

INTERNATIONAL MONETARY FUND

IMF Country Report No. 22/69

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

March 2022

### 2022 ARTICLE IV CONSULTATION DISCUSSIONS— PRESS RELEASE; AND STAFF REPORT

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 2022 Article IV consultation discussions with 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, following discussions that ended on December 15, 2021, with the officials of People's Republic of China—Hong Kong Special Administrative Region on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on January 26, 2022.
- An Informational Annex prepared by the IMF staff.

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

Selected Issues

The IMF's transparency policy allows for the deletion of market-sensitive information and premature disclosure of the authorities' policy intentions in published staff reports and other documents.

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### International Monetary Fund Washington, D.C.



### IMF Executive Board Concludes 2022 Article IV Consultation Discussions with the People's Republic of China—Hong Kong Special Administrative Region

### FOR IMMEDIATE RELEASE

**Washington, DC** – **March 8, 2022:** On February 10, 2022, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation discussions<sup>1</sup> with the People's Republic of China—Hong Kong Special Administrative Region (SAR), and considered and endorsed the staff appraisal without a meeting on a lapse-of-time basis.<sup>2</sup>

Hong Kong SAR's economy is recovering strongly, with real activity increasing by 6.4 percent in 2021, as ample policy space allowed the enaction of swift and bold policy responses to address the unprecedented crisis emanating from multiple shocks, including the pandemic. In 2022, growth is expected to moderate to 3 percent, with a continued handoff from public to private demand facilitated by improving labor market conditions and a gradual re-opening of the border.

The financial system remains resilient supported by significant policy buffers, a strong external position, and strong institutional frameworks. Hong Kong SAR's financial system has continued expanding robustly even during the pandemic while maintaining its role as a major international financial center. The Hong Kong dollar continues to trade in a smooth and orderly manner within the Convertibility Zone. Housing prices, which declined by less than 1 percent in 2020 in terms of average annual prices, have increased by about 4 percent as of November in 2021.

Nevertheless, the balance of risks is tilted to the downside. In particular, pandemic related uncertainty, including renewed local outbreaks led possibly by new variants, could lead to a slower resumption in the flow of people, further weakening the recovery in private consumption. A slower-than-expected global recovery and sustained disruptions to global supply chains could reduce the flow of goods and derail the recovery. A sharp rise in global risk premia and a disorderly tightening in the monetary policy of major advanced economies could affect the flow of capital. Ample policy buffers and the strong external position should, however, help mitigate the adverse impact on financial stability and economic growth: fiscal and FX reserves stood at about 30 and 135 percent of GDP, respectively, as of November 2021.

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> 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.

#### **Executive Board Assessment**

In concluding the 2022 Article IV consultation discussions with Hong Kong SAR, Executive Directors endorsed staff appraisal as follows:

**Outlook.** The economy has recovered strongly supported by swift and bold policy responses, notably a large fiscal stimulus. The financial sector has remained resilient on the back of significant policy buffers, a strong external position, and strong institutional frameworks. However, the recovery remains unbalanced with private consumption lagging. The economic recovery is projected to continue in 2022 with a handoff from public to private demand, facilitated by a moderating pace of fiscal consolidation and a gradual re-opening of the border.

**Risks.** The balance of risks is tilted to the downside. Pandemic-related uncertainty could delay the resumption in the flow of people. A slower-than-expected global recovery and sustained disruptions to global supply chains could reduce the flow of goods and derail the recovery. A sharp rise in global risk premia, a disorderly tightening of monetary policy in major advanced economies, large housing market corrections, escalating U.S.-China tensions, and a shift of market confidence in Hong Kong SAR's status as a major international financial center could affect the flow of capital. Conversely, faster-than-expected border re-opening and global recovery and the development of the Greater Bay Area could improve growth prospects.

**Fiscal policy.** Fiscal policy should continue to support the recovery by returning to a balanced budget at a gradual pace, while focusing in the near term on providing more targeted support for low-income households, unemployed workers, and SMEs. Over the medium term, fiscal policy should strengthen its role as an automatic stabilizer and address structural challenges of population aging, high income inequality, and public housing shortage. A comprehensive tax reform that broadens the tax base while maintaining fairness and international competitiveness is needed to rebuild fiscal buffers.

**Financial ties with Mainland China.** The authorities should continue to strengthen systemic risk analysis of Mainland China-related credit risks, including by ensuring that the internal credit risk models used by Hong Kong SAR banks to determine the capital charges for exposures to Mainland Chinese borrowers, particularly those in the real estate sector with low credit ratings, are sufficiently forward-looking. Continued close monitoring of banks' significant exposures to non-bank Mainland Chinese entities and a periodic stress test of banks' large exposures—on top of the regular stress testing—would also help. As the financial ties are broadening to the cross-border use of the e-CNY in Hong Kong SAR, the potential implications from a more widely adopted e-CNY in Hong Kong SAR should be carefully studied.

**Housing policies.** The three-pronged approach—boosting housing supply, macroprudential measures, and stamp duties—to improving housing affordability and

containing housing market risks remains valid. Housing supply should be increased, including by expanding land supply and expediting and streamlining the process for land identification and production. While the macroprudential stance for housing market should be maintained for now, the Council of Financial Regulators should take a lead in strengthening the regular surveillance and data collection on lending by non-bank lenders and the authorities should regularly assess the need to expand the regulatory perimeter to mitigate the leakages in macroprudential policies. The New Residential Stamp Duty, assessed to be a capital flow management measure and a macroprudential measure (CFM/MPM), should be phased out once systemic risks from non-resident inflows dissipate.

**Financial sector policies.** Financial policies should shift focus towards addressing solvency issues concerning corporates and individuals, as the recovery gains further momentum. The cut in the countercyclical capital buffer during the pandemic was appropriate but the Hong Kong Monetary Authority should stand ready to adjust it to the level consistent with updated systemic risk assessments. The ongoing efforts to further strengthen regulatory and supervisory frameworks are welcome, and further steps should be taken to enhance macroprudential oversight, including by adopting a more comprehensive and systematic approach to identify and address systemic risks. A consistent and cross-sectoral supervisory and regulatory framework is also critical to effectively address industry-wide fintech-related issues.

**Exchange rate regime and external position.** The Linked Exchange Rate System remains the appropriate arrangement as an anchor for economic and financial stability. The authorities should continue to preserve the rule of law and maintain the free flow of capital. Staff's preliminary assessment suggests that the external position in 2021 was broadly in line with the level implied by medium-term fundamentals and desirable policies.

**Climate change.** The updated action plan to achieve carbon neutrality before 2050 is welcome. To complement ongoing efforts, the government could consider introducing additional carbon pricing mechanisms to incentivize energy saving and green transportation. Climate-related risks should be carefully monitored and assessed by strengthening systemic risk analysis. Hong Kong SAR should play a key role in global efforts to mobilize private investment for green development by enhancing the green and sustainable finance ecosystem.

	Proj.									
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
NATIONAL ACCOUNTS										
Real GDP (percent change)	3.8	2.8	-1.7	-6.1	6.4	3.0	3.0	2.9	2.8	2.8
Private consumption	5.5	5.3	-0.8	-9.9	6.2	4.8	4.8	4.6	4.3	4.1
Government consumption	2.8	4.2	5.1	8.1	4.0	0.6	2.0	2.3	2.3	2.3
Gross fixed capital formation	3.1	1.7	-14.9	-11.2	12.1	10.3	4.2	3.0	3.0	3.0
Inventories (contribution to growth)	0.4	0.0	-0.5	1.7	-0.1	-0.3	-0.3	-0.3	-0.3	-0.1
Net exports (contribution to growth)	-1.2	-1.5	2.1	0.3	-0.2	-1.9	-0.9	-0.8	-0.8	-0.8
Output gap (in percent of potential GDP)	0.1	0.1	-2.5	-6.8	-1.9	-1.2	-0.8	-0.5	-0.3	-0.
ABOR MARKET										
Employment (percent change)	1.0	1.1	-0.4	-4.9	-0.2	2.0	0.5	0.6	0.7	0.
Jnemployment rate (percent, period average)	3.1	2.8	2.9	5.8	5.2	3.5	3.3	3.2	3.1	3.0
Real wages (percent change)	2.3	1.0	0.1	2.5	0.8	1.1	1.2	1.3	1.3	1.3
PRICES										
nflation (percent change)										
Consumer prices 3/	1.5	2.4	2.9	0.3	1.6	2.1	2.3	2.4	2.5	2.
GDP deflator	2.9	3.7	2.0	0.6	0.2	2.0	2.1	2.2	2.3	2.
GENERAL GOVERNMENT										
Consolidated budget balance (percent of GDP) 1/	5.6	2.4	-0.6	-9.4	-3.7	-2.2	-1.5	-1.1	-0.7	-0.
Revenue	23.3	21.2	20.8	21.0	21.6	21.7	21.9	21.8	22.0	22.0
Expenditure	17.7	18.8	21.4	30.4	25.3	23.9	23.3	23.0	22.7	22.
iscal reserves (as of end-March, percent of GDP)	41.5	41.3	40.8	34.5	29.9	27.4	25.7	24.1	23.0	22.
INANCIAL										
nterest rates (percent, period average) 3/										
Best lending rate	5.0	5.0	5.1	5.0	5.0					
Three-month HIBOR	0.9	1.8	2.1	1.1	0.2					
10-year Treasury bond yield	1.6	2.2	1.6	0.8	1.2					
MACRO-FINANCIAL										
oans for use in Hong Kong SAR (excl. trade inancing)	16.1	6.5	7.7	2.1	8.4	10.3	8.6	8.0	7.7	7.
louse prices (year-on-year percent change or last quarter)	13.7	5.8	3.4	-0.1	3.0	5.8	7.1	7.4	7.6	7.
Credit-to-GDP gap 2/	20.6	12.5	21.2	23.9	11.5	12.2	9.6	6.2	2.7	0.0
lang Seng stock index (percent change) 3/	36.0	-13.6	9.1	-3.4	-14.1				<i>2.1</i>	
XTERNAL SECTOR										
Aerchandise trade (percent change)										
Export value	8.0	7.3	-4.1	-1.5	18.3	5.0	3.8	3.7	3.7	3.1
Import value	8.7	8.4	-4.1	-3.3	18.4	5.5	4.2	4.1	4.1	4.1
Current account balance (percent of GDP)	4.6	3.7	-0.5	-5.5	7.5	6.7	4.2 5.5	5.0	4.1	4. 4.(
Foreign exchange reserves	0	5.7	5.0	0.5	1.5	5.7	5.5	5.0	4.0	ч.
In billions of U.S. dollars (end-of-period)	431	425	441	492	500	508	516	525	537	553
In percent of GDP	126	117	122	142	135	131	126	122	119	116
Net international investment position (percent	.20						0			
of GDP)	418	354	432	612	581	560	538	517	496	476
Exchange rate 3/		55.		5.2	50.	200				
Market rate (HK\$/US\$, period average)	7.793	7.839	7.836	7.757	7.773					
Real effective rate (period average, 2010=100)	115.3	113.1	117.7	116.9	111.6					

Before issuance and repayment of government bonds and notes.
 Based on loans for use in Hong Kong SAR, including trade financing.
 Actual values for 2021.



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

STAFF REPORT FOR THE 2022 ARTICLE IV CONSULTATION DISCUSSIONS

### **KEY ISSUES**

**Overview.** Hong Kong SAR's economy is recovering strongly as ample policy space has allowed the enaction of swift and bold policy responses to address the unprecedented crisis emanating from multiple shocks, including notably the pandemic. But the recovery remains uneven, with private consumption lagging, owing, in part, to a zero-COVID tolerance approach. The financial sector has remained resilient supported by significant buffers, strong institutional frameworks, and a well-functioning Linked Exchange Rate System (LERS). Increasing financial linkages with Mainland China bring both opportunities and challenges for growth and financial stability.

**The policy strategy** to secure a balanced recovery and maintain the Hong Kong SAR's competitiveness as an international financial center (IFC) includes:

• *Promoting inclusive growth.* With slack remaining in the economy, fiscal consolidation should be gradual, but policy should shift focus towards providing targeted support for vulnerable households and businesses. Additional support through social safety nets, public housing and infrastructure, and job retraining will help promote inclusive growth and the transition to a new normal post-COVID.

• Safeguarding financial stability. The high-quality regulatory and supervisory frameworks should be further strengthened to contain macro-financial risks, notably from extensive linkages with Mainland China. The three-pronged approach—boosting housing supply, macroprudential measures, and stamp duties—should continue to address the structural supply-demand imbalance in the housing market and associated risks. The LERS remains appropriate and should be maintained as an anchor for economic and financial stability. The authorities should preserve the rule of law to maintain the solid foundation for the financial sector's competitiveness.

• *Managing climate-related risks while leveraging green finance.* Climate-related risks should be carefully monitored and assessed by strengthening the systemic risk analysis. Fostering a green and sustainable finance ecosystem will strengthen Hong Kong SAR's position as a hub for green finance and support global efforts to mobilize private sector investment for green development.

January 26, 2022

### Approved By Krishna Srinivasan and Guillaume Chabert

Discussions took place virtually during December 1–15, 2021. The team included Joong Shik Kang (head), Fei Han, Yu Ching Wong (all APD), and Phakawa Jeasakul (Resident Representative, MCM). Krishna Srinivasan (APD) and Prasad Ananthakrishnan (MCM) joined the concluding meetings. The mission met Financial Secretary Paul Chan, HKMA Chief Executive Eddie Yue, and other senior officials. Zhongxia Jin, Zhengxin Zhang and Michael Law (all OED) joined the official meetings. Pablo Gonzalez Dominguez, Alessandra Balestieri (all APD), Daisy Wong (COM), Atis Lee, and Hong Xiao (Resident Representative Office) provided support to the mission.

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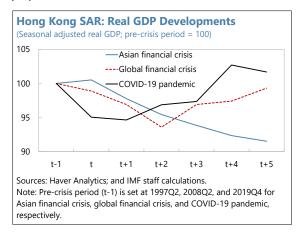
### **NAVIGATING MULTIPLE SHOCKS**

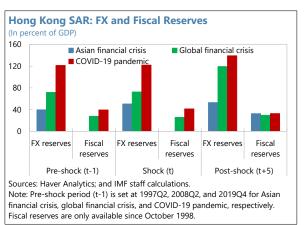
#### 1. Hong Kong SAR is a services-oriented small open economy that relies heavily on the

**free flow of capital, goods, and people.**<sup>1</sup> About 90 percent of GDP and employment come from the services sector. Financial services, trade and logistics, and hospitality services, which are underpinned mainly by the free flow of capital, goods, and people, respectively, account for about half of output and employment. Other services, including professional, real estate, IT/telecommunications, and public services, account for the remaining 40 percent of GDP.<sup>2</sup>



2. Large policy buffers and a strong containment effort have helped the economy cope with multiple shocks, including the pandemic. Hong Kong SAR has faced multiple domestic and external shocks since 2019, including social unrest, U.S.-China tensions,<sup>3</sup> and the pandemic, which resulted in an economic contraction for two consecutive years. However, the ample pre-crisis buffers—including, for example, fiscal reserves of more than 40 percent of GDP—allowed for swift and bold policy actions that have helped mitigate the impact of the adverse shocks and enabled a gradual recovery. A strict containment strategy under a zero-COVID tolerance approach has helped contain local outbreaks,<sup>4</sup> and, as of mid-January 2022, more than 70 percent of the eligible population has been vaccinated with at least two doses.





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

<sup>2</sup> Professional services include legal, accounting, engineering and management consultancy as well as some other lower-paying services such as cleaning services.

<sup>3</sup> In July 2020, the U.S. revoked the special status granted to Hong Kong SAR and enacted the Hong Kong Autonomy Act, under which it has imposed sanctions on several government officials of Hong Kong SAR and Mainland China whose actions it determined as having reduced Hong Kong SAR's high degree of autonomy. Under the Act, the U.S. can also impose secondary sanctions on foreign financial institutions that conduct significant transactions with the sanctioned individuals and entities.

<sup>4</sup> There has been a new round of local outbreaks since late December 2021 after nearly three months of no local infection.

## 3. Financial linkages with Mainland China continue to deepen, creating both opportunities and challenges for Hong Kong SAR.

- As a key financial gateway vis-à-vis Mainland China, Hong Kong SAR channels over 60 percent of direct investment into and out of Mainland China. It is also the most important offshore funding platform for Mainland Chinese corporates, accounting for more than 80 percent of total offshore bond issuance and about one-third of its equity financing. Meanwhile, Hong Kong SAR's banking exposures to Mainland China-related non-banks (mostly corporates) and Mainland China-located banks amount to about 300 percent of GDP.
- At the same time, the extensive linkages are a key macro-financial vulnerability. The large exposures to Mainland Chinese corporates through both banking and capital market linkages imply that macro-financial developments in Mainland China, including those arising from the recent wave of regulatory measures imposed by the Mainland Chinese authorities on the property and technology sectors, could have a large impact on Hong Kong SAR through various channels.

4. The authorities have prioritized policies to secure growth opportunities from closer ties with Mainland China, while ensuring social stability and achieving carbon neutrality before 2050. The authorities are promoting the flow of capital, people, goods, and knowledge in the Guangdong–Hong Kong SAR–Macao SAR Greater Bay Area (GBA) to effectively integrate Hong Kong SAR's expertise in financial and professional services with the innovation and manufacturing capacity in the Guangdong Province, including through the Northern Metropolis development.<sup>5</sup> The authorities have pledged to address the problem of insufficient housing supply and maintain social stability for sustainable growth. The government has also announced a Climate Action Plan to achieve carbon neutrality before 2050 and promote a greener economy.

### FROM STRONG RECOVERY TO SUSTAINABLE GROWTH

### A. A Strong but Unbalanced Recovery

## 5. Strong and swift policy actions have helped mitigate the impact of the adverse shocks and enable a gradual recovery.

• *Fiscal.* The government provided a large fiscal stimulus amounting to about 12.3 and 3.5 percent of GDP in 2020 and 2021, respectively. Key measures included: (i) a cash payout and digital consumption vouchers to all eligible residents (Box 1); (ii) employment support through wage subsidies for firms to retain employees and temporary job creation; (iii) one-off relief measures

<sup>&</sup>lt;sup>5</sup> The Northern Metropolis development strategy also aims to alleviate Hong Kong SAR's chronic housing shortage and foster a new high-tech hub by consolidating the development of the two districts at the north of the New Territories into a holistic metropolis with a total area of 30,000 hectares.

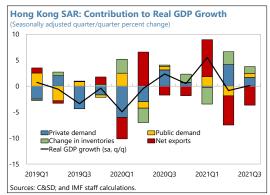
to households and enterprises; and (iv) health-related spending to enhance anti-epidemic efforts.

Hong Kong SAR: Key Fiscal Policy Responses to the CO	VID-19 Pan	demic		
(In percent of GDP)				
List of Measures	Estimated Size			
	2020	2021		
Total	12.3	3.5		
Support for household income and consumption	2.6	1.3		
Cash payout to eligible residents	2.6	-		
Digital consumption vouchers to eligible residents	-	1.3		
Support for employment	3.4	0.2		
Employment support scheme	3.4	-		
Creating 30,000 temporary jobs	-	0.2		
Health-related spending on anti-epidemic efforts and vaccination	1.0	0.2		
Other relief measures	5.2	1.8		
Relief measures for households and enterprises	-	0.9		
Loan guarantee schemes	0.4	0.5		
Reducing salaries tax and other personal assessments	0.7	0.4		
Subsidizing rates for residential properties	0.5	-		
Subsidy schemes, one-off grants and others	3.6	-		
Sources: Hong Kong SAR government; and IMF staff calculations.				

 Financial. The countercyclical capital buffer (CCyB) was lowered from 2.0 to 1.0 percent and the level of regulatory reserves for credit loss provisions was cut by one half to support banks' lending capacity. The Hong Kong Monetary Authority (HKMA) introduced a US Dollar Liquidity Facility and encouraged banks to use their liquidity buffers. The key financial relief measures have included: (i) low-interest loans for small and medium-sized enterprises (SMEs) and personal loans for unemployed and self-employed individuals with 100-percent government guarantee; and (ii) loan moratoria on principal payments for affected SMEs, sectors and households.

## 6. The economy has recovered strongly, helped by a rebound in the flow of goods, with tentative signs of a handoff from public to private demand.

 Growth. The economy continued its recovery in the first quarter of 2021, with a sequential growth of 5.5 percent, led by strong external demand on the back of robust global recovery. Tentative signs of a handoff from public to private demand also emerged in the second and third quarters, with a recovery in private consumption and investment offsetting the drag on growth from fiscal withdrawal and a softening of external demand.<sup>6</sup>



<sup>&</sup>lt;sup>6</sup> Fiscal year begins in April, so the impact of fiscal withdrawal started to kick in in the second quarter.

With local pandemic outbreaks largely under control, high frequency indicators suggest that domestic economic activity continued to expand in the fourth quarter.

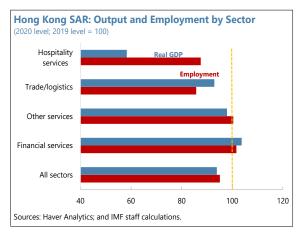
Inflation. Headline and core inflation rose to 1.6 and 0.6 percent in 2021, partly driven by the
expiration of one-off government relief measures introduced in 2020. The underlying headline
inflation after netting out such effects stood at 1.4 percent in December 2021, well below its prepandemic level, as the impact of the remaining slack in the economy and weak housing rental
inflation more than offset rising imported inflation.

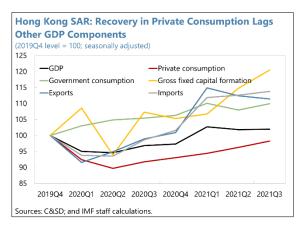
## 7. The recovery remains uneven as the flow of people has not recovered, owing to travel restrictions in the context of a zero-COVID tolerance approach.

• On the supply side, the recovery has been uneven across sectors. The border control has

significantly limited the flow of people in and out of Hong Kong SAR, putting more stress on contact-intensive activities, notably hospitality services, while the flow of capital has been barely affected and the flow of goods is recovering strongly amid the global recovery, following a large collapse initially. Other less contact-intensive services have also been affected by the pandemic, albeit to a lesser degree.

 On the demand side, private consumption is lagging other GDP components and remains below its pre-pandemic level, reflecting the significant decline in household income and the uneven recovery in the labor market (Appendix I). The overall unemployment rate fell sharply from a peak of 7.2 percent in the three-month period ending in February 2021 to 3.9 percent in December, driven by both the strong economic recovery and a decline in the labor force (by about 3 percent since the pandemic). However, employment in some contact-intensive sectors

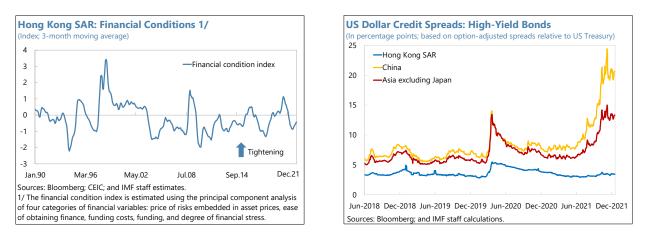




(e.g., retail services) declined further in 2021, contributing to the relatively weak recovery in household income and consumption.

8. Financial conditions remain accommodative despite some modest tightening recently, partly due to increased financial market volatility in Mainland China. Interest rates remain low and risk premia are still broadly favorable. However, stock prices have declined notably since mid-2021 led by the real estate and technology sectors amid heightened uncertainty arising from Mainland China's policy actions to reduce leverage in the property sector and a wave of regulatory

policy measures in the technology and fintech-related sectors. The spillovers to local Hong Kong SAR corporates in the US dollar bond market have been relatively limited, while the Hong Kong dollar (HKD) continues to trade in a smooth and orderly manner within the Convertibility Zone.



## 9. Financial vulnerabilities remain elevated with overvalued house prices and continued increases in private sector leverage.

- Large house price misalignment. Following a modest decline of less than 1 percent in 2020 in terms of annual averages, residential property prices have increased by about 4 percent as of November 2021 on the back of a structural housing supply-demand imbalance (see ¶40). Staff's latest estimates suggest that house prices are significantly overvalued by about 30 percent as of 2021Q3. Prices of private offices, which fell by 17 percent at the peak of the pandemic, have recovered to less than 6 percent below its pre-pandemic level as of November 2021.<sup>7</sup>
- Rising private sector leverage. Households' bank debt increased to 92 percent of GDP in 2021Q3, up by about 10 percentage points from end-2019, mostly driven by robust mortgage borrowing amid low interest rates.<sup>8</sup> Credit to non-financial corporates also increased to 304 percent of GDP in 2021Q2 (up from 268 percent at end-2019).<sup>9</sup> The credit-to-GDP gap, based on credit for domestic use, narrowed but remained sizeable at 18.6 percent in 2021Q2.

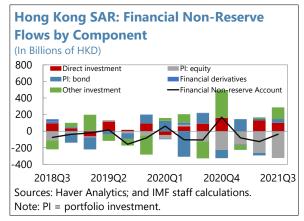
**10.** The financial system remains resilient supported by significant policy buffers, a strong external position, and strong institutional frameworks. As also noted by the 2021 Financial Sector Assessment Program (FSAP), prudential policies, ample capital and liquidity in the banking

<sup>&</sup>lt;sup>7</sup> The cap on the loan-to-value ratio for mortgage loans on non-residential properties was raised from 40 to 50 percent in August 2020, and the double *ad valorem* stamp duty imposed on non-residential property transactions was abolished on November 26, 2020.

<sup>&</sup>lt;sup>8</sup> Part of the increase in the household debt-to-GDP ratio also reflects the lower nominal GDP. The 2021 FSAP noted that the total household debt could be at least 3-5 percent of GDP higher if credit provided by non-bank lenders is included.

<sup>&</sup>lt;sup>9</sup> The non-financial corporate credit-to-GDP ratio may overstate Hong Kong SAR firms' leverage, since it includes many multinational and non-local firms that borrow funds from Hong Kong SAR banks to finance their operations outside Hong Kong SAR.

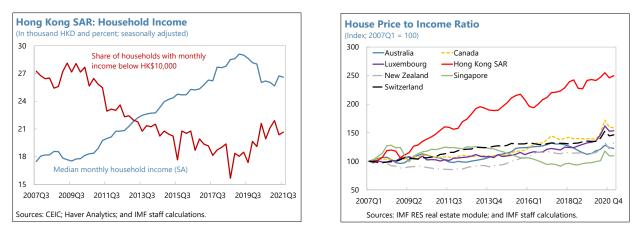
sector, and a strong external position (with FX reserves and net international investment position of about 135 and nearly 600 percent of GDP, respectively) have provided Hong Kong SAR with important buffers to cope with the series of macrofinancial shocks.<sup>10</sup> The flow of capital has been little affected by the crisis, with FDI and other investment inflows rebounding significantly in 2020. There is also no sign of significant outflow from the banking system with customer deposits further increasing in the midst of the crisis. Banks'



profitability has declined on the back of reduced net interest margins, but still remain high by international comparison.

### 11. The crisis has brought Hong Kong SAR's income inequality and housing market

**challenges to the fore.** Despite the strong recovery, income inequality, which was already among the highest in the region before the pandemic, has likely widened as low-income households working in the contact-intensive service sectors have been worst hit by the pandemic. The share of lower-income households in the total has increased after the outbreak of the pandemic, <sup>11</sup> which, in the context of a continued rise in house prices, has further reduced housing affordability that was already among the lowest in the world before the pandemic.



### **B. Handoff to Private Demand with Challenges Ahead**

12. Real GDP is projected to have grown by 6.4 percent in 2021, and is expected to moderate to 3.0 percent in 2022, with a continued handoff from public to private demand.

<sup>&</sup>lt;sup>10</sup> See "<u>People's Republic of China—Hong Kong Special Administrative Region: Financial System Stability</u> <u>Assessment</u>" (Country Report No. 2021/102).

<sup>&</sup>lt;sup>11</sup> The share of the rich (e.g., monthly income above HK\$80,000) has remained relatively stable.

- The growth projection anticipates a moderate slowdown in fiscal consolidation, with the deficit in the cyclically adjusted primary balance (CAPB) narrowing by 1<sup>1</sup>/<sub>2</sub> percent of potential GDP in 2022, largely due to a scaling back of the discretionary stimulus measures.
- Despite the progress in vaccination, border re-opening is expected to be very gradual throughout 2022, partly due to the renewed outbreaks since late 2021 in both Hong Kong SAR and Mainland China, beginning with a limited opening to Mainland China.
- Despite the renewed local outbreak, normalization of economic activity is expected to continue with private consumption and investment further gathering momentum along with a recovery in income. Credit growth is expected to rise in 2022 in the context of a recovery in domestic demand.
- As a result, the negative output gap is expected to narrow to about 1 percent of potential GDP and CPI inflation is projected to gradually rise to about 2 percent in 2022 in line with improving labor market conditions.

### 13. The current account surplus is expected to narrow with the recovery in domestic

**demand.** The merchandise trade deficit is expected to widen further in 2022 as imports continue to recover along with domestic demand, more than offsetting the modest improvement in services trade surplus as border re-opening is expected to be gradual over the course of the year. On a preliminary basis and adjusting for transitory pandemic-related factors, developments in 2021 suggest that the external position was broadly in line with the level implied by medium-term fundamentals and desirable policies (Appendix II).<sup>12</sup>

## 14. The economy will adjust to a new normal, but the pandemic is expected to have scarring

effects on potential output. The pandemic will likely have a permanent *level* effect on potential GDP, owing to the largely uneven recovery in the labor market and the impact of the pandemic on labor participation, offset, in part, by increasing digitalization and the impact it would have on the reallocation of production factors and labor productivity. At the same time, the medium-term *growth rates* of potential GDP



is projected to slow to below 3 percent due to structural headwinds, such as population aging.

15. The balance of risks is tilted to the downside, but ample policy buffers and the strong external position should help mitigate the adverse impact on financial stability and economic growth (Appendix III).

<sup>&</sup>lt;sup>12</sup> Given the lack of full year data for 2021 and the uncertainty from the ongoing COVID-19 crisis, a complete analysis will be provided in the 2022 External Sector Report.

- Downside. Pandemic-related uncertainty, including renewed local outbreaks led by new variants, could delay the resumption in the *flow of people*, further weakening the recovery in private consumption. A slower-than-expected global recovery, sustained disruptions in global supply chains, as well as de-globalization and decoupling amid heightened protectionism could reduce the *flow of goods* and derail the recovery. Moreover, a sharp rise in global risk premia, a disorderly tightening of monetary policy in major advanced economies, large housing market corrections, escalating U.S.-China tensions, and a shift of market confidence in Hong Kong SAR's status as a major IFC could affect the *flow of capital*. In particular, under the currency board arrangement, a faster-than-expected tightening in the U.S. monetary policy could lead to tighter financial conditions in Hong Kong SAR.<sup>13</sup> Large-scale defaults in Mainland China's real estate sector and a sudden growth slowdown in Mainland China could prompt negative spillovers to Hong Kong SAR's economy and financial system.
- On the *upside*, a faster-than-expected border re-opening could lead to a stronger recovery in private consumption. A faster-than-expected global recovery could contribute to stronger export growth than currently envisaged. The development of the GBA could further improve medium- and long-term growth prospects.

**16. Climate change also poses challenges to growth and financial stability.** Even though Hong Kong SAR does not have carbon-intensive heavy industries, the economy is still vulnerable to both physical and transition risks. The FSAP found that the insurance sector's equity valuations are already adversely affected by physical risks such as storm, floods, and landslides. If global efforts to reduce carbon emissions fall short of envisaged benchmarks, climate-related risk could intensify and have significant adverse effects on both financial institutions and corporates. In addition, banks with large exposures to fossil energy, heavy industry, and transportation sectors in both Hong Kong SAR and Mainland China—sectors with the most carbon emissions—are most vulnerable during the transition towards a low-carbon economy.<sup>14</sup>

### Authorities' Views

17. The authorities broadly agreed with staff's assessment of the macroeconomic outlook.

They viewed the continued border closures and associated weak tourism as the key factors constraining the pace of economic recovery, while noting that private consumption has started to pick up thanks to improving labor market conditions and the support from the Consumption Voucher Scheme. Regarding the potential scarring effects from the pandemic, the authorities noted that the closer integration with Mainland China and digitalization could generate new business opportunities and help mitigate the effects. They agreed that any shocks that disrupt the free flow of

<sup>&</sup>lt;sup>13</sup> The FSAP stress tests found that the banking sector would remain resilient in the face of severe macro-financial shocks including tighter financial conditions, with interest rate spreads (over the USD LIBOR) well exceeding the levels seen during the global financial crisis and a 4-ppt increase in corporate bond spreads.

<sup>&</sup>lt;sup>14</sup> As of 2021Q3, Hong Kong SAR banks' lending to the abovementioned carbon-intensive sectors amounted to about 11 and 25 percent of total loans for use in Hong Kong SAR and Mainland China, respectively, with the combined lending amounting to 5 percent of Hong Kong SAR's banking sector assets (or 48 percent of GDP).

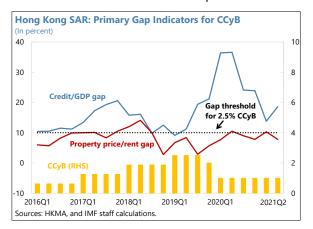
people, goods, and capital could derail the recovery, but were confident that the sizable fiscal and FX buffers and strong capital and liquidity positions in the banking system would help mitigate any adverse impact on financial stability and economic growth. The authorities concurred with staff's preliminary external sector assessment for 2021.

### SUPPORTING BALANCED AND INCLUSIVE GROWTH

### A. Adjusting Macroeconomic Policy to the Pace of the Recovery

**18.** As the recovery gains further momentum, financial policies should shift towards addressing solvency issues concerning corporates and individuals. The authorities' plan to engage with banks to develop an exit strategy from the loan repayment deferral scheme, which will expire at end-April 2022, is welcome.<sup>15</sup> As firms repair their balance sheets and adjust business models to the post-pandemic new normal, financial policies should support this process by facilitating the efficient restructuring of viable firms while allowing nonviable firms to exit, leveraging on the Hong Kong SAR's robust corporate insolvency framework.<sup>16</sup> In this context, the planned introduction of a statutory corporate rescue procedure in line with international best practice is

timely. The cut in the CCyB during the pandemic was appropriate since it encouraged bank lending and supported the recovery, and there is merit in keeping the CCyB unchanged as of now given the renewed local outbreak. As the indicative buffer guide—a metric based on the credit-to-GDP gap and house price-to-rental gap—based on 2021Q2 data signals a 2.25-percent CCyB, the HKMA should stand ready to adjust the CCyB to the level that is consistent with the updated assessment of systemic risks going forward.



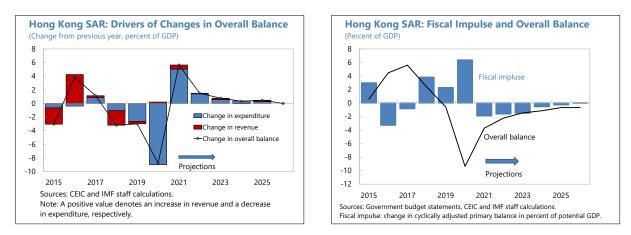
**19. Fiscal policy should continue to support the recovery by returning to a balanced budget, albeit at a gradual pace and after recovery is firmly entrenched.** As there still remains a large negative output gap, a premature withdrawal of fiscal policy support to return to a balanced budget principle could endanger a sustained recovery.<sup>17</sup> As fiscal space remains ample, with the fiscal reserves standing at about 30 percent of GDP at end-November 2021, the pace of fiscal consolidation in 2022 should remain gradual, with the CAPB tightening by about 1½ percent of

<sup>&</sup>lt;sup>15</sup> Credit risk related to the moratorium scheme appears manageable as the principal -only payment deferral feature enables banks to closely monitor borrowers' credit risk and the current usage is small at 2.7 percent of all eligible borrowers.

<sup>&</sup>lt;sup>16</sup> See "<u>Flattening the Insolvency Curve: Promoting Corporate Restructuring in Asia and the Pacific in the Post -C19</u> <u>Recovery</u>," IMF Working Paper 21/16.

<sup>&</sup>lt;sup>17</sup> While there are some flexibilities, the principle underlying the government's management of public finance, as enshrined in the Hong Kong SAR's Basic Law, is to keep expenditure within the limits of revenues to achieve a fiscal balance and ensure that the budget is commensurate with the growth rate of GDP.

potential GDP, as assumed in the baseline, to help enable the handoff to private demand. A gradual consolidation over the medium term, at about 1/2 percent of GDP per year from around 2023 after the recovery is entrenched, would help stabilize the decline in fiscal reserves and safeguard fiscal sustainability (Appendix IV).<sup>18</sup>



## 20. Fiscal policy should focus on more targeted support to foster balanced and inclusive growth, and its role as automatic stabilizers could be strengthened over the medium term.

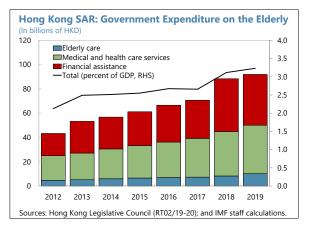
- In the near term, fiscal measures should be more targeted to support vulnerable and low-income households, unemployed workers, and affected SMEs, notably leveraging the digitalization of infrastructure.<sup>19</sup> This would also increase the effectiveness of fiscal policy in stimulating growth given the higher marginal propensity to consume of lower-income households. This could be accompanied by further refinements to the social safety net to allow more effective identification and delivery of support to the most vulnerable. For example, additional electronic consumption vouchers could be distributed to low-income households that meet the assistance criteria. The eligibility criteria for the Comprehensive Social Security Assistance Scheme could also be temporarily relaxed again to provide more help to the unemployed.
- In the medium term, the introduction of a dedicated unemployment benefit system could be considered to better protect the labor force against idiosyncratic and systemic shocks (Appendix V). In the absence of a formal unemployment benefit system, support for the unemployed is provided through severance payment/long service payment and a means-tested social safety net, but its coverage has been limited against the surge in unemployment during the pandemic. Expanding automatic stabilizers, especially through unemployment benefit systems, could protect household incomes and strengthen resilience against adverse shocks.

<sup>&</sup>lt;sup>18</sup> The government has doubled the borrowing ceiling of the Green Bond Program to HK\$200 billion to allow for the further issuance of HK\$175 billion green bonds within the five years in 2022-26, which will reduce fiscal pressure arising from the need to use existing resources in fiscal reserve to finance capital expenditure.

<sup>&</sup>lt;sup>19</sup> The government announced to provide additional reliefs of HK\$3.6 billion (0.1 percent of GDP) in January 2022 to support the affected sectors following the tightening of social distance measures amid the renewed outbreak.

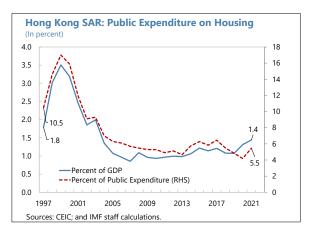
## 21. Fiscal policy should also address structural challenges of population aging, high income inequality, and insufficient public housing supply to promote inclusive growth.

 Social welfare and healthcare. Hong Kong SAR's population is aging rapidly with the share of population aged 65 and above projected to increase from less than 20 percent in 2021 to 27 percent in mid-2030. While government spending on the elderly has been rising in the past few years to about 3 percent of GDP or close to one-sixth of operating expenditure in 2019, spending pressure is expected to increase further to address gaps in social safety nets and medical services.<sup>20</sup> There



is room to strengthen the provision of medical services and financial assistance for the elderly population, notably among low-income households. Staff welcomes the plan to further strengthen the support for elderly persons with financial needs by merging the Normal Old Age Living Allowance (OALA) and Higher OALA in the second half of 2022, which will allow the existing Normal OALA recipients and eligible new applicants to receive higher OALA payments.<sup>21</sup>

- Education and training. Education spending has declined to an average 3.9 percent of GDP in 2020 and 2021, from the previous peak of 4.3 percent of GDP in 2019, in part due to more urgent pandemic-related spending needs, but this needs to be reversed. Upgrading human capital through education and job training, with a focus on digital-related technologies, would mitigate the scarring effects of the pandemic and facilitate the sectoral reallocation of labor in the transition to a digitalized economy.
- Public housing. Stepping up expenditure to increase public housing and related infrastructure investment would be critical in addressing the large housing supply-demand imbalance and improving housing affordability. Increasing the provision of public housing could also play a key role in alleviating poverty and reducing inequality, as it is an effective means of targeted transfer to low-income households given high house prices and rents.



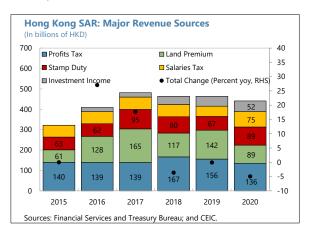
<sup>&</sup>lt;sup>20</sup> Total public spending on social welfare and healthcare is about 7 percent of GDP in 2020, well below the OECD average of about 20 percent.

<sup>&</sup>lt;sup>21</sup> There are about 580,000 elderly persons receiving the means-tested Higher OALA (currently at HK\$3,815 per month) and about 50,000 elderly persons receiving Normal OALA (currently at HK\$2,845 per month).

• A simulation analysis shows that fiscal measures aimed at increasing welfare spending, upgrading low skill workers through education and training, and bolstering public housing programs/infrastructure could help address structural challenges and boost both aggregate demand and potential output.<sup>22</sup>

**22.** To address long-term fiscal needs, build buffers, and secure greater equity, a comprehensive tax reform over the medium term remains an imperative. The current regime of a narrow tax base and low tax rates have led to a low tax revenue-to-GDP ratio, less than 14 percent of GDP in fiscal year 2018 before the crisis, with heavy reliance on volatile revenue sources such as property-related taxes. While this regime has supported Hong Kong SAR's competitiveness in the financial and service industries, it could constrain the rebuilding of fiscal buffers when the economy is facing rising spending pressures. The ongoing global corporate tax reforms could also result in

some revenue losses (Appendix VI). In this context, the government should consider a comprehensive tax reform that broadens the tax base to provide a stable source of revenue to meet the long-term spending needs while maintaining fairness and international competitiveness. International benchmarking of other IFCs suggests that there is room to introduce a VAT, raise excise taxes, and increase the progressivity of personal income tax by raising the tax rates on top brackets.<sup>23</sup> Considerations could also be given to introducing taxes on capital gains and dividends.



### Authorities' Views

23. The authorities agreed that the current macroprudential policy stance is appropriate while crisis measures need to be phased out in a gradual and orderly manner as the recovery gains momentum. They noted that the current low level of CCyB could be maintained to continue supporting the recovery as there is no clear sign of a credit boom. The authorities also underscored that the loan repayment deferral scheme has been helpful in supporting small businesses affected by the crisis and indicated that its exit, when initiated, will be gradual. They noted that credit quality is less of a concern as the scheme only defers principal repayments, enabling banks to closely monitor borrowers' repayment capacity, and that the scheme's take-up has dropped to a low level.

24. The authorities concurred that fiscal policy should continue to support a balanced recovery in the near term while rebuilding buffers over the medium term. They will continue to exercise fiscal prudence with a view to achieving a fiscal balance over a period of time in the future

<sup>&</sup>lt;sup>22</sup> See "<u>People's Republic of China—Hong Kong Special Administrative Region: 2019 Article IV Consultation</u> <u>Discussions</u>" (Country Report No. 19/394).

 <sup>&</sup>lt;sup>23</sup> See "<u>People's Republic of China—Hong Kong Special Administrative Region: Selected Issues</u>" (Country Report No. 18/17).

and maintaining adequate fiscal reserves in the long run. On the merit of having a dedicated unemployment benefit scheme, the authorities viewed the current system of severance payment/long service payment paid by employers to eligible employees upon meeting certain criteria and means-tested social security as striking a reasonable balance between alleviating financial hardship caused by loss of employment and providing incentives to work. They had an open mind regarding the need for new sources of revenue to address higher spending needs arising from aging population. Nevertheless, the authorities emphasized that the principle of a simple and low tax system that has contributed to Hong Kong SAR's competitiveness should not be undermined.

### **B. Strengthening Productivity and Competitiveness**

**25.** Further integration with regional and global economies will strengthen Hong Kong SAR's status as a regional trade hub and boost growth potential in the long run. Hong Kong SAR is considering participation in the Regional Comprehensive Economic Partnership (RCEP), whose current members account for more than 70 percent of Hong Kong SAR's total trade. For the GBA development, the authorities have: (i) strengthened infrastructure connections such as the railway system and logistics to promote the flow of people and goods; (ii) launched financial connection schemes to facilitate the flow of capital; and (iii) enhanced technology collaboration such as establishing a one-stop sandbox framework by linking the Fintech Supervisory Sandbox with the People's Bank of China's Fintech Innovation Regulatory Facility to facilitate cross-border fintech applications and promote the flow of knowledge. For more effective integration, the coordination among regulators in Mainland China and Hong Kong and Macao SARs could be strengthened by taking into account the differences in legal, regulatory, and institutional frameworks.

**26.** Accelerated digitalization could enhance the competitiveness of financial services and promote the transformation toward a post-pandemic "new normal." The Smart City Blueprint 2.0 continues to enhance and expand existing public management measures and services. "Fintech 2025," which was launched in 2021 following the Smart Banking initiative in 2017, includes, among other measures: (i) fully digitalizing banking operations from front-end to back-end, supported by appropriate Regtech solutions (e.g., Anti-Money Laundering Regtech Lab); (ii) developing a new-generation data infrastructure that enables an efficient and safe access to customer information by banks with an aim to improve credit intermediation efficiency and financial access especially for SMEs; and (iii) expanding the fintech-savvy workforce, for example by developing fintech-specific training programs and qualifications. These initiatives should be implemented with a focus on facilitating the sectoral reallocation of resources towards digitalized services and promoting financial inclusion, especially for low-income groups, the elderly, and SMEs.

### Authorities' Views

**27.** The authorities concurred that the GBA development and digitalization could boost growth potential in the long term. They noted that the one-stop GBA Fintech Innovation Supervisory "Network Link-up", of which operational details are being finalized, would help facilitate

pilot trials of cross-boundary fintech initiatives, concurrently in Hong Kong SAR and GBA cities in Mainland China. The authorities also noted that the digitalization of infrastructure has the potential to increase the effectiveness of targeted fiscal transfers. They were of the view that the participation in the RCEP, on top of existing bilateral Free Trade Agreements, would further strengthen Hong Kong SAR's status as a regional trade hub by providing more certainty to trading partners amid the rise of protectionism.

### SAFEGUARDING FINANCIAL STABILITY

## 28. Hong Kong SAR's financial system has continued expanding even during the pandemic while maintaining its role as a major IFC.

- Hong Kong SAR's competitiveness is grounded in the common law system, rule of law, transparent and efficient institutions, high-quality professional services, and strong financial regulatory and supervisory frameworks adapted to international standards and best practices, as well as the well-functioning LERS as an anchor for economic and financial stability.
- The banking sector in Hong Kong SAR is one of the key business hubs of global systemically important banks (G-SIBs) with its assets of 920 percent of GDP as of end-October 2021. Hong Kong SAR is also a global wealth management center, with the total assets under management of 1,300 percent of GDP as of end-2020 (with more than 60 percent of funding sources from foreign investors). Reflecting its role as an international funding center, Hong Kong SAR also hosts the largest foreign exchange and over-the-counter (OTC) interest derivatives markets in Asia.

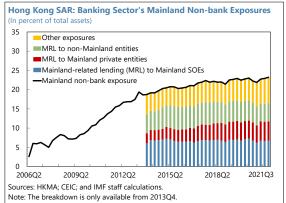
**29.** Key macro-financial vulnerabilities, identified by the FSAP, are: (i) extensive linkages with Mainland China; (ii) potential shifts in global investors' risk sentiment; and (iii) stretched real estate valuation. Despite these vulnerabilities, the FSAP stress tests show that, benefiting from large capital buffers and strong pre-impairment earnings, banks would remain adequately capitalized even in a severely adverse scenario with a prolonged pandemic, a marked slowdown of Mainland China's economy, a significant tightening of financial conditions, and a sharp housing market correction. The FSAP also assessed that the micro-prudential oversight over the financial system is modernized and strong and the institutional framework for macro-prudential policy is functioning well, while crisis management arrangements have been significantly strengthened.

### A. Opportunities and Challenges from Rising Ties with Mainland China

## **30.** Financial linkages with Mainland China have deepened, creating both opportunities and risks to Hong Kong SAR's financial system.

• *Capital market linkages.* In addition to several existing channels of investment flows between Hong Kong SAR and Mainland China, the cross-boundary Wealth Management Connect Scheme in the GBA and the Southbound Bond Connect Scheme have been launched in 2021, with the former expected to provide new asset management business opportunities for Hong Kong SAR banks. Hong Kong SAR: Banking Sector's Mainland Non-bank Exposures

 Banking system exposures. Hong Kong SAR banks' exposures to Mainland China-related non-banks, mostly corporates, have risen to about 245 percent of GDP as of September 2021. Hong Kong SAR's gross claims on Mainland China-located banks also increased during the pandemic to HK\$1.7 trillion in September 2021 (about 60 percent of GDP).

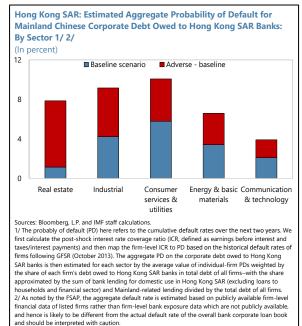


 Offshore renminbi (RMB) business. Hong Kong SAR is the largest offshore RMB center, and its liquidity pool continues to expand with RMB deposits rising to about RMB 835 billion as of October 2021, serving as a main platform for raising and investing renminbi funds and as an intermediary channeling RMB funds between offshore and onshore markets.

## 31. The authorities should continue to strengthen systemic risk monitoring and analysis of Mainland China-related credit risks.

• Potentially high credit risk from Mainland China real estate sector. The nonperforming loan (NPL) ratio from Mainland-related lending remains low at 0.77 percent as of September 2021, slightly below Hong Kong SAR banks' overall NPL ratio of 0.81 percent and well below the onshore

Chinese banks' NPL ratio of 1.75 percent. However, potential financial stress and a slowdown in the Mainland China's property sector could negatively transmit to Hong Kong SAR, including through financial institutions' direct exposures (on- and off-balance sheet exposures) as well as indirect real and financial linkages. The FSAP corporate vulnerability analysis using firm-level data at end-2019 found that the estimated aggregate default rate for banks' exposures to real estate firms in Mainland China could increase significantly under a severe adverse scenario featuring a slowdown in the real GDP growth, significant tightening of financial conditions, and large housing market corrections in both Hong Kong SAR and Mainland China. However, the impact of a significant growth slowdown in Mainland



China on Hong Kong SAR banks' capital would likely be manageable based on the FSAP stress tests.<sup>24</sup>

 Need for a further strengthening in the monitoring and analysis of credit risks from high-risk Mainland Chinese borrowers. Against the backdrop of recent financial stress in several Mainland's property developers, the credit exposures of Hong Kong SAR banks to Mainland China's real estate sector should be closely monitored and analyzed as recommended by the FSAP. The authorities should also continue to ensure that the internal credit risk models used by Hong Kong SAR banks to determine the capital charges for exposures to Mainland Chinese borrowers, particularly those in the real estate sector with low credit ratings, are sufficiently forward-looking. Continued monitoring of banks' significant exposures to non-bank Mainland Chinese entities, complemented by periodic stress tests of banks' large exposures on top of the regular stress testing, would help identify and mitigate risks from potential default of such exposures.

**32.** Financial ties are broadening to the cross-border use of Mainland China's central bank digital currency (CBDC), i.e., the e-CNY. The HKMA has strengthened its research for potential issuance of a local CBDC (i.e., the e-HKD) for *retail* use and potential use of a *wholesale* CBDC for cross-border payments (Multiple CBDC Bridge project) and has tested the cross-border *retail* use of the e-CNY in Hong Kong SAR (Box 2). As a major IFC, the efficiency gains from the use of CBDCs, particularly in cross-border cases, could be potentially large for Hong Kong SAR. For example, the e-CNY could potentially reduce the costs and increase the speed of cross-border transactions between Hong Kong SAR and Mainland China residents or corporates, and further strengthen the financial integration between the two economies. However, potential implications and risks from a more widely adopted e-CNY in Hong Kong SAR such as compliance with regulations in both jurisdictions should be carefully studied before a large-scale adoption.

### Authorities' Views

**33.** The authorities viewed that spillovers from financial strains across property developers in Mainland China to Hong Kong SAR's financial system would be manageable. They emphasized that Hong Kong SAR banks' exposures to Mainland -related corporates are being closely monitored and the credit quality has been healthy. Their exposures to high-risk developers are small and not concentrated. The authorities noted that bank-specific Pillar 2 capital add-on could be considered, if needed, to ensure capital adequacy that is commensurate with individual banks' risk-taking behavior. They also underscored that securities firms' exposures due to pledged securities lending have been stress tested to ensure their resilience. The authorities noted that they have not decided whether to launch the e-HKD and did not see significant risks from cross-boundary use of the e-CNY in Hong Kong SAR, while continuing to deepen technical research and analysis on policy considerations.

<sup>&</sup>lt;sup>24</sup> For the detailed FSAP corporate analysis and stress tests, see "<u>Hong Kong SAR FSAP Technical Note—Stress</u> <u>Testing the Banking Sector and Systemic Risk Analysis (2021)</u>."

### **B. Strengthening Resilience to Global Risk Sentiment**

**34.** The free flow of capital should be maintained to safeguard financial stability of both Hong Kong SAR and regional and global economies. Given the importance of Hong Kong SAR as a financial gateway vis-à-vis Mainland China as well as an IFC, any disruption to the free flow of capital into and out of Hong Kong SAR, including in US dollar, could destabilize regional and global financial markets beyond Hong Kong SAR and Mainland China with repercussions on the global economy. The authorities should continue to preserve the rule of law and strengthen the highquality regulatory and supervisory frameworks to preserve the solid foundation for Hong Kong SAR's financial stability and competitiveness and maintain the free flow of capital. At the same time, the authorities should also closely monitor the financial system for potential disruptions and be ready to take actions to contain systemic risk, if needed, with clear and careful communication.

**35. Some liquidity risks of banks and investment funds deserve closer monitoring.** The FSAP identified that, despite the resilience of the overall banking system, some of the foreign bank branches are more vulnerable to liquidity stress, largely due to their higher reliance on unsecured interbank funding and inability to tap the local deposit base. To mitigate such risks, as recommended by the FSAP, further steps can be taken to integrate all existing liquidity stress tests into a single framework to enhance the monitoring of liquidity position of more vulnerable segments including those foreign branches. Furthermore, as some investment funds (e.g., funds with shares denominated in foreign currencies or geared towards riskier asset classes) appear more prone to liquidity stress, the monitoring and stress testing of investment funds' liquidity could be integrated into the supervisory framework.

**36.** The LERS remains the appropriate arrangement for Hong Kong SAR as an anchor for economic and financial stability. The credibility of the currency board arrangement has been ensured by a transparent set of rules governing the arrangement, ample fiscal and FX buffers, strong financial regulation and supervision, the flexible economy, and a prudent fiscal framework. The FSAP stress test found that the LERS mechanism and the substantial amount of FX reserves would mitigate the impact of potential large capital outflows on the HKD interest rate, thus helping maintain the solvency and resilience of the banking system.

### Authorities' Views

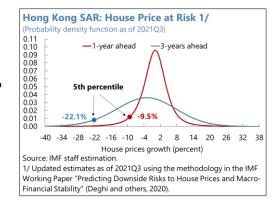
**37.** The authorities noted that capital inflows have continued in recent years despite various challenges faced by Hong Kong SAR. They emphasized that Hong Kong SAR continues to be a major IFC, thriving on the rule of law, the robust regulatory and supervisory frameworks, the vibrant ecosystem, and its role as a leading financial gateway for Mainland China. The authorities noted that liquidity risk in the banking and asset management sectors is adequately monitored and managed, while stressing that the regulatory and supervisory approach to liquidity risk is the same for domestic banks and foreign branches. They also viewed investment funds as a shock absorber during liquidity stress episodes, noting that the existing regulatory framework limits concentrated exposures and allows for swing pricing.

### C. Containing Housing Market Risks

**38. Residential house prices are on the rise again, contributing to a further increase in the already elevated level of household debt.** The average debt-servicing ratio for new mortgages increased to 36.9 percent at its peak in February 2021 from 36.0 percent in December 2019, partly driven by the decline in household income. While household assets are large in aggregate—as reflected by the high household net worth-to-liabilities ratio of 11.2 times and safe assets-to-liabilities ratio of 2.9 times in 2019—the wealth distribution is skewed towards high-income households.<sup>25</sup>

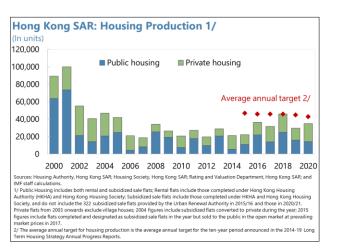
### 39. Given the stretched valuation, a disorderly adjustment in the property market could

**pose a risk to the economy.** A sharp house price correction could trigger an adverse feedback loop between house prices, debt service capacity, household consumption, and growth, negatively affecting banks' balance sheets.<sup>26</sup> In addition, the FSAP analysis indicated that low-income households could be under significant financial stress when facing rising interest rates and falling income. To mitigate such risks, the authorities should continue to carefully monitor the household debt repayment capacity, particularly for low-income households.



## 40. The three-pronged approach to increasing housing affordability and containing housing market risks remains valid, but more efforts are needed to raise housing supply.

 Increasing housing supply is critical to resolve the structural supply-demand imbalance. Housing supply has increased on average since 2015 with the implementation of the government's Longterm Housing Strategy and the Hong Kong 2030+ Strategy, but has fallen short of target by about 30 percent on average. Staff welcomes the identification of the land to provide 330,000 public housing units within the next ten years and urges



<sup>&</sup>lt;sup>25</sup> The household net worth-to-liabilities and safe assets-to-liabilities ratios are relatively high in Hong Kong SAR compared to some other advanced economies according to a <u>recent assessment by the HKMA</u>: for example, the former ratio was five times in the U.K., six times in Singapore, seven times in the U.S., and eight times in Japan, while the latter ratio was one in the U.S., the U.K. and Singapore, and three times in Japan.

<sup>&</sup>lt;sup>26</sup> Staff's house price-at-risk analysis as of 2021Q3 indicates that, real house prices in Hong Kong SAR could fall by about 10 percent over the next four quarters with a 5 percent likelihood.

the authorities to bring the actual public housing production back to the target without further delays. To this end, a comprehensive approach is urgently needed, including increasing land supply for housing production (e.g., land resumption, reclamation, and re-zoning) while expediting and streamlining the process for land identification and production (e.g., environmental, transport, and other relevant assessments). The recently announced Northern Metropolis development strategy could boost housing supply over the longer-term period.

- The macroprudential stance for property markets should be maintained to safeguard financial stability. A series of macroprudential policies that have been introduced and tightened since 2009—such as ceilings on loan-to-value (LTV) ratio, caps on debt service-to-income ratio (DSR), and stress testing of the DSR against interest rate increases—have helped contain vulnerabilities in the banking system (Appendix VII). Given resilient house prices and mortgage growth, the existing residential property-related macroprudential policies should be kept unchanged for now and any changes should be data-dependent with due attention to the emerging risk of regulatory leakages. Moreover, the Council of Financial Regulators (CFR) should take the lead in strengthening the regular surveillance and data collection on lending by non-bank lenders (e.g., property developers and non-bank financial institutions), and the authorities should regularly reassess the need to expand the regulatory perimeter to mitigate the leakages in macroprudential policies.
- Stamp duties have been effective in containing speculative activity and external demand. The government has introduced three types of stamp duties to curb excess demand by both residents and nonresidents. Although they have helped curb house price increases and contain household leverage and systemic risks,<sup>27</sup> the New Residential Stamp Duty (NRSD) introduced since November 2016 (Appendix VII) is a residency-based capital flow management measure and a macroprudential measure (CFM/MPM) levied at a higher rate on non-residents than on first-time resident home buyers. Therefore, staff recommends phasing it out once systemic risks from the non-resident inflow dissipate.<sup>28</sup>

### Authorities' Views

**41.** The authorities agreed that increasing land supply remains the key to fundamentally resolving the structural imbalance between housing demand and supply. They emphasized that various measures had been taken to boost land supply for housing production, including by accelerating land resumption and expediting and streamlining the process of land production, and such efforts were starting to bear fruits. The authorities viewed the current tight macroprudential stance for housing market as appropriate given the elevated house prices, while noting that they will continue to closely monitor the housing market and stand ready to make necessary adjustments with a view to safeguarding financial stability. They noted that mortgage lending by non-banks has

<sup>&</sup>lt;sup>27</sup> See "<u>An Estimated DSGE Model to Analyze Housing Market Policies in Hong Kong SAR</u>," IMF Working Paper 18/90.

<sup>&</sup>lt;sup>28</sup> The non-resident housing purchases have declined during the pandemic mainly due to the border closure with Mainland China, while the systemic risk from such inflow remains once the border reopens.

been closely monitored and has declined in recent years amid the authorities' efforts to regulate banks' lending to non-banks and the expansion in the mortgage insurance program.

### D. Further Enhancing Regulatory and Supervisory Frameworks

42. The ongoing efforts to further strengthen the regulatory and supervisory frameworks are welcome. Banking regulation and supervision remain strong, and the regulatory initiatives have kept pace with changes in the banking sector and technological advancements. Staff welcomes the authorities' early implementation of FSAP recommendations, including efforts to strengthen the monitoring of OTC trades and the planned implementation of risk-based capital requirements and group-wide supervision of insurers (Appendix VIII). The authorities have also improved data collection through the Granular Data Reporting initiative, and further steps should be taken to enhance macroprudential oversight, including by adopting a more comprehensive and systematic approach to identify and address systemic risks. There is also room to further strengthen the regulatory and supervisory frameworks as recommended by the FSAP (see text table). Hong Kong SAR has a solid regime for anti-money laundering and combating the financing of terrorism (AML/CFT) that is delivering good results, and has taken steps to improve its effectiveness further following the 2019 mutual evaluation. These efforts should continue notably to ensure that accurate information on the beneficial owners of legal entities can be accessed on a timely basis, which will be crucial in safeguarding Hong Kong SAR's reputation as an IFC.

Areas	Recommendations			
Micro-prudential oversight	• The FSAP recommended adopting a framework to ensure that the			
	prudential mandate of regulatory authorities is not compromised by			
	development initiatives and providing de jure operational independence to			
	the HKMA as the banking authority.			
	Group-wide supervision and risk-based capital requirements of insurers			
	should be implemented as planned.			
Systemic risk monitoring and analysis	The Council of Financial Regulators/Financial Stability Committee			
	secretariat should adopt a more comprehensive and systematic approach to			
	identify and address systemic risk by leveraging more on the organizational			
	framework and expertise of the HKMA and other regulators.			
	Collecting more comprehensive and granular data on cross-sectoral and			
	cross-border exposures could help improve systemic risk monitoring.			
Financial sector safety net	The deposit protection scheme should be strengthened by expanding the			
	scope of depositor preference, allowing the scheme to contribute to			
	resolution costs, and reviewing the size of the scheme's funding.			
Financial integrity	• The authorities are encouraged to continue to improve the AML/CFT			
	regime as identified in the Financial Action Task Force 2019 Mutual			
	Evaluation Report, including by enhancing prosecution of the laundering of			
	proceeds from foreign offenses, increasing risk understanding, and			
	strengthening supervision of certain non-financial sectors such as trust and			
	company service providers and legal and accounting professionals.			

Source: 2021 Hong Kong SAR Financial System Stability Assessment report.

### 43. A consistent and cross-sectoral supervisory and regulatory framework is critical to

effectively address industry-wide fintech-related issues. As the financial system embraces technology, the operational resilience and cyber security of the financial sector should be strengthened in tandem with the development in fintech. Close coordination among regulators is also essential to achieve a more holistic activity-based approach consistent across sectors, especially in the areas of cyber and IT-related risks, Regtech adoption and use of artificial intelligence. Continued review of the regulatory perimeter of non-bank fintech firms is also warranted and the trading of virtual assets should also be closely monitored in order to identify and mitigate risks associated with virtual assets, including those from fraud and money laundering/financing of terrorism.

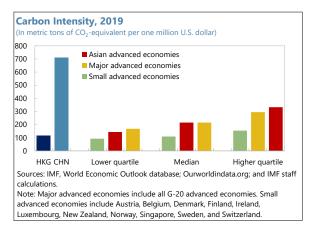
#### Authorities' Views

**44.** The authorities viewed the cross-sectoral systemic risk monitoring as effective, benefiting from the strong inter-agency coordination. They highlighted the recent progress in strengthening data collection and analytical capacity, including by utilizing trade repositories data and big data on individual mortgage and commercial loans, and conducting joint thematic reviews among different regulators to better analyze and manage identified risks. The authorities also noted that the implementation of the risk-based capital framework for insurers is on track and a regulatory framework for licensing and regulating all virtual asset trading platforms in Hong Kong SAR will be introduced. They did not see the need to update the deposit protection scheme as it has a different role from, and is not part of, the resolution regime and all costs of handling failing banks will be ultimately paid by the banking sector.

### **SEIZING OPPORTUNITIES FOR A GREENER ECONOMY**

**45.** Hong Kong SAR has made significant progress over the last decade to address climate change, which will help achieve the new commitment of carbon neutrality before 2050. Hong Kong SAR has already reduced coal in fuel mix for electricity generation to 24 percent in 2020, down from 48 percent in 2015, and carbon emissions per capita was already among the lowest in advanced economies as of 2019 (see SIP). In October 2021, the government announced an updated

action plan to achieve carbon neutrality, with an ambitious intermediate target of reducing carbon emissions by 50 percent from the 2005 level before 2035. The strategy focuses on de-carbonizing electricity generation, embracing greater energy saving, adopting green transportation, and enhancing waste management, among others. To complement ongoing efforts, the government could consider introducing additional carbon pricing mechanisms to incentivize energy saving and green transportation. As Hong Kong SAR will likely be affected by higher global carbon prices



over time via imported products, supportive measures for low-income households could be provided to alleviate the burden.<sup>29</sup>

46. Climate-related risks should be carefully monitored and assessed by strengthening

**systemic risk analysis.** The authorities' efforts to address climate-related risks are welcome climate-related financial disclosures aligned with the Task Force on Climate-related Financial Disclosures will be mandated by 2025, and climate-focused scenario analysis by banks, insurers and asset managers, including pilot stress testing exercises, are promoted.<sup>30</sup> The HKMA has also introduced and implemented measures in phases that encompass assessing the "greenness baseline", setting supervisory expectations or requirements, and monitoring and evaluating banks' progress in managing climate-related risks. It is important to ensure that such risks are adequately embedded in financial institutions' risk management and the authorities' systemic risk analysis.

**47.** Hong Kong SAR should play a key role in global efforts to mobilize private sector investment for green development by enhancing the green and sustainable finance ecosystem. The key initiatives taken by the authorities include: (i) adopting forthcoming international standards such as the Common Ground Taxonomy and the sustainability-related disclosure standards by the International Sustainability Standards Board; (ii) providing subsidies to eligible green and sustainable bond issuers and loan borrowers to cover issuance and other related expenses; (iii) scaling up the government green bond issuance (up to HK\$200 billion during 2021-25); and (iv) promoting the United Nations Principles for Responsible Investment, including the adoption by the HKMA as the manager of the Exchange Fund. The authorities are also exploring how Hong Kong SAR could develop into a regional carbon trading center. Capitalizing on the opportunities from Mainland China and strengthening regional and international collaboration would help develop Hong Kong SAR into a green and sustainable finance center, further strengthening its status as a major IFC.

### Authorities' Views

**48.** The authorities were committed to achieving carbon neutrality before 2050. They noted that the two power companies—the largest local emitters—are subject to emission caps which have been tightened over time and did not see the immediate need to introduce additional carbon pricing mechanisms. The authorities emphasized that all financial regulators have taken steps to deal with climate-related financial risks and that they are in the forefront of developing climate-related disclosure standards. They also expected that ongoing efforts in establishing a green finance ecosystem would help finance the green transition in Mainland China and other regional economies.

<sup>&</sup>lt;sup>29</sup> Carbon taxes can be a highly effective mitigation tool for the region, especially when supported by complementary measures to compensate those affected by higher energy prices (<u>IMF Departmental Paper No. 2021/007</u>).

<sup>&</sup>lt;sup>30</sup> In December 2021, the HKMA published <u>the results of the pilot banking sector climate risk stress</u>, which showed that climate risks could potentially cause significant adverse impacts on the banking sector under extreme climate scenarios although the banking sector would remain resilient given their strong capital buffers.

## **STAFF APPRAISAL**

**49. Outlook.** The economy has recovered strongly supported by swift and bold policy responses, notably a large fiscal stimulus. The financial sector has remained resilient on the back of significant policy buffers, a strong external position, and strong institutional frameworks. However, the recovery remains unbalanced with private consumption lagging. The economic recovery is projected to continue in 2022 with a handoff from public to private demand, facilitated by a moderating pace of fiscal consolidation and a gradual re-opening of the border.

**50. Risks.** The balance of risks is tilted to the downside. Pandemic-related uncertainty could delay the resumption in the flow of people. A slower-than-expected global recovery and sustained disruptions to global supply chains could reduce the flow of goods and derail the recovery. A sharp rise in global risk premia, a disorderly tightening of monetary policy in major advanced economies, large housing market corrections, escalating U.S.-China tensions, and a shift of market confidence in Hong Kong SAR's status as a major IFC could affect the flow of capital. Conversely, faster-than-expected border re-opening and global recovery and the development of the Greater Bay Area could improve growth prospects.

**51. Fiscal policy.** Fiscal policy should continue to support the recovery by returning to a balanced budget at a gradual pace, while focusing in the near term on providing more targeted support for low-income households, unemployed workers, and SMEs. Over the medium term, fiscal policy should strengthen its role as an automatic stabilizer and address structural challenges of population aging, high income inequality, and public housing shortage. A comprehensive tax reform that broadens the tax base while maintaining fairness and international competitiveness is needed to rebuild fiscal buffers.

**52. Financial ties with Mainland China.** The authorities should continue to strengthen systemic risk analysis of Mainland China-related credit risks, including by ensuring that the internal credit risk models used by Hong Kong SAR banks to determine the capital charges for exposures to Mainland Chinese borrowers, particularly those in the real estate sector with low credit ratings, are sufficiently forward-looking. Continued close monitoring of banks' significant exposures to non-bank Mainland Chinese entities and a periodic stress test of banks' large exposures—on top of the regular stress testing—would also help. As the financial ties are broadening to the cross-border use of the e-CNY in Hong Kong SAR, the potential implications from a more widely adopted e-CNY in Hong Kong SAR should be carefully studied.

**53. Housing policies.** The three-pronged approach—boosting housing supply, macroprudential measures, and stamp duties—to improving housing affordability and containing housing market risks remains valid. Housing supply should be increased, including by expanding land supply and expediting and streamlining the process for land identification and production. While the macroprudential stance for housing market should be maintained for now, the CFR should take a lead in strengthening the regular surveillance and data collection on lending by non-bank lenders and the authorities should regularly assess the need to expand the regulatory perimeter to mitigate

the leakages in macroprudential policies. The NRSD, assessed to be a CFM/MPM, should be phased out once systemic risks from non-resident inflows dissipate.

**54. Financial sector policies.** Financial policies should shift focus towards addressing solvency issues concerning corporates and individuals, as the recovery gains further momentum. The cut in the CCyB during the pandemic was appropriate but the HKMA should stand ready to adjust it to the level consistent with updated systemic risk assessments. The ongoing efforts to further strengthen regulatory and supervisory frameworks are welcome, and further steps should be taken to enhance macroprudential oversight, including by adopting a more comprehensive and systematic approach to identify and address systemic risks. A consistent and cross-sectoral supervisory and regulatory framework is also critical to effectively address industry-wide fintech-related issues.

**55. Exchange rate regime and external position.** The LERS remains the appropriate arrangement as an anchor for economic and financial stability. The authorities should continue to preserve the rule of law and maintain the free flow of capital. Staff's preliminary assessment suggests that the external position in 2021 was broadly in line with the level implied by medium-term fundamentals and desirable policies.

**56. Climate change.** The updated action plan to achieve carbon neutrality before 2050 is welcome. To complement ongoing efforts, the government could consider introducing additional carbon pricing mechanisms to incentivize energy saving and green transportation. Climate-related risks should be carefully monitored and assessed by strengthening systemic risk analysis. Hong Kong SAR should play a key role in global efforts to mobilize private investment for green development by enhancing the green and sustainable finance ecosystem.

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

### **Box 1. Electronic Consumption Voucher<sup>1</sup>**

Hong Kong SAR has introduced a Consumption Voucher Scheme (CVS), amounting to 1.3 percent of GDP, to boost private consumption and provide targeted support to local retail, catering and service sectors. Being implemented in a digital format, the CVS is expected to have high growth impact and foster the use of electronic payment (e-payment), thereby accelerating a digital transformation of the economy.

The CVS aims to stimulate private consumption and foster a more balanced recovery. Despite strong policy support such as cash handout in 2020, private consumption is lagging in its recovery and employment in contact intensive sectors remains well below its pre-pandemic levels. In response, the government has disbursed electronic consumption vouchers (e-vouchers) in installments with a total value of HK\$5,000 (or US\$640) to each of the 7.2 million eligible Hong Kong SAR permanent resident and new arrival aged 18 or above in the second half of 2021 to boost local consumption.

**The CVS is designed to provide targeted support to local retail, catering and service sectors**. Up to mid-January 2022, about 6.3 million eligible registrants have received e-vouchers through four stored value facilities (SVFs: Alipay HK, WeChat Pay HK, Octopus, and Tap & Go). Those e-vouchers generally have a short validity period and can be used only at local retail stores, catering and service outlets and their online platforms, but not for cash-out or for person-to-person payments.

The unique features of the e-voucher could help boost consumption more effectively and promote an inclusive recovery. Its use-it-or-lose-it nature with a short validation period helps kickstart spending while limiting leakages through direct saving. As the e-vouchers can only be used to purchase goods and services from local eligible merchants, the CVS can also effectively provide targeted support to the hardest hit sectors during the pandemic, fostering an inclusive recovery. In addition, the distribution and use of consumption vouchers in digital format reduces the administrative cost while speeding up the implementation. The 7/24 nature of e-payment as well as no minimum purchase requirement would increase the convenience and benefit of using e-vouchers, thereby further helping stimulate consumption amid remaining uncertainty about the ongoing pandemic. The government expects that the CVS would boost overall GDP growth by 0.7 percent.

**The CVS could also promote the further development of e-payment, paving the way for the digital transformation of Hong Kong SAR's economy.** Progress in the usage of electronic payment system before the pandemic has been relatively slow despite its advanced physical and digital infrastructure. However, the introduction of the CVS has accelerated a digital transformation of local merchants using e-payment system. The number of consumer accounts in four participating SVFs and the number of merchants accepting e-payment have increased by about 4.7 million and 96,000, respectively, by mid-January 2022. The design of the CVS allowing people to choose the SVFs that best suit their needs has also promoted competition among different payment platforms through lower fees and improved service quality.

<sup>1</sup> Prepared by Yu Ching Wong.

### Box 2. Recent Developments in Central Bank Digital Currencies in Hong Kong SAR<sup>1</sup>

The HKMA has strengthened its research for potential issuance and use of central bank digital currencies (CBDCs) at both retail and wholesale levels. The HKMA has also been collaborating with the People's Bank of China (PBC) to technically test the use of Mainland China's CBDC (e-CNY) in Hong Kong SAR.

**The HKMA has been developing an architectural design of a local CBDC, the e-HKD, for** *retail* **use.**<sup>2</sup> Together with the BIS, the HKMA has been studying two-tier distribution models of retail CBDCs with the central bank in charge of issuing and redeeming the CBDC (first tier) while issuing intermediaries (e.g., commercial banks) distributing and circulating the CBDC (second tier). The HKMA has also proposed a two-tier architecture in the *Project e-HKD*, aiming to address the problems of cross-ledger synchronization, over-issuance prevention, privacy-preserving transaction traceability, and flexible instantiations of different two-tier distribution models, but has not decided on the distribution model for implementing e-HKD.<sup>3</sup> The cross-departmental working group established inside the HKMA is studying the potential use cases, benefits and risks of issuing the e-HKD, as well as the related technical, policy and legal issues.

The HKMA, together with other central banks, has also been actively researching the use of a *wholesale* CBDC in cross-border payments. The HKMA, the Bank of Thailand, the PBC, and the Central Bank of the United Arab Emirates, together with the BIS, are jointly exploring the capabilities of distributed ledger technology (DLT) and CBDC in facilitating real-time cross-border foreign exchange payment-versus-payment transactions in a multi-jurisdictional real-time context (*Multiple CBDC Bridge or mBridge project*). In particular, the project has been developing a DLT-based cross-border platform prototype to support multiple currencies and interface with new or traditional domestic payment systems. This aims to alleviate the pain points in cross-border fund transfers (e.g., inefficiencies, high cost and complex regulatory compliance) and evaluate the feasibility of CBDCs for cross-border fund transfers, international trade settlement, and capital market transactions. It has adopted three general principles: (i) no disruption to other monetary authorities or international monetary system; (ii) compliance with local regulations; and (iii) interoperability between different CBDC systems as well as between CBDC and traditional payment systems.<sup>4</sup>

**The HKMA and the PBC have been testing the cross-border** *retail* **use of the e-CNY in Hong Kong SAR.** The e-CNY test in Hong Kong SAR, in which PBC-designated banks are participating, aims to provide convenient cross-border payment services for residents in both Hong Kong SAR and Mainland China and enable interoperability with the Faster Payment System in Hong Kong SAR, which is a local payment system connecting banks and digital wallet operators. As the cross-border use of CBDCs entails risks and challenges including, for example, compliance with regulations in both home and host jurisdictions, the e-CNY technical test in Hong Kong SAR is <u>reportedly</u> exploring ways to minimize such risks and adhere to the three general principles listed above, including by imposing a mandatory conversion between the e-CNY and HKD.<sup>5</sup>

<sup>&</sup>lt;sup>1</sup> Prepared by Fei Han and Phakawa Jeasakul.

<sup>&</sup>lt;sup>2</sup> A *retail* CBDC would be used like a digital cash by the general public, whereas a *wholesale* CBDC can only be used by permitted institutions for settlements in financial market infrastructures.

<sup>&</sup>lt;sup>3</sup> See "e-HKD: A technical perspective (request for comments)" (HKMA in collaboration with BIS, 2021).

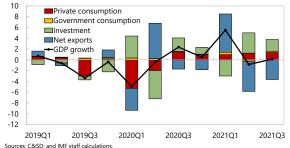
<sup>&</sup>lt;sup>4</sup> See "Inthanon-LionRock to mBridge: Building a multi CBDC platform for international payments" (2021).

<sup>&</sup>lt;sup>5</sup> See the Selected Issues Paper "Recent Developments and Macro-financial Implications of the e-CNY" in the 2021 China Article IV Consultation.

### Figure 1. Hong Kong SAR: A Strong yet Uneven Recovery

Growth has recovered strongly from the pandemic...





Sources, cccop, and mission calculations. Note: For 2021Q3, the real CDP growth is the authorities' advance estimate, while the contribution of each component is obtained by assuming that the y/y growth rate of the seasonally adjusted series of each component is the same as their non-seasonally-adjusted series (since the seasonally-adjusted components are not available yet).

Retail sales rebounded from 2020 lows but remained relatively weak amid collapsed tourism particularly from Mainland China...

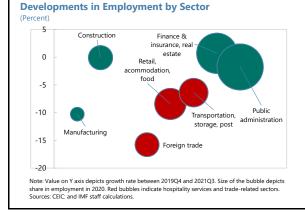
#### **Retail Sales and Visitor Arrivals**

(Year-on-year percent change and 100 thousand people, 3mma)

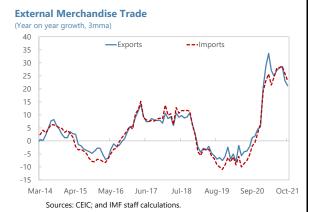


Jan-15 Oct-15 Jul-16 Apr-17 Jan-18 Oct-18 Jul-19 Apr-20 Jan-21 Oct-21 Sources: Haver Analytics; and IMF staff calculations.

#### Recoveries across sectors remain uneven with hospitality services and trade-related sectors suffering the most.

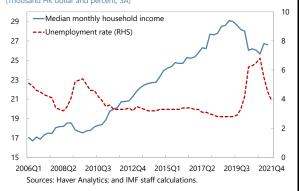


...initially led by swift and bold public support followed by a strong rebound in external trade.



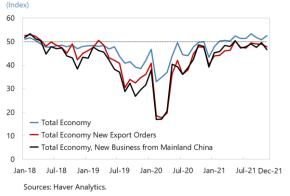
...as well as the reduced household income despite the rapid recovery in labor market.

#### Household Income and Unemployment Rate (Thousand HK dollar and percent; SA)



Sequential growth momentum continues in 2021Q4 with the overall PMI remaining in the expansionary territory.

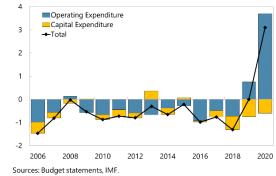
Purchasing Managers Index (SA, 50+ = Expansion)



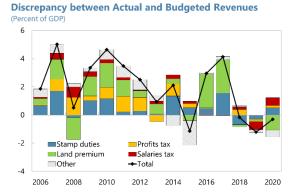
### Figure 2. Hong Kong SAR: Large Fiscal Stimulus During the Pandemic

Government expenditures have increased significantly...

#### **Discrepancy between Actual and Budgeted Expenditures** (Percent of GDP)

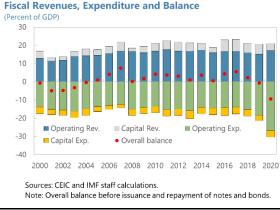


Revenues also have declined more than expected during the crisis...

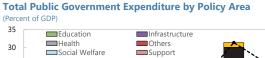


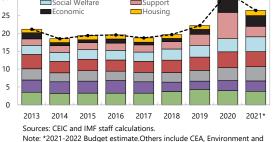
Sources: Budget statements, IMF.

As a result, fiscal deficit increased sharply...



...led by large COVID-19 relief measures.

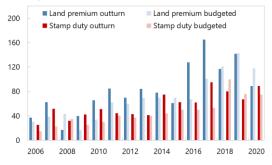




Food and Security

...mainly driven by lower-than-budgeted land premium.

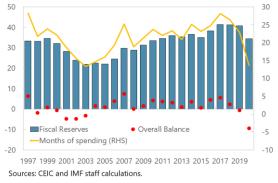
#### **Fiscal Revenues: Real Estate-Related** (HKD billions)



Sources: CEIC, government budget statements, and IMF staff calculations.

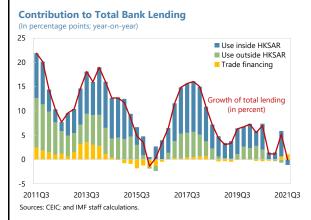
... and fiscal reserves declined to 35 percent of GDP in 2020.

**Fiscal Reserves and Fiscal Balance** (Percent of GDP)



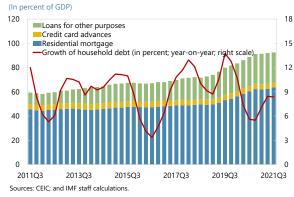
### Figure 3. Hong Kong SAR: High Financial Vulnerabilities Amid Increased Leverage

Overall bank lending growth remains weak, with a recent decline due to the base effect induced by strong IPO-driven lending in late 2020.

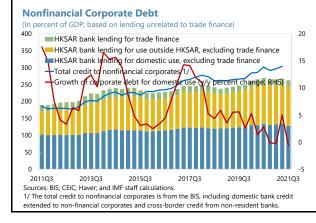


Household debt, underpinned by a large mortgage debt, continued to increase during the crisis...

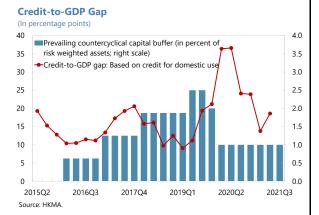
### **Household Debt**



Corporate debt is also growing, of which slightly less than half is for domestic use in Hong Kong SAR.

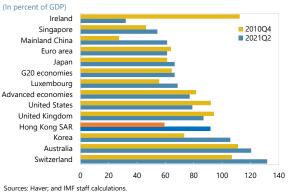


The credit-to-GDP gap, based on credit for domestic use, has narrowed but still remains sizeable.



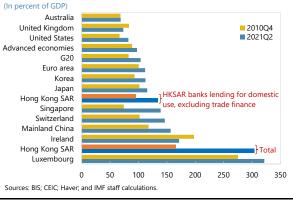
### ...making Hong Kong SAR households among the most indebted in the world.

### Selected Economies: Household Debt



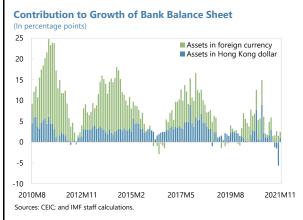
Corporate debt for domestic use is also relatively high among international peers.

### Nonfinancial Corporate Debt



### Figure 4. Hong Kong SAR: Strong Banking System with Large Buffers

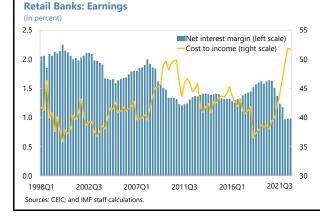
Bank balance sheets had expanded during the crisis, with a recent contraction due to the base effect induced by strong IPO-driven lending in late 2020.



Nonperforming and special-mention loans have increased but are stabilizing at low levels.

**Retail Banks: Problem Loans** (In percent of total loans) 12 1.4 Special-mention loans Nonperforming: Loss loans 1.2 Nonperforming: Doubtful loans 1.0 9 Nonperforming: Substandard loans 0.8 0.6 6 Impairment expense 0.4 (right scale) 0.2 0.0 -0.2 -0.4 0 2001Q3 2005Q3 2009Q3 2013Q3 2017Q3 2021Q3 Sources: CEIC: and IMF staff calculations.

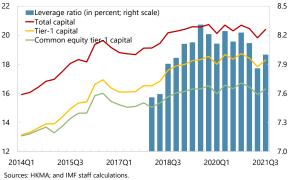
Banks have seen reduced net interest margin, reducing their profitability in recent years.



Banks' capital adequacy ratio has remained relatively stable, well above the regulatory requirements.

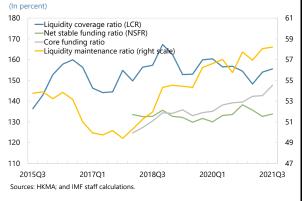
### **Capital Adequacy and Leverage**



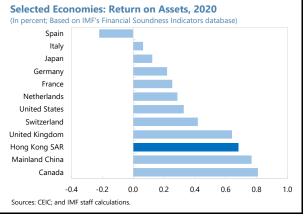


Banks have plenty of liquidity buffers, underpinned by a relatively stable funding profile.





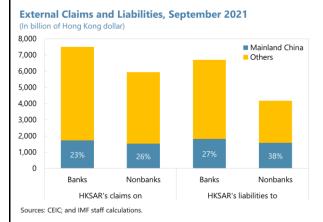
However, they are among the most profitable relative



to banking systems with G-SIBs.

### Figure 5. Hong Kong SAR: Increasing Financial Linkages with Mainland China

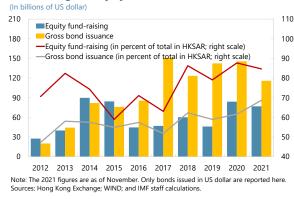
Mainland China accounts for a sizeable portion of Hong Kong SAR's external claims and liabilities.



Mainland-related exposures account for one-third of HKSAR banking sector assets.

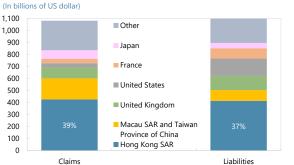


Hong Kong SAR is an important platform for Mainland Chinese firms to raise equity financing and issue bonds.



Fund-Raising Activity by Mainland Firms in HKSAR (In billions of US dollar) Hong Kong SAR banks play a leading role in intermediating cross-border financing for Mainland China.

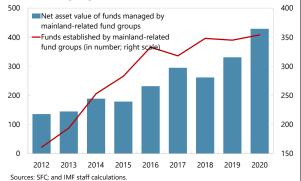
International Banks' Cross-border Position vis-à-vis Chinese Residents, June 2021



Sources: BIS; and IMF staff calculations.

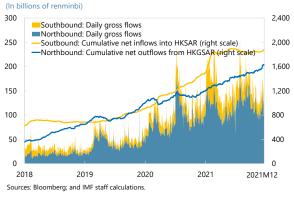
Investment activity by Mainland Chinese investors in Hong Kong SAR has increased steadily.

### **Investment Activity by Mainland Investors** (In billions of Hong Kong dollar)



The stock connect schemes are the main channels for foreign investors to invest in Mainland Chinese equities.

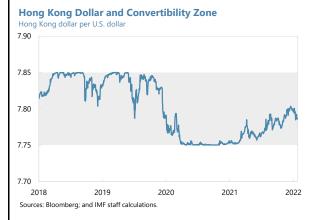
Stock Connect Flows



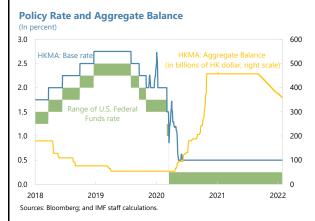
34 INTERNATIONAL MONETARY FUND

### Figure 6. Hong Kong SAR: Smooth Functioning of The Linked Exchange Rate System

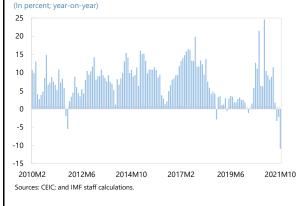
The HKD has moved towards the middle of the Convertibility Zone more recently...



The Aggregate Balance has declined, though still sizeable, being replaced by Exchange Fund Bills and Notes...

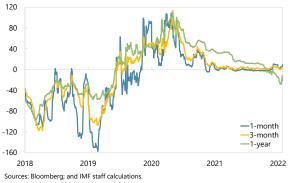


System-wide liquidity has been supported by robust HKD deposit growth in recent years. A recent decline was due to the IPO-driven base effect in late 2020. Growth of Hong Kong Dollar Deposits



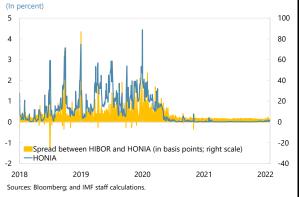
...as the spreads between HKD and US dollar interest rates have narrowed.

Spread Between HK Dollar HIBOR and US Dollar LIBOR (In basis points)



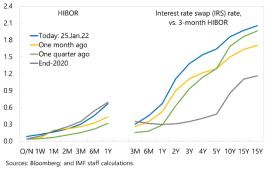
...but liquidity remains ample in the banking system as reflected by the overnight interbank rates.

### **Overnight Money Market Rates**



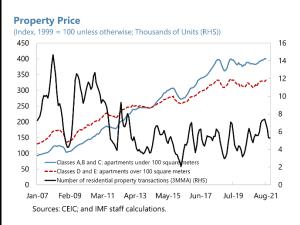
# The HKD yield curve has steepened in recent months given the prospects of the U.S. Fed's tapering.



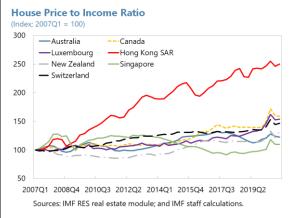


House prices were affected only marginally by the

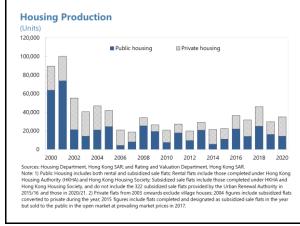
pandemic and have started to rise again ...



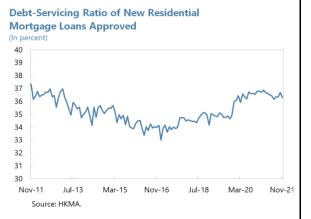
Housing affordability continued to worsen reflected by the rising house price-to-income ratio...



Public housing supply remained weak despite higher private housing supply...



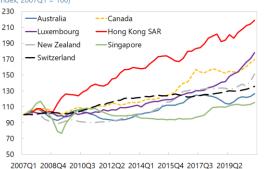
...while the debt-servicing burden for newly approved loans increased, partly reflecting lower household income.



...and house price-to-rent ratio.



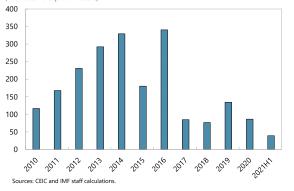
Figure 7. Hong Kong SAR: Further Worsening of Housing Affordability



2007Q1 2008Q4 2010Q3 2012Q2 2014Q1 2015Q4 2017Q3 2019Q2 Sources: C&SD; IMF RES real estate module; and IMF staff calculations.

...and land supply for private housing started to decline recently.

Land Area of Private Housing Sites Disposed by Government Land Sales (In thousand square meters)



							Proj		
	2017	2018	2019	2020	2021	2022	2023	2024	2025
NATIONAL ACCOUNTS									
Real GDP (percent change)	3.8	2.8	-1.7	-6.1	6.4	3.0	3.0	2.9	2.8
Private consumption	5.5	5.3	-0.8	-9.9	6.2	4.8	4.8	4.6	4.3
Government consumption	2.8	4.2	5.1	8.1	4.0	0.6	2.0	2.3	2.3
Gross fixed capital formation	3.1	1.7	-14.9	-11.2	12.1	10.3	4.2	3.0	3.0
Inventories (contribution to growth)	0.4	0.0	-0.5	1.7	-0.1	-0.3	-0.3	-0.3	-0.3
Net exports (contribution to growth)	-1.2	-1.5	2.1	0.3	-0.2	-1.9	-0.9	-0.8	-0.8
Output gap (in percent of potential GDP)	0.1	0.1	-2.5	-6.8	-1.9	-1.2	-0.8	-0.5	-0.3
LABOR MARKET									
Employment (percent change)	1.0	1.1	-0.4	-4.9	-0.2	2.0	0.5	0.6	0.7
Unemployment rate (percent, period average)	3.1	2.8	2.9	5.8	5.2	3.5	3.3	3.2	3.1
Real wages (percent change)	2.3	1.0	0.1	2.5	0.8	1.1	1.2	1.3	1.3
PRICES									
Inflation (percent change)									
Consumer prices 3/	1.5	2.4	2.9	0.3	1.6	2.1	2.3	2.4	2.5
GDP deflator	2.9	3.7	2.0	0.6	0.2	2.0	2.1	2.2	2.3
GENERAL GOVERNMENT									
Consolidated budget balance (percent of GDP) 1/	5.6	2.4	-0.6	-9.4	-3.7	-2.2	-1.5	-1.1	-0.7
Revenue	23.3	21.2	20.8	21.0	21.6	21.7	21.9	21.8	22.0
Expenditure	17.7	18.8	21.4	30.4	25.3	23.9	23.3	23.0	22.7
Fiscal reserves (as of end-March, percent of GDP)	41.5	41.3	40.8	34.5	29.9	27.4	25.7	24.1	23.0
FINANCIAL									
Interest rates (percent, period average) 3/									
Best lending rate	5.0	5.0	5.1	5.0	5.0				
Three-month HIBOR	0.9	1.8	2.1	1.1	0.2				
10-year Treasury bond yield	1.6	2.2	1.6	0.8	1.2				
MACRO-FINANCIAL									
Loans for use in Hong Kong SAR (excl. trade financing)	16.1	6.5	7.7	2.1	8.4	10.3	8.6	8.0	7.7
House prices (year-on-year percent change for last quarter)	13.7	5.8	3.4	-0.1	3.0	5.8	7.1	7.4	7.6
Credit-to-GDP gap 2/	20.6	12.5	21.2	23.9	11.5	12.2	9.6	6.2	2.7
Hang Seng stock index (percent change) 3/	36.0	-13.6	9.1	-3.4	-14.1				
EXTERNAL SECTOR									
Merchandise trade (percent change)									
Export value	8.0	7.3	-4.1	-1.5	18.3	5.0	3.8	3.7	3.7
Import value	8.7	8.4	-6.5	-3.3	18.4	5.5	4.2	4.1	4.1
Current account balance (percent of GDP)	4.6	3.7	5.8	6.9	7.5	6.7	5.5	5.0	4.6
Foreign exchange reserves	424	425	A 4 1	400	E00	500	E1C	525	577
In billions of U.S. dollars (end-of-period)	431	425	441	492	500 125	508	516	525	537
In percent of GDP	126	117 254	122	142	135	131	126	122	119
Net international investment position (percent of GDP)	418	354	432	612	581	560	538	517	496
Exchange rate 3/ Market rate (HK\$/US\$_period average)	7 702	7 920	7 926	7 757	7 772				
Market rate (HK\$/US\$, period average)	7.793	7.839	7.836	7.757	7.773				
Real effective rate (period average, 2010=100)	115.3	113.1	117.7	116.9	111.6				

							Proj.			
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
				(In	billions of U.	S. dollars)				
Current account	15.6	13.5	21.2	23.8	27.8	26.2	22.7	21.4	21.0	19.0
Goods balance	-22.9	-32.3	-15.4	-5.4	-7.1	-11.1	-14.3	-17.9	-21.6	-25.6
Services balance	26.4	31.5	21.0	11.7	12.8	15.2	17.9	21.1	24.0	25.3
Income balance	12.2	14.3	15.6	17.5	22.0	22.1	19.1	18.2	18.5	19.3
Capital and financial account 1/	-9.8	-22.3	-30.3	-31.5	-27.8	-26.2	-22.7	-21.4	-21.0	-19.0
Capital account	-0.1	-0.2	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
Financial account	-9.7	-22.1	-30.2	-31.4	-27.7	-26.2	-22.6	-21.4	-21.0	-19.0
Net direct investment	24.0	22.0	20.5	34.0	34.9	35.8	36.3	36.6	37.0	37.3
Portfolio investment	33.9	-78.6	-27.5	-68.1	-87.5	-62.4	-59.9	-57.9	-56.0	-54.3
Financial derivatives	7.9	4.2	0.2	2.4	2.7	2.9	3.1	3.3	3.6	3.8
Other investment	-43.4	31.2	-24.5	34.1	29.9	5.6	5.8	6.1	6.3	9.
Reserve assets (net change)	-32.1	-1.0	1.1	-33.9	-7.8	-8.1	-8.0	-9.5	-11.9	-15.
Net errors and omissions	-5.8	8.8	9.1	7.7	0.0	0.0	0.0	0.0	0.0	0.0
Memorandum item:										
Nominal GDP	341.2	361.7	363.0	346.6	369.8	388.4	408.7	429.7	451.7	475.0
					(In percent o	of GDP)				
Current account	4.6	3.7	5.8	6.9	7.5	6.7	5.5	5.0	4.6	4.0
Goods balance	-6.7	-8.9	-4.2	-1.5	-1.9	-2.9	-3.5	-4.2	-4.8	-5.4
Services balance	7.7	8.7	5.8	3.4	3.5	3.9	4.4	4.9	5.3	5.3
Income balance	3.6	4.0	4.3	5.0	5.9	5.7	4.7	4.2	4.1	4.1
Capital and financial account 1/	-2.9	-6.2	-8.3	-9.1	-7.5	-6.7	-5.5	-5.0	-4.6	-4.0
Capital account	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial account	-2.9	-6.1	-8.3	-9.1	-7.5	-6.7	-5.5	-5.0	-4.6	-4.0
Net direct investment	7.0	6.1	5.7	9.8	9.4	9.2	8.9	8.5	8.2	7.9
Portfolio investment	9.9	-21.7	-7.6	-19.6	-23.7	-16.1	-14.6	-13.5	-12.4	-11.4
Financial derivatives	2.3	1.2	0.0	0.7	0.7	0.7	0.8	0.8	0.8	0.8
Other investment	-12.7	8.6	-6.7	9.8	8.1	1.5	1.4	1.4	1.4	2.1
Reserve assets (net change)	-9.4	-0.3	0.3	-9.8	-2.1	-2.1	-2.0	-2.2	-2.6	-3.3
Net errors and omissions	-1.7	2.4	2.5	2.2	0.0	0.0	0.0	0.0	0.0	0.0

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

							Proj			
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
			(In	percent of	GDP, unle	ess stated o	otherwise)			
Consolidated revenue	23.3	21.2	20.8	21.0	21.6	21.7	21.9	21.8	22.0	22.0
Operating revenue	16.6	16.0	15.3	17.1	17.5	17.4	17.6	17.6	17.7	17.7
Capital revenue	6.7	5.1	5.5	3.9	4.1	4.3	4.3	4.3	4.3	4.3
Taxes	14.3	13.8	12.4	14.0	14.4	14.4	14.6	14.6	14.7	14.7
Nontax	9.0	7.4	8.4	7.0	7.2	7.2	7.3	7.3	7.3	7.3
Of which:										
Land premium	6.2	4.1	5.0	3.3	3.4	3.6	3.6	3.6	3.6	3.6
Investment income	0.8	1.4	1.7	1.9	2.9	2.6	1.7	1.4	1.5	1.5
Consolidated expenditure	17.7	18.8	21.4	30.4	25.3	23.9	23.3	23.0	22.7	22.7
Operating expenditure	13.9	15.3	18.4	26.7	21.3	18.9	18.5	18.1	17.7	17.7
Of which : Personnel related (including pensions)	4.4	4.4	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.9
Capital expenditure	3.8	3.5	3.0	3.6	4.0	5.0	4.8	4.9	4.9	4.
Of which:										
Interest expenditure	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2
Overall balance 2/	5.6	2.4	-0.6	-9.4	-3.7	-2.2	-1.5	-1.1	-0.7	-0.7
Memorandum items:										
Operating balance 3/	2.7	0.8	-3.1	-9.7	-3.8	-1.6	-0.9	-0.5	-0.1	-0.
Primary balance 4/	4.8	1.0	-2.3	-11.3	-6.6	-4.7	-3.1	-2.4	-2.1	-2.
Cyclically adjusted primary balance (in percent of potential GDP)	4.8	1.0	-1.3	-7.7	-5.8	-4.2	-2.7	-2.2	-1.9	-1.
Fiscal impulse 5/	-0.8	3.8	2.3	6.4	-1.9	-1.6	-1.5	-0.5	-0.3	0.
Fiscal reserves	41.5	41.3	40.8	34.5	29.9	27.4	25.7	24.1	23.0	22.
(Months of spending)	28.1	26.4	22.9	13.6	14.2	13.7	13.2	12.6	12.2	11.
Gross general government debt	0.1	0.1	0.3	1.0	2.2	3.2	4.2	4.8	5.3	5.
(Including issuance under the Government Bond Program)	3.7	3.4	3.2	5.4	7.3	7.1	8.1	8.7	9.3	9.
Assets of the Government Bond Fund 6/	5.2	4.9	4.3	5.8	7.4	5.5	5.5	5.5	5.5	5.
Net general government debt 7/	-42.9	-42.8	-41.8	-34.8	-29.9	-25.7	-23.1	-20.9	-19.3	-17.

### Table 3. Hong Kong SAR: Consolidated Government Account, 2017–26 1/

Sources: Annual Report of the Director of Accounting Services; The Treasury, CEIC; and IMF staff estimates.

1/ Fiscal year begins April 1.

2/ Before issuance and repayment of government bonds and notes.

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

4/ Balance excluding investment income and interest expenditure.

5/ Change in cyclically adjusted primary balance. A positive value corresponds to an expansionary fiscal stance.

6/ The Bond Fund was established in connection with the implementation of the Government Bond Program. The Fund does not form part of the fiscal reserves and is managed separately from the other Government accounts.

7/ Gross general government debt including issuance under the Government Bond Program minus fiscal reserves and assets of the Government Bond Fund. A negative sign indicates net assets.

					Proj	
	2017	2018	2019	2020	2021	2022
		(In billi	ons of Hon	g Kong do	llars)	
Net foreign assets	7475	7855	8128	8439	8871	9029
Monetary authorities	3372	3326	3439	3814	4009	4081
Banks	4103	4529	4689	4625	4862	4949
Domestic credit 1/	6019	6320	6806	6952	7535	8313
Other items (net)	262	174	-188	215	215	215
M2	13755	14348	14746	15607	16621	17557
Of which:						
Deposits in HKD 2/	6572	6796	6941	7381		
Deposits in foreign currencies 2/	6745	7086	7307	7685		
Notes and coins in circulation	439	467	497	541		
		(Ann	ual percent	age chang	e)	
Domestic credit 1/	16.1	5.0	7.7	2.1	8.4	10.3
M2	10.0	4.3	2.8	5.8	6.5	5.6
		(Contribut	ion to M2	growth, in	percent)	
Net foreign assets	7.4	2.8	1.9	2.1	2.8	1.0
Domestic credit 1/	6.7	2.2	3.4	1.0	3.7	4.7
Other items (net)	-4.1	-0.6	-2.5	2.7	0.0	0.0
			(In percent	of GDP)		
Net foreign assets	281.1	277.1	285.7	313.9	309.5	298.5
Domestic credit 1/	226.3	222.9	239.3	258.6	262.9	274.8
Other items (net)	9.8	6.1	-6.6	8.0	7.5	7.1
M2	517.2	506.1	518.4	580.5	579.8	580.3

1/ Domestic credit measures loans for use in Hong Kong SAR (excluding trade financing). Data from 2018 onwards use the new methodology after the reclassification of working capital loans.

2/ Includes savings, time, demand deposits, and negotiable certificates of deposits issued by licensed banks.

	2017	2018	2019	2020	2021Q1	2021Q2	2021Q3
Banking sector (in percent)							
Regulatory capital to risk-weighted assets	19.1	20.3	20.7	20.7	20.5	19.8	20.4
Regulatory tier 1 capital to risk-weighted assets	16.6	17.9	18.6	18.7	18.4	17.8	18.3
Nonperforming loans net of provisions to capital	1.6	1.4	1.1	1.9	2.0	2.0	1.9
Nonperforming loans to total gross loans	0.7	0.5	0.6	0.9	0.9	0.9	0.8
Sectoral distribution of total loans: residents	69.9	69.7	70.0	70.3	70.8	71.8	70.6
Sectoral distribution of total loans: other financial corporations	9.8	9.5	9.4	9.5	9.8	10.9	8.9
Sectoral distribution of total loans: nonfinancial corporations	53.0	52.6	52.1	52.5	52.7	52.7	53.4
Sectoral distribution of total loans: other domestic sectors	7.2	7.6	8.5	8.3	8.3	8.1	8.
Sectoral distribution of total loans: nonresidents	30.1	30.3	30.0	29.7	29.2	28.2	29.4
Return on assets	1.0	1.0	1.0	0.7	0.8	0.7	0.8
Return on equity	12.6	13.1	11.7	8.1	8.7	7.7	7.
Interest margin to gross income	51.2	56.2	57.1	50.6	43.8	46.6	46.
Noninterest expenses to gross income	45.7	44.7	44.8	49.4	48.2	51.6	51.
Liquid assets to total assets (liquid asset ratio)	19.6	20.4	21.3	23.4	22.3	21.5	21.
Liquid assets to short-term liabilities	182.2	187.5	176.1	179.9	170.7	159.6	167.
Net open position in foreign exchange to capital	0.5	0.0	-0.2	3.4	2.3	2.2	1.
Public sector							
Fiscal balance (in percent of calendar year GDP) 1/	5.6	2.4	-0.6	-9.4			
Fiscal reserves (in percent of calendar year GDP)	41.5	41.3	40.8	34.5			
External sector							
Gross official reserves (in billions of U.S. dollar)	431	425	441	492			
In percent of GDP	126	117	122	142			
In months of retained imports	37	33	41	51			
In percent of monetary base	200	204	207	182			
In percent of broad money 2/	25	23	23	24			
In percent of Hong Kong dollar M3	48	46	46	48			•
Short-term debt (in billions of U.S. dollar)	1,053	1,130	1,099	1,176			
In percent of gross reserves	244	266	249	239			
Financial sector	26.0	12.6	0.1	2.4			
Hang Seng index (percent change, end-year) House prices (percent change, year average)	36.0 16.7	-13.6 13.0	9.1 1.5	-3.4 -0.5			

### Table 5 Hong Kong SAR: Financial Soundness Indicators 2017–2103

Sources: CEIC; Hong Kong SAR authorities; Bank for International Settlements; Bloomberg; IFS; and IMF staff estimates.

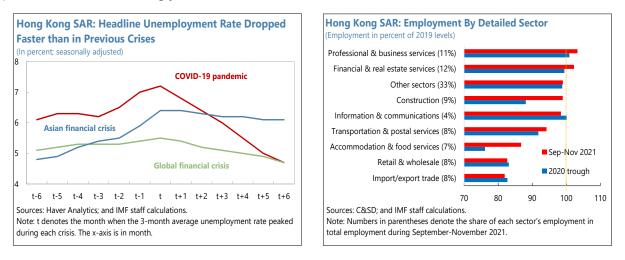
1/ Before issuance and repayment of government bonds and notes.

2/ Broad Money refers to M2.

# **Appendix I. Divergence in the Labor Market<sup>1</sup>**

Amid the successful containment of local outbreaks and a strong economic recovery, the labor market recovery has been fast yet uneven across sectors, with those that rely on the flow of people lagging partly due to a very gradual re-opening of the border. This divergence has contributed to the relatively weak recovery in household income and consumption, and potentially higher income inequality.

1. Despite the rapid recovery in the headline unemployment rate, the employment in the hospitality and trade-related sectors have remained weak. In line with the overall economic recovery, the seasonally adjusted unemployment rate declined to 3.9 percent (in the three-month period ending) in December 2021 from the peak of 7.2 percent in February 2021, although still remaining above the pre-pandemic level of about 3 percent, driven by the strong economic recovery and the decline in labor force. This has been a faster improvement compared to previous crises; however, there are large divergences across sectors. The employment in the financial service and real estate sectors has been less affected and recently surpassed its pre-crisis level amid the unaffected flow of capital and the recovering housing market. In contrast, employment in the retail/wholesale and trade sectors remains even below their 2020 lows. Meanwhile, the employment in the professional/business services sector increased notably, partly reflecting the increase in pandemic-related cleaning jobs.<sup>2</sup>



### 2. The recovery in wages has also been uneven, with the contact-intensive sectors

**lagging.** According to the average wage rates from the Labor Earnings Survey conducted by the Census and Statistics Department,<sup>3</sup> the (seasonally adjusted) average wage rate of all the sectors covered by the survey has recovered to about 0.5 percent below its pre-pandemic level in 2021Q2

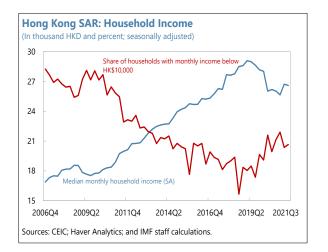
<sup>&</sup>lt;sup>1</sup> Prepared by Fei Han.

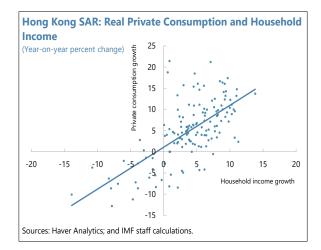
<sup>&</sup>lt;sup>2</sup> The professional/business services in Hong Kong SAR include some lower-paying services such as cleaning services.

<sup>&</sup>lt;sup>3</sup> The average wage rates from the Labor Earnings Survey only cover employees up to the supervisory level (i.e., excluding managerial and professional employees), and hence the findings based on such data are only for those employees. Having said that, since most of the employment rebound came from non-managerial/professional employees, the average wage rate data may better capture the wage development of the newly created jobs.

after declining by about 1 percent at the peak of the pandemic, reflecting the flexible wage adjustments in Hong Kong SAR.<sup>4</sup> While the average wage rates of some sectors (e.g., financial services and real estate) have surpassed their pre-pandemic levels by 2021Q2, the average wage rates of the hospitality and trade-related sectors remain weak. In particular, the average wage rate of accommodation/food services remained 2 percent below its pre-pandemic level by 2021Q2, and that of professional/business services—the sector with the lowest average wage rate for employees up to the supervisory level—has dropped by 3 percent compared to its pre-pandemic level, despite the expansion in the sector's employment.

**3.** The divergence in the labor market recovery has contributed to the relatively weak recovery in household income and consumption, and likely higher income inequality. The job losses in the sectors relying on the flow of people could translate to household income losses. Although some of the unemployed were absorbed by the financial services and real estate sectors, more have moved into the professional/business services sector (including cleaning services), whose lower-level employees have the lowest average wage rate among all sectors. These factors have likely contributed to the drop in the (seasonally adjusted) median household income of about 5½ percent since the pandemic and the increase in the share of the low-income households (defined as those with monthly income below HK\$10,000 here), weighing on the consumption recovery and potentially widening income inequality.





<sup>&</sup>lt;sup>4</sup> See <u>Price and Wage Flexibility in Hong Kong SAR</u>," IMF Working Paper 17/9.

## **Appendix II. External Sector Assessment**

Overall Assessment: On a preliminary basis, the external position in 2021 was broadly in line with the level implied by medium-term fundamentals

and desirable policies. The CA surplus (in percent of GDP) is projected to widen in 2021 with a narrower trade surplus on the strong economic recovery being more than offset by a larger income balance on strong portfolio investment income flows. From a longer-term perspective, the CA surplus remained below its pre-2010 level on account of structural factors, including the opening of Mainland China's 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 USD developments. The credibility of the currency board arrangement has been ensured by a transparent set of rules governing the arrangement, large fiscal and FX reserves, strong financial regulation and supervision, the flexible economy, and a prudent fiscal framework. Potential Policy Responses: In the near term, fiscal policy should continue to support the recovery until it is firmly entrenched by returning to a balanced budget at a gradual pace. In the medium to long term, measures should be taken to ensure fiscal sustainability given the rapidly aging population. Maintaining policies that support wage and price flexibility is crucial to preserving competitiveness under the currency board arrangement. Robust and proactive financial supervision and regulation, prudent fiscal management, flexible markets, and the LERS have worked well, and continuation of these policies will help keep the external position broadly in line with fundamentals. Background. The net international investment position (NIIP) decreased to 589 percent of GDP in 2021Q3 from 612 percent in **Foreign Asset** and Liability 2020. This was mainly due to a decrease in gross assets by 40 percentage points of GDP, following a large increase of 270 **Position and** percentage points of GDP recorded in 2020. Both gross assets and liabilities are high, reflecting Hong Kong SAR's status as an Trajectory international financial center. Valuation changes have been sizable as the increase in NIIP during 2016–2021Q3 (229 percent of GDP) far exceeded the cumulative financial account balances (34 percent of GDP). Assessment. Vulnerabilities are low given the positive and sizable NIIP and its favorable composition. FX reserves are large and stable (135 percent of GDP at end-November 2021) and direct investments account for a large share of gross assets and liabilities (34 and 50 percent, respectively) while only 13 percent of gross liabilities are portfolio investments. 2021Q3 (% GDP) NIIP: 589 Gross Assets: 1,774 Debt Assets: Gross Liab.: 1,185 Debt Liab.: 433 595(2021Q2) (202102)Current Background. The CA surplus is expected to widen to 7.5 percent of GDP in 2021, from 6.9 percent in 2020. The trade surplus is Account expected to narrow due to a larger goods deficit arising from stronger domestic demand and service surplus to remain largely unchanged with continued strict travel restrictions amid the pandemic, while the income balance would improve further driven by strong portfolio investment income flows. From a longer-term perspective, the gradual decline in private saving, driven by robust consumption growth, a tight labor market, and wealth effects related to the strong housing market, accounted for most of the drop in the CA surplus from its peak of 15 percent of GDP in 2008. The CA balance is projected to gradually decline to about 4.0 percent of GDP over the medium term. Assessment. On a preliminary basis, after adjusting for cyclical factors and for the transitory impact of the COVID-19 crisis on the travel (including tourism) and medical sectors (adjustments of 0.7 and -0.8 percent of GDP respectively), the CA surplus is expected to be 7.2 percent of GDP in 2021, within the staff-assessed CA norm range of 5.0 to 8.0 percent of GDP. The staffassessed CA gap range is hence around -0.8 to 2.2 percent of GDP with a midpoint of 0.7 percent. Since Hong Kong SAR is not in the EBA sample, the CA norm was estimated by applying EBA-estimated coefficients to Hong Kong SAR and was adjusted for measurement issues related to the large valuation effects in the NIIP and the discrepancies between stocks and flows.<sup>2</sup> CA: 7.5 Cycl. Adj. CA: 7.2 EBA Norm: — EBA Gap: — COVID-19 Adj.: -0.1 Other Adj.:-0.3 Staff Gap: 0.7 2021 (% GDP) **Real Exchange** Background. Under the currency board arrangement, REER dynamics are largely determined by the USD developments and Rate inflation differentials between the U.S. and Hong Kong SAR. In line with the USD, after appreciating by about 20 percent between 2012-20, the REER depreciated by about 5 percent in 2021 compared to its 2020 average. Assessment. Staff assesses the REER gap, based on the staff-assessed CA gap range, to be in the range of -5.7 to 2.0 percent, with a midpoint of -1.8 percent (based on the average CA-REER elasticity of about 0.4).<sup>3</sup> **Capital and** Background. As an international financial center, Hong Kong SAR has an open capital account. Non-reserve financial flows Financial turned into a net outflow of US\$31 billion in the first three guarters of 2021, from net inflows of US\$3 billion in 2020, largely Accounts: driven by portfolio investment outflows. The financial account is typically very volatile, reflecting financial conditions in Hong Flows Kong SAR and Mainland China (transmitted through growing cross-border financial linkages),<sup>4</sup> shifting expectations of U.S. and Policy monetary policy, and related arbitraging in the FX and rates markets. Measures Assessment. Large financial resources, proactive financial supervision and regulation, and deep and liquid markets should help limit the risks from potentially volatile capital flows. The greater financial exposure to Mainland China could also pose risks to financial sector through real sector linkages particularly trade and tourism, credit exposures of the banking sector, and fundraising by Mainland firms in local financial markets. However, Hong Kong SAR's banking system is assessed to be broadly resilient to macro-financial shocks with its high capital buffers and profitability. **FX** Intervention Background. The HKD continues to trade in a smooth and orderly manner within the Convertibility Zone during the pandemic crisis. Total reserve assets decreased to around 135 percent of GDP at end-November 2021 (or 1.8 times the monetary base) from and Reserves Level 142 percent of GDP at end-2020. Assessment. FX reserves are currently adequate for precautionary purposes and should continue to evolve in line with the automatic adjustment inherent in the currency board system. Despite a large fiscal deficit in 2020 and 2021, Hong Kong SAR still

holds significant fiscal reserves (about 30 percent of GDP at end-November 2021) built up through a track record of strong fiscal
discipline in previous years.

<sup>1</sup> Given the lack of full-year data for 2021 and the uncertainty from the ongoing COVID-19 crisis, a complete analysis will be provided in the 2022 External Sector Report.

<sup>2</sup> 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 EBAestimated coefficients and apply them to Hong Kong SAR. Following this approach, the CA norm in 2021 is estimated to be about 16.0 percent of GDP, implying a CA gap of -8.7 percent, which is almost entirely explained by the model residuals. The EBA CA gap is overstated as it does not properly reflect the measurement issues that are relevant for Hong Kong SAR, for which three adjustments are made. First, an adjustment of 3-5 ppt with a midpoint of 4 ppt is made to EBA's implied contribution of the NIIP position. This is because the positive NIIP contribution in EBA captures average income effects that are less relevant for Hong Kong SAR since the income balance relative to its NIIP is systematically lower than other peer economies, due to a persistently higher share of debt instruments on the asset side than on the liability side. Second, the opening of the Precious Metals Depository has resulted in a decline of 4-4½ ppt with a midpoint of 4¼ ppt in the gold trade balance that does not reflect changes in wealth but rather the increased physical settlement of gold futures contracts. Third, Mainland China's increased on shoring has led to a decline in logistics and trading activities in Hong Kong SAR (1-1½ ppt with a midpoint of 1¼ ppt), which did not result in lower consumption because it is viewed as temporary and to be replaced with increased provision of high value-added services as Hong Kong SAR's own economy rebalances in response to Mainland demand. See "<u>People's Republic of China—</u> <u>Hong Kong Special Administrative Region: Selected Issues</u>" (Country Report No. 17/12) for more details.

<sup>3</sup> The range is calculated by applying the average semi-elasticities of Hong Kong SAR and similar economies.

<sup>4</sup> The financial linkages with the Mainland have deepened in recent years with the increase in cross-border bank lending, capital market financing, and the internationalization of the RMB. As of end-September 2021, banking system claims on Mainland non-bank entities amounted to HK\$6.9 trillion, or about 245 percent of GDP, up by about 8 ppt from end-2020.

# **Appendix III. Risk Assessment Matrix<sup>1</sup>**

Source of risk	Likelihood	Expected Impact and Policy Advice
	External	
1. Uncontrolled COVID-19 local outbreaks and subpar/volatile growth. Outbreaks in slow-to-vaccinate countries force new lockdowns. For many emerging markets and low-income countries, policy response to cushion the economic impact is constrained by lack of policy space, with some market access countries facing additional financial tightening as a reassessment of growth prospects triggers capital outflows, depreciations, and debt defaults.	High	<b>High.</b> A sudden surge in COVID-19 outbreaks and the continuation of the zero-COVID tolerance strategy could further delay border re-opening and the recovery in private consumption. Macroeconomic policy should step up if growth falters. Hong Kong SAR has fiscal space to revert to an expansionary stance if needed, with the composition of fiscal stimulus decisively shifting to targeted support for vulnerable and low-income households.
2. De-anchoring of inflation expectations in the U.S. leads to rising core yields and risk premia. A fast recovery in demand (supported by excess private savings and stimulus policies), combined with COVID-19-related supply constraints, leads to sustained above-target inflation readings and a de-anchoring of expectations. The Fed reacts by signaling a need to tighten earlier than expected. The resulting repositioning by market participants leads to a front-loaded tightening of financial conditions and higher risk premia, including for credit, equities, and emerging and frontier market currencies.	Medium	<b>High.</b> A sharp rise in global risk premia compounded by U.SChina tensions, large capital outflows, large housing market corrections, and a potential shift in market confidence for Hong Kong SAR as a major international financial center, could potentially affect the flow of capital and threaten financial stability and growth. Targeted fiscal support should be provided as needed. Financial stability should be ensured through macroprudential measures and liquidity provision.
<b>3. Disorderly transformations.</b> COVID-19 triggers structural transformations, but the reallocation of resources is impeded by labor market rigidities, debt overhangs, and inadequate bankruptcy resolution frameworks. This, coupled with a withdrawal of COVID-19-related policy support, undermines growth prospects and increases unemployment, with adverse social/political consequences. Adjustments in global value chains and reshoring (partly driven by geostrategic and national security concerns) shift production activities across countries.	Medium	<b>Medium.</b> Renewed escalation in trade tensions increased decoupling pressure and large-scale defaults in Mainland China's real estate sector could prompt negative spillovers to Hong Kong SAR's economy, depress confidence, increase financial market volatility and reduce investment. The authorities should provide targeted fiscal stimulus with continued efforts on medium-term reforms and safeguard financial stability through macro-prudential measures and liquidity provision. Further strengthen the regulatory and prudential frameworks to address pockets of vulnerabilities.
<b>4. Intensified geopolitical tensions and security risks.</b> Geopolitical tensions in selected countries/regions cause economic/political disruption, disorderly migration, higher volatility in commodity prices (if supply is disrupted), and lower confidence, with spillovers to other countries.	High	Medium. U.SChina tensions, social unrest and heightened uncertainty could further weaken economic sentiment amid the pandemic, delaying recovery. Deploy temporary and targeted fiscal stimulus with emphasis on low-income and vulnerable households. Continue to adopt policies to ease housing supply constraints by ensuring an adequate supply of land and accelerating the supply of public housing. Safeguard financial stability through macro-prudential measures and liquidity provision.
	Domestic	
<b>5. Disorderly correction of house prices.</b> A disorderly house price correction could trigger an adverse feedback loop between house prices, debt service ability of households, and lower consumption, with weakening growth leading to a second-round effects on banks' balance sheets.	Medium	<i>High.</i> Relax macroprudential measures and provide targeted fiscal support if needed. Safeguard financial stability and stand ready to provide liquidity through existing facilities.

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

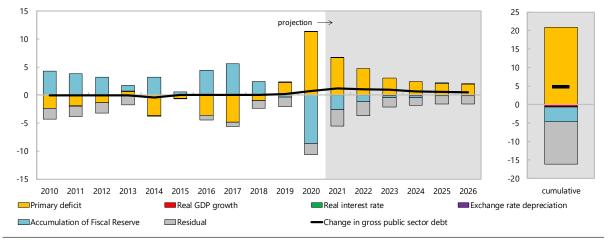
## **Appendix IV. Debt Sustainability Analysis**

### **Figure 1. Hong Kong SAR: Public Sector DSA – Baseline Scenario** (In percent of GDP unless otherwise indicated)

Debt, Economic and Market Indicators <sup>1/</sup>												
	Actua	Actual			Projections						uary 11, 20	22
	2010-2018 2/	2019	2020	2021	2022	2023	2024	2025	2026	Sovereign	Spreads	
Nominal gross public debt	0.3	0.3	1.0	2.2	3.2	4.2	4.8	5.3	5.8	EMBIG (br	o) 3/	
Public gross financing needs	-3.2	0.6	9.4	3.7	2.2	1.4	1.3	0.8	0.8	5Y CDS (b	p)	25
Real GDP growth (in percent)	3.4	-1.7	-6.1	6.4	3.0	3.0	2.9	2.8	2.8	Ratings	Foreign	Local
Inflation (GDP deflator, in percent)	2.7	2.0	0.6	0.2	2.0	2.1	2.2	2.3	2.3	Moody's	Aa3	Aa3
Nominal GDP growth (in percent)	6.1	0.3	-5.5	6.7	5.0	5.2	5.1	5.1	5.2	S&Ps	AA+	AA+
Effective interest rate (in percent) 4/	4.9	9.5	2.5	2.4	1.7	1.7	1.9	2.0	2.1	Fitch	AA-	AA-

### **Contribution to Changes in Public Debt**

	Actu					F	Projections				
	2010-2018	2019	2020	2021	2022	2023	2024	2025	2026	Cumulative	Debt-stabilizing
											Primary Balance <sup>10/</sup>
Primary deficit	-2.1	2.3	11.3	6.6	4.7	3.1	2.4	2.1	2.0	20.9	-0.2
Primary (noninterest) revenue and gra	ants 20.4	19.1	19.0	18.6	19.1	20.2	20.4	20.5	20.6	119.3	
Primary (noninterest) expenditure	18.4	21.4	30.3	25.3	23.8	23.2	22.8	22.5	22.5	140.2	
Automatic debt dynamics 5/	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.2	-0.6	
Interest rate/growth differential 6/	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.2	-0.6	
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	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.6	
Exchange rate depreciation 7/	0.0	0.0	0.0								
Residual, including asset changes <sup>8/</sup>	-1.2	-1.7	-1.9	-2.9	-2.6	-1.7	-1.3	-1.5	-1.4	-11.4	
Change in gross public sector debt	-0.1	0.2	0.7	1.2	1.1	0.9	0.6	0.5	0.5	4.8	
Change in fiscal reserves <sup>9/</sup>	3.2	-0.4	-8.6	-2.5	-1.1	-0.4	-0.3	0.1	0.1	-4.1	



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/ Not available for Hong Kong SAR

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

 $5/ \text{ Derived as } [(r - \pi(1+g) - g + ae(1+r)]/(1+g + \pi + g\pi)) \text{ times previous period debt ratio, with } r = \text{ interest rate; } \pi = \text{ growth rate of GDP deflator; } g = \text{ real GDP growth rate; } real GDP deflator; } g = \text{ real GDP growth rate; } real GDP deflator; } g = \text{ real GDP growth rate; } real GDP deflator; } g = \text{ real GDP growth rate; } real GDP deflator; } g = \text{ real GDP growth rate; } real GDP deflator; } g = \text{ real GDP growth rate; } real GDP deflator; } g = \text{ real GDP growth rate; } real GDP deflator; } g = \text{ real GDP growth rate; } real GDP deflator; } g = \text{ real GDP growth rate; } real GDP deflator; } g = \text{ real GDP growth rate; } real GDP deflator; } g = \text{ real$ 

a = share of foreign-currency denominated debt; and e = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

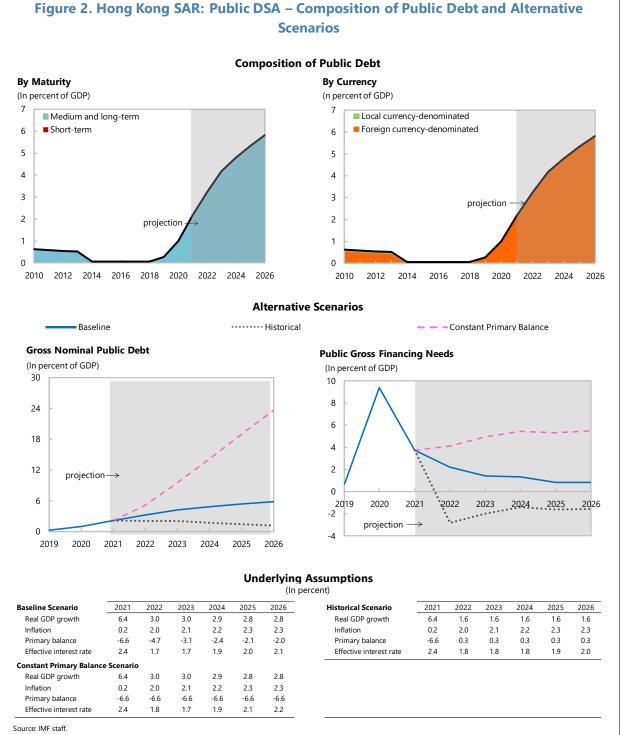
6/ The real interest rate contribution is derived from the numerator in footnote 5 as  $r - \pi (1+g)$  and the real growth contribution as -g.

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

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

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

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



# **Appendix V. Unemployment Benefits<sup>1</sup>**

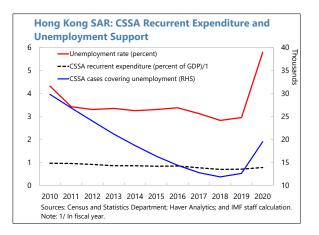
The experience of this pandemic crisis has highlighted the role of adequate social safety nets in supporting livelihoods and ensuring resilience against systemic shocks. It offers an opportunity for an in-depth review of the unemployment benefits system in Hong Kong SAR, including its role as an automatic stabilizer.

1. The significant job losses at the onset of the pandemic exposed gaps in the social safety net. During the COVID-19 crisis, the seasonally-adjusted unemployment rate reached 7.2 percent for a three-month period ending in February 2021. While the unemployment rate has declined to 3.9 percent in December 2021 with the economic recovery, continued border closure, uneven sectoral recovery, and potential scarring effects following the pandemic imply longer adjustment in the labor market, suggesting that some would remain jobless for a longer period (see Appendix I).

2. In the absence of a formal unemployment benefit system, support for the unemployed in Hong Kong SAR is provided through a means-tested social safety net. A key pillar of the social safety net is the Comprehensive Social Security Assistance (CSSA) Scheme that provides a broad range of supports to meet basic needs.<sup>2</sup> The CSSA design encompasses different types of groups with low incomes, such as the unemployed, the elderly, and low-income families. Households with income and assets below threshold levels are entitled to these benefits subject to fulfilment of other eligible criteria, such as residence requirements. However, CSSA's budget has remained below one percent of GDP over the last decade and about 60 percent of total cases covered by the CSSA Scheme as of August 2021 are for old age support.

# **3.** Large temporary COVID-19 relief measures have supported domestic demand and **livelihoods in general throughout the crisis, but support for the unemployed is limited.** One-off relief programs for households and enterprises such as cash payouts and an employment

support scheme have provided prompt support to cushion the income shock from the crisis. However, unemployed individuals are entitled to limited further support. The CSSA Scheme provides financial support for unemployed individuals to meet their basic needs. However, while the number of CSSA cases covering unemployment support increased by 55 percent (y/y) to about 19,500 cases by end-2020, the increased coverage remains limited against the surge in unemployed persons. Some support to unemployed individuals



<sup>&</sup>lt;sup>1</sup> Prepared by Céline Thévenot and Yu Ching Wong.

<sup>&</sup>lt;sup>2</sup> Other social security programs include the Social Security Allowance (SSA) Scheme that provides Old Age Allowance, Old Age Living Allowance, and Disability Allowance.

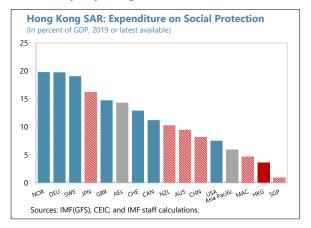
is provided by the statutory severance payment (SP) and long service payment (LSP) covering eligible employees with a qualifying period of employment, but they do not play the usual unemployment protection function.<sup>3</sup> In addition, available statistics suggest that the unemployed remain so for a longer duration than prior to the crisis. The median duration of all unemployed has increased from 65 days in April-June 2019 to 154 days in Feb-Apr 2021 before shortening to 112 days in Aug-Oct 2021. This raises concerns about worsening long-term unemployment, skills obsolescence, and rising inequality.<sup>4</sup>

4. In reaction to the COVID-19 crisis, many countries have actively enhanced their automatic stabilizers by expanding social safety nets. Expanding social safety nets, especially unemployment benefit systems, can protect household incomes and strengthen resilience against systemic shocks. Unemployment benefits have been expanded, for example, by extending their duration, raising benefit levels, or relaxing eligibility rules. In economies with limited automatic stabilizers in place, as in the case of Hong Kong SAR, the need for discretionary measures is greater in the event of a systemic shock.

5. Given the available fiscal space, Hong Kong SAR could further increase the adequacy and coverage of social assistance benefits. Hong Kong SAR maintains a tax regime combining low tax rates and a non-contributory social welfare system. Despite large fiscal reserves at about 30 percent of GDP as of end-November 2021, the level of social welfare spending stood at 3.7 percent of GDP in 2020, well below the average of about 14 percent for advanced economies. Key areas to strengthen the current system include better protecting the unemployed by: (i) strengthening the share of unemployed people covered by the CSSA Scheme by including those who are entitled but not claiming the benefit; (ii) easing the eligibility rules so that an income replacement is provided to individuals before they reach very low income levels, for instance by adjusting the asset test; and (iii)

assessing the level of the benefit so that it allows an adequate living standard in comparison with the rest of society. As the crisis abates, such measures could be conditioned on participation in active labor market programs, including retraining for those previously employed in sectors or firms unlikely to fully recover from the economic shock.

# 6. Hong Kong SAR could consider introducing a dedicated unemployment benefit system to



better protect individuals against idiosyncratic and

<sup>&</sup>lt;sup>3</sup> The qualifying period of employment for SP (LSP) is not less than 24 months (five years) under a continuous contract. The maximum amount of SP/LSP is HK\$390,000, calculated at two-thirds of an employee's last full month's wages (capped at HK\$22,500) for every reckonable year of service.

<sup>&</sup>lt;sup>4</sup> Other <u>data</u> indicated that the proportion of unemployed persons with unemployment duration of six months and above increased to 41.3 percent in 2020Q4 from 21.5 percent in 2020Q1. The latest figure, Aug -Oct 2021, remained at a similar level of 40.1 percent, in conjunction with the decline in the number of long -term unemployed persons as the overall unemployment situation improved.

systemic shocks. Such an unemployment benefit system could comprise of: (i) an unemployment insurance program financed from contributions—which can be capped at a given level;—and (ii) a mean-tested unemployment assistance program financed by government revenues for those who have either not contributed sufficiently to be entitled to unemployment insurance or have exhausted their insurance benefits.<sup>5</sup> Such benefits could be set at a level high enough to ensure a higher living standard than social assistance, but also limited enough compared to labor incomes to maintain incentives to work.<sup>6</sup> They could be complemented by increased spending in retraining and assisting jobseekers. The CSSA Scheme would continue to support poor individuals not covered by the program.

7. The government could also consider developing transitional programs in the near term to immediately augment unemployment supports. For example, increasing budget allocation to the CSSA Scheme, greater flexibility in the time-bound measures, and appropriate relaxation of eligibility criteria could ease the hurdle for the unemployed to receive adequate support under the current CSSA Scheme.

<sup>&</sup>lt;sup>5</sup> IMF, Fiscal Monitor, April 2020.

<sup>&</sup>lt;sup>6</sup> "Guaranteed Minimum Income Schemes in Europe: Landscape and Design," IMF Working Paper 21/179.

# **Appendix VI. Potential Impact of Global Tax Reforms<sup>1</sup>**

The global community has agreed to reform the international corporate tax system around two areas: relocation of taxing rights and minimum tax. As Hong Kong SAR is a key global business and investment hub in the region for many multinational enterprises with relatively lower corporate income tax, these reforms could have an important impact on its fiscal revenues and competitiveness.

### 1. In October 2021, 136 (out of 140) jurisdictions within the OECD-led Inclusive Framework (IF) have agreed to a "two-pillar" solution to reform the international corporate tax system.<sup>2</sup>

- Pillar One is to reallocate some taxing rights over multinational profits from where companies are based to where the services or goods are consumed. This residual profit allocation mechanism applies to the largest and most profitable multinational enterprises (MNEs) with global sales above €20 billion, under which 25 percent of the residual profit exceeding the routine profit at the profitability threshold of 10 percent would be distributed among market jurisdictions.
- Pillar Two is to create a global minimum corporate income tax rate and subject the profits of multinationals to supplemental tax in the home country. The IF has agreed on a minimum global effective tax rate of 15 percent for companies with revenue above €750 million.

### 2. Under Pillar One, Hong Kong SAR could lose some of its corporate income tax

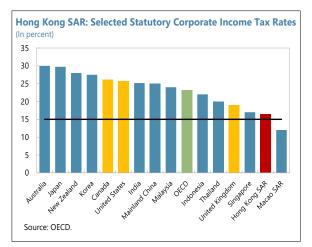
**revenues.** There remains some uncertainty about calculation methodologies as well as the removal of unilateral digital services taxes by some jurisdictions. However, once Pillar One becomes effective in 2023, Hong Kong SAR could lose its tax revenues as many MNEs are headquartered in the jurisdiction, accounting for about 6 percent of global residual profits. A recent preliminary study shows that the potential tax revenue loss could amount to about 0.16 percent of GDP if Pillar One is applied to all industries.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Prepared by Yu Ching Wong.

<sup>&</sup>lt;sup>2</sup> See "<u>Corporate Taxation in the Global Economy</u>," IMF Policy Paper No. 19/007.

<sup>&</sup>lt;sup>3</sup> See "<u>Digitalization and Taxation in Asia</u>," IMF Departmental Paper, DP/2021/017.

3. Pillar Two could also pose challenges for Hong Kong SAR's corporate tax regime characterized by simple and low corporate tax rates. Hong Kong SAR has a statutory corporate income tax rate of 16.5 percent, higher than the agreed minimum rate of 15 percent. However, there are several preferential regimes for granting tax breaks and exemption for specific activity. Hence, effective tax rates for some MNEs are lower than 15 percent, and thereby subject to pay top-up tax in their home countries once a global minimum corporate tax rate is implemented in 2023.



However, the overall impact remains uncertain as a low corporate tax rate is only one of many factors that attracts MNEs to Hong Kong SAR.

### 4. The Hong Kong SAR government is committed to the implementation of global tax

**reforms**. The government has set up an Advisory Panel in June 2020 to review the impact on the competitiveness of the business environment, and has made recommendations to the government on the response measures as the OECD finalized the technical details of the reform package.

# Appendix VII. Summary of Property Market Measures Introduced Since 2009

Date		LTV Measures 1/		Other Measures
	Price Range	LTV Cap	Max Loan Amount	
October 2009	Greater than or equal to HK\$20mn	60 percent (previously 70 percent)		
	Less than HK\$20mn	Remains 70 percent	HK\$12mn	
August 2010	Greater than or equal to HK\$12mn	60 percent (previously 70 percent for properties valued between HK\$12mn and HK\$20mn)		<ul> <li>Debt-service-to-income ratio (DSR) capped at 50 percent for all income groups (previously was 60 percent for high income groups)</li> <li>The stressed DSR would not exceed</li> </ul>
	Less than HK\$12mn	Remains 70 percent	HK\$7.2mn	60 percent, were mortgage rates to go up by 2 percentage points
	Not owner- occupied, any price range	60 percent (previously 70 percent)		
November 2010	Greater than or equal to HK\$12mn	50 percent (previously 60 percent)		<ul> <li>Special Stamp Duty set at</li> <li>15 percent for residential properties resold within first six months of</li> </ul>
	Greater than or equal to HK\$8mn and less than HK\$12mn	60 percent (previously 70 percent)	HK\$6mn	<ul> <li>purchase</li> <li>10 percent if resold between six and 12 months</li> <li>5 percent if resold between 12 and</li> </ul>
	Less than HK\$8mn	Remains at 70 percent	HK\$4.8mn	24 months
	owner-occupied re a company and inc	ent (previously 60 percent) sidential properties, prope dustrial and commercial pro roperty mortgage loans.	rties held by	
June 2011	Greater than or equal to HK\$10mn	50 percent		
	Greater than or equal to HK\$7mn and less than HK\$10mn	60 percent (previously 70 percent for properties valued less than HK\$8mn)	HK\$5mn	
	Less than HK\$7mn	Remains at 70 percent	HK\$4.2mn	
	borrowers with ma Kong SAR for resid	y further 10 percentage po in income derived from ou lential and non-residential orth based mortgage loans	tside Hong properties.	
	from 50 percent to	40 percent, irrespective of al and non-residential prop	property	

Date		LTV Measures 1/		Other Measures
	Price Range	LTV Cap	Max Loan Amount	
September 2012	outstanding prope with multiple prop mortgage applicat commercial prope (i) LTV cap lowered borrowers with SAR; and (ii) LTV cap for net-	Remains at 50 percent Remains at 60 percent Remains at 60 percent Remains at 70 percent Remains at 50 percent enty mortgage loans for on- erties under mortgages) at ion (including residential, i rties): d by further 20 percentage main income from outside worth based mortgage loa t to 30 percent, irrespective	e or more (i.e., the time of a ndustrial, and points for Hong Kong ans lowered	<ul> <li>For applicants with multiple properties under mortgages (including residential, industrial and commercial properties):         <ul> <li>(i) Base DSR capped at 40 percent for all income groups (previously was 50 percent); and</li> <li>(ii) Stressed DSR would not exceed 50 percent were mortgage rates to go up by 2 percentage points (previously was 60 percent)</li> </ul> </li> <li>Mortgage applicants for residential and non-residential properties without outstanding mortgages were not subject to the DSR limits reduction, i.e., with base DSR cap of 50 percent (by 2 percentage points hike assumption)</li> <li>Maximum tenor of all new property mortgage loans capped at 30 years</li> </ul>
October 2012 February 2013	Greater than or equal to HK\$10mn Greater than or equal to HK\$7mn and less than	Remains at 50 percent Remains at 60 percent	HK\$5mn	<ul> <li>Buyer's Stamp Duty set at 15 percent for all residential property transactions except local (i.e. Hong Kong SAR permanent resident) buyer</li> <li>Special Stamp Duty raised to 20 percent for residential properties resold within first six months of purchase, 15 percent if resold between six and 12 months, 10 percent if resold between 12 and 36 months</li> <li>For applicants with multiple properties under mortgages, DSR 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</li> </ul>
	HK\$10mn Less than HK\$7mn Not owner-occupied, any price range	Remains at 70 percent Remains at 50 percent	HK\$4.2mn	was by 2 percentage points) for all types of properties including residential as well as commercial and industrial properties

Date		LTV Measures 1/		Other Measures
	Price Range	LTV Cap	Max Loan Amount	
February 2013 (continued)	mortgage loans 50 percent • LTV cap for star	ustrial and commercial p s at 40 percent; previous idalone car park spaces maximum tenor at 15 y	was set at	<ul> <li>Mortgage applicants for residential and non-residential properties without outstanding mortgage were not subject to the DSR limits reduction—i.e., with base DSR cap of 50 percent and stressed DSR cap of 60 percent (by 3 percentage points hike assumption increased from previously 2 percentage points)</li> <li>Risk weight floor of 15 percent introduced on new residential mortgages for banks using IRB approach</li> <li>Ad valorem Stamp Duty raised from the scale of \$100 to 4.25 percent to the scale of 1.5 percent to 8.5 percent, applicable to both residential and non-residential properties, except for residential properties acquired by local buyers who do not own any other residential property in Hong Kong SAR at the time of purchase or whose purchase is to replace their only residential property in Hong Kong SAR</li> </ul>
February 2015	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 60 percent (previously 70 percent) Remains at 50 percent	: HK\$5mn	<ul> <li>DSR for borrowers who buy a second residential property for self-use properties, including residential properties, commercial and industrial properties and car park spaces, capped at 40 percent; 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 from reduction in existing DSR caps</li> <li>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</li> </ul>

Date		LTV Measures 1/		Other Measures
	Price Range	LTV Cap	Max Loan Amount	
November 2016				<ul> <li>Ad valorem Stamp Duty on residential properties raised to a flat rate of 15 percent (also known as the New Residential Stamp Duty) except local buyers who do not own any other residential property in Hong Kong SAR at the time of purchase or whose purchase is to replace their only residential property in Hong Kong SAR</li> </ul>
April 2017				<ul> <li>New Residential Stamp Duty applied to purchases of multiple residential properties under a single instrument</li> </ul>
May 2017 June 2018	Greater than or equal to HK\$10mn Less than HK\$10mn Not owner- occupied, any price range	Remains at 50 percent Remains at 60 percent Remains at 50 percent	HK\$5mn	<ul> <li>LTV cap lowered by 10 percent points for applicants with multiple properties under mortgages (including residential, industrial and commercial properties).</li> <li>For self-occupied or without outstanding mortgage, DSR ratio capped at 50 percent; the stressed DSR would not exceed 60 percent were mortgage rates to go up by 3 percentage points</li> <li>DSR caps lowered by 10 percent points for pre-existing mortgages or non-self-occupied.</li> <li>DSR caps lowered by 10 percent points for applicants whose income is mainly derived from outside Hong Kong SAR.</li> <li>Risk weight floor of 25 percent (previously 15 percent) for all new residential mortgages and 15 percent for all existing residential mortgages for banks using IRB approach</li> <li>Required developers to offer no less</li> </ul>
				<ul> <li>than 20 percent of the total number of flats subject to the same pre-sale consent at each turn of sale.</li> <li>Proposed to introduce "Special Rates" on unsold or unleased first- hand private flats at 200 percent of the flat's ratable value (roughly 5 percent of the property value). The bill to implement the "Special Rates" was introduced into the Legislative Council for scrutiny in October 2019, but was withdrawn in October 2020.</li> </ul>

Date	LTV Measures 1/		Other Measures	
	Price Range	LTV Cap	Max Loan Amount	
August 2020	Greater than or equal to HK\$10mn	Remains at 50 percent		<ul> <li>LTV caps for mortgage loans on non-residential properties are adjusted upward by 10 percentage</li> </ul>
	Less than HK\$10mn	Remains at 60 percent	HK\$5mn	points, from 40 percent to 50 percent for general cases.
	Not owner- occupied, any price range	Remains at 50 percent		
1/ Refer to residential properties, unless otherwise indicated.				

# Appendix VIII. Implementation of the 2021 FSAP Recommendations<sup>1</sup>

Recommendations	Status
Strengthening Systemic Risk Monitoring	
Continue to monitor Authorized Institutions' concentrated exposures to non-bank mainland China entities, particularly of banking groups with foreign bank branches and subsidiaries. [HKMA]	Progress: On track Banks' Mainland-related exposures continue to be a supervisory priority of the HKMA. Substantial supervisory resources are being devoted to the surveillance of banks' relevant risk exposures as well as onsite and offsite reviews of the risk controls. Supervisory actions are being taken in respect of banks with concentrated exposures to Mainland borrowers such as requiring banks to put in place risk mitigation measures and/or plans to rein in the relevant concentrated exposures. In recent years, the HKMA has stepped up surveillance of major Mainland borrowers in vulnerable sectors such as property development focusing on their financial strength and repayment ability, as well as the implication on the banking sector. Close communication is maintained with banks to ensure relevant exposures are being carefully monitored.
	Foreign bank branches (FBBs) and local subsidiaries are subject to the same supervisory requirements to set appropriate internal limits for different type of risk exposures to manage concentration risk. Reviews are conducted from time to time to ensure FBBs' compliance with the said supervisory requirements. The HKMA will also conduct thematic examinations of banking groups with both FBBs and subsidiaries in Hong Kong SAR to assess whether consistent and prudent principles are applied in underwriting loans to non-bank Mainland entities and identify whether there is any risk of regulatory arbitrage.
Reassess the need for amending the regulatory	Progress: On track
perimeter to monitor non-deposit-taking finance companies and leakages to macroprudential policy. [Hong Kong SAR Authorities]	In coordination with the FSTB and other regulatory authorities where necessary, the SFC has been responding proactively to changing markets and new regulatory challenges with a

<sup>&</sup>lt;sup>1</sup> Information provided by the Hong Kong SAR authorities.

	view to: (i) identifying, assessing and managing risks in a timely manner; (ii) continuing reviewing the effectiveness and relevance of its past regulatory decisions; and (iii) determining whether additional measures at the sectoral level are needed, or even to bring in previously unregulated activity into the perimeter of regulation. As non-deposit-taking finance companies are outside of its regulatory purview, the HKMA will continue to support the relevant authorities to take forward this recommendation, with a view to protecting the integrity of its macroprudential measures. Moreover, the Registrar of Money Lenders conducts annual surveys to monitor the landscape of the licensed money lenders sector. One of the indicators under close watch is the amount of personal loans secured by residential properties for financing the purchase of the properties, which amounted to about \$23 billion as at end-2020, slightly lower than \$24 billion as at end-2019. Furthermore,
	compared to the amount of loans made by banks for the same purpose in 2020, the portion of loans made by money lenders was minimal (around 1.4 percent). The systemic risk posed by the licensed money lending sector to the financial system remained generally low.
Ensure sufficiently forward-looking internal risk models for capital charge for mainland China real estate borrowers with low credit ratings. [HKMA]	Progress: On track The HKMA will continue to ensure that banks' internal risk models used to determine the capital charge for potential high-risk Mainland borrowers are sufficiently forward-looking during model reviews and approval. Furthermore, the HKMA plans to conduct ad hoc reviews to scrutinize IRB banks' internal risk models adopted for the concerned exposures. The reviews intend to cover various modelling aspects such as methodologies, use of forward-looking elements in risk models, the latest model performance and robustness of recognizing the risk mitigating effect of guarantees.
Integrate all bank liquidity stress tests, streamline reporting, and enhance monitoring of liquidity position of foreign branches that appear more vulnerable. [HKMA]	<b>Progress: On track</b> The HKMA will study how to enhance the reporting requirements in light of the FSAP recommendation on the HKMA's supervisory liquidity stress testing (SLST). Upon implementation of the enhanced reporting requirements, the HKMA will further enhance

	the SLST framework by making use of the data collected from the enhanced returns. According to the liquidity stress test conducted by the FSAP team, some foreign bank branches (FBBs) appeared more vulnerable under a three-month stress horizon. In view of this, the HKMA is currently developing a three-month SLST with reference to the FSAP approach. The three-month SLST will cover both local banks and major FBBs (including those identified by FSAP as more vulnerable) with a view to enhancing the ongoing monitoring of their liquidity positions under a longer stress horizon. Banks having a liquidity shortfall under the SLST will be followed up so that the vulnerabilities identified can be properly addressed or mitigated.
Integrate monitoring and stress testing of investment funds' liquidity in the supervisory framework and increase granularity of data collation. [SFC]	<b>Progress: Under consideration</b> The SFC has been requiring fund managers to implement adequate liquidity risk management policies and procedures. In particular, managers of SFC-authorized funds are required to perform ongoing liquidity risk assessment to assess the liquidity profile of their funds' liabilities and assets on a regular basis and perform liquidity stress tests on their funds on an ongoing basis. The SFC reviews compliance during inspections. The SFC also continues to monitor fund managers' implementation and conducts ad-hoc enquiries to specific fund managers for more granular data in response to latest market development. While some residual liquidity risks remain under the severe scenario of funds experiencing the worst percentile of their historical outflows, they are unlikely to affect asset prices substantially. In view of the international regulatory development, the SFC is consulting the industry to update the data collection framework to collect more granular data from fund managers for supervisory and monitoring purpose.
Monitor non-mortgage household debt; ensure consistency of risk guidelines among regulators on investment credit to high-net- worth individuals. [HKMA/SFC]	<b>Progress: Implemented</b> The HKMA continues to closely monitor the trend of household indebtedness, including gathering data and analyzing different components of household debt. The HKMA has completed a review in 2021 on the guidance to banks on credit risk management of share margin lending business and investment loans for wealth management customers including high-net-worth

	individuals, and issued a guideline on the update to the HKMA's supervisory policy in relation to share margin financing. Close communication with SFC has been maintained throughout the process to ensure consistency. The HKMA will proactively assess whether Als conduct their business prudently by stepping up surveillance and collection of data on banks' collateral portfolio, to facilitate formulation of appropriate supervisory actions going forward. The SFC has issued new guidelines to provide guidance on risk management standards expected of brokers conducting securities margin financing activities. The new guidelines, which took effect on 4 October 2019, set out qualitative requirements and quantitative benchmarks for margin lending policies and key risk controls. The HKMA appeared to have considered the regulatory requirements and guidelines consistent in principles, with a focus on prudence.
Monitor the household debt repayment capacity at a disaggregated level.	<b>Progress: On track</b> The HKMA is using transaction-level data collected from banks under the Granular Data Reporting initiative to, among other things, monitor the debt servicing ratio of mortgage borrowers.
Consider incorporating non-financial corporates in the stress testing framework and communicate the key findings in HKMA's Monetary and Financial Stability Reports.	<b>Progress: On track</b> Some preliminary empirical works have already been conducted to estimate the liquidity and solvency risks of non-financial corporates under a Covid-19 shock. The details of the preliminary analysis can be found in box 4 of the <u>September 2020 issue of the HKMA's</u> <u>Monetary and Financial Stability Report</u> . Such analysis is currently under further enhancement and we plan to incorporate it in the stress testing framework going forward.
Enhance oversight over banking groups that have both foreign branches and local subsidiaries in HKSAR.	<b>Progress: On track</b> The HKMA has recently enhanced the oversight of banking groups, focusing on intragroup exposures including those between foreign branches and subsidiaries under the same group. For example, a couple of revisions to supervisory guidelines have been made since 2019 to step up the requirements on consolidated supervision and intragroup exposure limit setting. Collection of data in relation to intragroup exposures has also been strengthened to enable the HKMA to identify

	abnormal movements or transactions on an ongoing basis and facilitate necessary supervisory intervention. The HKMA is planning a round of thematic onsite examinations targeting banking groups which have both foreign branches and local subsidiaries in Hong Kong SAR to assess if there is any risk of regulatory arbitrage.
Heighten monitoring of liquidity risk at the group and entity level for banks that operate with multiple group entities.	<b>Progress: On track</b> The HKMA plans to conduct a round of thematic reviews of banks' intragroup liquidity risk management, covering banks operating with multiple group entities in Hong Kong SAR. Areas to be covered in the reviews include, among others, banks' management and control of liquidity support to/from group entities, and monitoring of contagion risk from group entities.
Stress test banks' large exposures separately	Progress: On track
from their total loan books.	With reference to FSAP's stress test on concentration risk, the HKMA will introduce a similar element in its Top-down Solvency Stress Test starting from the report on positions as of end-Dec 2021 scheduled to be completed in Q2 2022.
Macroprudential Policy Framework	
Strengthen the systemic risk monitoring and data collection framework; Continue leveraging analytical expertise of the HKMA/other regulators in CFR/FSC. [FSTB/HKMA/SFC/IA]	Progress: On track The existing high-level and cross-sectoral setup of the Council of Financial Regulators ("CFR") and Financial Stability Committee ("FSC"), with direct oversight by the Financial Secretary ("FS") and the Secretary for Financial Services and the Treasury ("SFST"), already allows the government to monitor and discuss cross-sectoral issues of regulatory concerns or systemic implications with financial regulators and relevant government agencies. The HKMA's most recent research, benefiting from its enhanced data collection framework,
	has used transactional big data to better monitor activities of non-deposit-taking finance companies in both the residential and

Enhance communication through a comprehensive and dedicated financial stability report. Financial Sector Supervision Update legislation to reflect HKMA's de facto	collected from authorized insurers on an annual basis. The data collection template covers, amongst others, the intersectoral linkages (i.e., inter-connectedness) with other financial institutions of an authorized insurer. <b>Progress: On track</b> Monthly Reports of the Financial Stability Committee (FSC) are submitted to the Financial Secretary's Office on a monthly basis. <b>Progress: No intention to implement</b>
Enhance data collection of intersectoral claims with a focus on claims of the non-bank financial institutions to better gauge the importance of intersectoral linkages. [FSTB/HKMA/SFC/IA]	<b>Progress: On track</b> The authorities note that the non-bank financial sector, including non-bank lending, is already covered in their monitoring. The government and the financial regulators will consider further measures to enhance monitoring of financial systemic risks and the need to expand the macroprudential regulatory regime to cover non-bank financial institutions ("NBFIs") as necessary having regard to any systemic risks identified. On the insurance front, sector-wide monitoring data set under IAIS Holistic Framework is being
	Report. Subject to data availability, the HKMA will use these transactional big data to enhance the systemic risk monitoring. Also, the HKMA continues to implement its monitoring framework for Hong Kong SAR's financial and monetary stability with input from different data sources (trade repository data, granular data on bank loans, textual analysis) which will be expanded as and when needed. Discussion with other regulators is also held from time to time to assess possible cross-sectoral matters with financial and monetary stability implications. On the insurance front, work is in progress to enhance the supervisory review process by including "outward risk" as part of the qualitative risk assessment in the annual Company Review Cycle. Criteria, indicators and thresholds for the risk assessment will be developed.

	respect to the exercise of their respective functions under the BO. The power vested in the CESAR to issue directions to the MA under Section 10 of BO reflects the HKSAR government's ultimate responsibility to formulate monetary and financial policies and supervise financial markets as enshrined in the Basic Law. Given that the power is included in the BO, it would have to be exercised in accordance with the objectives and functions of the BO and in practice would only be used as a tool of last resort to implement specific remedial measures in the most critical and extreme circumstances. Such power in fact has never been exercised. There is a deeply embedded constitutional and political convention of restraint such that any attempt to abuse the power would be politically untenable and subject to judicial review. These considerations, together with the institutional arrangements put in place to ensure a high degree of operational autonomy of the HKMA, provide strong backing for the Monetary Authority to exercise his supervisory power in an
Implement group-wide supervision and risk- based capital requirements as planned. [IA]	independent and professional manner. <b>Progress: On track</b> The group-wide supervision framework commenced on 29 March 2021, with the designation of three insurance holding companies under the framework on 14 May
	2021. For the risk-based capital regime, we are preparing the enabling legislative amendments for introduction into the Legislative Council in 2022, with the target of the regime coming into effect in 2024.
Assess systemic risk of individual insurers (potential FIRO designation), and cross-sector risks. [IA]	<b>Progress: On track</b> As part of the macroprudential supervision, the IA has been working on enhancing its tools and methodologies to assess both the inward and outward systemic risk to/from the Hong Kong SAR's insurance sector, including a methodology to assess the systemic risk of individual insurers for designation under the FIRO. The FIRO designation methodology is still under development. These tools and methodologies proposed/developed are in addition to the supervision work already being undertaken by the IA.

Enhance surveillance and monitoring of OTC	Progress: On track
trades. [SFC]	The HKMA will continue to explore the proposed initiative: "giving HKMA's oversight responsibility over HKCC's liquidity and settlement risks" with SFC, which is the regulator for HKCC. The SFC issued a consultation paper in December 2020 to consult the public on a proposal to introduce an OTC securities transactions reporting regime for certain activities relating to shares listed on the stock market operated by HKEX with a view to enhancing the surveillance of OTC trades. The
	consultation conclusions paper was issued in August 2021. Subject to the market readiness, the SFC plans to launch the OTC securities transactions reporting regime in the first half of 2023.
Expand enforcement powers over recognized	Progress: Under Consideration
exchange companies and clearing houses, and Part III Automated Trading System providers. [SFC]	In relation to the recommendation for expansion of enforcement powers (similar to the powers that the SFC has over Part V ATS providers) over recognized exchanges and Part III ATS providers, in particular the ability to impose monetary penalties, the SFC would need to consider further about whether such additional enforcement powers would further assist in achieving credible deterrence in the Hong Kong SAR market. The SFC has a wide range of regulatory powers
	that can be exercised in its supervision of recognized exchanges and Part III ATS providers, and the SFC addresses any relevant issues with the recognized exchanges and Part III ATS providers through the regular supervisory activities. For example, the SFC can make a suspension order on the functions of the board of directors of the recognized exchanges. In addition, the SFC has been supervising recognized exchanges and Part III ATS providers to strengthen corporate governance framework to achieve better
	compliance of relevant rules and procedures. The SFC and other law enforcement agencies also conduct enforcement action against any employee of recognized exchanges and Part III ATS providers committing criminal offences under the Securities and Futures Ordinance and other ordinances. Imposing monetary penalties on recognized exchanges and Part III ATS providers might not provide additional

	benefits in achieving the regulatory objectives in the short run.
Strengthen the current governance of the HKCC by setting up a proper HKCC board, an independent risk management committee, and decentralized key functions. [HKEX]	Progress: Not applicable The HKEX board engaged an independent consultant to help conduct a comprehensive review of HKEX group risk governance. The review was completed in 2021. The SFC notes that the key recommendations of the risk review include bolstering the ability of risk management to influence decision making, investing in adequate resources and tools for risk management, restructuring and upgrading the compliance function to improve regulatory engagement and internal controls, developing a structured framework to ensure proper subsidiary governance, and enhancing the HKEX board's oversight by clarifying its roles and responsibilities and improving interaction and information flows with management. If fully implemented, the SFC expects these recommendations to significantly improve the independence and effectiveness of HKEX's risk and conflict of interest management thereby addressing the IMF's concerns. The SFC is of the view that the need of making any fundamental changes to HKCC's governance structure should be considered only after the full implementation of the review recommendations.
Adopt a framework to ensure that its prudential mandate is not compromised by development initiatives.	Progress: On track The HKMA's objectives and functions are clearly focused on the effective working and general stability of the banking system (Banking Ordinance s. 7) and the stability and integrity of the monetary and financial systems (Exchange Fund Ordinance s. 3(1A)) of Hong Kong SAR. There is a strong tradition and commitment within the organization, communicated publicly, of recognizing such stability as a prerequisite and cornerstone for the maintenance of Hong Kong SAR's position as an international financial center. To the extent that action can be taken by the HKMA, using the resources of the Exchange Fund, under the Exchange Fund Ordinance "with a view to maintaining Hong Kong SAR as an international financial center" it must still be for the purpose of maintaining the stability and the integrity of the monetary and financial systems of Hong Kong SAR. Hence the healthy

	development of the banking system is consistent with the maintenance of stability. By way of example, whilst technologically advanced financial infrastructure may be developed, or action taken to increase the depth and breadth of the local debt markets, the underlying objective in each case remains the effective working and, by extension, the stability of the local financial system. Within the HKMA, there is clear delineation of responsibilities among departments the work of which contribute to the overall stability and development of Hong Kong SAR's financial system. The banking departments of the HKMA are primarily responsible for the prudential supervision and conduct supervision of banks, while some other departments are undertaking macro- surveillance, liquidity support, and market operations functions to ensure monetary stability. All in all, in planning for developmental work, an overarching consideration for the HKMA is the implications of the initiatives on monetary and financial stability.
Enhance the risk management framework of the HKCC, including giving HKMA's oversight responsibility over HKCC's liquidity and settlement risks and strengthening HKCC's capacity to manage credit and operational risks.	Progress: Not applicable See above responses.
Improve the AML/CFT regime, including enhancing prosecution of the laundering of proceeds from foreign offenses, increasing risk understanding, and strengthening supervision of certain nonfinancial sectors.	<b>Progress: On track</b> On understanding of money laundering/terrorist financing ("ML/TF") risk, the government is conducting the 2nd territory-wide AML/CTF risk assessment and aims to publish the report in 2022. The financial regulators, including the HKMA, the SFC and the IA, have been adopting a risk- based approach in their AML/CFT supervisory regime and engaging their respective sector on updating the ML/TF risk assessment. On strengthening the supervision of designated non-financial business and professions ("DNFBPs"), the DNFBP supervisors have stepped up efforts in ML/TF risk assessment and identification, as well as implementing risk-based supervision for the respective sectors. For example, the Hong Kong Institute of Certified Public Accountants and Estate Agent Authority have been conducting programs to understand the risks

	of individual firms and enhance their risk- based supervision. The Law Society of Hong Kong is preparing a draft questionnaire to understand the ML risk of individual law firms by January 2022, and developing a more robust risk-based supervision regime and devising mechanism to monitor the AML measures of law firms. The Companies Registry is also conducting profiling exercises for individual trust or company service providers to understand their ML/TF risks. Following the inclusion of DNFBPs including legal professionals, accounting professionals, estate agents, trust or company service providers under the regulatory framework of the Anti-Money Laundering and Counter- Terrorist Financing Ordinance (AMLO) since 1 March 2018, the Government plans to introduce a bill to amend the AMLO to introduce a bill to amend the AMLO to introduce a two-tier registration regime for dealers in precious metals and stones (DPMS) in the 2022 legislative session. Registered DPMS will also be subject to the CDD and record-keeping requirements under the AMLO. In addition, the amendment bill to AMLO will also introduce a licensing regime for virtual asset services providers (VASP). The VASP sector will be subject to the AML/CFT and other applicable regulatory requirements, as required by the Financial Action Task Force (FATF). On law enforcement, the Hong Kong Police Force (HKPF) has established the Financial Intelligence and Investigation Bureau in June 2021 and is developing a financial data analytic platform (FDAP). Equipped with sophisticated AML/CFT analytical tools, the FDAP can enhance HKPF's capability in developing financial intelligence and harnessing advanced technologies to combat increasingly sophisticated financial crimes. The law enforcement authorities have also been more proactive in combating foreign non-fraud predicate crimes and have continued to work with international counterparts to halt the flight and dissipation of assets, including those arising from foreign predicate crimes.
Crisis Management and Financial Safety Nets	
Update the deposit protection scheme, including expanding the scope of depositor preference, extending the mandate of the Deposit Protection Board to allow it to	<b>Progress: On track/Under consideration</b> Hong Kong SAR's Deposit Protection Scheme (DPS) fulfils predominantly a payment role with a primary focus on consumer protection in

contribute to resolution costs, and reviewing	case of bank insolvency, while resolution of		
the size of the Deposit Protection Scheme fund and flexibility of levies. [FSTB/HKMA]	banks in too-big-to-fail situations is to be dealt with separately under the FIRO regime. The DPS Fund was set up to cover shortfall loss and finance cost in a payout scenario, and is not expected to be able to make meaningful contribution to the costs of resolving a large		
	and complex financial institution.		
	With regard to introducing depositor preference for all deposits, the authorities do not consider it appropriate to align the treatment of creditors in resolution and insolvency given the very different nature of		
	the two situations and the fact that the DPS is not part of the resolution regime in Hong Kong SAR.		
	The Deposit Protection Board is working closely with an appointed external consultant to carry out a review of the modalities of the DPS, which would include the target fund size and the current protection limit. The external review is expected to be completed in the first half of 2022.		
Enhance the implementation of the resolution framework, including resolution planning for non-systemically important banks, close monitoring of Loss-Absorbing Capacity, ex-	<b>Progress: On track</b> The Financial Institutions (Resolution) (Contractual Recognition of Suspension of		
post resolution levies, resources of non-bank resolution authorities (particularly, for CCPs), and cross-border cooperation.	Termination Rights—Banking Sector) Rules ("Stay Rules") came into operation on 27 August 2021. Finalization of a FIRO code of practice chapter on the Stay Rules was published on December 22, 2021. A FIRO code of practice chapter on operational continuity in resolution was published on 5 November 2021. The development of draft code of practice chapters on authorized institutions (Als)'s liquidity reporting and estimation capabilities as well as continuity of access to financial market infrastructure (FMI) is underway. The HKMA continued to advance resolution planning, including monitoring the build-up of loss-absorbing capacity (LAC) resources and related periodic public disclosures by domestic systemically important Als (D-SIBs), some of which are also progressing their approaches to non-pre-positioned LAC resources. The HKMA has also been overseeing D-SIBs' development and testing of various capabilities to enhance resolvability. Beyond D-SIBs, the HKMA rolled		

	progressing the development of the preferred resolution strategy for these Als. On international cooperation and coordination, the HKMA continued to participate in Crisis Management Groups and Resolution Colleges for 14 global systemically important Als (G-SIBs) for firm-specific resolution planning, in addition to bilateral engagement on both firm-specific and policy matters. The HKMA continues to contribute to international policy development through its participation at relevant Financial Stability Board (FSB) groupings. Regionally, in 2020 the HKMA was appointed chair and secretariat of
	the Executives' Meeting of East Asia-Pacific Central Banks Study Group on Resolution (SGR) which supports knowledge sharing and discussion among regional authorities in relation to resolution in a cross-border context.
Provide greater clarification on governance and risk management of emergency liquidity assistance.	<b>Progress: On track</b> The HKMA has communicated and restated the framework for the provision of liquidity, incorporating certain refinements to prior arrangements so as to foster a better understanding of the liquidity facilities framework and to also introduce the Resolution Facility. Further to the publication of the framework, the HKMA has been working internally to operationalize the Contingent Term Facility and Resolution Facility. The subject involves a number of functional areas of the HKMA and the work is ongoing.
Fintech and Financial Innovation	
Promote consistency and facilitate information sharing across financial sectors with respect to cyber risk supervision; review and compare incident reporting frameworks across sectors and apply best practices to other sectors. [HKMA/SFC/IA]	<b>Progress: Implemented</b> The HKMA, the SFC and the IA have regular meetings on matters related to cyber risk supervision, including feasibility of extending the Hong Kong Association of Banks' cyber threat intelligence platform to other sectors and sharing of information on cyber incident reporting frameworks across sectors. The authorities are considering putting in place more structured exchange on cyber risk supervision, commensurate with the threat landscape. In addition, any significant cybersecurity incidents will also be discussed on an anonymous basis in the meeting so that any lesson learned, and best practices can be shared.

Consider undertaking exercise to map network interdependencies. [HKMA/SFC/IA]	<b>Progress: On track</b> In September 2021, the FSTB, the HKMA, the SFC and the IA discussed how to jointly take forward the cyber mapping initiative. All parties have indicated in-principle support for undertaking the cyber mapping exercise. The HKMA will flesh out the proposal in terms of project scope and implementation approach for further discussion with the FSTB, the SFC		
Strengthen systematic data collection of entities to enhance monitoring of holdings of virtual assets; monitor virtual assets trading activities continuously; increase investor education. [HKMA/SFC/IA]	and the IA. <b>Progress: On track</b> The virtual asset trading platform licensed by the SFC is required to submit monthly reporting of its virtual asset trading activities to the SFC. The SFC has collected data from SFC- licensed hedge fund managers on the virtual assets holding by the funds under their management as of 31 December 2020. The SFC also plans to collect data on virtual assets holding by other SFC-licensed corporations as part of their regular financial reporting. It should be noted that licensed corporations' holding of virtual assets is not currently counted towards their liquid assets when assessing the adequacy of these corporations' regulatory capital.		
Note: FSC = Financial Stability Committee; FSTB HKCC = Hong Kong SAR Futures Exchange Clear SAR Stock Exchange; IA = The Insurance Authori Commission.	ing Corporation Limited; HKEX = Hong Kong		



INTERNATIONAL MONETARY FUND

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

January 26, 2022

STAFF REPORT FOR THE 2022 ARTICLE IV CONSULTATION DISCUSSIONS—INFORMATIONAL ANNEX

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

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# **FUND RELATIONS**

### **Membership Status**

As a Special Administrative Region of the People's Republic of China, Hong Kong SAR is not a member of the Fund. However, annual consultation discussions have been held with the Hong Kong SAR authorities since October 1990, and the staff also holds discussions with the authorities in connection with the Fund's multilateral surveillance 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 courses on statistics, financial programming, and other macro-financial surveillance topics. The mandatory Financial Stability Assessment under the FSAP was concluded by the Executive Board of the IMF on May 21, 2021.

### **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. Phakawa Jeasakul is the current Resident Representative.

# **STATISTICAL ISSUES**

(As of January 25, 2022)

### I. Assessment of Data Adequacy for Surveillance

**General:** The economic database is generally comprehensive and of high quality, and data provision is adequate for surveillance.

**National Accounts:** Hong Kong SAR compiles and disseminates GDP statistics under the production and expenditure approaches. The expenditure measure of GDP which is more well established, is adopted as the single measure of GDP. The production and expenditure approaches are also compiled in chained volume terms. The statistical discrepancies are explicit under to the production approach in current terms. Quarterly GDP is available by expenditure components (current values and volume) as well as by industry value added (in volume only). GDP compilation closely follows the 2008 SNA.

**Price Statistics:** The monthly CPI covers the "expenditure" of all households in Hong Kong SAR, excluding only (i) marine population, (ii) households receiving public assistance, (iii) collective households such as those living in hospitals, prisons and homes for the aged, and (iv) households in the highest or lowest expenditure brackets which together accounted for some 10 percent of households. It includes 920 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.

**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	A data ROSC was disseminated in 1999.
Dissemination Standard since 1996, and is fully	
compliant with its requirements.	

Table 1. Hong Kong SAR: Common Indicators Required for Surveillance         (As of January 25, 2022)					
	Date of Latest Observation	Date Received	Frequency of Data <sup>5</sup>	Frequency of Reporting <sup>5</sup>	Frequency of Publication <sup>5</sup>
Exchange rates	Jan. 2022	Jan. 2022	D	D	D
International reserve assets and reserve liabilities of the monetary authorities <sup>1</sup>	Nov. 2021	Dec. 2021	М	М	М
Reserve/base money	Dec. 2021	Jan. 2022	М	М	М
Broad money	Nov. 2021	Dec. 2021	М	М	М
Central bank balance sheet	Oct. 2021	Dec. 2021	М	М	М
Consolidated balance sheet of the banking system	Oct. 2021	Jan. 2022	М	М	М
Interest rates <sup>2</sup>	Jan. 2022	Jan. 2022	D	D	D
Consumer price index	Dec. 2021	Jan. 2022	М	М	М
Revenue, expenditure, balance and composition of financing <sup>3</sup> – central government	Nov. 2021	Dec. 2021	М	Μ	М
Stocks of central government and central government-guaranteed debt <sup>4</sup>	Nov. 2021	Dec. 2021	М	Μ	М
External current account balance	Q3/2021	Dec. 2021	Q	Q	Q
Exports and imports of goods and services	Q3/2021	Nov. 2021	Q	Q	Q
GDP/GNP	Q3/2021	Nov. 2021	Q	Q	Q
Gross external debt	Q3/2021	Dec. 2021	Q	Q	Q
International investment position	Q3/2021	Dec. 2021	Q	Q	Q

<sup>1</sup> 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.

<sup>2</sup> Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.

<sup>3</sup> Foreign, domestic bank, and domestic nonbank financing.

<sup>4</sup> Including currency and maturity composition.

<sup>5</sup> Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Annually (A); Irregular (I); Not Available (NA).