and Futures Commission intends to impose quantitative limits on margin lending by brokers. The development of a risk-based capital regime for insurance companies is in the Phase-2, with a focus on detailed rules for quantitative requirements.

48. Housing policy. The combination of macroprudential measures and stamp duties currently in place remains appropriate, but more needs to be done to raise housing supply. While macroprudential measures have allowed for building buffers in the financial system against a correction, housing prices remain overvalued, and affordability has deteriorated. A significant increase in housing supply remains the most needed course of action. The DSD/NRSD is assessed to be a capital flow management measure and macroprudential measure under the IMF's Institutional View of Capital Flows and should be phased out once systemic risks dissipate.

49. Exchange rate regime and external position. The LERS remains the appropriate exchange rate arrangement for Hong Kong SAR. Since its introduction, the LERS has served as an anchor of stability, helping to ensure sustained growth, competitiveness, and the smooth functioning of the extensive financial services industry. The functioning of LERS is aided by Hong Kong SAR's flexible economy, ample fiscal buffers, and strong financial regulation and supervision. The credibility of the arrangement is further underscored by ample FX reserves. Hong Kong SAR's external position and the HK dollar remain broadly in line with medium-term fundamentals and desirable policy settings.

50. Fiscal policy. The FY2018/19 budget is expected to deliver a fiscal stimulus that is not needed given the economy's strong cyclical position. At the same time, increased expenditure on social welfare, health, and education is welcome, though some allowances could be better targeted, and spending on public housing should be raised. Other expenditure increases should be carefully analyzed as they may be difficult to reverse in the future, thus complicating long-term fiscal management when aging pressures arise. The authorities should also consider reversing the recent tax cuts. Furthermore, the authorities should strive for greater countercyclicality in the face of both positive and negative shocks.

51. Long-term fiscal challenges. Aging will lead to higher pension and healthcare spending and the housing market will likely normalize, which may lead to structural fiscal deficits. Therefore, the authorities will need to consider measures to ensure fiscal sustainability, unless the social safety net is scaled back. The Tax Policy Unit should study possible tax-broadening measures and their impact on long-term fiscal sustainability, competitiveness and growth. Options identified through international benchmarking include introducing/raising indirect taxes like sales tax or VAT and raising excise taxes to avoid overreliance on direct taxes. On the expenditure side, periodic expenditure reviews should continue to ensure adequate quality of fiscal spending. Hong Kong SAR's strong fiscal buffers afford it time to plan for meeting future needs.

52. Inequality. The authorities' efforts to reduce inequality and poverty through a combination of subsidies, allowances, social welfare payments, and public housing should continue. Introduction of the Annuity Scheme and the reverse mortgage can help ensure adequate retirement income. Going forward, additional steps would be welcome including: increasing progressivity of personal income taxation, ensuring adequate levels of spending on housing, health, education and social welfare, and better targeting existing benefits.

53. Competitiveness and long-term growth. Efforts to raise labor force participation of women and older workers should continue. The authorities' plan to abolish the arrangement for "offsetting" severance payment and long service payment with Mandatory Provident Fund benefits is welcome, and should proceed as planned. Plans to develop the bond market and further promote innovation and technology are steps in the right direction. Further expansion of the Hong Kong SAR's role as a leading financial center and as the gateway to Mainland China should also help.

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

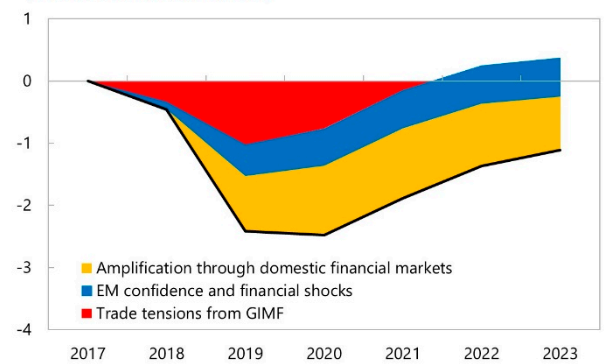
Box 1. Amplification of Risks Scenario for Hong Kong SAR[1]

Tariff actions could significantly impact the global economy, with sizable spillovers to Emerging Markets (EMs). IMF (2018) assesses the impact of tariff actions by the U.S. and several of its trading partners on the G20 using the Global Integrated Monetary and Fiscal (GIMF) model. It finds that tariffs not in the baseline but under consideration[2] could result in lower global GDP by about 0.7 percent in 2019-20 when also factoring-in impacts on confidence and financial markets. Mainland China, the U.S. and NAFTA partners would be particularly affected. Not featured in IMF (2018) are impacts on other EMs, which presumably are even more sensitive to changes in global risk sentiment and in some cases are heavily exposed to the trade relationship between the U.S. and China. Thus, shocks to confidence and corporate risk premia could be expected to be significantly larger for EMs not in the G-20.

The IMF's Flexible System of Global Models (FSGM) is used to assess the combined impact on HKSAR of trade tensions and turmoil in EMs. The simulation considers three layers: (i) trade tensions, modeled as an exogenous demand shock to match IMF (2018); (ii) a shock to confidence in EMs and higher corporate spreads, calibrated to be double that on G20 EMs in IMF (2018); and (iii) financial amplification in HKSAR, to match stock market responses to "mid-sized" shocks.[3] This combination of shocks is highly relevant for Hong Kong SAR, given its exposure to the U.S. and the Mainland (Figure 6), and its role as a global financial center that is highly sensitive to shifts in the global capital flow cycle.

Under this scenario where risks materialize together, Hong Kong SAR's GDP could decline by close to 2½ percent in 2019 and remain lower in the long-term. An escalation of trade tensions would depress both external and domestic demand. The HK dollar would appreciate versus trading partners following the US dollar because of the LERS. Interest rates would thus be relatively tight, and further depress domestic demand. If EM tensions flare up, investment would slump further on the back of a sharp reversal of flows and decreased confidence. In addition, Hong Kong SAR's domestic asset markets could fall significantly, further depressing investment and consumption through wealth effects. Taking all of these together, the level of real GDP could be around 2½ percent below the baseline in 2019 and 2020 and recover only slowly, being roughly 1 percent below baseline in 2023. These estimates though are subject to a great degree of uncertainty. The results also abstract from discretionary policy responses, both in HKSAR and elsewhere, with only automatic fiscal and monetary responses operating when relevant.

Downside Scenario: Impact on Real GDP
(Percent difference from baseline)



Source: IMF staff estimates.

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[1] Prepared by Rui C. Mano (APD) and Keiko Honjo (RES).

[2] These include the U.S. imposing a further 25 percent tariff on (i) all imports from China and (ii) on all imported cars and car parts, with major trading partners retaliating proportionately.

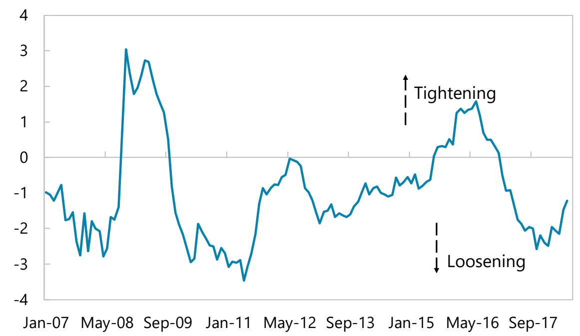
[3] This shock is roughly calibrated to responses of equity prices following "mid-sized" crisis episodes, like the mid-90s tequila crisis or the uncertainty shock surrounding China following the summer of 2015, and is thus smaller than the Global Financial Crisis or Asian Financial Crisis. Therefore, there is still potential for larger disruptions.

Box 2. Financial Conditions and Growth at Risk[1]

Financial conditions in Hong Kong SAR remain accommodative but are moving towards neutral. Financial condition indices (FCIs) measure the ease of funding, incorporating information on prices, lending terms as well as other costs of credit for households and corporates. Since the end of 2017, easy conditions have begun to move towards neutral amid rising interest rates, sizable equity market losses and capital outflows.

The FCI for Hong Kong SAR underscores its sensitivity to external developments. Reflecting Hong Kong SAR's highly-open economy and role as a global financial center, financial conditions have been mostly accommodative since the Global Financial Crisis and tightened during the European sovereign debt crisis in late 2011 and the Taper Tantrum in 2013 as well as the during the increased volatility following the change to the RMB fixing mechanism in 2015.

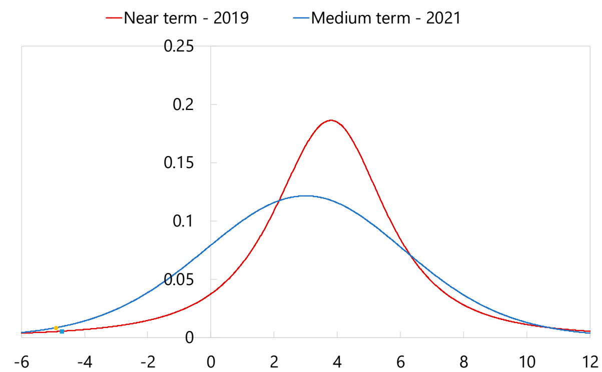
Financial Conditions Index



Sources: Bloomberg, and IMF Staff Calculations.
Note: FCI is based on principal component analysis of data on funding costs and quantity from 1980 to Q2 2018.

The growth-at-risk analysis suggests a low probability of recession in the near term but risks could rise.[2] Tighter financial conditions have been historically associated with declines in output growth. Higher funding costs, lower credit supplied and wealth effects from reduced asset prices could weigh on consumption and investment, introducing a negative feedback loop between investment and spending, profit growth, asset prices and investor confidence. A return to neutral FCI is not expected to have sizable impact on near-term growth. The probability of a recession in 2019 is about 11 percent, not much different from 2018. However, a prolonged period of easy conditions raises risks to growth. Over the medium term, should conditions remain at the current accommodative level, the probability of recession rises to around 15 percent. And, if financial conditions were to tighten sharply, growth could fall sizably.

Growth at Risk
(Probability Density as of 2018Q2)



Source: IMF Staff Calculations.

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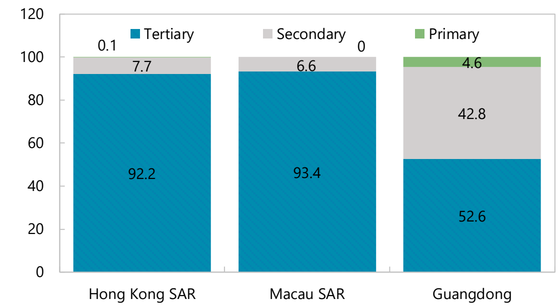
[1] Prepared by Sally Chen (MCM).

[2] GaR model forecasts the conditional distribution of future growth – using the quarterly growth rate - for different forecast horizons based on current financial conditions. "Near term" refers to the one-year horizon; "medium term" refers to the three-year horizon out to 2021.

Box 3. Greater Bay Area: Opportunities and Challenges[1]

The combined GDP of the Greater Bay Area (GBA) rivals the 17th largest global economy. The area comprises Hong Kong SAR, Macau SAR and nine major cities in Guangdong; in total, it has 70 million people with a nominal GDP of US$1.5 trillion in 2017.

GDP structure of Hong Kong SAR, Macau SAR and Guangdong
(share in percent)



Sources: IMF staff calculations.

Unique and complementary advantages each region brings to the GBA can boost its overall productivity. Tertiary industry accounts for more than 90 percent of Hong Kong SAR's GDP. Through closer integration, Hong Kong SAR can leverage its expertise in financial services to meet the funding needs of Mainland companies in the GBA. Meanwhile, Hong Kong SAR companies can utilize the research capacity in Shenzhen, which is Mainland China's technology hub, to upgrade its fintech industry and other innovation capabilities.

The GBA development offers a rich array of opportunities for Hong Kong SAR. Hong Kong SAR residents will have greater opportunities to tap into the dynamic economies of the Area. Specifically, Hong Kong SAR could strengthen its roles as an international financial center and high-end professional services hub by tapping into increased fund flows and to meet the demand for financial and business services in the area.

Significant progress achieved in GBA development is already reducing trade barriers. Residents of Hong Kong and Macau SARs can apply for resident cards in Mainland China with greater ease, thus facilitating their access to online services in the GBA and other parts of Mainland China. Pilot use of Hong Kong e-wallets in Mainland started in October, facilitating cross-border mobile payments in the Area. The high-speed railway link between Hong Kong SAR and Mainland China, in operation since September 2018, has dramatically reduced travel time. The bridge that links Hong Kong SAR, Zhuhai and Macau SAR, opened in October 2018, will facilitate flows of goods and peoples among these three cities.

Still, challenges remain. Near-term challenges to GBA development revolve primarily around overcoming hurdles to movements of capital, people and goods. Some of the key challenges include:

- Harmonizing customs policy by simplifying clearance procedures for transporting goods within the GBA;
- Streamlining the working visa arrangement to promote talent exchange;
- Simplifying procedures for opening bank accounts and further expanding the use of e-wallet by Hong Kong SAR residents.

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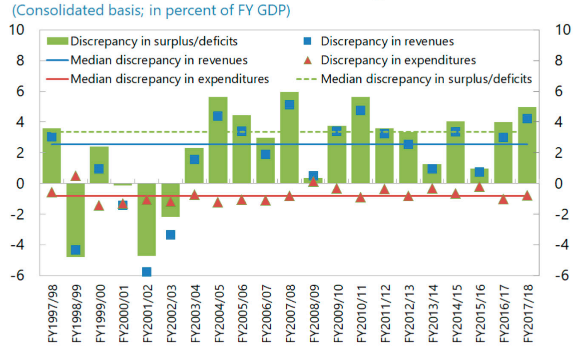
[1] Prepared by Sally Chen (MCM).

Figure 2. Hong Kong SAR: Strong Fiscal Position but Spending Pressures Loom in the Medium-Term

Fiscal surplus in 2017-18 was much higher than budgeted...

Discrepancy of Fiscal Outturn and Budget

(Consolidated basis; in percent of FY GDP)

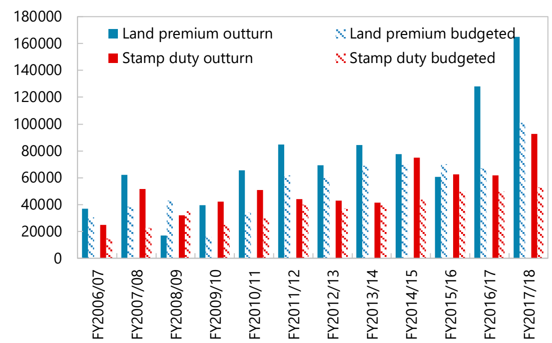


Note: Adjusting for ex-post placements with the Exchange Fund that were not initially in the budget. Sources: Government budget statements; and IMF staff estimates.

...mostly due to overperformance of real estate-related revenues

Fiscal Revenues: Real Estate-Related

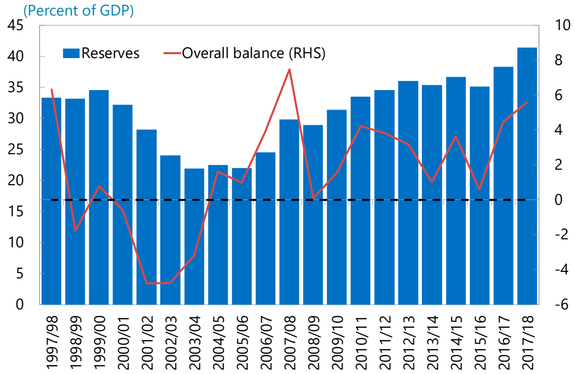
(HKD millions)



...leading to a further buildup of fiscal reserves.

Fiscal Reserves and Overall Balance

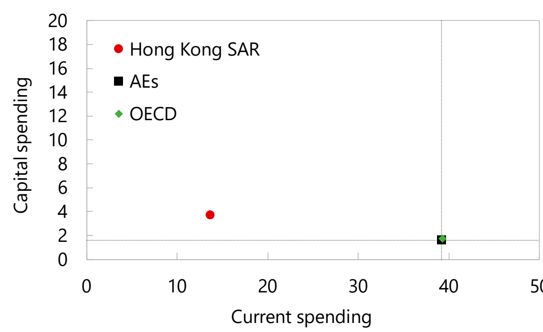
(Percent of GDP)



While spending is low compared to other countries...

Current and Capital Spending

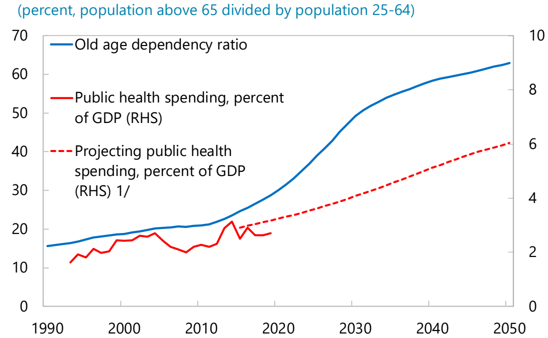
(in percent of GDP, 2017)



...over the medium term, population aging will create spending pressures.

Old Age Dependency Ratio and Public Health Spending

(percent, population above 65 divided by population 25-64)

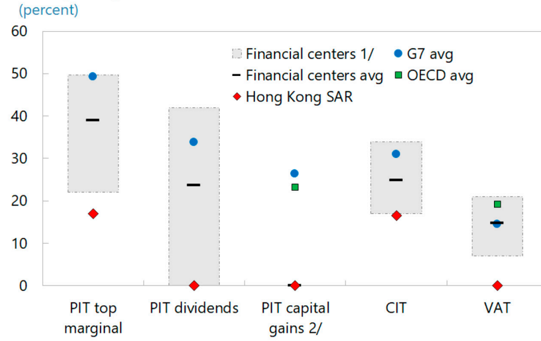


1/ Using IMF's Fiscal Affairs Department template for assessing the fiscal implications of demographic shifts. Sources: Government of the HKSAR, staff estimates.

To finance this expenditure, there is room to increase revenues without hampering competitiveness.

Comparing Tax Rates in 2017

(percent)



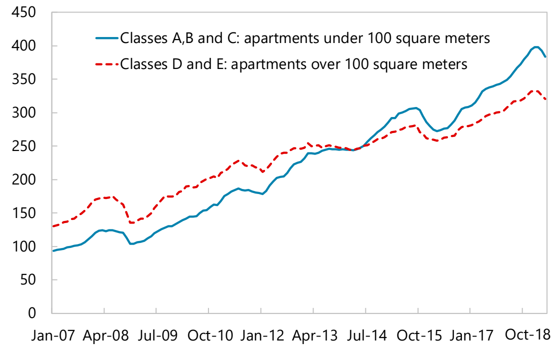
1/ Range for Belgium, Luxembourg, Netherlands, Singapore and Switzerland.
2/ 2015.

Sources: CEIC, Haver, and IMF staff calculations.

Figure 3. Hong Kong SAR: Housing Boom Continues Despite Tight Macroprudential Settings

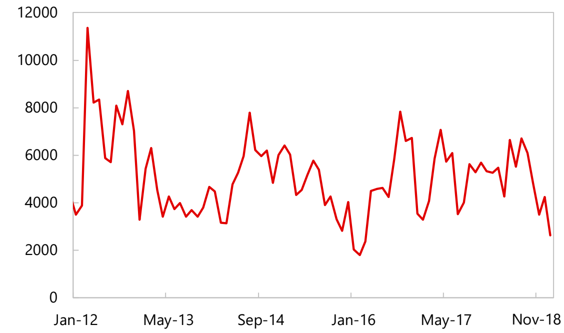
House prices rose rapidly to July, but have softened since…

Property Price
(Index; 1999=100 unless otherwise specified)



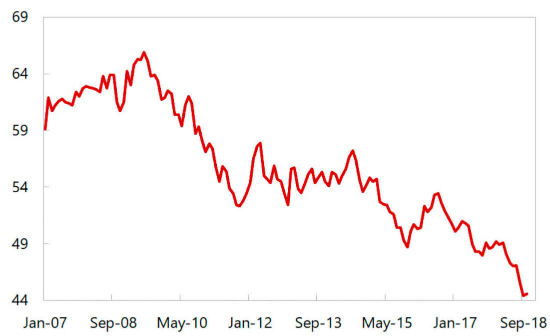
…While residential transactions also retreated.

Transactions of Residential Flats
(NSA, number of units)



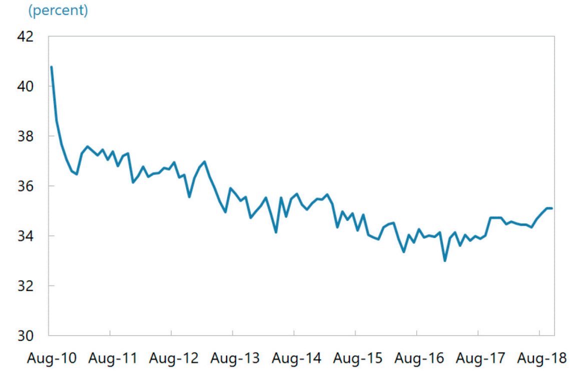
Strong demand has not been primarily credit-driven due to tight macro-prudential settings…

New Loans Approved: Loan-to-Value Ratio
(NSA, %)



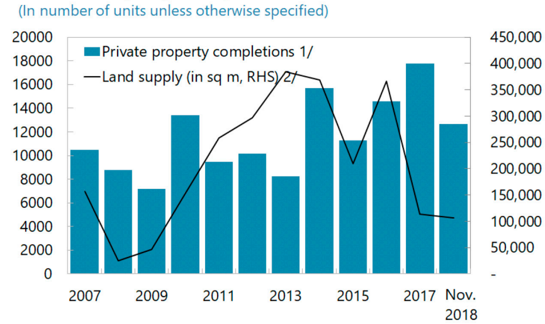
…as reflected in the declining debt-service ratio for new mortgages. .

Debt-Service Ratio for New Mortgages
(percent)



Instead, tight supply continues to be the chief bottleneck…

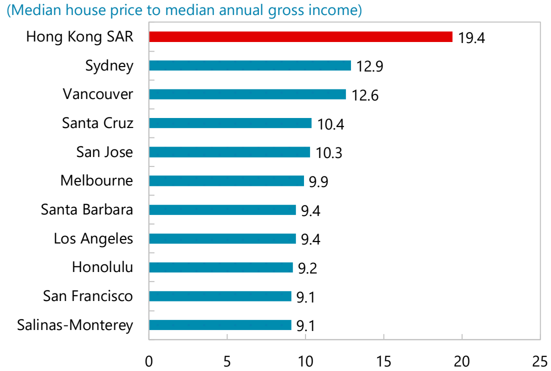
Private Property Completions
(In number of units unless otherwise specified)



1/ Private property completions data as of Sept. 2018. 2/Land supply refers to government land sale by auction/tender.

…And affordability remains a key concern

Affordability Indicators: International Housing Markets
(Median house price to median annual gross income)

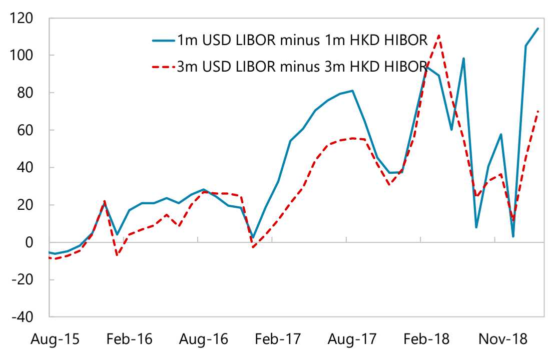


Sources: CEIC, Haver, Demographia, Hong Kong SAR Authorities, and IMF staff calculations.

Figure 4. Hong Kong SAR: The Linked Exchange Rate System Has Operated Smoothly

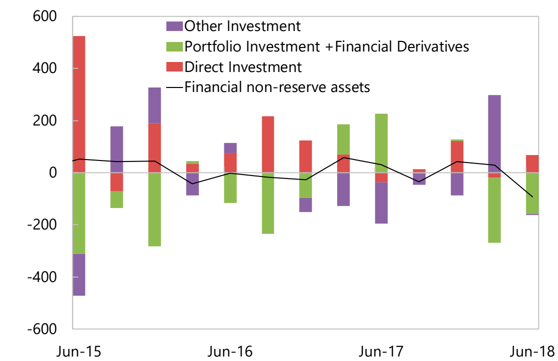
Local money market rates did not initially follow U.S. rates as the FED tightened monetary policy…

Spread between USD LIBOR and HKD HIBOR
(bps)



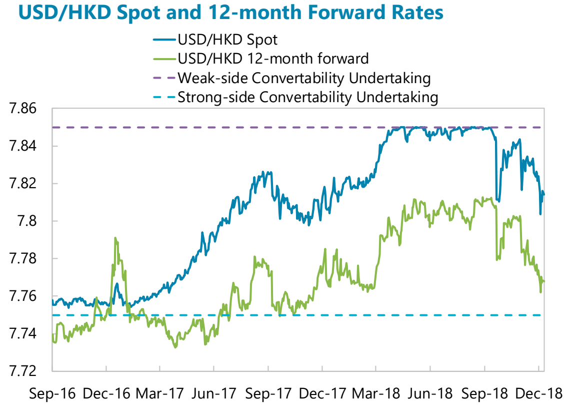
… prompting arbitrage and portfolio investment outflows, and overall net outflows in Q2…

Balance of Payments: Financial Account
(NSA, HKD Billions)



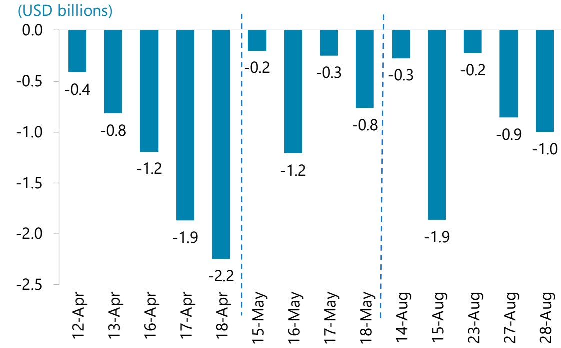
… which, pushed the HKD towards the weak side of the Convertibility Undertaking.

USD/HKD Spot and 12-month Forward Rates



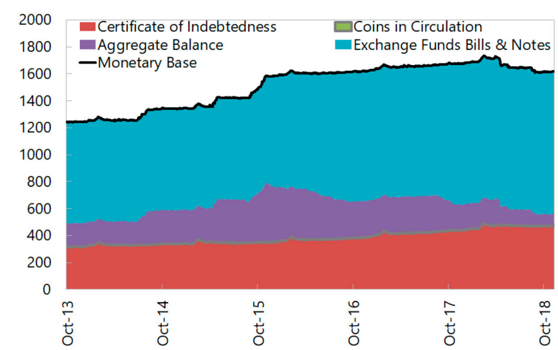
The HKMA stepped in, selling USD and buying HKD according to the weak-side Convertibility Undertaking

US Dollar Sold by HKMA under Weak-side Convertability Undertaking
(USD billions)



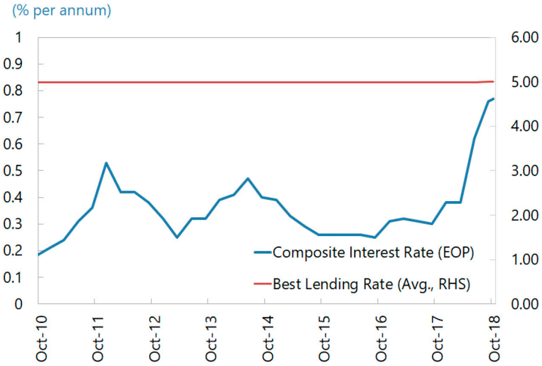
Consequently, the aggregate balance, a measure of excess liquidity in the system, has fallen.

Hong Kong SAR: Monetary base by components
(HKD billions)



The cost of funding for banks is slowly rising, putting pressure to adjust the reference rate for loans.

Interest Rates
(% per annum)

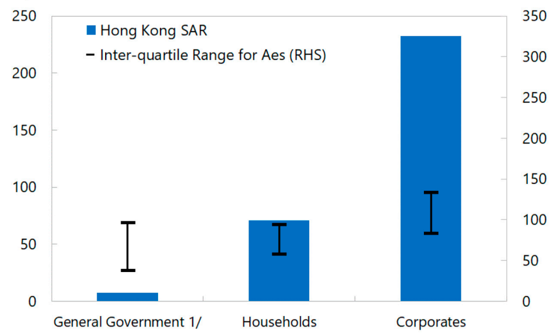


Sources: Bloomberg, CEIC, Haver, HKMA, and IMF staff calculations.

Figure 5. Hong Kong SAR: Debt Vulnerabilities

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

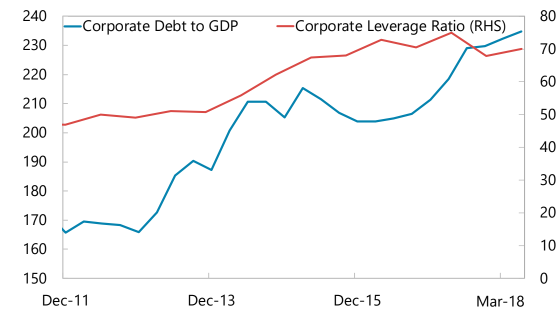
Hong Kong SAR Debt in end-2017
(percent of GDP)



1/ Data for Hong Kong SAR for March 2017.

Corporate debt is large and rising as is leverage ....

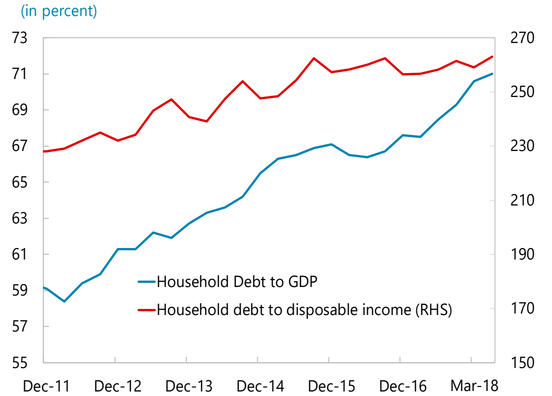
Corporate Debt and Leverage
(in percent)



Note: Corporate Leverage ratio calculated as a market cap weighted total debt to equity ratio of all listed non financial corporates on the Hong Kong Stock Exchange (data as of Q2 2018).

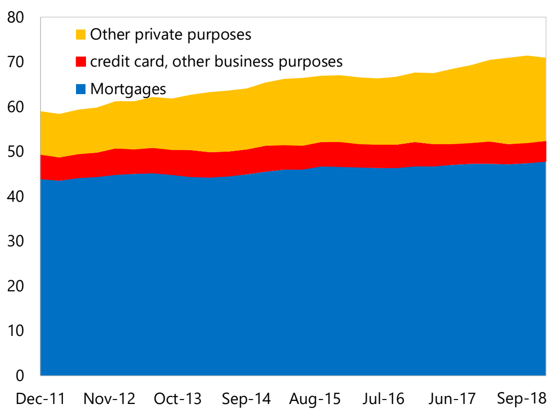
...with households also becoming more indebted and leveraged.

Household Debt and Leverage
(in percent)



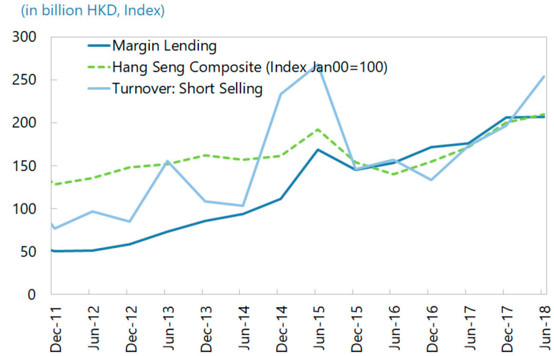
Household debt excluding mortgages and credit card debt grew rapidly...

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



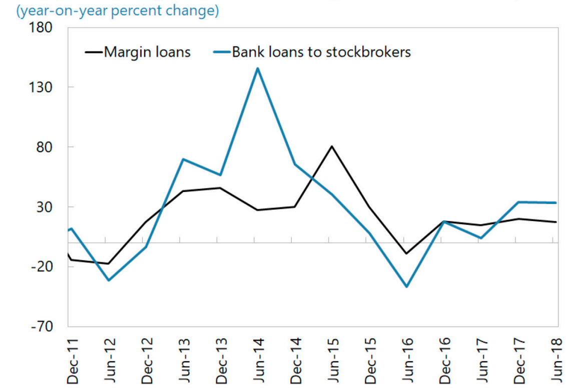
...driven by a sharp rise of margin lending tied to turnover in the stock market.

Margin Lending and the Market
(in billion HKD, Index)



Brokers seem to turn to banks to fund margin loans.

Margin Lending and Bank Lending to Securities Companies
(year-on-year percent change)

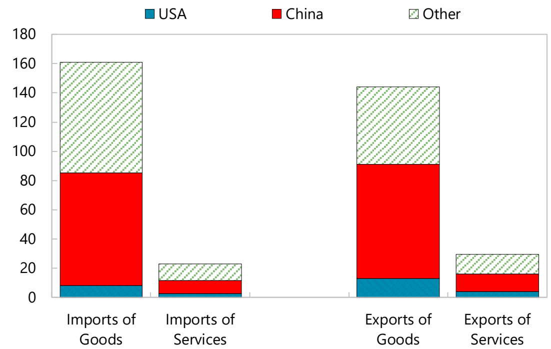


Sources: BIS, CEIC, and IMF staff calculations.

Figure 6. Hong Kong SAR: Exposures of Hong Kong SAR

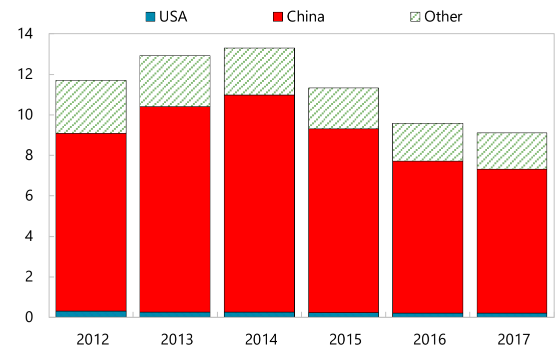
"Real economy" exposures include trade, where HKSAR is highly dependent on the Mainland and the U.S. ....

Trade Exposure to China and the U.S.
(percent of GDP)



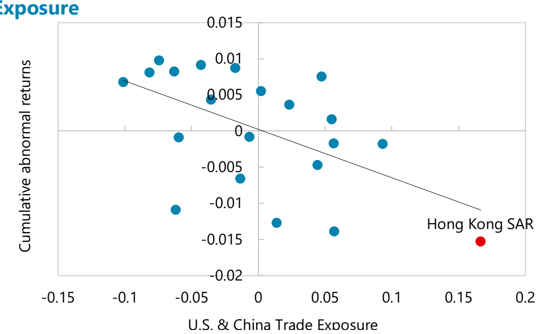
... and tourism, where Mainland tourists account for a large majority of spending.

Tourism Receipts
(percent of HKG's GDP)



In addition, capital markets amplify real channels as illustrated by market reactions to trade announcements...

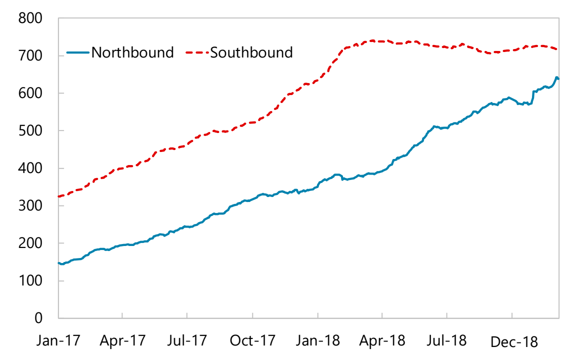
Cumulative Abnormal Returns v.s. U.S. & China Export Exposure



Note: Pearson's r t-stat = 2.8336; based on residuals of variable on GDP per capita PPP. Exposure based on 2016/17 averages of exports to China & U.S. / total exports.

...since the "connects" remain key gateways for international access to onshore markets

Cumulative Net Inflows Under Stock Connect
(in RMB billions)



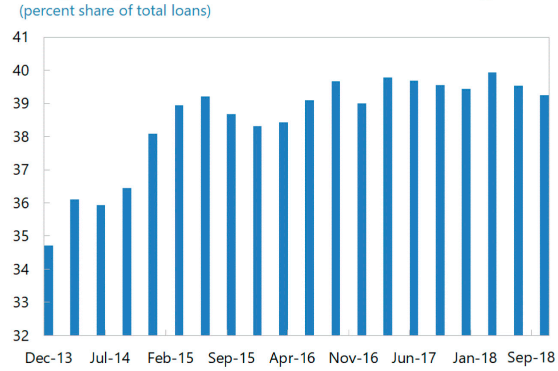
Hong Kong SAR's banking sector is highly exposed to the Mainland...

HKSAR's Banking Sector Exposure to the Mainland
(in percent of GDP)

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

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

Hong Kong SAR Banks' Mainland Related Lending
(percent share of total loans)



Sources: APD REO, CEIC, Hong Kong SAR C&SD, Haver, Hong Kong SAR Authorities, WIND, and IMF Staff Calculations.

Table 1. Hong Kong SAR: Selected Economic and Financial Indicators, 2015-23

				Proj.					
	2015	2016	2017	2018	2019	2020	2021	2022	2023
NATIONAL ACCOUNTS									
Real GDP (percent change)	2.4	2.2	3.8	3.5	2.9	3.0	3.1	3.1	3.1
Contribution									
Domestic demand	1.4	2.5	5.2	5.4	3.3	3.5	3.5	3.6	3.5
Private consumption	3.1	1.3	3.7	4.0	2.2	2.3	2.3	2.5	2.5
Government consumption	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3
Gross fixed capital formation	-0.7	0.0	0.7	0.9	0.8	0.9	0.8	0.7	0.8
Inventories	-1.2	0.9	0.5	0.1	0.0	0.0	0.0	0.0	0.0
Net exports	0.8	-0.3	-1.4	-1.9	-0.4	-0.5	-0.3	-0.5	-0.4
Output gap (in percent of potential)	-0.2	-0.8	0.0	0.5	0.3	0.2	0.2	0.1	0.1
Saving and investment (percent of GDP)									
Gross national saving	24.9	25.5	26.6	25.6	25.7	25.7	25.7	25.5	25.5
Gross domestic investment	21.5	21.5	22.3	22.3	22.2	22.3	22.3	22.2	22.1
Saving-investment balance	3.3	4.0	4.3	3.4	3.5	3.4	3.4	3.4	3.5
LABOR MARKET									
Employment (percent change)	0.9	0.2	0.9	1.0	0.4	0.4	0.3	0.3	0.3
Unemployment rate (percent, period average)	3.3	3.4	3.1	2.6	2.6	2.6	2.6	2.6	2.6
Real wages (percent change)	0.5	1.2	2.3	1.6	1.0	1.2	1.3	1.3	1.3
PRICES									
Inflation (percent change)									
Consumer prices	3.0	2.4	1.5	2.4	2.1	2.2	2.4	2.5	2.5
GDP deflator	3.6	1.7	2.9	3.1	2.0	2.0	1.7	1.9	1.9
GENERAL GOVERNMENT (percent of GDP)									
Consolidated budget balance	0.6	4.5	5.6	3.3	2.0	1.8	1.7	1.7	1.7
Revenue	18.8	23.0	23.3	22.2	21.0	20.9	21.2	21.2	21.2
Expenditure	18.2	18.6	17.7	18.9	19.0	19.1	19.5	19.5	19.5
Fiscal reserves as of March 31	35.1	38.3	41.4	42.2	42.1	41.9	41.6	41.3	41.0
FINANCIAL									
Interest rates (percent, period-average)									
Best lending rate	5.0	5.0	5.0	...	...	...	...	...	...
Three-month HIBOR	0.4	0.6	0.9	...	...	...	...	...	...
10-year Treasury bond yield	1.6	1.2	1.6	...	...	...	...	...	...
MACRO-FINANCIAL									
Loans for use in Hong Kong SAR (ex. trade financing	6.3	8.0	16.1	14.6	8.4	7.4	9.1	8.1	9.3
House prices (end of period, percent change)	2.4	7.9	14.7	14.8	3.3	3.1	4.5	5.9	6.6
Credit Gap 1/	11.0	10.9	19.6	19.3	10.2	7.2	5.6	2.6	2.0
Hang Seng stock index (percent change)	-7.2	0.4	36.0	...	...	...	...	...	...
EXTERNAL SECTOR									
Merchandise trade (percent change)									
Export value	-1.8	-0.5	8.0	8.0	5.3	3.6	4.0	3.6	3.5
Import value	-4.1	-1.0	8.7	8.6	5.3	3.9	4.3	4.1	3.8
Terms of trade	0.5	0.0	-0.1	0.8	0.0	-0.1	-0.2	-0.2	-0.1
Current account balance (percent of GDP) 2/	3.3	4.0	4.3	3.4	3.5	3.4	3.4	3.4	3.5
Foreign exchange reserves 2/									
In billions of U.S. dollars, end-of-period	358.8	386.2	431.6	447.7	470.0	492.8	510.7	528.1	540.9
In percent of GDP	116.0	120.3	126.4	123.6	122.2	119.9	117.2	113.9	109.4
Net international investment position (percent of GD	324.2	359.2	409.4	387.0	372.1	357.6	344.4	331.3	318.7
Linked rate (fixed)									
Market rate (HK$/US$1, period average)	7.752	7.762	7.793	...	...	...	...	...	...
Real effective rate (period average, 2010=100)	113.9	118.3	118.2	...	...	...	...	...	...

Sources: BIS,CEIC; HKSAR Census and Statistics Department; and IMF staff estimates.
1/ Based on loans for use in Hong Kong SAR
2/ Data published using the Balance of Payments Statistics Manual 6 (BPM6) format

Table 2. Hong Kong SAR: Balance of Payments, 2015-23

	2015	2016	2017	Proj. 2018	2019	2020	2021	2022	2023
			(In billions of U.S. dollars)						
Current account	10.3	12.7	14.8	12.2	13.3	13.9	14.7	15.7	17.1
Goods balance	-22.9	-16.7	-24.0	-29.2	-31.5	-35.3	-39.2	-44.6	-48.9
Services balance	30.3	24.1	27.1	30.5	34.0	38.8	44.1	50.9	56.4
Income balance	2.9	5.4	11.6	10.9	10.8	10.5	9.8	9.4	9.5
Primary income balance	5.7	8.1	14.2	13.6	13.8	13.7	13.3	13.3	13.9
Secondary income balance	-2.9	-2.7	-2.6	-2.7	-3.0	-3.2	-3.5	-3.9	-4.3
Transfer balance									
Capital and financial account 1/	-16.6	-13.0	-19.9	-12.1	-13.2	-13.9	-14.7	-15.6	-17.0
Capital account	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
Financial account	-16.6	-13.0	-19.8	-12.1	-13.2	-13.8	-14.7	-15.6	-17.0
Net direct investment	102.5	57.7	21.5	23.1	23.1	23.5	23.6	24.1	21.9
Assets	-78.5	-75.5	-100.9	-109.1	-120.0	-132.4	-144.7	-158.5	-176.5
Liabilities	181.0	133.2	122.4	132.2	143.1	155.9	168.3	182.6	198.3
Portfolio investment	-125.2	-60.5	39.1	13.8	12.9	11.9	10.5	8.8	6.7
Assets	-85.3	-68.3	3.0	-16.7	-19.4	-22.6	-26.1	-30.2	-34.8
Liabilities	-39.9	7.8	36.2	35.1	34.0	32.9	31.8	30.7	29.6
Financial derivatives	12.8	4.7	5.1	5.5	6.1	6.7	7.3	8.0	8.9
Assets	72.8	95.1	81.6	88.3	97.1	107.1	117.1	128.2	142.7
Liabilities	-60.0	-90.4	-76.5	-78.0	-79.5	-81.0	-82.5	-84.0	-85.5
Other investment	29.7	-13.7	-53.4	-37.0	-38.3	-41.0	-43.4	-46.2	-49.1
Assets	36.8	-41.5	-187.7	-178.3	-184.6	-197.4	-209.0	-222.4	-236.5
Liabilities	-7.0	27.8	134.4	141.2	146.2	156.4	165.6	176.2	187.4
Reserve assets (net change)	-36.4	-1.1	-32.1	-17.5	-17.0	-14.9	-12.6	-10.3	-5.3
Net errors and omissions	6.3	0.3	5.1	0.0	0.0	0.0	0.0	0.0	0.0
Memorandum item:									
Nominal GDP	309.4	320.9	341.5	362.3	384.8	411.1	435.6	463.8	494.3
			(In percent of GDP)						
Current account	3.3	4.0	4.3	3.4	3.5	3.4	3.4	3.4	3.5
Goods balance	-7.4	-5.2	-7.0	-8.1	-8.2	-8.6	-9.0	-9.6	-9.9
Services balance	9.8	7.5	7.9	8.4	8.8	9.4	10.1	11.0	11.4
Income balance	0.9	1.7	3.4	3.0	2.8	2.5	2.3	2.0	1.9
Capital and financial account	-5.4	-4.1	-5.8	-3.3	-3.4	-3.4	-3.4	-3.4	-3.4
Capital account	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial account	-5.4	-4.0	-5.8	-3.3	-3.4	-3.4	-3.4	-3.4	-3.4
Net direct investment	33.1	18.0	6.3	6.4	6.0	5.7	5.4	5.2	4.4
Portfolio investment	-40.5	-18.9	11.5	3.8	3.4	2.9	2.4	1.9	1.4
Financial derivatives	4.1	1.5	1.5	1.5	1.6	1.6	1.7	1.7	1.8
Other investment	9.6	-4.3	-15.6	-10.2	-10.0	-10.0	-10.0	-10.0	-9.9
Reserve assets (net change)	-11.8	-0.4	-9.4	-4.8	-4.4	-3.6	-2.9	-2.2	-1.1
Net errors and omissions	2.0	0.1	1.5	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, 2015-2023 1/

(In percent of GDP, unless stated otherwise)

	2015	2016	2017	Proj. 2018	2019	2020	2021	2022	2023
Consolidated revenue	18.8	23.0	23.3	22.2	21.0	20.9	21.2	21.2	21.2
Operating revenue	15.9	16.5	16.6	17.0	16.5	16.5	16.7	16.7	16.7
Capital revenue	2.9	6.5	6.7	5.2	4.5	4.4	4.5	4.5	4.5
Taxes	14.4	14.0	14.3	13.7	12.9	12.9	13.0	13.0	13.0
Of which:									
Salaries tax	2.4	2.4	2.3	...	...	...	...	...	...
Profits tax	5.8	5.6	5.2	...	...	...	...	...	...
Stamp duties	2.6	2.5	3.6	...	...	...	...	...	...
Nontax	4.4	9.0	9.0	8.5	8.1	8.1	8.1	8.1	8.1
Of which:									
Land premium	2.5	5.1	6.2	4.3	3.7	3.7	3.7	3.7	3.7
Investment income	0.0	0.8	0.8	1.4	1.2	1.1	1.1	1.3	1.6
Consolidated expenditure	18.2	18.6	17.7	18.9	19.0	19.1	19.5	19.5	19.5
Operating expenditure	14.5	14.2	13.9	15.0	15.2	15.4	15.5	15.5	15.5
Of which:									
Personnel related (including pensions)	4.3	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.5
Capital expenditure	3.7	4.4	3.8	3.9	3.8	3.7	4.0	4.0	4.0
Of which:									
Interest expenditure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overall balance	0.6	4.5	5.6	3.3	2.0	1.8	1.7	1.7	1.7
Memorandum items:									
Operating balance 2/	1.4	2.3	2.7	2.0	1.3	1.1	1.2	1.2	1.2
Primary balance 3/	0.6	3.6	4.8	1.9	0.8	0.7	0.5	0.3	0.1
Fiscal impulse 4/	2.1	-1.2	0.9	1.2	0.3	-0.1	0.3	-0.1	0.0
Fiscal reserves	35.1	38.3	41.4	42.2	42.1	41.9	41.6	41.3	41.0
(Months of spending)	23.2	24.8	28.1	26.8	26.6	26.3	25.6	25.4	25.2
Government debt	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Government debt including Bond Fund	4.9	5.1	4.6	4.8	4.8	4.8	4.8	4.8	4.8
Bond Fund assets	5.4	5.7	5.2	5.2	5.2	5.2	5.2	5.2	5.2
Net general government debt 5/	-35.6	-38.8	-42.0	-42.6	-42.6	-42.3	-42.1	-41.8	-41.5

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 corresponds to an expansionary fiscal stance.

5/ Negative sign indicates net assets.

Table 4. Hong Kong SAR: Monetary Survey, 2013-19

	2013	2014	2015	2016	2017	Proj. 2018	2019
	(In billions of Hong Kong dollars)						
Net foreign assets	4866	5064	4991	5293	5849	5660	5803
Monetary authorities	2582	2792	3051	3114	3508	3260	3303
Banks	2285	2272	1940	2179	2341	2400	2500
Domestic credit	3979	4515	4800	5185	6019	6895	7475
Other items (net)	1212	1432	1827	2030	1888	1888	1888
M2	10056	11011	11618	12508	13755	14443	15165
Of which:							
Deposits in HKD 1/	4481	4896	5416	5890	6572	...	...
Deposits in foreign currencies 1/	5261	5786	5853	6228	6745	...	...
Notes and coins in circulation	314	330	349	390	439	...	...
	(Annual percentage change)						
Domestic credit 2/	-2.9	13.5	6.3	8.0	16.1	14.6	8.4
M2	12.4	9.5	5.5	7.7	10.0	5.0	5.0
	(Contribution to M2 growth, in percent)						
Net foreign assets	4.7	2.0	-0.7	2.6	4.4	-1.4	1.0
Domestic credit	-1.3	5.3	2.6	3.3	6.7	6.4	4.0
Other items (net)	9.0	2.2	3.6	1.7	-1.1	0.0	0.0
	(In percent of GDP)						
Net foreign assets	227.6	224.1	208.1	212.5	219.8	199.3	194.7
Domestic credit	186.1	199.8	200.1	208.2	226.2	242.8	250.8
Other items (net)	56.7	63.4	76.2	81.5	70.9	66.5	63.3
M2	470.3	487.2	484.4	502.2	516.9	508.7	508.9

Sources: IMF, *International Financial Statistics*; Haver Analytics, and staff calculation.

1/ Includes savings, time, demand, and negotiable certificates of deposits.
2/ Domestic Credit measures loans for use in Hong Kong SAR.

Table 5. Hong Kong SAR: Vulnerability Indicators, 2013-18

	2013	2014	2015	2016	2017	2018Q2
Banking sector						
Regulatory capital to risk-weighted assets	15.9	16.8	18.3	19.2	19.1	19.4
Regulatory tier 1 capital to risk-weighted assets	13.3	13.9	15.3	16.4	16.6	16.8
Nonperforming loans net of provisions to capital	1.5	1.3	1.9	2.0	1.6	1.6
Nonperforming loans to total gross loans	0.5	0.5	0.7	0.9	0.7	0.6
Sectoral distribution of total loans: residents	70.1	69.8	69.7	70.3	69.9	70.0
Sectoral distribution of total loans: other financial corporations	5.5	6.1	6.7	7.6	9.8	10.3
Sectoral distribution of total loans: nonfinancial corporations	57.9	56.9	55.9	55.7	53.0	52.4
Sectoral distribution of total loans: other domestic sectors	6.7	6.8	7.1	7.0	7.2	7.3
Sectoral distribution of total loans: nonresidents	29.9	30.2	30.3	29.7	30.1	30.0
Return on assets	1.1	1.0	1.0	1.1	1.0	1.1
Return on equity	14.4	13.1	13.2	16.0	12.6	13.9
Interest margin to gross income	46.7	51.2	46.5	42.6	51.1	53.8
Noninterest expenses to gross income	48.5	48.9	48.0	42.8	45.7	42.8
Liquid assets to total assets (liquid asset ratio)	21.6	22.3	21.5	21.6	19.6	19.8
Liquid assets to short-term liabilities 1/	44.9	47.0	164.3	180.8	182.2	175.8
Net open position in foreign exchange to capital	3.7	5.3	5.9	4.1	0.5	-2.6
Public sector						
Fiscal surplus (in percent of fiscal year GDP)	1.0	3.2	0.6	4.5	5.6	…
Fiscal reserves (in percent of fiscal year GDP)	35.3	36.7	35.1	38.3	41.4	…
External sector						
Gross official reserves (in billions of U.S. dollar)	311.2	328.5	358.8	386.1	431.5	…
In percent of GDP	112.9	112.7	116.0	120.3	126.4	…
In months of retained imports	26.2	26.4	32.1	36.0	36.8	…
In percent of monetary base	192.1	189.2	174.6	183.2	199.9	…
In percent of broad money 2/	24.0	23.1	23.9	24.0	24.5	…
In percent of Hong Kong dollar M3	50.2	48.7	48.1	47.6	47.9	…
Short-term debt (in billions of U.S. dollar)	861.8	928.4	901.7	915.7	1,047.0	…
In percent of gross reserves	277.0	282.6	251.3	237.1	242.7	…
Financial sector						
Hang Seng index (percent change, end-year)	2.9	1.3	-7.2	0.4	36.0	…
House prices (percent change, end-year)	7.7	13.5	2.4	7.9	14.7	…

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.

Appendix I. Risk Assessment Matrix 1/

Risk Assessment Matrix

Source of risk	*Likelihood*	*Impact*	*Policy Advice*
External			
1. Rising protectionism and retreat from multilateralism. Escalating trade tensions could lead to lower global growth both directly, through a negative impact on global trade, and by indirectly through confidence and financial markets. 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 tightening of global financial conditions** could cause higher debt service and refinancing risks, stress on leveraged households and firms, and capital account pressures. Tighter financial conditions could be triggered by a sharper than expected increase in U.S. interest rates (prompted by higher than expected inflation) or the materialization of other risks.	***High***	***High***	Provide targeted fiscal support as needed. Continue to adopt policies to ease housing supply constraints by ensuring an adequate supply of land and public housing.
3. Weaker than expected global growth, especially in Mainland China. Over the medium term, insufficient progress in deleveraging and rebalancing could reduce growth, with additional stimulus postponing the slowdown. Should a sharp adjustment occur, this would entail weak domestic demand, and reduce global growth.	***Low/Medium***	***High***	Counter the adverse impact on growth through a temporary fiscal stimulus centered on vulnerable households. 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.
Domestic			
Disorderly correction of house prices: Higher global market volatility and financing costs resulting from faster-than-expected Fed tightening leads to an abrupt downturn in property prices. Falling collateral values and negative wealth effect trigger adverse feedback loop between economic activity, bank lending, household indebtedness, and housing market.	***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 and 30 percent, and "high" a probability between 30 and 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 1 year and 3 years, respectively.

Appendix II. Debt Sustainability Analysis

Hong Kong SAR Public Sector DSA - Baseline Scenario

(In percent of GDP unless otherwise indicated)

Debt, Economic and Market Indicators [1/]

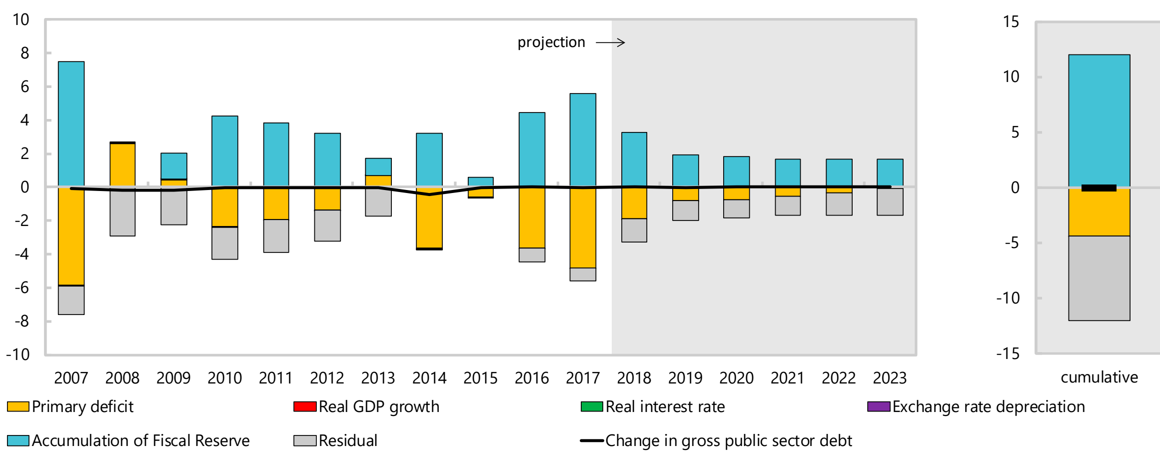
	Actual			Projections					
	2007-2015 [2/]	2016	2017	2018	2019	2020	2021	2022	2023
Nominal gross public debt	0.6	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Public gross financing needs	-2.8	-4.5	-5.6	-3.3	-1.9	-1.8	-1.7	-1.7	-1.7
Real GDP growth (in percent)	3.1	2.2	3.8	3.5	2.9	3.0	3.1	3.1	3.1
Inflation (GDP deflator, in percent)	2.2	1.7	2.9	3.0	1.0	1.1	1.0	1.3	1.5
Nominal GDP growth (in percent)	5.4	3.9	6.8	6.6	5.0	4.9	5.0	5.0	5.1
Effective interest rate (in percent) [4/]	4.6	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1

As of September 20, 2018

Sovereign Spreads		
EMBIG (bp) 3/		...
5Y CDS (bp)		36
Ratings	Foreign	Local
Moody's	Aa2	Aa2
S&Ps	AA+	AA+
Fitch	AA+	AA+

Contribution to Changes in Public Debt

	Actual			Projections							
	2007-2015	2016	2017	2018	2019	2020	2021	2022	2023	Cumulative	Debt-stabilizing Primary Balance [10]
Primary deficit	-1.3	-3.6	-4.8	-1.9	-0.8	-0.7	-0.5	-0.3	-0.1	-4.4	0.0
Primary (noninterest) revenue and grants	19.1	22.2	22.5	20.8	19.8	19.8	20.0	19.8	19.6	120.0	
Primary (noninterest) expenditure	17.8	18.5	17.7	18.9	19.0	19.1	19.5	19.5	19.5	115.6	
Automatic debt dynamics [5/]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Interest rate/growth differential [6/]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Of which: real interest rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Of which: real GDP growth	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exchange rate depreciation [7/]	0.0	0.0	0.0	...	...	...	...	...	...	...	
Residual, including asset changes [8/]	-1.6	-0.8	-0.8	-1.4	-1.2	-1.1	-1.1	-1.3	-1.6	-7.7	
Change in gross public sector debt	-0.1	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	-0.1	
Change of fiscal reserves [9/]	2.8	4.5	5.6	3.3	1.9	1.8	1.7	1.7	1.7	12.0	



Source: IMF staff.

1/ Public sector is defined as general government.

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

3/ EMBIG.

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

5/ Derived as [(r - π(1+g) - g + ae(1+r)]/(1+g+π+gπ)) 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 - π (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/ Assumes a buildup of reserves under the baseline scenario.

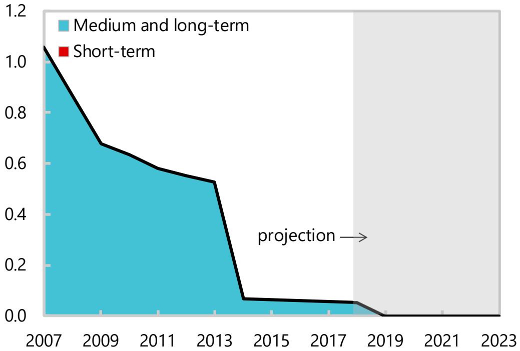
10/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

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

Composition of Public Debt

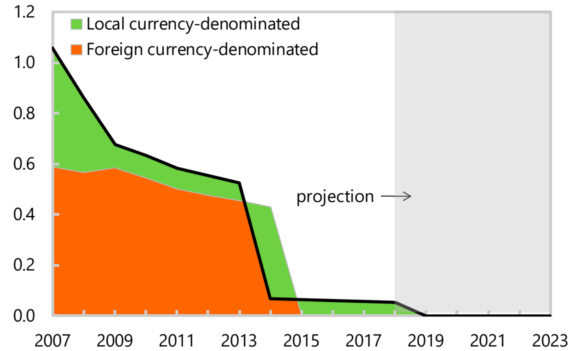
By Maturity

(In percent of GDP)



By Currency

(n percent of GDP)

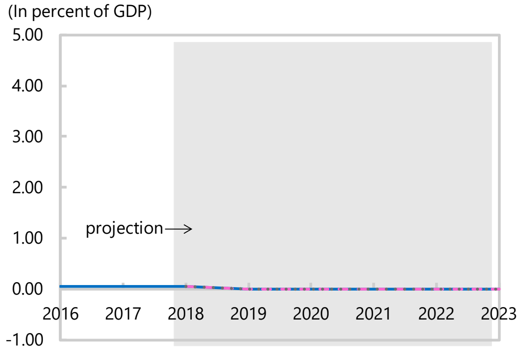


Alternative Scenarios

Baseline Historical Constant Primary Balance

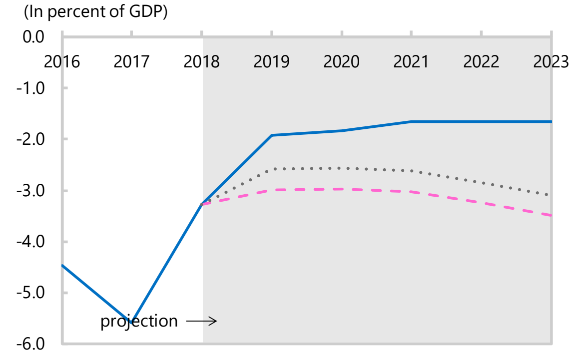
Gross Nominal Public Debt

(In percent of GDP)



Public Gross Financing Needs

(In percent of GDP)



Underlying Assumptions

(In percent)

Baseline Scenario	2018	2019	2020	2021	2022	2023
Real GDP growth	3.5	2.9	3.0	3.1	3.1	3.1
Inflation	3.0	1.0	1.1	1.0	1.3	1.5
Primary balance	1.9	0.8	0.7	0.5	0.3	0.1
Effective interest rate	5.1	5.1	5.1	n.a.	n.a.	n.a.
Constant Primary Balance Scenario						
Real GDP growth	3.5	2.9	3.0	3.1	3.1	3.1
Inflation	3.0	1.0	1.1	1.0	1.3	1.5
Primary balance	1.9	1.9	1.9	1.9	1.9	1.9
Effective interest rate	5.1	5.1	n.a.	n.a.	n.a.	n.a.

Historical Scenario	2018	2019	2020	2021	2022	2023
Real GDP growth	3.5	2.7	2.7	2.7	2.7	2.7
Inflation	3.0	1.0	1.1	1.0	1.3	1.5
Primary balance	1.9	1.5	1.5	1.5	1.5	1.5
Effective interest rate	5.1	5.1	n.a.	n.a.	n.a.	n.a.

Source: IMF staff.

<table>
<tr><th></th><th colspan="12">Hong Kong SAR</th><th>Overall Assessment</th></tr>
<tr><td>Foreign asset and liability position and trajectory</td><td colspan="12">Background. The net international investment position (NIIP) reached around 409 percent of GDP as of end-2017, up from 275 percent in 2012. Gross assets (about 1,606 percent of GDP) and liabilities (about 1,197 percent of GDP) are high, reflecting Hong Kong SAR's status as a major international financial center. Valuation changes have been sizable and positive, as the change in NIIP in the past 5 years was close to 200 percent of 2017 GDP compared to cumulated financial account balances of only 20 percent of 2017 GDP in the same period. On the other hand, income accrued to the large NIIP has been modest, due to relatively low yields on assets and, even more importantly, substantially higher payments on liabilities.
Assessment. Vulnerabilities are low given the size of NIIP and its favorable composition, with large and stable stock of reserve assets as a share of total assets, and direct investment accounting for a large and rising share of total assets and liabilities (37.2 and 54.0, respectively in 2017).</td><td rowspan="6">Overall Assessment:
The external position in 2018 was broadly consistent with medium-term fundamentals and desirable policy settings.

The current account 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 Linked Exchange Rate System (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. 3/

Potential policy responses:
Macroeconomic policies are broadly appropriate. Maintaining policies that support wage and price flexibility is crucial particularly as the tightening cycle of U.S. monetary policy continues. Robust and proactive financial supervision and regulation, prudent fiscal management, flexible markets, and the Linked Exchange Rate System have worked well and continuation of these policies will help keep the external position broadly in line with medium-term fundamentals.</td></tr>
<tr><td>Current account</td><td colspan="12">Background. The current account (CA) surplus is projected to decline to 3.4 percent of GDP in 2018 from 4.3 percent in 2017, driven by a lower primary income balance and a larger trade deficit on the back of robust domestic demand. From a sectoral perspective, the gradual decline of private saving (from the peak of 34.4 percent of GDP in 2006 to 24.6 percent of GDP in 2017), driven by robust consumption growth, 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 surplus is projected to be 3.1 percent of GDP in 2019.
Assessment. The CA is broadly consistent with medium-term fundamentals and desirable policies. Staff's quantitative assessment finds that the projected cyclically-adjusted CA at 3.6 percent is roughly in the mid-point of the CA norm range of 2.1 to 5.1 percent of GDP. The CA gap range is hence -1½ to 1½ 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.1/</td></tr>
<tr><td>CA Assessment 2018</td><td>Actual CA</td><td>3.4</td><td>Cycl. Adj. CA</td><td>3.6</td><td>EBA CA Norm</td><td></td><td>EBA CA Gap</td><td></td><td>Staff Adj.</td><td></td><td>Staff CA Gap</td><td>0.0</td></tr>
<tr><td>Real exchange rate</td><td colspan="12">Background. The REER was essentially unchanged in 2017 (0.3 percent below the average REER in 2016). REER dynamics are largely determined by the HKD/USD peg and the subdued inflation in Hong Kong SAR. The HKD has appreciated by 1.6 percent in real effective terms through September 2018 compared to the 2017 average and the weak side of the convertibility undertaking has been triggered several times since April prompting the HKMA to sell USD in the market.
Assessment. The real exchange rate is broadly consistent with medium-term fundamentals and desirable policies. 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 to +5.</td></tr>
<tr><td>Capital and financial accounts:

flows and policy measures</td><td colspan="12">Background. As a financial center, Hong Kong SAR has an open capital account. Non-reserve financial flows moved from sizeable net outflows in 2016 back to net inflows in 2017. The financial account is typically very volatile both in terms of portfolio and direct investment. These large movements are likely associated with both financial volatility in the Mainland, transmitted through growing cross-border financial linkages 2/ as well as shifting expectations of a U.S. policy rate hike and related arbitraging in the FX and rates markets.
Assessment. Large financial resources and proactive financial supervision and regulation lessen 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.</td></tr>
<tr><td></td><td colspan="12"></td></tr>
</table>

	Hong Kong SAR (continued)
Technical Background Notes	1/ 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 applying them to Hong Kong SAR. Following that approach, the CA norm in 2018 is estimated to be about 15.3 percent of GDP. The implied CA gap of -11.7 is almost entirely due to EBA regression residuals, with the policy gap accounting for only 0.5 percentage points. The large residual reflects a combination of factors chiefly related to measurement issues that are relevant for Hong Kong SAR but not captured by EBA. First, an adjustment of 5-7 percentage points is made to EBA's implied contribution of the NIIP position. The NIIP variable in EBA captures average income effects across countries. Instead, Hong Kong SAR's NIIP has been driven by valuation effects (see box on foreign assets and liabilities), and thus it has had a systematically lower income balance relative to its NIIP compared to 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, the decline in logistics and trading activities in Hong Kong SAR in response to mainland China's increased onshoring accounts for a decline of 1-1½ percentage points in the CA. While leading to lower income, the loss of activity 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 HKSAR's own economy rebalances in response to changes in mainland demand. Adjusting for these factors, staff estimates that the CA gap is close to zero. See SIP in the 2016 Article IV staff report for more details. 2/ 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 2018Q2, banking system claims, including those of foreign banks, on mainland nonbank entities amounted to HK$5.7 trillion, or about 204 percent of projected 2018 GDP, up by 5 percentage points from a year earlier. 3/ See SIP in the 2016 Article IV staff report and IMF WP17/09.

Appendix IV. Implementation of the 2014 FSAP Recommendations

Area	Recommendation	Progress
Crisis management and resolution	Establish a fully comprehensive framework for recovery and resolution, in line with emerging international best practices; and Establish recovery and resolution plans for all systemic financial institutions, including financial market infrastructures ("FMIs").	**Framework for resolution and resolution planning for banks** **Implemented** • The Financial Institutions (Resolution) Ordinance (Chapter 628 of the Laws of Hong Kong) ("FIRO") was enacted by the Legislative Council 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-sector resolution regime in Hong Kong SAR. • The cross-sector regime applies to all banks (authorized institutions ("AIs")), certain securities firms, insurers and financial market infrastructures, 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 Securities and Futures Commission ("SFC") and the Insurance Authority are established as resolution authorities 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 resolution authority for all AIs). The 2018 Financial Stability Board ("FSB") Peer Review Report confirmed that Hong Kong SAR has legal powers and safeguards related to resolution that are consistent with the requirements of the FSB's *Key Attributes of Effective Resolution Regimes for Financial Institutions* and noted that 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 for each of the existing cross-sectoral G-SIB groups which include both banking sector entities and securities and futures sector entities. This constitutes 25 cross-sectoral groups of which the MA is designated as the lead resolution authority. • The Financial Institutions (Resolution) (Protected Arrangements) Regulation (Chapter 628A of the Laws of Hong Kong) 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 a resolution authority under the FIRO were to exercise its resolution powers to manage the orderly failure of a non-viable systemically important financial institution in Hong Kong SAR. • Further necessary work is underway to make the FIRO regime operational. As part of this work for the banking sector, within the HKMA, a Resolution Office was established on 1 April 2017 with dedicated resources and governance and is working to ensure the Hong Kong SAR resolution regime is operational for banks. Its priorities are to establish resolution policy standards for banks, define resolution strategies and conduct resolvability assessments of banks, work with banks to remove impediments to their orderly

Area	Recommendation	Progress
		resolution, and develop the HKMA's operational capability necessary to execute orderly resolution such as developing operational mechanics to implement transfer and bail-in stabilization options. • On resolution policy, the Resolution Office issued three FIRO Code of Practice Chapters in July 2017 providing guidance on MA functions under 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 resolution authority. 2018 priorities include the development of rules and guidance to be made under the FIRO to address barriers to resolvability, with work focussed on the following two barriers: insufficient loss-absorbing capacity ("LAC") and disorderly exercise of early termination rights. • On the first barrier, the Resolution Office published a public consultation paper on the LAC requirements in January 2018, and subsequently issued a draft of the AI LAC Rules for industry consultation in July 2018. Following a negative vetting procedure by the Legislative Council, the AI LAC rules came into operation on 14 December 2018. • On the second barrier, 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 locally. To this end, an important step towards removing this barrier locally was achieved with ISDA's publication of the Hong Kong Country Annex to the ISDA 2015 Universal Resolution Stay Protocol ("ISDA Protocol") in December 2017. As the ISDA protocol only covers certain financial contracts and will not fully address this barrier, the HKMA is in the process of developing proposed rules under the FIRO to require broader adoption of contractual recognition of stays, and intends to consult on the relevant policy proposals in Q1 2019. • On resolution planning, the Resolution Office continues to advance the resolution planning for G-SIBs that have a higher potential systemic impact on failure via local bilateral programmes with the AIs and cross-border cooperation via Crisis Management Groups. In light of the commencement of the FIRO, the Resolution Office rolled out resolution planning for all D-SIBs. The formal submission of core information from D-SIBs was received. The target is to determine the preferred resolution strategy and communicate indicative LAC requirements for each D-SIBs by end 2018 and to classify the D-SIBs as resolution entities/material subsidiaries by end 2019, with their compliance with the LAC requirements by 1 January 2022 at the earliest. Besides, the core information requirement is expected to be rolled out to the other locally incorporated non-D-SIBs AIs (around 11 banks) that are considered as having a higher systematic impact should they fail starting from 2019. • On the development of the HKMA's operational capability, the Resolution Office is working to strengthen operational readiness for executing resolution transactions, including by establishing and enhancing cross-border arrangements for cooperation in resolution with non-Hong Kong SAR authorities and the practical operation of the resolution tools under the FIRO. On the latter, the Resolution Office is refining the MA's crisis management framework to reflect

Area	Recommendation	Progress
		the establishment of the FIRO and related internal coordination arrangements, including by establishing a new HKMA cross-functional crisis management framework supported by a "Watchlist Framework" for communicating AIs' proximity to failure and developing internal resolution planning handbook for AIs. The Crisis Management Coordination Group ("CMCG") was established in 2018. CMCG has a role in overseeing the development of cross-departmental crisis management capabilities in business-as-usual and ensuring coordinated advice to CE/MA on AIs entered the Watchlist. The standing members of CMCG include the deputy CE for banking, deputy CE for monetary, Commissioner for Resolution Office and General Counsel.
		Recovery planning for banks
		Implemented • 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 date, all key locally incorporated AIs in Hong Kong SAR, including the six domestic systemically important banks, have already submitted their recovery plans to the HKMA for review. All remaining AIs, which are foreign bank branches and other smaller AIs, are submitting their recovery plans to the HKMA in 2018. • 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 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.
		FMIs under the purview of SFC
		On Track • 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 ("SEOCH"), 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 FMIs; 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. Clearing rule changes to implement those enhancements were approved by the SFC in late September and then implemented in mid-October 2018. • The SFC has identified possible resolution strategies to resolve a RCH under different scenarios, and at a later stage is planning to discuss with the relevant stakeholders and finalize the details of these strategies.
		FMIs under the purview of HKMA
		Implemented • For FMIs under the purview of the HKMA, the requirement to establish a comprehensive framework for recovery and resolution

Area	Recommendation	Progress
		only applies to the settlement institution and system operator of the three foreign-currency Real Time Gross Settlement 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 Central Moneymarkets Unit ("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.
		On Track • FSB issued the 'Guidance on Continuity of Access to Financial Market Infrastructures (FMIs) 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 ("IIA") as scheduled in 2015.	**Implemented** • The Insurance Authority ("IA"), a statutory body established by the Insurance Ordinance, is a new insurance regulator independent of the Government. It 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	**Implemented** • Enhancements made to the legal and regulatory framework have been in operation since 26 June 2017. These include (i) the requirement to seek 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 Insurance Ordinance; 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 Insurance Ordinance 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	**On Track** • Apart from the current role of IA in (i) leading the supervisory college of a Hong Kong SAR-incorporated insurance group and soon a

Area	Recommendation	Progress
		demerged insurance group; (ii) co-leading a regional supervisory college of a Global Systemically Important Insurer with the home regulator; and (iii) actively participating in supervisory colleges of other insurance groups. • IA has proposed a regulatory regime for insurance groups and subgroups. Depending on the structure and size of insurance groups, a three-tier approach for supervisory measures for group-wide supervision was proposed. IA is working on legislative preparation accordingly.
	(ii) implement an RBC regime and	**On Track** • A consultation on the proposed RBC framework was conducted in Q3 2015. • After taking into account feedback from stakeholders, IA has started Phase 2 of the 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 quantitative impact studies ("QIS") in December 2017. Based on the industry data received from QIS 1, IA calibrated the parameters and launched the second QIS in August 2018. It is anticipated that at least one more QIS (i.e. the third QIS or QIS 3) would be required and launched in mid-2019. • Detailed rules will be drafted and consultation on detailed rules will be conducted after QIS 3. Industry Focus Groups comprising representatives from the industry have been established to discuss technical issues identified and would be engaged during the development process. 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., Pillars 2 requirements under the RBC framework), IA launched the consultation on draft guidelines on enterprise risk management and own risk and solvency assessment in May 2018, with a view to finalizing the guideline by end of 2018 or early 2019. • For disclosure requirement, IA will soon kick start the study and plans to consult the industry by 2019/2020.
	(iii) strengthen supervision of intermediaries.	**On Track** • The Insurance Companies (Amendment) Ordinance 2015 ("Amendment Ordinance") provides for the establishment of a statutory licensing regime for insurance intermediaries and provides IA with express 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 broad principles of conduct requirements on the part of a licensed insurance intermediary are stipulated in the Amendment Ordinance. IA is also empowered to make rules for insurance intermediaries to comply with practices and standards relating to conduct requirements, and issue codes or guidelines to facilitate their compliance with the conduct requirements. The IA is in the process of conducting public consultation on various rules, codes and guidelines. It is expected that the IA will take over the regulation of

Area	Recommendation	Progress
		insurance intermediaries from the three Self-Regulatory Organizations ("SROs"), and implement a new statutory regulatory and licensing regime in about mid-2019. The three SROs are the Insurance Agents Registration Board established under The Hong Kong Federation of Insurers, The Hong Kong Confederation of Insurance Brokers and Professional Insurance Brokers Association. • As regards the conduct of business requirements for insurers, the IA has issued two guidelines 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.
Securities market	Strengthen the oversight regime of the Hong Kong Exchanges and Clearing Limited ("HKEX").	**Implemented** • 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 – (i) The SFC has imposed a gearing ratio requirement and financial resources requirement on HKEX and its subsidiary recognised exchanges ("REC") and recognised clearing houses ("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: Hong Kong Securities Clearing Company Limited ("HKSCC"), HKFE Clearing Corporation Limited ("HKFE"), and the SEHK Options Clearing House Limited ("SEOCH"). HKEX and its subsidiary exchanges and clearing houses have fully complied with the requirements. (ii) HKEX agrees on the need to strengthen its compliance function. A Regulatory Compliance Department has been established and is implementing 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 program have been completed to date, both with respect to HKEX's cash market. The SFC has commenced work on the third review. • 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. It is essential for the SFC and the HKMA to

Area	Recommendation	Progress
		continue to stay on RMC to provide inputs from the macroprudential and financial stability angles.
	Further develop clear and transparent requirements for the recognition of exchanges and the authorisation of automated trading services.	**Implemented** • The SFC has amended its Guidelines for the Regulation of Automated Trading Services ("ATS Guidelines) to clarify the factors relevant to considering whether a particular operator is more suited to be regulated as a recognised exchange company ("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 Hong Kong SAR.
	Improve the oversight of auditors of listed entities.	**On Track** • FSTB launched a public consultation to solicit views on proposals to introduce an independent oversight regime for the regulation of listed entity auditors in June 2014. The consultation conclusions were issued in June 2015.[1] • With general support from the audit profession and the relevant stakeholders, the Government introduced an amendment bill into the Legislative Council (LegCo) in January 2018 to implement the reform. The amendment bill is now being scrutinised by LegCo. The reform will bring Hong Kong SAR in line with the international standards that auditor regulatory regimes should be independent of the profession itself and be subject to independent oversight by bodies acting in the public interest. • Under the reform proposals, the Financial Reporting Council ("FRC") will become the independent auditor oversight body vested with direct inspection, investigation and disciplinary powers with regard to listed entity auditors. The enforcement powers to be vested with FRC will also be stronger as compared with those under the present regime. Without compromising the independence of the new auditor regulatory regime, the authorities will 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	**Implemented** • 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 been proven to be effective in ensuring that the Hong Kong SAR markets remain safe, fair and efficient. • The SFC has taken tough actions against licensed corporations and registered institutions for breaches of SFC Code of Conduct. Some recent examples of these actions include:

1 The consultation conclusion is available at http://www.fstb.gov.hk/fsb/ppr/consult/doc/conclu_rpirrlea_e.pdf.

Area	Recommendation	Progress
		○ In November 2017 – fined HSBC Private Bank (Suisse) SA a record sum of HK$400 million after the Securities and Futures Appeals Tribunal upheld the SFC's disciplinary action against the bank for material systemic failures in the sale of structured products in the run-up to the global financial crisis in 2008 ○ 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 • The SFC and the Department of Justice (DOJ) entered into a memorandum of understanding on 4 March 2016 (MOU). • 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("FMI")	Develop a clear timetable for each FMI for compliance with the Principles for FMIs ("PFMIs").	**FMI under SFC purview**
		On Track • The SFC and HKEX have agreed on a timetable for the recognised clearing houses in the HKEX Group to comply with the PFMIs 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 CCP which have already been provided settlement finality) and involves legislative amendments. In preparation, the SFC has had extensive discussions with HKEX and expects the formal market consultation to begin around the end of 2018. The second relates to the use of central bank money for settlement where the SFC is in ongoing discussions with HKEX and HKMA on the most appropriate design and implementation.
		• 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 3 of 24

Area	Recommendation	Progress
		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 is reviewing the PFMI compliance of the recognised clearing houses in the HKEX Group to identify any areas for further improvement.
		FMI under HKMA purview
		Implemented • 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 website.[2] • The HKMA has completed PFMI assessments on all the FMIs under its purview, with the assessment summaries published on the HKMA 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 PFMIs, 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 ("IA") would help ensure that cross-sectoral interconnections are adequately captured and brought to the attention of the Financial Stability Committee ("FSC").	**On Track** • The SFC has commenced a review of its long-term risk data strategy focusing on identifying data that can be collected in a methodological fashion and that may contribute to the early identification of systemic risk, as well as to the setting of strategic, policy and supervisory priorities. The SFC launched a new risk data strategy which aims to use technology to enhance daily operations, including processes ranging from regulatory risk identification to intermediary monitoring and market surveillance, and to broaden understanding of the latest trends in the markets. Elements of the strategy include reviewing the risk data collected, benchmarking against major overseas regulators and analysing social media information. ○ 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 is analysed to isolate patterns and connections between individuals, companies and transactions which may indicate conduct risks. ○ By applying new data analytic technologies and techniques to complex issues, the newly-established Data Analytics Group will allow the SFC to carry out more effective market

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 http://www.hkma.gov.hk/eng/key-functions/banking-stability/oversight.shtml.

Area	Recommendation	Progress
		surveillance as well as to monitor and address prudential and systemic risks in a comprehensive manner. • To enhance existing macroprudential surveillance and support policymaking, IA is taking steps to improve its data infrastructure by requiring insurers to provide 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, IA has been working towards the development of more robust quantitative indicators for assessing the systemic risk of insurers. In this annual exercise, 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. • 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 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 IA for ongoing monitoring purpose. In addition, IA uses information contained in quarterly returns from insurers to perform industry-wide resilience tests on a quarterly basis. 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, IA provides the HKMA with statistics of insurers associated with banking groups to enable the latter to perform its role in macroprudential surveillance. • Besides, IA has been collecting business statistics from insurers and calculating industry-wide claims ratios for specified lines of business. 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, IA liaises with other local financial regulators (such as the HKMA and the SFC) regularly via the Council of Financial Regulators ("CFR") and FSC on supervisory and regulatory issues with cross-market implications. 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.	**Implemented** • HKMA continues its active participation in the supervisory colleges and Crisis Management Groups for cross-border banking groups including a number of Globally Systemically Important Banks to discuss their risk profiles, business strategies, and developments, the supervisory concerns and priorities as well as the development of recovery and resolution plans in accordance with the Key Attributes established by FSB.

Area	Recommendation	Progress
		• Following the coming into force of the main provisions of the FIRO on 7 July 2017, the HKMA has set up a Resolution Office which will lead resolution planning within the HKMA and actively coordinate with overseas resolution authorities in cross-border resolution planning for AIs. The HKMA will also be the primary point of contact for overseas authorities regarding the 25 cross-sectoral G-SIB groups for which it is designated as the lead resolution authority under the FIRO.
	Strong cooperation with regulatory counterparts in mainland China	**Implemented** • The HKMA has been maintaining close communication with the People's Bank of China ("PBC") 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 has also been maintaining close dialogue with the China Banking and Insurance Regulatory Commission ("CBIRC") on supervisory matters relating to the Mainland bank subsidiaries and branches of Hong Kong SAR banks. In addition to the bilateral meetings held twice a year between the HKMA and the CBIRC, a number of working-level meetings were 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. The secondment programme established with CBIRC is in place to enhance understanding of banking issues and supervisory approaches of both places. • The SFC has been maintaining constant dialogue with various Mainland authorities including the China Securities Regulatory Commission ("CSRC") on different regulatory matters. For example, 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, the SFC reached an agreement with CSRC to implement an investor identification regime for Northbound trading under Stock Connect on 26 September 2018 whilst the Southbound model is being finalized. • The IA has been maintaining close dialogue with the China Banking and Insurance Regulatory Commission ("CBIRC") on supervisory matters relating to Mainland insurers' subsidiaries and branches operating in Hong Kong SAR, as well as Mainland shareholders and business partners (e.g., reinsurers) of Hong Kong SAR insurers. IA has entered into two MOUs with CBIRC on cooperation of insurance supervision and anti-insurance fraud. There are regular meetings between 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.
	Continued active participation in	**Implemented**

Area	Recommendation	Progress
	international regulatory fora is also needed to mitigate potential effects from global regulatory developments.	• The relevant regulators continue to participate actively in international regulatory fora including G20, IOSCO, and FSB to ensure that financial regulation in 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, Hong Kong SAR has implemented mandatory reporting and mandatory clearing as follows: (i) after the two phases of mandatory reporting were implemented in July 2015 and July 2017 respectively, Hong Kong SAR requires the reporting of OTC derivative transactions in five main asset classes (namely interest rate derivatives, foreign exchange derivatives, equity derivatives, credit derivatives and commodity derivatives) to the HKMA's Trade Repository; and (ii) the first phase of mandatory clearing was implemented on 1 September 2016, which requires certain standardized 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. • In June 2018, the Hong Kong SAR regulators jointly issued a conclusions paper to the March 2018 market consultation on enhancements to the OTC derivatives. They cover the following areas – (i) mandate the use of Legal Entity Identifiers ("LEIs") in OTC derivatives trade reporting, applicable to certain entities and to the reporting of new transactions and daily valuation information beginning 1 April 2019; (ii) expand the clearing obligation. Subject to legislative process, Hong Kong SAR will expand the scope of the products subject to clearing obligation to include certain standardised Australian Dollars interest rate swaps. Due to required legislative changes, the implementation timeline is not expected to be earlier than Q4 2019; and (iii) adopt a trading determination process for introducing a platform trading obligation. The proposed trading determination process and criteria are therefore adopted, and are being used in the process to determine which products may be appropriate for Hong Kong SAR to introduce a platform trading obligation. • Studies of the Hong Kong Trade Repository data are being conducted for analysing liquidity (market depth and breadth) of certain standardized interest rate swaps reported in Hong Kong SAR in order to determine how best to implement the trading mandate. • The status of Hong Kong SAR in meeting the requirements of the U.S. and EU OTC regulatory reforms relating to OTC derivatives that are applicable to central counterparties ("CCPs") is as follows: (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.

Area	Recommendation	Progress
		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 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 Hong 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 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 SFC's indirect access to the EU trade repositories via ESMA. • 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.

Appendix 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)		
	Less than HK$20mn	Remains 70 percent	HK$12mn	
Aug 2010	Greater than or equal to HK$12mn	60 percent (previously 70 percent for properties valued between HK$12mn and HK$20mn)		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
	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)		Special Stamp Duty set at 15 percent for residential properties resold within first 6 months of purchase, 10 percent if resold between 6 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$8mn and less than HK$12mn	60 percent (previously 70 percent)	HK$6mn	
	Less than HK$8mn	Remains at 70 percent	HK$4.8mn	
	Not owner-occupied, any price range	50 percent (previously 60 percent)		
June 2011	Greater than or equal to HK$10mn	50 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$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, (i) LTV cap lowered by further 20 percentage points for borrowers with main income from outside Hong Kong SAR; (ii) LTV cap for net-worth based mortgage loans lowered from 40 percent to 30 percent, irrespective of property value
	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	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
	Not owner-occupied, any price range	Remains at 50 percent		Maximum tenor of all new property mortgage loans capped at 30 years
Oct 2012				Buyer's Stamp Duty set at 15 percent for all residential property transactions except Hong Kong SAR permanent resident Special Stamp Duty raised to 20 percent for residential properties resold within first six months of purchase, 15 percent if resold between 6 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 Greater than or equal to HK$7mn and less than HK$10mn Less than HK$7mn Not owner-occupied, any price range	Remains at 50 percent Remains at 60 percent Remains at 70 percent Remains at 50 percent	 HK$5mn HK$4.2mn	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 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 Risk weight floor of 15 percent introduced on new residential mortgages for banks using IRB approach Ad valorem Stamp Duty raised to 1.5 percent to 8.5 percent except for Hong Kong SAR permanent residents who do not own any other residential property in Hong Kong SAR at the time of purchase or who replace their only home in Hong Kong SAR.

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)		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
	Not owner-occupied, any price range	Remains at 50 percent		
Nov 2016				Ad valorem Stamp Duty on residential properties raised further from the DSD rates to a flat 15 percent (also known as the New Residential Stamp Duty, NRSD). Prevailing exemptions remain unchanged
Apr 2017				Exemption under the NRSD regime was tightened so that the Ad valorem Stamp Duty of 15 percent was also

				applied to purchases of multiple residential properties under a single instrument by a Hong Kong SAR permanent resident who does not own any other residential property in Hong Kong at the time or purchase.

Date	Price Range	LTV CAP	Max Loan Amount	Other
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. DSR ratio caps lowered by 10 percent points for borrowers whose income is mainly derived from outside Hong Kong SAR.
	Less than HK$7mn	Remains at 60 percent		
	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

Date	Price Range	LTV CAP	Max Loan Amount	Other
				existing residential mortgages for banks using IRB approach
June 2018				Vacant property tax ("Special Rates" tax) of 200 percent of flat's "ratable" value (roughly 5 percent of the property value) for unsold new residential units applied after 6 months, and a requirement on developers to offer no less than 20 percent of flats during each sale. The proposed vacancy tax is subject to approval by Legislative Council.

Appendix VI. Main Recommendations of the 2017 Article IV Consultation

<table>
<tr><th>Fund Recommendations</th><th>Policy Actions</th></tr>
<tr><td colspan="2">Fiscal policy:</td></tr>
<tr><td>Fiscal stance was considered to be appropriate, and there was no need for an additional fiscal stimulus in 2017/18 given the economy's cyclical position.
In the medium-term, fiscal policy could be more countercyclical, as it is the main demand management tool under the currency board arrangement. To ensure fiscal sustainability in the face of medium- to long-term challenges related to population aging, fiscal framework could be adjusted, and new revenue sources should be explored.</td><td>Fiscal policy delivered a positive fiscal impulse of around 0.9 percentage points of GDP in 2017/18 due to an implementation of delayed projects, temporary tax relief, and temporary measures to support low income or disadvantaged households. Further expenditure increases and tax cuts are projected to result in an additional fiscal impulse of 1.4 percentage points of GDP in 2018/19.</td></tr>
<tr><td colspan="2">Property market policy:</td></tr>
<tr><td>The three-pronged strategy to the property market should remain in place.
Sustained increases in housing supply are needed to reduce the structural supply-demand imbalance. While various obstacles to further increases housing supply remain in place, including lack of ready sites and relevant development restrictions, there are benefits from expediting the process of identifying land and building sites and conducting relevant studies.
Loan to value or debt service to income settings should remain unchanged.
Stamp duties should remain in place in the near term but should be phased out once risks dissipate.</td><td>The authorities housing strategy will continue to be guided by the Long-Term Housing Strategy, which targets providing 460,000 units of housing over the next decade from 2018/19 onwards, and the Hong Kong 2030+ plan, which is a longer-term development strategy to provide land and housing on more sustainable basis. However, housing production in 2017 fell below the 2016 numbers, and fiscal spending on housing has been below the budgeted amount.
The HKMA kept in place very tight macroprudential policies on LTVs and DSRs, as well as the stamp duties.
To stem further price increases, the government implemented a vacancy tax and a requirement for developers to offer no less than 20 percent of flats during each sale. They also announced plans to reform pricing of subsidized housing units, initiate starter homes project, and set up a task force to assist with provision of transitional housing. The Task Force on Land Supply is studying options to increase availability of land for residential housing.</td></tr>
<tr><td colspan="2">Financial sector policy:</td></tr>
<tr><td>The strategy of continued strengthening of the regulatory and supervisory framework should continue. Potential systemic vulnerabilities are being closely monitored and addressed through coordination between the government and the FSC, close dialogue with Mainland China, and participation in international fora.
Further strengthening of the oversight regime for non-bank institutions would help prevent risks.
The authorities should carefully balance the tradeoff between greater efficiency and maintaining stability in the face of rapid developments in fintech.</td><td>The implementation of the Basel III requirements remains on track. The authorities set the countercyclical buffer to 1.875 percent, and plan to increase it to 2.5 percent in 2019. They have also introduced the net stable funding ratio and published a consultation paper on prescribing loss-absorbing capacity requirements to authorized institutions. Supervision of bank loans to property developers has been strengthened, and Mainland China-related exposures. Are being monitored.
The development of a risk-based capital regime for insurance companies is in Phase-2.
Stock exchange listing rules have been eased to allow dual class stocks.
Banks have improved their AML/CFT frameworks to target high-risk areas.</td></tr>
</table>

INTERNATIONAL MONETARY FUND

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

December 20, 2018

STAFF REPORT FOR THE 2018 ARTICLE IV CONSULTATION DISCUSSIONS—INFORMATIONAL ANNEX

Prepared By	Asia and Pacific Department (in consultation with other departments)

CONTENTS

FUND RELATIONS 2

STATISTICAL ISSUES 3

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 latest FSAP was undertaken in 2014 at the request of the authorities. The next FSAP is tentatively planned for 2019.

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 October 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 December 20, 2018)

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% 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 *IFS*. 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 *IFS*, 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 *IFS*.
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 December 4, 2018)

	Date of Latest Observation	Date Received	Frequency of Data[5]	Frequency of Reporting[5]	Frequency of Publication[5]
Exchange rates	Sep. 2018	Sep. 2018	D	D	D
International reserve assets and reserve liabilities of the monetary authorities[1]	Jul. 2018	Aug. 2018	M	M	M
Reserve/base money	Jul. 2018	Aug. 2018	M	M	M
Broad money	Jul. 2018	Aug. 2018	M	M	M
Central bank balance sheet	Jul. 2018	Aug. 2018	M	M	M
Consolidated balance sheet of the banking system	Jun. 2018	Aug. 2018	M	M	M
Interest rates[2]	Sep. 2018	Sep. 2018	D	D	D
Consumer price index	Aug. 2018	Sep. 2018	M	M	M
Revenue, expenditure, balance and composition of financing[3]–central government	Jul. 2018	Aug. 2018	M	M	M
Stocks of central government and central government-guaranteed debt[4]	Jul. 2018	Aug. 2018	M	M	M
External current account balance	Q2/18	Jul. 2018	Q	Q	Q
Exports and imports of goods and services	Q3/18	Jul. 2018	Q	Q	Q
GDP/GNP	Q3/18	Jul. 2018	Q	Q	Q
Gross external debt	Q2/18	May. 2018	Q	Q	Q
International investment position	Q2/18	Jul. 2018	Q	Q	Q

[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.
[2] Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.
[3] Foreign, domestic bank, and domestic nonbank financing.
[4] Including currency and maturity composition.
[5] Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Annually (A); Irregular (I); Not Available (NA).