ASEAN +3 MACROECONOMIC RESEARCH OFFICE

AMRO Annual Consultation Report

Hong Kong, China - 2023

ASEAN+3 Macroeconomic Research Office (AMRO)

February 2024

Acknowledgments

1. This Annual Consultation Report on Hong Kong, China has been prepared in accordance with the functions of AMRO to monitor, assess and report on its members' macroeconomic status and financial soundness, to identify relevant risks and vulnerabilities, and to assist them in the timely formulation of policy to mitigate such risks (Article 3 (a) and (b) of the AMRO Agreement).
2. This Report is drafted on the basis of the Annual Consultation of AMRO with Hong Kong, China from 23 August to 1 September 2023 (Article 5 (b) of the AMRO Agreement). The AMRO Mission team was headed by Dr Jae Young Lee, Group Head and Lead Economist. Members include Dr Fan Zhai, Senior Economist and Desk Economist for Hong Kong, China; Mr Suan Yong Foo, Senior Economist; Ms Vanne Khut, Economist; Mr Jung-Sung Kim, Economist; Mr Chiang Yong (Edmond) Choo, Associate Economist; and Ms Cho Nwe Aung, Associate. AMRO Director Dr Kouqing Li and Chief Economist Dr Hoe Ee Khor also participated in key policy meetings with the authorities. This AMRO Annual Consultation Report on Hong Kong for 2023 was peer-reviewed by a group of economists from AMRO's Country Surveillance, Financial Surveillance and Fiscal Surveillance teams; endorsed by the Policy and Review Group; and approved by Chief Economist Dr Khor.
3. The analysis in this Report is based on information available up to 17 November 2023.
4. By making any designation of or reference to a particular territory or geographical area, or by using the term "member" or "country" in this Report, AMRO does not intend to make any judgments as to the legal or other status of any territory or area.
5. On behalf of AMRO, the Mission team wishes to thank the Hong Kong, China authorities for their comments on this Report, as well as their excellent arrangements and warm engagement during our consultation.

Table of Contents

Executive Summary

1. The economy of Hong Kong, China[1] has recovered steadily as activities have gradually normalized with the reopening of the economy. Due to the fifth wave of the COVID-19 pandemic and declining external demand, Hong Kong's economy faced significant challenges in 2022, and contracted by 3.5 percent. With the progressive reopening of Hong Kong and Mainland China since late 2022, the economy resumed growth of 2.8 percent (year on year) in the first three quarters of 2023 as a whole, underpinned by robust domestic consumption and recovery in inbound tourism.

2. The recovery is expected to be sustained on the back of the continued resumption of cross-boundary travel and tourism as well as the continuation of policy support. Although the initial surge in activities resulting from the economic reopening has waned after Q1 2023, consumption remains resilient and investment spending is likely to expand faster, driven by the revival of retail sales and the services industry. Furthermore, the projected bottoming of the global electronics cycle in late 2023 is expected to reduce the drag from merchandise trade on GDP growth. GDP growth is expected to rebound to 3.6 percent in 2023 before moderating marginally to 3.5 percent in 2024.

3. Labor market conditions have continued to improve but progress has been uneven across sectors. The seasonally adjusted unemployment rate declined to 2.9 percent in August-October 2023. Over the past twelve months, many sectors saw job growth, with notable growth observed in sectors such as retail, accommodation and food services, as well as transportation, while job growth in a few sectors, such as manufacturing, import/export trade, and wholesale sectors, remained sluggish.

4. Inflation remained soft despite the economic recovery. For the first nine months of 2023, CPI inflation edged up only slightly to 1.9 percent. With the labor market getting tight and the feed-through of rising housing rentals, price pressures are expected to rise modestly. Headline inflation is forecast to rise to 2.0 percent in 2023 and 2.5 percent in 2024.

5. The overall external position has stayed strong, bolstered by a substantial current account surplus and ample foreign reserves. Despite the weak trade performance, Hong Kong sustained a large current account surplus in H1 2023, supported by its strong services and primary income surpluses. Capital flows remained volatile, driven by the fluctuations in interest rate spreads between the Hong Kong dollar and the U.S. dollar as well as investors' sentiment on China's post-Covid recovery.

6. The financial system remains resilient despite a ratcheting up of pressures in financial markets. Overall credit in Hong Kong continued to contract in H1 2023, mainly driven by declines in credit for use outside Hong Kong, and trade finance. The banking sector remains sound, underpinned by ample capital and liquidity buffers. Stock markets have been weighed down by high interest rates and lingering concerns over Mainland China's economic slowdown. Separately, the property market has remained weak despite nascent signs of recovery in early 2023.

7. Risks to Hong Kong's economic outlook are tilted to the downside. A protracted global trade down cycle poses a significant risk to Hong Kong's near-term economic growth. A higher-for-longer US policy rate would lead to tighter-for-longer domestic financial conditions and

[1] Hong Kong, China will be referred to as Hong Kong hereafter.

dampen the recovery. Moreover, if the U.S. and Europe were to experience a recession, Hong Kong's economic growth would be adversely affected. A faltering economic recovery in Mainland China would also weaken Hong Kong's economic recovery. Domestically, the weakness in the property market, if prolonged, could weigh on the sentiment of households and firms. In the medium term, Hong Kong's vulnerability to an escalation of U.S.-China tensions and broadened geoeconomic fragmentation is a major risk. Population aging and climate change pose challenges to Hong Kong's economic growth in the long run too.

8. The government's continued fiscal support for the economy is commendable. Although the fiscal support in FY2023 has been smaller than in previous years, it is expected to continue playing a significant role in bolstering the economy. Given the improved economic outlook, it is appropriate to gradually phase out most pandemic-related relief and stimulus measures. As the recovery has been uneven across different sectors, it would be appropriate to adjust the remaining fiscal support measures to focus on more vulnerable sectors and households.

9. AMRO welcomes the government's plan for a gradual unwinding of the financial relief measures implemented in response to the COVID-19 pandemic. With economic activities continuing to gain traction, relief measures can be phased out in line with the normalization of economic activities. This phasing out is not expected to have a negative impact on the asset quality of the banking sector, as the ongoing economic recovery should help improve the financial positions of borrowers.

10. Increasing fiscal reserves should be prioritized as a buffer against future shocks. Strong fiscal reserves are crucial for Hong Kong to effectively manage economic shocks and safeguard its economic and financial stability. After the recent large drawdown, some rebuilding of fiscal reserves would be prudent. In the long run, the government should implement both revenue and expenditure reforms to generate more revenue and ensure that fiscal resources are used more efficiently.

11. Addressing supply-side constraints is essential to supporting a fuller economic recovery and improving long-term competitiveness. For sectors such as tourism, enhanced coordination with the mainland authorities can expedite the resolution of critical issues such as airline capacities and labor crunches. The policy measures to overcome labor shortages in the tourism and transportation industries are also important to the sectors' recovery. In consideration of the aging population, the government is encouraged to continue to pursue its proactive and comprehensive approach to address some long-term supply-side challenges. This could include strategic planning and measures to foster labor inflows, attract skilled talent and maintain a stable supply of land.

12. AMRO supports the government's push to enhance Hong Kong's pivotal role as a "super-connector" between Mainland China and the rest of the world. Hong Kong's financial integration with Mainland China could be strengthened further through initiatives like the Connect Schemes and offshore renminbi business. Enhancing Guangdong–Hong Kong–Macao Greater Bay Area (GBA) integration should remain a top priority for Hong Kong in its efforts to strengthen its role as a super-connector. Shifting international political dynamics offer opportunities for Hong Kong to expand its economic ties beyond traditional markets. The government's efforts to bolster trade, investment, finance, and technology links with regions like the Middle East and ASEAN are a welcome step toward further diversifying Hong Kong's global reach.

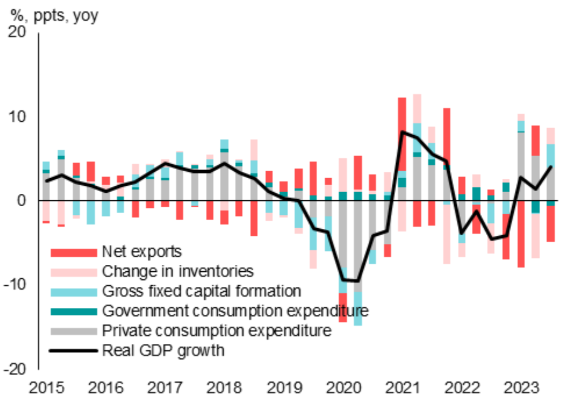
A. Recent Developments and Outlook

Real Sector Developments and Outlook

1. After a significant downturn in 2022, Hong Kong's economy showed resilience and rebounded as activities gradually normalized. The outbreak of the fifth wave of COVID-19 and declining external demand led to a contraction of 3.5 percent in GDP in 2022. With the progressive reopening of Hong Kong and Mainland China since late 2022, the economy resumed a growth of 2.8 percent (year on year) in the first three quarters of 2023 as a whole, primarily driven by robust domestic consumption and a rebound in tourism (Figure 1). On a sequential basis, GDP grew by 5.4 percent in Q1 but experienced a contraction of 1.3 percent in Q2 against the high base of comparison, before edging up by 0.1 percent in Q3 of 2023 (seasonally adjusted, qoq). Gross fixed asset investment in the first three quarters grew by 8.2 percent (yoy), underpinned by recovery in both real estate investment and investment in machinery and equipment. Due to sluggish global trade and the cyclical downturn in the semiconductor industry, (re)export activities remained lackluster, impeding the overall recovery.

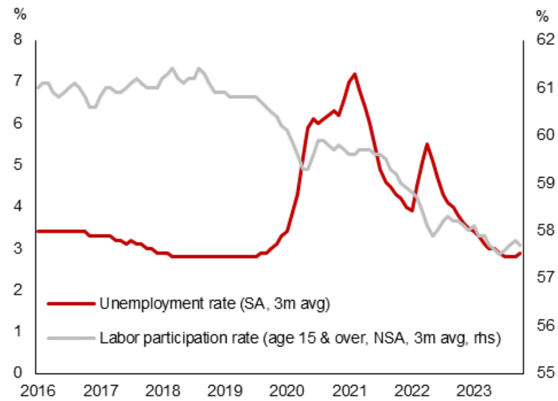
2. The labor market continued to improve, but progress has been uneven across sectors. The seasonally adjusted unemployment rate declined from its most recent peak of 5.5 percent in February-April 2022 to 2.9 percent in August-October 2023 (Figure 2). Total employment recovered significantly to 3.71 million in August-October 2023, but remained 3.5 percent below its level in the fourth quarter of 2019, reflecting the compounding effects of population aging and the pandemic (Figure 3). Over the past twelve months, many sectors saw job growth, with notable growth observed in sectors such as retail, accommodation and food services, as well as transportation, while employment growth in a few sectors, such as manufacturing, import/export trade, and wholesale sectors, remained sluggish.

Figure 1. GDP Growth by Expenditure (percentage point contribution)



Source: Census & Statistics Department (C&SD); Haver Analytics

Figure 2. Unemployment Rate and Labor Force Participation Rate

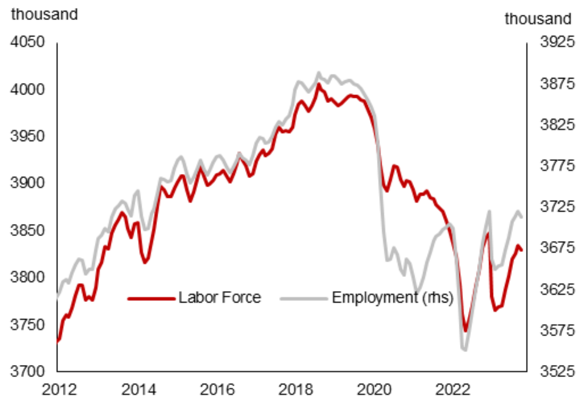


Source: C&SD; Haver Analytics

3. Inflation remained soft despite the economic recovery. The headline CPI rose by 1.9 percent in 2022, mainly driven by prices of energy-related items, food, clothing, and footwear. CPI inflation stayed at 1.9 percent for the first nine months of 2023 (Figure 4). Inflation in the housing component, accounting for 40 percent of the composite CPI basket, edged up from -0.1 percent (yoy) in Q1 2023 to 0.8 percent (yoy) in Q3 2023. However, the moderation in food inflation and the falling prices of durable goods helped contain overall CPI inflation. The pass-through of global commodity prices to the local CPI has been muted, reflecting the relatively small weight of energy in the consumption basket. Low food inflation in Mainland China and the appreciation of the Hong Kong dollar against the RMB through the first half of 2023 have also contributed to the low inflation rates.

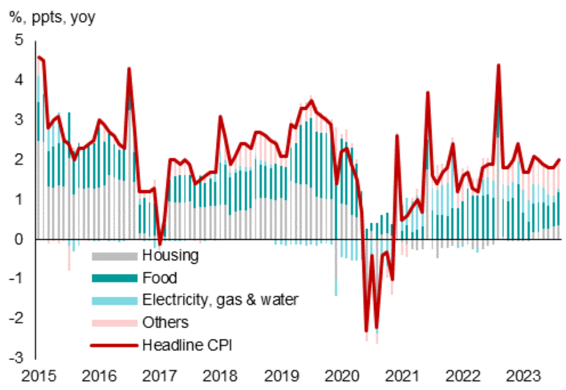
4. Looking ahead, Hong Kong's economic growth is expected to be sustained on the back of ongoing policy support and a broader economic recovery extending beyond the travel and tourism sectors. Although the initial surge in demand resulting from the economic reopening is likely to moderate in later 2023, retail sales and the service industry are expected to continue their revival, thanks to fiscal policy support and the continued resumption of cross-boundary travel. The spillover from the strength in retail sales to broader economic sectors may enhance business sentiment, leading to a rise in capital investment. Furthermore, the projected bottoming of the global electronics cycle in late 2023 is expected to reduce the drag from merchandise trade on GDP growth. As a result, GDP growth is forecast to rebound to 3.6 percent in 2023, before moderating marginally to 3.5 percent in 2024. With the labor market getting tight and the feedthrough of the increased fresh-letting residential rentals in recent months, price pressures are expected to rise modestly in 2024. Headline inflation is forecast to rise to 2.0 percent in 2023 and 2.5 percent in 2024.

Figure 3. Total Employment and Labor Force (3-month average, NSA)



Source: C&SD; Haver Analytics

Figure 4. Contribution to Headline Inflation



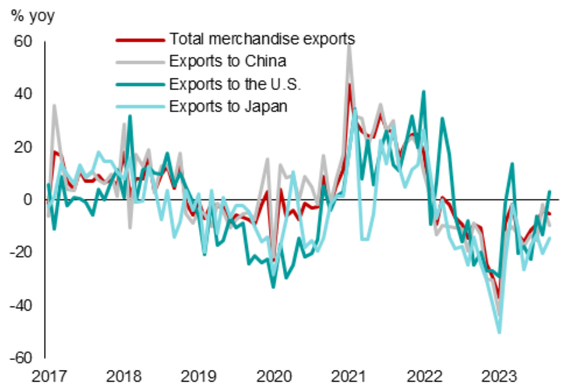
Source: C&SD; Haver Analytics; AMRO calculations

External Sector and the Balance of Payments

5. Hong Kong's strong external position has remained intact, bolstered by a substantial current account surplus and ample foreign reserves. The value of Hong Kong's merchandise exports decreased by 12.3 percent in the first nine months of 2023, primarily due to subdued global demand (Figure 5). Given the re-export nature of Hong Kong's merchandise trade, this decrease in exports resulted in a parallel decrease in imports, which witnessed an 9.8 percent decline during the same period. The recovery of cross-boundary land transport capacity has been slower than expected, partly limiting trade with Mainland China. Despite an enlarged trade deficit, Hong Kong sustained a large current account surplus in H1 2023, supported by its strong services and primary income surpluses. The financial account balance increased significantly in 2022 due to faster increases in international interest rates and the resulting carry trade and fund outflows (Figure 6). Capital outflows have moderated since late 2022 due to sharper increases in local interest rates and shrinking rate differentials between the Hong Kong dollar and U.S. dollar. In Q1 2023, net inflows of portfolio investment and "other investment" largely offset the net outflow of foreign direct investment (FDI), leading to smaller outflow in the financial account. However, portfolio investment recorded large net outflows in

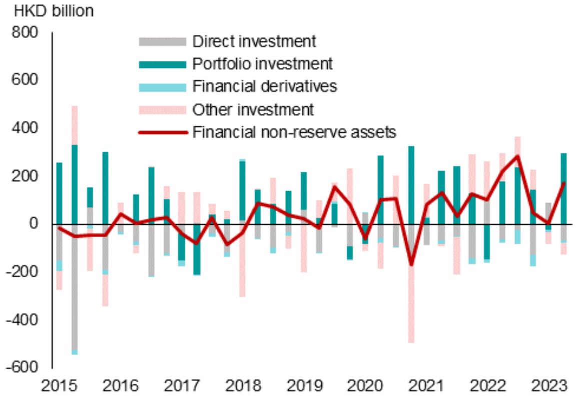
Q2 2023 due to repatriation of funds out of Hong Kong. By the end of October 2023, Hong Kong's foreign reserves had decreased slightly to USD416 billion from USD424 billion at the beginning of the year.

Figure 5. Merchandise Exports by Region



Source: C&SD; Haver Analytics

Figure 6. Balance of Payment: Financial Account



Source: C&SD; Haver Analytics
Note: Positive values in financial account balance indicate net acquisition of foreign assets by residents (capital outflow), while negative values indicate net foreign acquisition of local assets (capital inflow).

6. The recovery in inbound tourism has continued to gain traction, mainly supported by the return of tourists from the mainland. The long-awaited full resumption of normal travel in early February 2023 has unleashed the return of inbound tourists. Hong Kong received 23.3 million visitors in the first nine months of 2023, which is 50 percent of the number recorded in same period of 2019. Tourism receipts in the first half of 2023 also returned to 47 percent in the same period of 2019 (Figure 7). Among the visitors, 80 percent were from Mainland China, returning to virtually the same share as before the pandemic. Notwithstanding the strong Hong Kong dollar, constraints on airline capacity and shortages in labor, Hong Kong is expected to surpass the earlier estimation of 25.8 million visitor arrivals made by the Hong Kong Tourism Board, which is equivalent to 43 percent of the average number of visitors during the 2018–19 period. Primarily, the "Hello Hong Kong" marketing campaign, complemented by a strong line-up of mega events and new attractions, serves as a significant draw for tourists. Furthermore, the substantial pent-up demand for travel from Mainland China, as evidenced by the massive volume of travel by all modes of transportation during May Day and other national holidays,[2] indicates that Mainland tourists will make a significant return, especially as the economic outlook improves.

Monetary Conditions and the Financial Sector

7. Overall credit in Hong Kong continued to contract on a year-on-year basis in Q2 2023, mainly driven by declines in credit for use outside Hong Kong, and trade finance. Total credit contracted 4.2 percent (yoy) in Q2 2023, after a contraction of 3.3 percent recorded in Q1 2023 (Figure 8). This reduction was influenced by persistently weak global demand and high interest rates. Credit for use outside Hong Kong saw a significant decline by 12 percent (yoy) in Q2 2023, while Mainland China-related loans dipped further by 8.7 percent (yoy) in

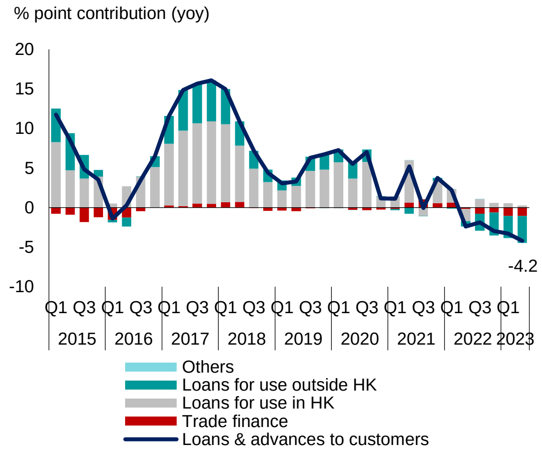
[2] According to the Ministry of Culture and Tourism of China, 274 million domestic trips were made during the May Day holiday (29 April – 3 May 2023), 71 percent and 19 percent increases from the same period in 2022 and 2019 respectively. During the 5-day period in 2023, Hong Kong saw around 0.72 million visitors based on data from the Hong Kong Immigration Department. June's Dragon Boat Festival also recorded a 12-fold jump in Chinese outbound bookings, according to Ctrip.com. Hong Kong was the most popular destination for mainland travellers during the holiday, with hotel reservations increasing by 18 times yoy.

Q2 2023 (Figure 9). On the other hand, credit for use inside Hong Kong maintained positive growth but experienced a moderation to 0.4 percent (yoy) in Q2 2023 from 0.8 percent in Q1 2023 (Figure 9). The moderation was mainly attributable to the decreases in loans to building, construction, property development and investment, and transport and transport equipment. As Hong Kong's economy gradually recovers, driven by improved domestic demand and the resurgence of travel and tourism industries after the full economic reopening, economic activities and demand for credit are expected to strengthen.

Figure 7. Annual Tourist Arrivals and Receipts

Source: C&SD via Haver Analytics, CEIC; AMRO staff calculations
Note: Data for 2023 year-to-date (Ytd) refer to levels of corresponding periods vis-à-vis 2019. For tourist receipts, 2023 Ytd is as of Q2 2023 and data refer to the averages of the quarterly business receipts index: tourism, convention, and exhibition. For tourist arrivals, 2023 Ytd is as of September 2023.

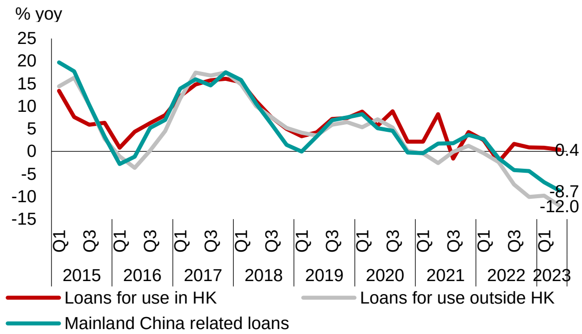
Figure 8. Total Credit



Source: HKMA; AMRO staff calculations

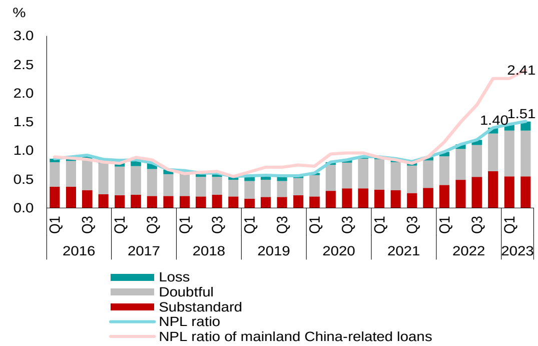
8. **The banking sector in Hong Kong remains sound, underpinned by ample capital and liquidity buffers.** Hong Kong's banks are well capitalized, with an aggregate capital adequacy ratio of 21 percent in Q2 2023, well above the 8-percent international minimum requirement. The liquidity coverage ratio increased to 169.8 percent in Q2 2023 from 166 percent in Q1 2023, well above the 100-percent statutory minimum requirement. The loan-to-deposit ratios for all currencies and the Hong Kong dollar stood at 68.0 percent and 88.7 percent respectively, at end-Q2 2023. The overall asset quality continued to be healthy, with a low non-performing loan (NPL) ratio of 1.5 percent in the same period. Although this is a slight increase from 1.40 percent in Q4 2022, the NPL ratio remains at a healthy level (Figure 10). That said, close attention should be paid to the quality of Mainland China-related loans, as the NPL ratio for these loans has risen from 1.5 percent in Q2 2022 to 2.41 percent in Q2 2023. On a positive note, there has been continuous improvement in profitability, mainly driven by the rise in net interest margin (1.6 percent in H1 2023 from 1.0 percent in H1 2022). This improvement can be mainly attributed to higher net interest income and income from held-for-trading investments (Figure 11).

Figure 9. Credit by Type



Source: HKMA; AMRO staff calculations
Note: The December 2018 figures for loans for use in/outside Hong Kong have been restated to reflect authorized institutions' reclassification of working capital loans.

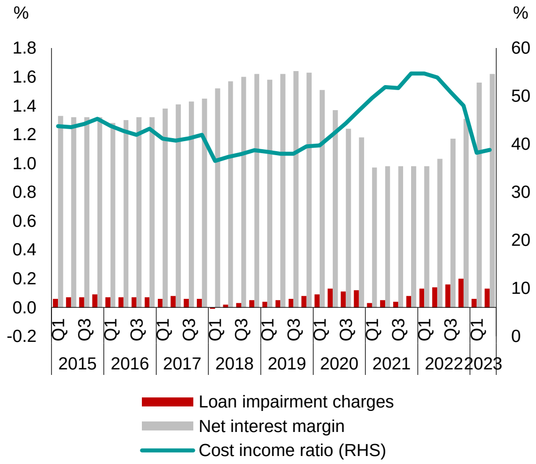
Figure 10. Non-Performing Loans of Banking Sector



Source: HKMA; AMRO staff calculations

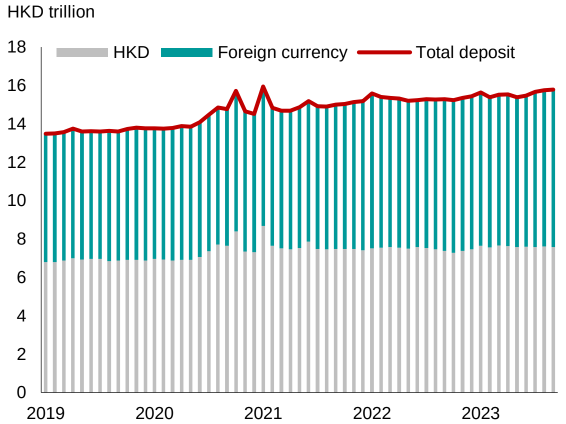
9. The spillover effects of the recent turmoil in the banking sectors of the U.S. and EU on Hong Kong's financial sector have been minimal. The direct and indirect exposures of Hong Kong's banking sector to the failed U.S. and EU banks have been very small. Unlike the failed banks in the U.S., only a quarter of the debt securities holdings of Hong Kong's banking sector were classified as "held to maturity" and valued at cost. Moreover, as a substantial proportion of the debt securities held by Hong Kong banks had short-term maturities, typically less than three years, the duration risk of the local banking sector is small. The total deposits of Hong Kong's banking system increased modestly from HKD15.44 trillion at end-2022 to HKD15.79 trillion at end-September 2023 (Figure 12), suggesting no significant outflows from bank deposits to other higher-yield offerings such as money-market funds.

Figure 11. Profitability of Banking Sector



Source: HKMA; AMRO staff calculations

Figure 12. Deposits of Banking System



Source: HKMA; Haver Analytics

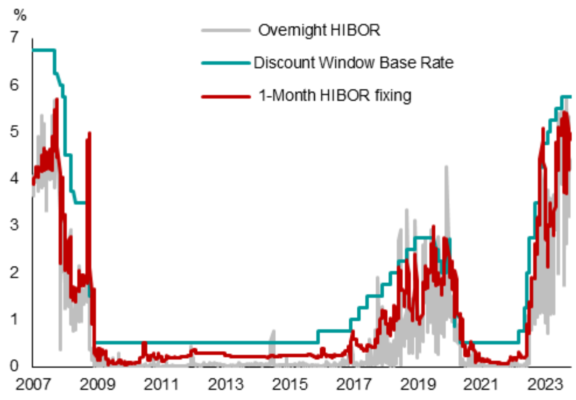
10. The financial system remains resilient despite greater pressures in financial markets. After a robust rebound from a multi-year low towards the end of October 2022, the Hang Seng Index peaked at the end of January 2023 but has subsequently declined due to concerns over the pace of the Mainland China's economic recovery, the monetary tightening in the U.S., and escalating U.S.-China tensions (Figure 13). The Hong Kong Interbank Offered Rates (HIBORs) have followed the upward trend of rising U.S. interest rates in accordance with the design and operation of the Linked Exchange Rate System (LERS) (Figure 14), while also being subject to the supply and demand of Hong Kong dollar funding. With the triggering of the weak-side Convertibility Undertaking (CU) under the LERS, the aggregate balance declined from HKD337.5 billion at the end of April 2022 to HKD44.7 billion at end July 2023 (Figure 15). The contraction of the aggregate balance drove up Hong Kong dollar interbank rates, pushing the HKD away from the weak-side limit to then stay within the Convertibility Zone. The weak-side CU triggering and the automatic interest rate adjustment mechanism have operated as designed under the LERS. Credit growth and IPO activities have remained weak, while fluctuations in stock trading and fund flows have affected demand for HKD. Meanwhile, the smaller liquidity pool has made HKD interbank rates more sensitive to changes in HKD funding supply and demand, leading to more frequent fluctuations. The Hong Kong dollar, which had persistently remained on the weak side of the CU band in the first half of 2023, has moved to the middle of the band since mid-July due to half-year-end corporate funding demand (Figure 16). The robust LERS, supported by ample foreign and fiscal reserves, continues to firmly anchor Hong Kong's economy and financial system, enabling and supporting its vital role as an international financial center.

11. The property market has remained weak despite nascent signs of recovery in early 2023 and is likely to remain challenging in the near term. After the correction in H2 2022, residential property prices rebounded somewhat in H1 2023 but turned to a decline again in Q3 2023 (Figure 17). On the commercial properties front, class B and C private office rentals increased by 0.04 percent (yoy) and 2.2 percent (yoy), respectively, in Q3 2023 (Figure 18). The outlook for the property market is expected to remain challenging in the near term, given tightened financial conditions, and structural changes in the post-pandemic new normal. The latest RICS-Spacious Survey as of Q3 indicates weaker expectations for property prices and transactions in the next 12 months, in line with the contraction in newly approved loans.[3]

Figure 13. Hang Seng Stock Index

Source: Haver Analytics

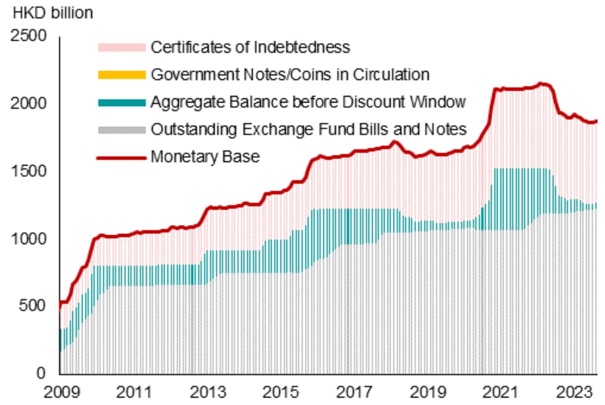
Figure 14. The Base Rate and Money Market Rates



Source: HKMA; Haver Analytics

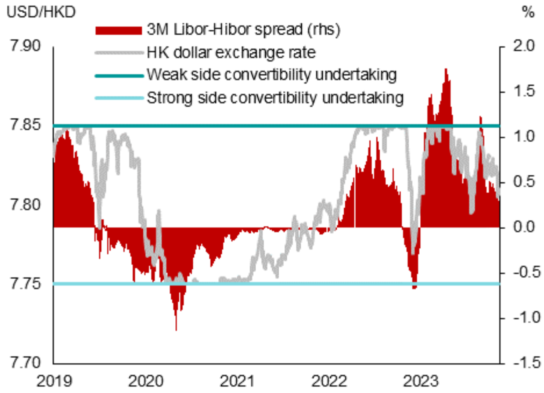
[3] According to the Residential Mortgage Survey, the newly approved loans contracted by 22.1 percent (yoy) in Q2 2023.

Figure 15. Monetary Base



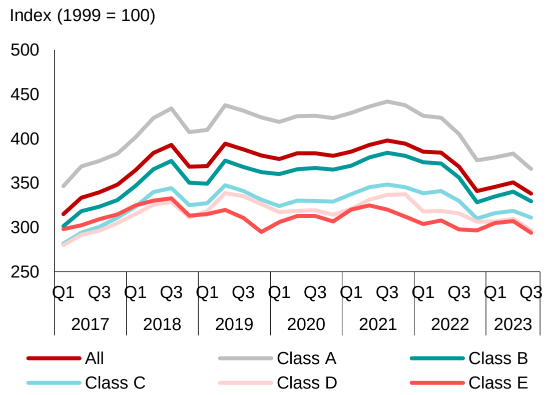
Source: HKMA; Haver Analytics

Figure 16. Hong Kong Dollar Exchange Rate and Interest Rate Spread with U.S. Dollar



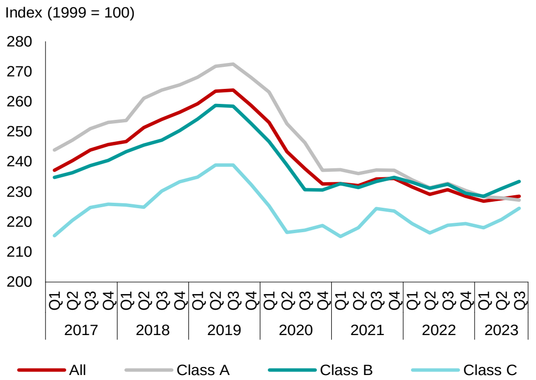
Source: HKMA; Haver Analytics

Figure 17. Residential Property Prices



Source: Rating & Valuation Department

Figure 18. Private Office Rentals



Source: Rating and Valuation Department; AMRO staff calculations

Fiscal Sector

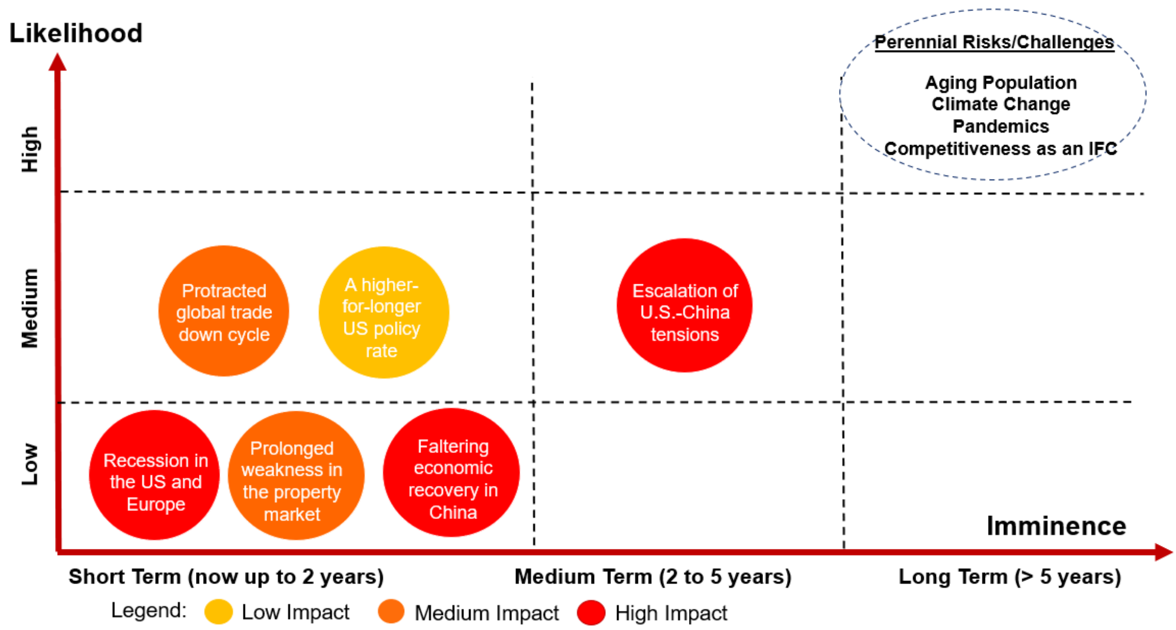
12. The FY2022[4] fiscal stance was expansionary to support the weak economy, with the consolidated fiscal deficit standing at 4.3 percent of GDP. Fiscal revenue in FY2022 dropped by 10.3 percent when compared to FY2021 and fell short of the budget by 13.1 percent. This was partly because the worsened property and stock markets led to lower-than-expected revenue from land premium and stamp duties. On the other hand, government expenditure increased by 16.9 percent in FY2022, as the resurgence of COVID-19 in 2022 necessitated higher pandemic-related spending. Excluding the net proceeds from government bond issuance, the fiscal deficit of FY2022 stood at 6.7 percent of GDP.

[4] For Hong Kong, China, the fiscal year runs from April 1 to March 31 the following year.

B. Risks, Vulnerabilities, and Challenges

13. Uncertainties surrounding Hong Kong's economic outlook remain high, and the balance of risks is tilted towards the downside (Figure 19). Various factors could adversely impact Hong Kong's economic growth in the near term. These include a protracted global trade down cycle, a higher-for-longer U.S. policy rate, a faltering economic recovery in Mainland China, recessions in the U.S. and Europe, and a challenging outlook for the property market in Hong Kong. Furthermore, there are structural challenges that may have lingering effects on Hong Kong's economic future in the medium to long term. Escalating U.S.-China tensions, an aging population, and climate change are challenges that could create headwinds for the economy.

Figure 19. Risk Map for Hong Kong



Source: AMRO staff

Near-term Risks to the Macroeconomic Outlook

14. The risk of a protracted global trade down cycle remains a significant concern for the Hong Kong economy, given its heavy connections with the global economy. The new export orders component of the global manufacturing PMI has persistently remained below the 50 threshold for over a year, indicating a notable weakness in demand for merchandise exports (Figure 20). The prolonged effects of global monetary tightening and the potential economic slowdown in advanced economies may further dampen the demand for tradable goods, delaying the global trade recovery. Given Hong Kong's crucial role as a regional trade hub, its economic recovery in the near term could be weakened if the global trade rebound is delayed.

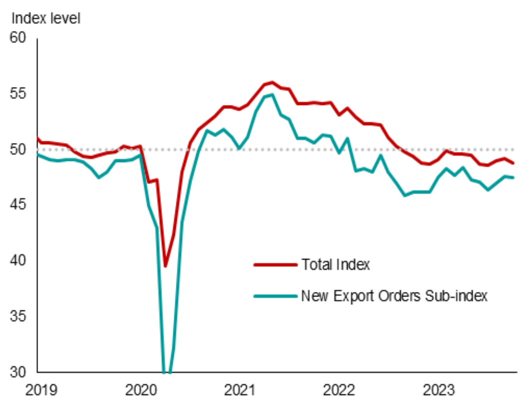
15. A higher-for-longer U.S. policy rate could lead to tighter-for-longer domestic financial conditions in Hong Kong. Persistent inflationary pressures in the U.S. and other advanced economies may prompt their central banks to maintain a tight monetary policy stance for an extended period. Given the Hong Kong dollar's peg to the U.S. dollar under the LERS, the persistence of high U.S. interest rates would imply that local interest rates in Hong Kong will also remain high, notwithstanding the relatively low inflation rate. This would have a dampening effect on domestic investment and consumption, and weigh on the economic recovery in Hong Kong.

16. If the U.S. and Europe were to go into a recession, Hong Kong's economic growth would be adversely impacted. Global inflation and aggressive monetary tightening have dampened demand, which may lead to a recession in the U.S. and Europe. A recession in these advanced economies would likely have a severe impact on global trade which would drag down Hong Kong's economy, derailing its nascent recovery.

17. In case of a faltering economic recovery in Mainland China, it would also weaken Hong Kong's economic recovery. As a primary gateway between Mainland China and the rest of the world, Hong Kong's economic ties with Mainland China in trade, tourism and financial activities have grown significantly. These close linkages between Hong Kong and Mainland China render the former sensitive to changes in Mainland China's economic growth.

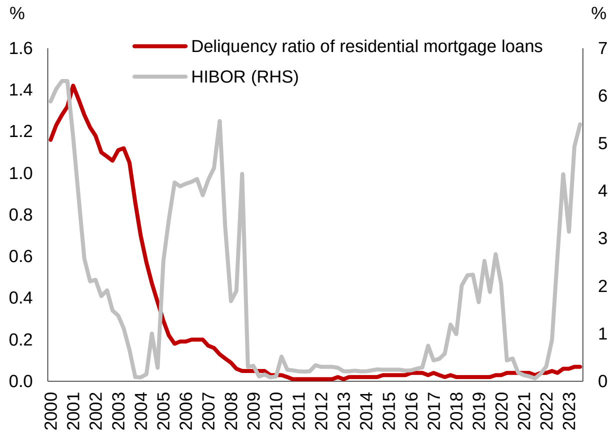
18. Weakness in the property market, if prolonged, could weigh on the finance of households and firms. If the property market remains weak for an extended period, it can have negative effects on Hong Kong's banking sector and other segments of the economy. It can lead to a deterioration in the balance sheets of corporate borrowers who use properties as collateral. At the same time, should interest rates stay high for longer than expected, strains on Hong Kong's property market could be exacerbated. Amid the continuous rise in the lending rate,[5] the delinquency ratio of residential mortgage loans—while still very low at 0.07 percent in September 2023 when compared with the period after the Asian Financial Crisis—has edged up recently (Figure 21).[6]

Figure 20. Global Manufacture PMI



Source: JP Morgan/S&P Global; Haver Analytics

Figure 21. HIBOR vs Delinquency Ratio of Residential Mortgage Loans



Source: HKMA; Haver Analytics

Longer-term Challenges and Vulnerabilities

19. In the medium term, an escalation of U.S.-China tensions and broader global geoeconomic fragmentation are major risks for Hong Kong's economy. Heightened tensions between the world's two largest economies would elevate the risks associated with fragmentation in trade, technology, and investment, posing significant challenges for Hong

[5] HSBC in Hong Kong raised its best lending rates by 12.5 basis points to 5.875 percent, effective from July 28, 2023.
[6] However, it should be noted that the average LTV ratio for newly approved residential mortgage loans was 58.5 percent in the first half of 2023, while the average debt servicing ratio of mortgage borrowers stayed at around 40 percent, providing ample buffers to absorb potential shocks from the property market.

Kong, which plays a crucial role in facilitating these activities. Elevated tensions would dampen business and financial market sentiment in the region, leading to reduced inflows of global capital and talents. Moreover, should geoeconomic fragmentation become more severe, global financial and trade flows are likely to be affected, posing challenges to Hong Kong as an international financial center and business hub.

20. Population aging and climate change present significant challenges to Hong Kong's long-term economic growth. The rapid pace of population aging in Hong Kong has put downward pressure on the resident population and labor force, posing a threat to its economic prospects. Population aging will also impose a growing fiscal burden on Hong Kong due to the increase in demand for healthcare and other social services for the elderly, as well as rising pension cost. Separately, climate change poses a significant risk to Hong Kong's economy, both through direct physical damage and losses as well as indirect transition costs. As a coastal city with high population density, Hong Kong is particularly vulnerable to the negative effects of rising sea levels, heatwaves, typhoons, and rainstorms. These environmental challenges may lead to property damage, disruption of essential services, and other adverse economic consequences.

Authorities' Views

21. Mainland China's growth and further opening-up will offer greater opportunities for Hong Kong. As the premier gateway for commerce and finance between Mainland China and the rest of the world, Hong Kong has benefited tremendously from the reform and opening up of Mainland China and the resultant flow of goods, capital, people and data. As Mainland China continues to promote high-level two-way opening up, Hong Kong will also continue to benefit from the unparalleled opportunities thus arising. Furthermore, Mainland China's economy, rather than faltering, has in fact demonstrated solid, positive momentum and made significant progress especially in terms of technological innovation and green development.

C. Policy Discussions and Recommendations

Calibrating Macroeconomic and Structural Policies to Fortify Fuller Recovery

22. The government's continued fiscal support for the economy is commendable. The economic recovery is still in its early stages and faces multiple internal and external headwinds. Therefore, it is crucial for the government to maintain its support for businesses and households to ensure a robust and broad-based recovery. Although the fiscal support in FY2023 has been smaller than in previous years, it is expected to continue to play a significant role in bolstering the economy. Given the improved economic outlook, it is appropriate to gradually phase out certain pandemic-related relief and stimulus measures. Nevertheless, as the recovery has been uneven across different sectors, it would be appropriate to adjust the remaining fiscal support measures to focus on more vulnerable sectors and households, thereby increasing their effectiveness and inclusiveness.

23. Addressing near-term supply-side constraints is essential to bolstering a fuller economic recovery. In particular, for the tourism sector, it is crucial to prioritize the resolution of supply side issues and continue providing support to firms in order to facilitate its full recovery *(Selected Issue 1: Reviving Inbound Tourism: Strategies for Hong Kong in Challenging Times)*. To achieve this, enhanced cross-ministry coordination between the mainland and Hong Kong authorities can expedite the resolution of critical issues, such as airline capacities and labor shortages. Hong Kong has launched labor importation scheme for the aviation industry to bring in up to 6,300 imported workers to help ease the labor crunch. At the same time, efforts to recruit and retrain former tourism staff through government and private sector partnerships and large-scale recruitment drives can play a vital role in bridging capacity gaps. This could facilitate swifter employment while ensuring the maintenance of service quality. Moreover, the government's initiative to support the sustainability of businesses by launching the Dedicated 100-percent Loan Guarantee Schemes for travel and cross-boundary passenger transport trade sectors in April 2023 is commendable. Such measures can contribute significantly to the sector's recovery and ensure its continued growth.

24. It is commendable that financial relief measures are being phased out in line with the normalization of economic activities. Credit relief measures, such as the pre-approved principal payment holiday scheme for both businesses and individuals, and the extension of loan tenor for personal loans, have been instrumental in alleviating temporary cash flow problems for businesses and individuals during the pandemic period. With economic activities continuing to gain traction, the pre-approved principal payment holiday scheme commenced an orderly exit at the end of July 2023, after its six-time extension. The scheme will be shifting its focus from supporting corporates through economic hardships during the pandemic to ensuring their smooth transition to normal repayment.[7] Moreover, the principal moratorium for the SME financing guarantee scheme will be phased out from the end of September 2023, in light of the ongoing recovery of economic activities.[8] The termination of the schemes is not expected to have a negative impact on asset quality, as the ongoing recovery of the economy

[7] As some corporates' cash flow conditions have not yet recovered fully, the Banking Sector SME Lending Coordination Mechanism further strengthens the existing partial principal repayment options to ensure a gradual transition to normal repayment for businesses under the scheme. These arrangements comprise: 1) 20 percent repayment of original principal repayment amount for installment loans for 18 months (extended from 12 months), or 50 percent repayment for 30 months (extended from 24 months); and 2) for trade facilities, banks may discuss with corporates based on their actual circumstances and allow them to repay the due amount by regular installments for over 24 months.

[8] The principal moratorium arrangement under the SME Financing Guarantee Scheme has not entirely come to an end. In fact, it is the application period of the principal moratorium that expired at end-September 2023. Before the application period ended, some borrowing enterprises applied for principal moratorium (or its renewal) of no more than 12 months. The principal moratorium of individual loans will lapse at different time between now and late 2024.

should help improve the finances of the borrowers. On the individual level, the 100-percent Personal Loan Guarantee Scheme has well served its purpose of supporting individuals in need during the pandemic and came to an end on 30 April 2023. Additionally, despite concerns about potential weakening of credit quality due to the elevated global interest rates, banks' asset quality is expected to remain sound with the NPL ratio staying well below 3 percent.

Building Policy Buffer for Greater Fiscal and Financial Resilience

25. The government is encouraged to prioritize increasing fiscal reserves and rebuilding fiscal policy space in line with the ongoing economic recovery. Strong fiscal reserves are crucial for Hong Kong to effectively manage economic shocks and safeguard its economic and financial stability. After three years of expansionary fiscal policy to support the economy from the pandemic's impact, Hong Kong's fiscal reserves have declined from 40.8 percent of GDP at the end of FY2019 to 29.6 percent at the end of FY2022. Although reserves remain substantial, it is advisable to consider replenishing them following a significant drawdown, in line with the principle of maintaining a fiscal balance on average across the business cycles. Predicated on a further cyclical revenue recovery and a reduction in pandemic-related health and relief spending, the government's medium-term fiscal plan appropriately aims to reach a balanced budget by FY2024 and to run budget surpluses thereafter. Given the great uncertainties surrounding the economic outlook, it is important to be flexible in planning the projected fiscal surpluses in the baseline scenario.

26. In the long run, the government should implement both revenue and expenditure reforms to ensure that fiscal resources are used more efficiently. With uncertainty in potential growth and expenditures trending up due to population aging, particularly in critical areas such as health and social welfare, there is a risk of heavy fiscal pressure even as the economy recovers. To ensure a healthy level of fiscal reserves, the government should consider implementing comprehensive tax reforms to broaden its revenue base. It could explore the feasibility of introducing new taxes, such as value-added taxes and capital gains taxes, in the medium to long term. These new taxes would diversify the sources of revenue and bolster the fiscal position. The taxes could be introduced initially at low rates if the budget is in surplus and the fiscal position is strong, but the rates can be raised if the fiscal position were to weaken in the future. Additionally, it is desirable to explore the possibility of enhancing the progressivity of the personal income tax as part of the overall tax reform efforts. By doing so, the burden can be distributed more fairly across different income levels, fostering social equity and economic stability. The introduction of these new taxes will enable the government to gradually reduce its reliance on traditional revenue sources such as land premiums. On the expenditure side, the government may consider building administrative infrastructure for more targeted use of public resources to effectively handle the growing resource needs in the future.

27. The high capital and liquidity ratios of Hong Kong banks should be maintained to safeguard financial stability. It is imperative that banks maintain high capital buffers, consider reducing dividend payouts, or opt for distribution of equity dividend where possible, particularly if profitability is weak. These measures are essential to mitigate procyclicality in the financial system. The planned transition to a positive cycle-neutral countercyclical capital buffer of 1 percent in 2024, as announced by the HKMA, is commendable and will significantly shore up the resilience of the banking system. To enhance their ability to withstand potential stresses, particularly those arising from exposures to overstretched property developers, larger banks should seek to increase their provisioning.

Maintaining Housing Market Soundness and Addressing Supply-side Constraints

28. The amendments to housing policy by the authorities in Q3 2023, including special premium concessions for first-time homebuyers, are expected to help enhance housing affordability and boost the property sector. Among them, the mortgage insurance programme (MIP) for residential properties was amended to support homebuyers with housing needs, while helping to maintain banking stability. The MIP amendments include adjusting the maximum LTV ratio to 70-80 percent for properties priced from above HKD15 million to HKD17.15 million; and setting the maximum LTV ratio at 70 percent for properties valued from above HKD17.15 million to HKD30 million. Furthermore, first-time homebuyers will receive special premium concessions for properties valued up to HKD15 million and general homebuyers a 35-percent premium discount. At the same time, the countercyclical macroprudential measures for property mortgage loans were also amended, increasing the LTV ratios to 60 percent (from 50 percent) for non-residential properties and to 70 percent for buyers of owner-occupied properties valued up to HKD15 million. These amendments are expected to help make properties more affordable for buyers, which will likely help improve the outlook of the property market in the short- to medium term. In addition, the government should maintain policy measures to ensure that the same prudent lending standards apply to all mortgages from banks or other issuers – including developers offering mortgage loans with higher interest rate and LTV ratios. This will help prevent the over-indebtedness of property buyers.

29. Increasing land supply is crucial to addressing the structural supply-demand imbalance in the property market. The scarcity of land has been a key factor in high property prices in Hong Kong. As such, the authorities have taken a multi-pronged approach to increase land supply and expedite land creation to meet the social and economic needs. The government has identified a long-term land supply of 7,300 hectares, with two mega-projects—the development of Northern Metropolis and the Kau Yi Chau Artificial Islands projects—contributing over half of the planned new land supply. Careful planning to balance conservation and development is vital for the success of these large-scale projects. The potential budgetary impact of financing the related investments should also be carefully studied. In addition, streamlining the statutory and administrative procedures for land development will help expedite the supply of public and private housing.

Tackling Labor and Skill Shortage

30. Facilitating labor inflow and attracting skilled talent can contribute significantly to sustaining economic growth and strengthening Hong Kong's position as an international financial and business hub. The current tightness in the labor market is a result of various factors from both the supply and demand sides, including the cyclical economic recovery, adverse demographic shifts, and the pandemic (Box A). With the demographic challenges expected to persist, labor and skills shortages may increasingly constrain Hong Kong's economic growth and undermine the city's competitiveness as a vital financial and business hub. To tackle these challenges, the government has taken actions by launching the Top Talent Pass Scheme and enhancing other talent admission schemes in late 2022. These initiatives aim to attract at least 35,000 individuals annually from 2023 to 2025. As of end October 2023, the government received about 184,000 applications under various talent admission schemes and approved over 115,000 of them. In the same period, over 70,000 talents made their move to come to Hong Kong, far exceeding the annual admission target of 35 000. Additionally, the government in mid-2023 launched labor importation schemes for the construction and transportation sectors to bring in up to 20,000 imported workers. Some other facilitating measures on labor importation, such as the Special Scheme to Import Care Workers for Residential Care Homes and the Enhanced Supplementary Labor Scheme, were also introduced by the government in June and September of 2023 respectively. However, it is essential to recognize that talent attraction and labor recruitment will require sustained efforts, and a comprehensive policy package needs to be developed to ensure there are economic and social inclusion, and affordable housing for the foreign workers, and help for affected local workers in finding new jobs.

Strengthening Hong Kong’s Super-connector Role between Mainland China and the World

31. The government’s commendable efforts to enhance Hong Kong’s global reach have come at a crucial time. Rising geopolitical tensions and shifting international political dynamics have prompted many countries to seek greater diversification of their international ties. Coupled with Hong Kong’s longstanding commitment to free trade and multilateral co-operation, this has created opportunities for Hong Kong to forge further economic linkages beyond its traditional markets. The current administration has taken proactive steps to strengthen Hong Kong’s trade, investment, financial, and technology connections with the Middle East and ASEAN. Despite the weakness in overall exports, Hong Kong’s trade with the Middle East has shown promising growth, with exports expanding by 23.4 percent in 2022 and 11.6 percent (yoy) in the first nine months of 2023. To further bolster trade with these dynamic markets, Hong Kong is actively pursuing a bilateral free trade agreement with the United Arab Emirates, and Investment Promotion and Protection Agreements with Bahrain, Saudi Arabia and Bangladesh respectively, and seeking early accession to the Regional Comprehensive Economic Partnership (RCEP). Beyond trade, Hong Kong has the potential to tap into cooperation opportunities with these non-traditional markets in areas such as green technology, fintech, stock cross-listings, and offshore RMB. Hong Kong can reinforce its position as a global hub for innovation and economic collaboration by harnessing the potential of cooperation in these diverse areas.

32. Financial integration between Mainland China and Hong Kong could be deepened through further development of the Connect Schemes and offshore RMB business. The Connect Schemes between Mainland China and Hong Kong have been expanding steadily, encompassing various financial instruments such as stocks, exchange-traded funds (ETFs), bonds, wealth management products and derivatives. Under the Stock Connect, ETFs were included in July 2022 and the scope of eligible stocks was broadened in March 2023, offering more diverse choices to investors. Northbound trading of Swap Connect was launched in May 2023, enabling offshore investors to better manage interest rate and exchange rate risks of their onshore bond holdings. The financial regulatory authorities of the Mainland China, Hong Kong and Macao have also announced to enhance the Greater Bay Area (GBA) Cross-boundary Wealth Management Connect Pilot Scheme through expanding eligibility to more GBA residents, expand its range of participating institutions and investment products as well as raise its investment limits for individuals. In the future, the Connect Schemes can be further improved by streamlining the investment processes and enhancing their scope, volume, and liquidity. As the internationalization of the RMB is gaining momentum, Hong Kong is also well positioned to harness these opportunities to offer a broader array of RMB-related products and services. This move would enrich the offshore RMB market, foster RMB internationalization, and bolster Hong Kong's role as a leading hub for offshore RMB business.

33. Enhancing GBA integration should remain a priority for Hong Kong in its efforts to strengthen its role as a super-connector. Improved connectivity could facilitate the movement of goods, services, capital, and talent within the GBA. This can further solidify Hong Kong's position as a pivotal trade, logistics, and finance hub, enabling seamless access to international markets for GBA-based businesses. Mainland China and Hong Kong authorities should focus on continuously improving both hard and soft infrastructure to further promote the integration of the GBA region *(Selected Issue 2: Hong Kong's Transport Infrastructure-Tourism Nexus: Efforts, Success Factors and Challenges)*. While significant progress has been made in cross-boundary physical connections in the past years, equal attention should be paid to institutional infrastructure, such as establishing common standards and facilitating information exchange. Existing development initiatives in Hong Kong (Northern Metropolis and the Kau Yi Chau Artificial Islands) should be planned with a holistic approach, taking broader regional connectivity considerations into account.

Enhancing Sustainable Development

34. The authorities' concerted efforts to strengthen climate resilience are commendable. Hong Kong aims to reduce its carbon emissions by 50 percent by 2035 and achieve carbon neutrality by 2050 through various initiatives and commitments (Table 2) *(Selected Issue 3: Hong Kong's Transition to Net Zero: Recent Developments and Policy Implications)*. In this regard, the Office of Climate Change and Carbon Neutrality was established in January 2023 to strengthen institutional coordination and enhance decarbonization efforts. The Green Tech Fund, founded in 2020 to provide financial support for climate-related research and development projects, received an additional injection of HKD200 million in FY2023, bringing the total provision to HKD400 million. The FY2023 Budget also outlines other significant initiatives, such as allocating HKD200 million under the New Energy Transport Fund to support the introduction of electric vehicles. Additionally, it earmarks HKD350 million in subsidies for the construction and testing of electric ferries and charging facilities, set to commence in 2024. Furthermore, a loan scheme with a 100-percent guarantee, amounting to an estimated HKD6.4 billion (equivalent to 0.2 percent of GDP), will be introduced later, to incentivize taxi owners to transition to electric battery taxis. Addressing climate change will also require substantial public expenditure on adaptation measures. As threats intensify, Hong Kong will have to invest significantly more in projects to mitigate the effects of climate change and protect its population and infrastructure from future risks.

Table 2. Hong Kong's Initiatives and Commitments for the Net Zero Transition

Commitment to reduce reliance on coal
- Phase out coal as a power generation source by 2035

Commitments on Renewable Energy
- Increase the share of renewable energy in the fuel mix for electricity generation to 7.5 percent–10 percent by 2035 and to 15 percent before 2050

Targets for Electric Vehicle (EV) Adoption
- Phase out fuel-propelled private cars, including hybrid vehicles
- Reduce vehicular emissions

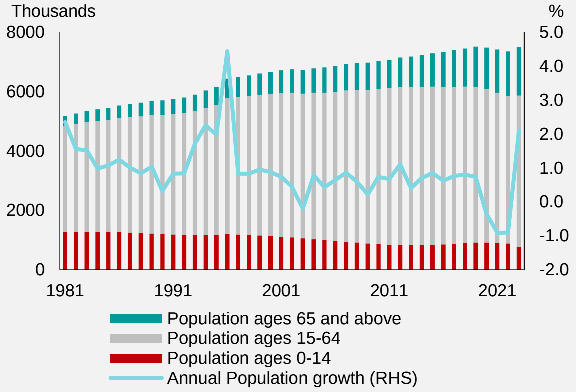
Green Bond Developments
- Inaugural offering of the Government Green Bond Program in May 2019 followed by three offerings in 2021
- Green bond issuances by financial insituttions and corporations in Hong Kong

Source: AMRO (2023); AMRO staff compilation from various sources

Box A. Labor Market Dynamics in the Changing Demographic Landscape of Hong Kong[9]

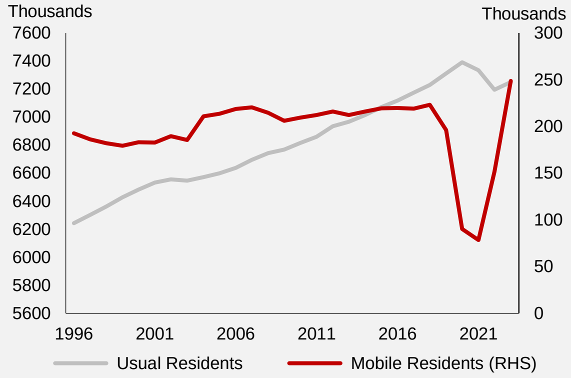
Hong Kong has experienced steady population growth over the past several decades. A notable surge in population growth in Hong Kong occurred between 1993 and 1996 when many individuals who had emigrated in early years returned to the city (Figure A1). This population growth trend continued steadily until 2019, except for a brief decline in 2003 due to the outbreak of severe acute respiratory syndrome (SARS). From 2020 to 2022, however, Hong Kong's population experienced a decline. This decline was primarily attributed to the strict travel restrictions and extended lockdown measures implemented in response to the COVID-19 pandemic, which resulted in a significant reduction in mobile residents.[10] Subsequently, with the gradual reopening of borders and the relaxation of anti-pandemic measures, the total population rebounded, registering a 2.1 percent increase from mid-2022 to mid-2023. This population growth was primarily driven by the return of Hong Kong residents who stayed abroad during the pandemic and an influx of migrants from Mainland China and other part of world. Mobile residents in Hong Kong has returned to the pre-pandemic levels by mid-2023, while usual residents[11] did not quite reach their pre-pandemic levels (Figure A2). According to government projections, Hong Kong's population will reach 8.19 million by mid-2046 under the baseline scenario. Specifically, it is projected that by mid-2046, the usual resident population will reach approximately 8 million, while the mobile resident population is expected to comprise approximately 0.19 million.[12]

Figure A1. Population Growth and Population by Age Group



Source: World Development Indicators; C&SD

Figure A2. Mobile Residents and Usual Residents



Source: C&SD; CEIC

Population aging in Hong Kong is accelerating due to the sustained increase in life expectancy and a declining fertility rate. The trend of an aging population in Hong Kong has become more pronounced in recent years, driven by post-war baby boomers entering old age and the persistently low fertility rate (Figure A3). Hong Kong's total fertility rate has declined from 1.86 in 1982 to 0.7 in 2022. This decline can be attributed to several factors, including a notable decrease in the proportion of married women, an increase in divorce rates, and a rise in the proportion of never-married women (Figure A4). The rapid rise in life expectancy in Hong Kong, partly attributed to the high standards of public health and the successful implementation of anti-smoking campaigns, has also played a role. Government projections indicate that the share of individuals aged 65 and above in the total population will gradually increase from 20.8 percent in mid-2022 to 25.3 percent in 2028, ultimately reaching 35.1 percent in 2069.[13] The United Nations also projects that, by 2050, Hong Kong will have the distinction of having the world's most aged population.

---

[9] Prepared by Aung Cho Nwe, Associate.

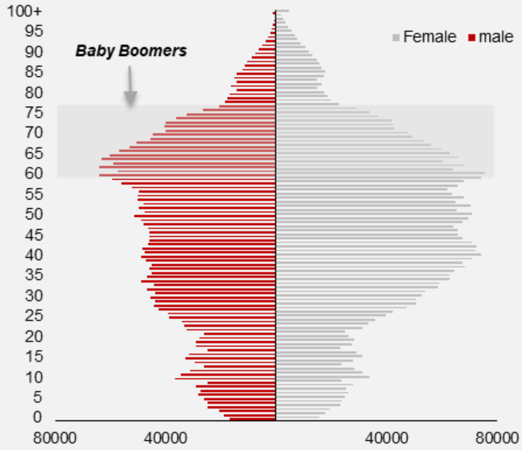
[10] Mobile residents refer to Hong Kong Permanent Residents that have stayed in Hong Kong for at least one month but less than three months during the six months before or for at least one month but less than three months during the six months after the reference time-point, regardless of whether they are in Hong Kong or not at the reference time-point.

[11] Usual Residents refer to two categories of people: (1) Hong Kong Permanent Residents who have stayed in Hong Kong for at least three months during the six months before or for at least three months during the six months after the reference time-point, regardless of whether they are in Hong Kong or not at the reference time-point; and (2) Hong Kong Non-permanent Residents who are in Hong Kong at the reference time-point.

[12] Hong Kong population projections for 2022-2046 (Source: Census and Statistics Department)

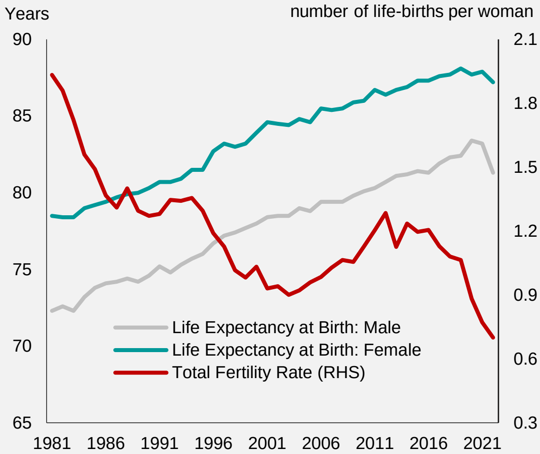
[13] Hong Kong Population Projections 2020-2069 (Source: Census and Statistics Department)

Figure A3. Hong Kong's Population Pyramid, 2022



Source: C&SD; CEIC

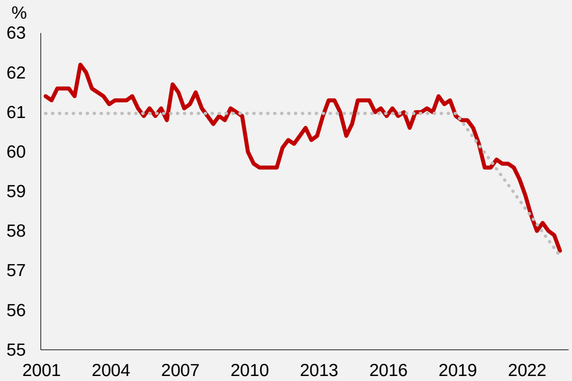
Figure A4. Life Expectancy and Fertility Rate



Source: C&SD; CEIC

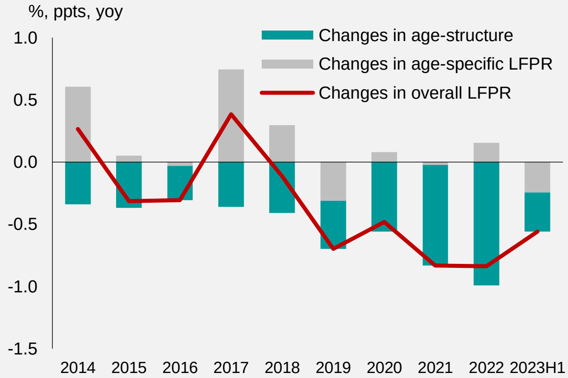
The labor force participation rate (LFPR) has declined sharply since 2019, primarily driven by the retirement of baby boomers and other significant demographic changes. Hong Kong had maintained a stable LFPR of around 61 percent for over two decades prior to 2019. However, the LFPR in Hong Kong declined rapidly from 61.3 percent in 2018 to 57.9% and 57.5% in Q1 and Q2 2023 respectively (Figure A5). Our decomposition analysis reveals that, of the 3.4 percentage point decline in Hong Kong's LFPR between the end of 2018 and mid-2023, changes in the age structure contributed to 3.06 percentage points (or 90 percent) (Figure A6). The remaining 0.34 percentage points can be attributed to changes in age-specific LFPRs. In fact, Hong Kong's old-age LFPRs (aged 50 and above) have continued to rise over the past two decades, partially offsetting the decline in LFPRs for youth (aged 15-24) (Figure A7). Projections released by the Census and Statistics Department suggest that overall LFPR (excluding foreign domestic helpers) is expected to decrease from 55.5 percent in June-August 2023 to 51.6 percent by 2046 due to the increasing proportion of elderly persons in the total population.

Figure A5. Labor Force Participation Rate



Source: C&SD; CEIC
Note: Labor force participation rate refers to the proportion of labor force in the total land-based non-institutional population aged 15 and over.

Figure A6. Decomposition of the Year-on-Year Change in the LFPR

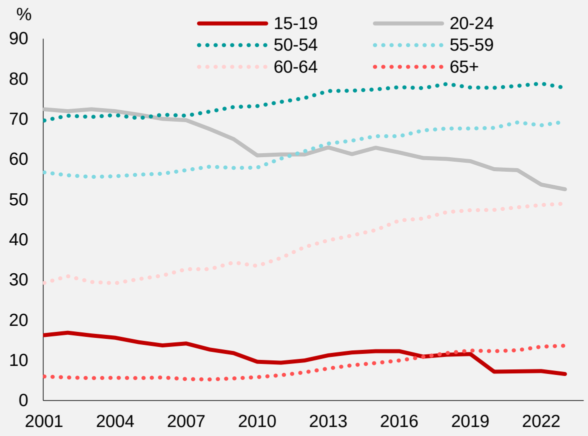


Source: C&SD; CEIC; AMRO staff calculations
Note: The annual rate of change for each year refers to the y-o-y change in Q4, whereas the rate of change in H1 2023 denotes the difference between Q4 2022 and Q2 2023.

Hong Kong's labor market has weathered multiple episodes of economic downturn over the past few decades. Notably, Hong Kong experienced spikes in unemployment during the Asian Financial Crisis, the outbreak of SARS, and the Global Financial Crisis. More recently, the labor market weakened in the second half of 2019 due to social unrest and worsening economic conditions and deteriorated further in early 2020 as the COVID-19 pandemic disrupted a wide range of economic activities. The impact of the fifth wave of local epidemic, coupled with stringent lockdown measures, led to a notable increase in the unemployment rate, which reached 5.5 percent in February-April 2022. Subsequently, the unemployment rate has declined gradually to 2.8 percent in June-August 2023, the lowest level since May-July 2019.

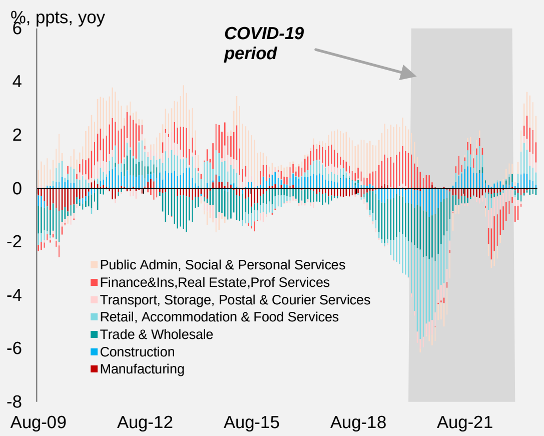
The sectoral composition of employment in Hong Kong has undergone significant transformations in recent years. Throughout the 2010s, there was a continued decline in manufacturing sector employment. During the COVID-19 pandemic, Hong Kong experienced a significant drop in employment within the retail, accommodation and food services, transportation, storage, postal and courier services, construction, import and export trade, and wholesale sectors, as regional trade flows and business activities were disrupted (Figure A8). Since the reopening efforts initiated in late 2022, employment has rebounded in many sectors, as in the construction, transportation, retail, accommodation and food services, and transportation, storage, postal and courier services sectors. However, employment remains subdued in some sectors, as in the manufacturing, import and export trade, and wholesale sectors.

Figure A7. LFPR by Age Group



Source: C&SD; CEIC

Figure A8. Contribution to Employment Growth by Sector



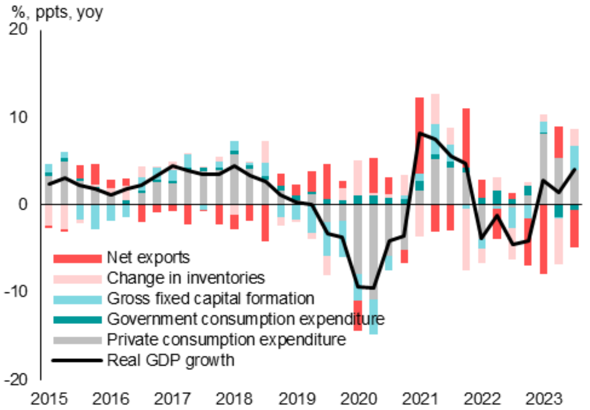
Source: C&SD; CEIC

Appendices

Appendix 1. Selected Figures for Major Economic Indicators

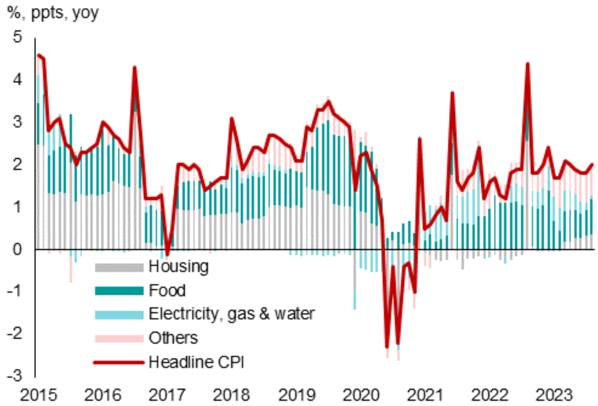
Figure 1.1 Real Sector

Hong Kong's economy recovered steadily in the first three quarters of 2023.



Source: C&SD; Haver Analytics

Inflation rose moderately on rising food prices.

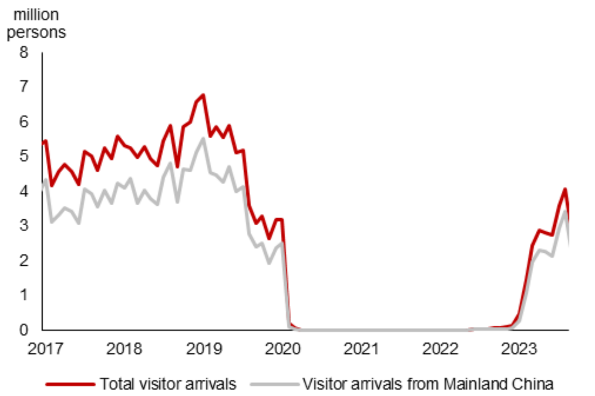


Source: C&SD; Haver Analytics; AMRO calculations

The PMI indicated signs of a slowdown in the economic recovery.

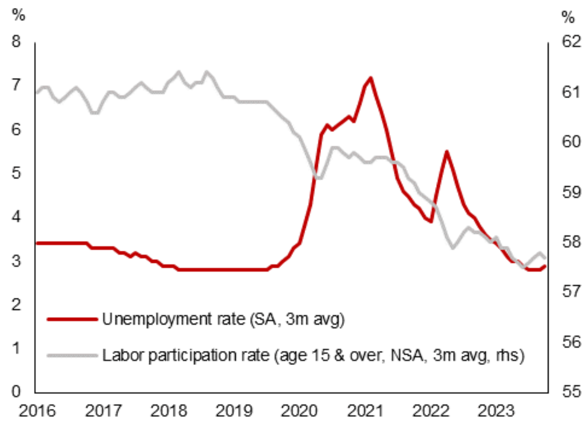
Source: C&SD; Haver Analytics

Tourist arrivals in the first nine months of 2023 recovered to half of that in the same period of 2019.



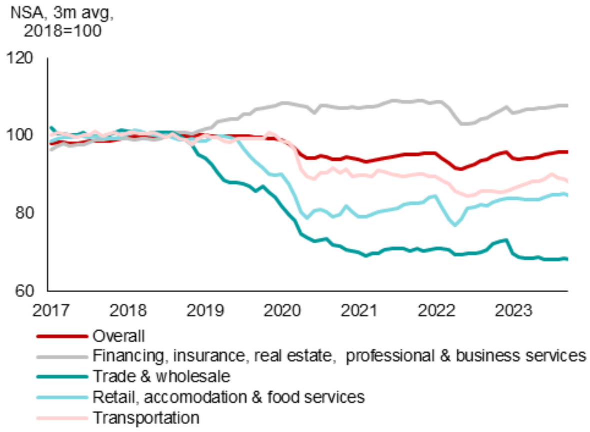
Source: Hong Kong Tourism Board; CEIC

Labor market conditions improved markedly…



Source: C&SD; Haver Analytics

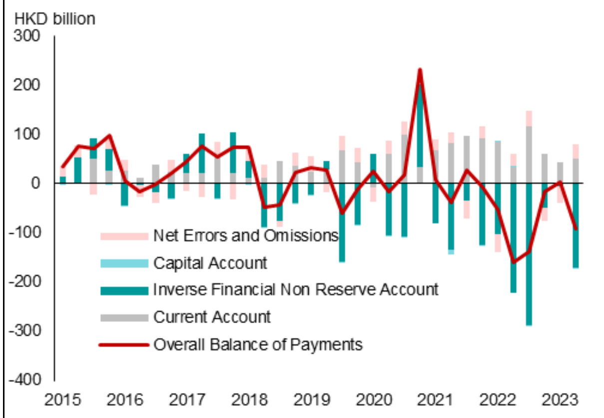
…but employment recovery remained uneven across sectors.



Source: C&SD; Haver Analytics

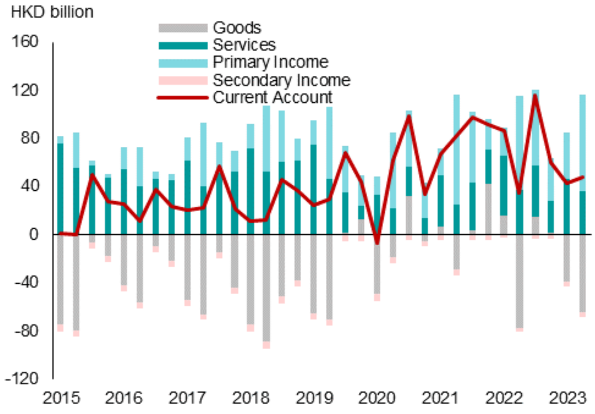
Figure 1.2. External Sector

The external position has remained resilient through the pandemic …



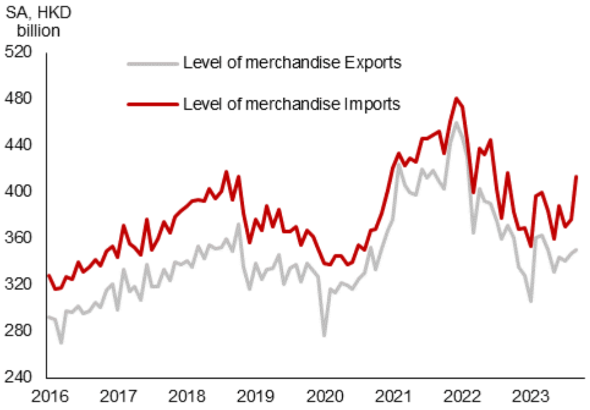
Source: C&SD; Haver Analytics

…with the surplus in services and primary income outweighing the deficit in goods.



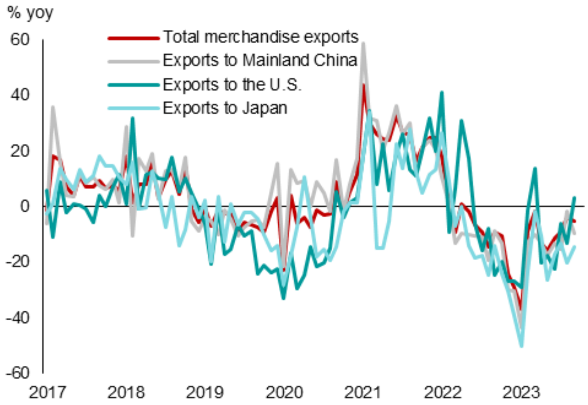
Source: C&SD; Haver Analytics

Merchandise exports have remained weak year-to-date…



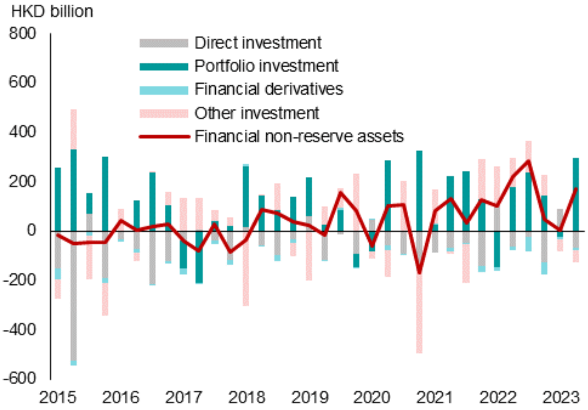
Source: C&SD; Haver Analytics

… reflecting the broad weakness in global demand.



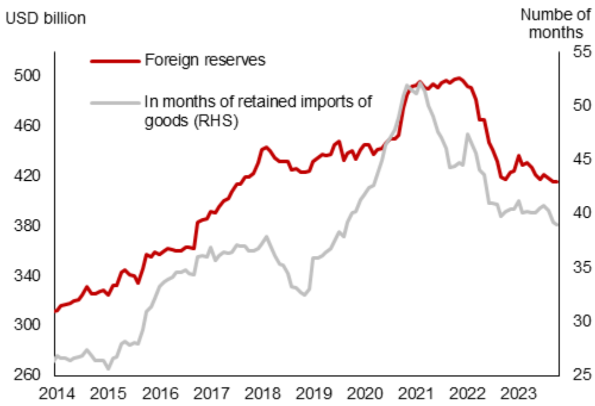
Source: C&SD; Haver Analytics

After moderating in Q4 2022 and Q1 2023, portfolio capital outflows once again increased in Q2 2023.



Source: C&SD; Haver Analytics

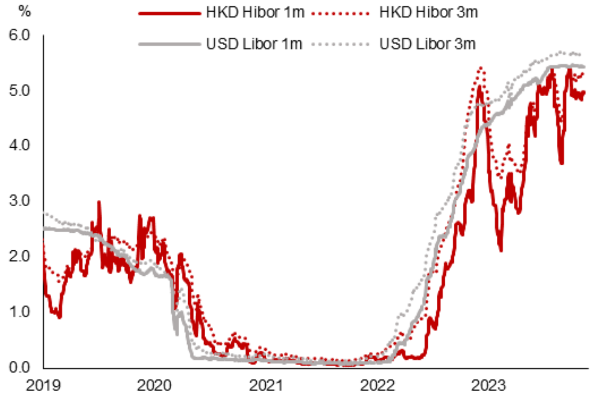
FX reserves remained ample, still covering about 40 months' worth of retained imports.



Source: HKMA; Haver Analytics

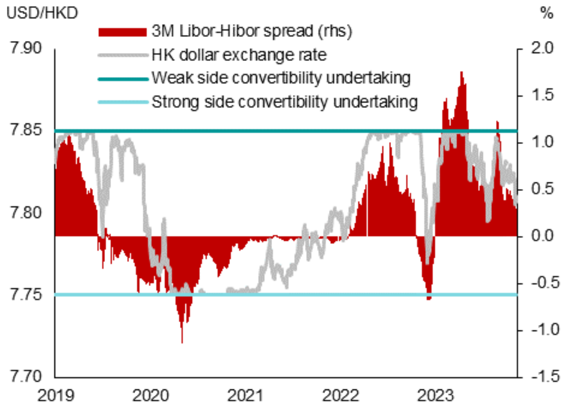
Figure 1.3. Monetary and Financial Markets

HKD interest rates have risen and become more volatile.



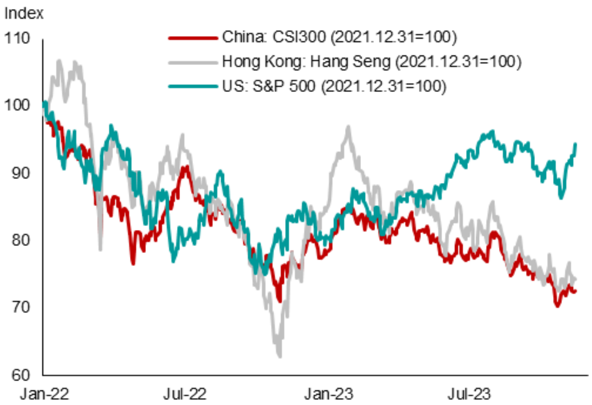
Source: Bloomberg

HKD depreciation pressure has eased since May 2023 due to narrowing USD-HKD interest rate spreads.



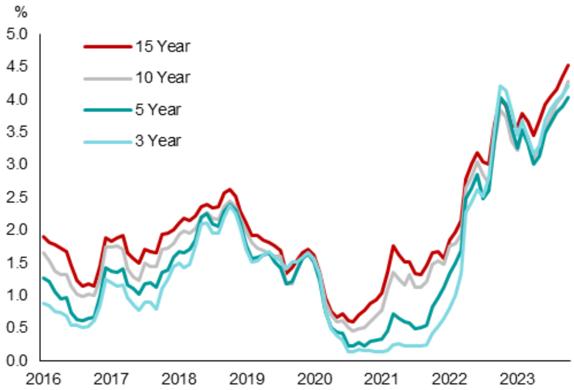
Source: Bloomberg

The Hang Seng Index and China's A share indexes have underperformed the U.S. stock market in 2023.



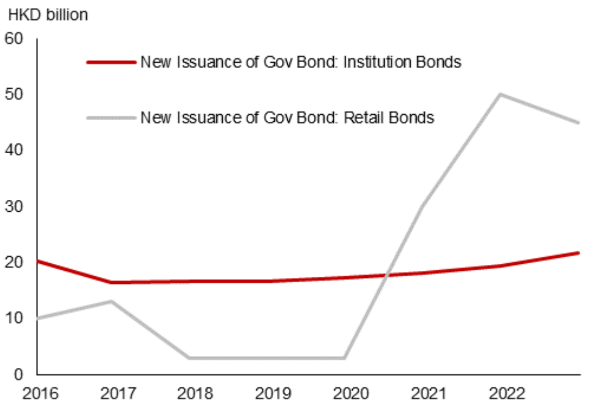
Source: Bloomberg

Yields of Hong Kong government bonds have fallen from their peaks in late 2022.



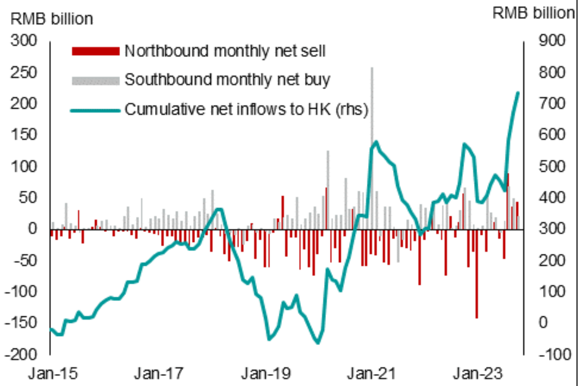
Source: HKMA; Haver Analytics

The government increased bond issuances to retail investors in 2021 and 2022.



Source: HKMA; Haver Analytics

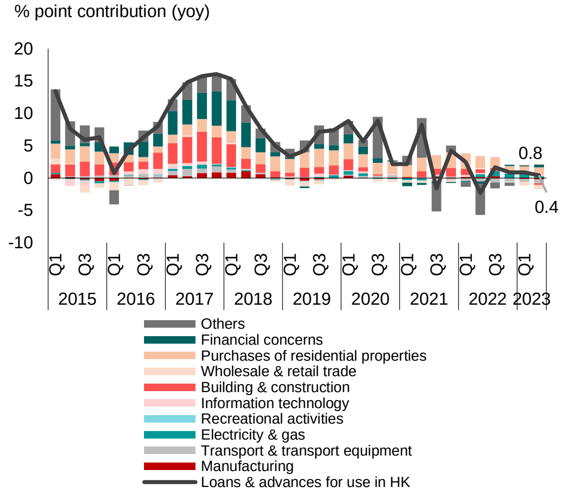
There was a net inflow to Hong Kong's stock market under the Stock Connect schemes in the first ten months of 2023.



Source: CEIC; AMRO calculations

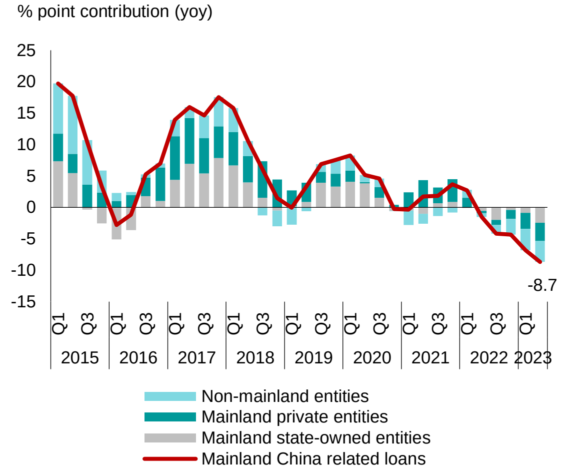
Figure 1.4. Banking Sector

Credit growth in Hong Kong slowed in Q2, due to decreases in loans to building, construction, property development and investment, and transport and transport equipment.



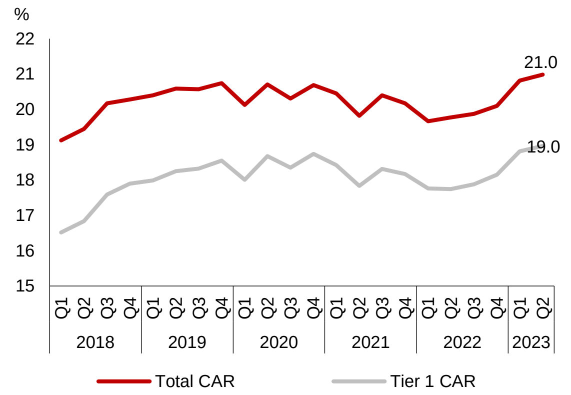
Source: HKMA; AMRO staff calculations

Mainland China related loans contracted further in Q2 2023.



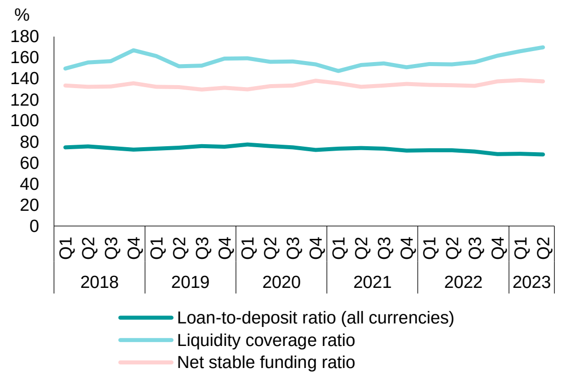
Source: HKMA; AMRO staff calculations

Hong Kong's banking sector continued to be well capitalized…



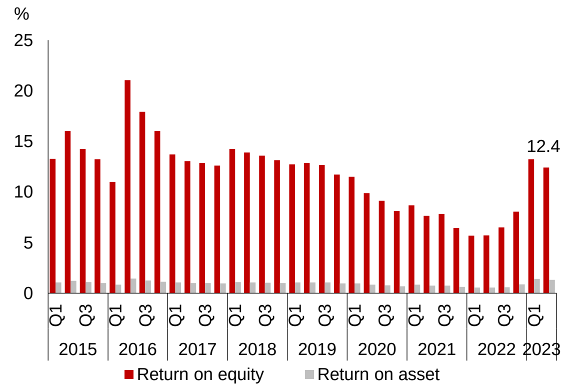
Source: HKMA

…amid ample liquidity.



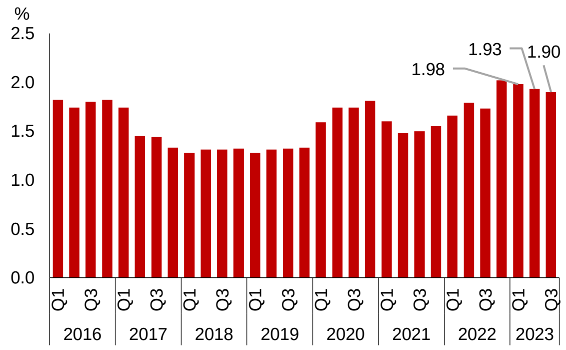
Source: HKMA

Banks' profitability remained high, with the return on equity recorded at 12.4 percent in Q2 2023.



Source: HKMA

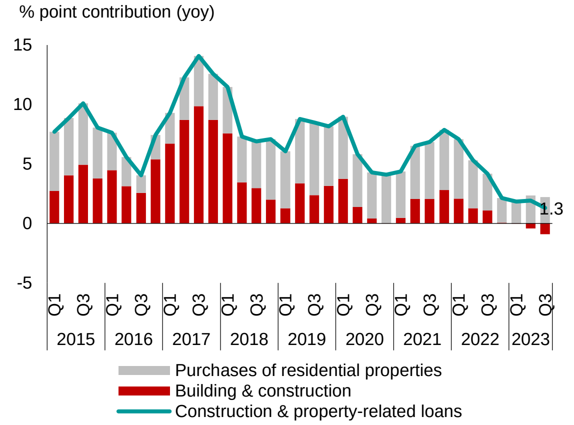
Special mention loan ratio continued to trend down slightly as of Q3 2023.



Source: HKMA

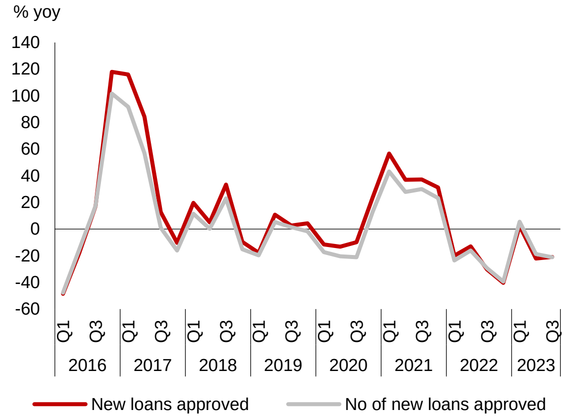
Figure 1.5. Property Sector

Credit growth for construction and property moderated due to decreased residential mortgages.



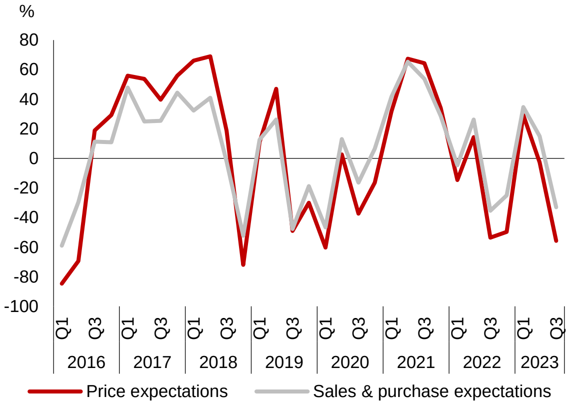
Source: HKMA; AMRO staff calculations
Note: Purchases of residential properties loans is the combination of purchase of flats in home ownership scheme and the purchase of other residential properties.

The number and value of newly approved residential mortgage loans continued to contract in Q3 2023.



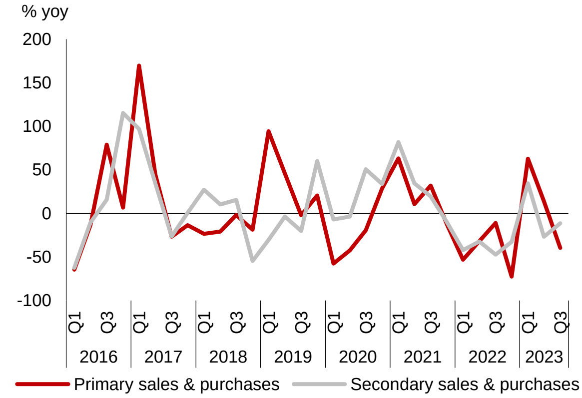
Source: HKMA; AMRO staff calculations

Expectations for property prices and transactions are subdued.



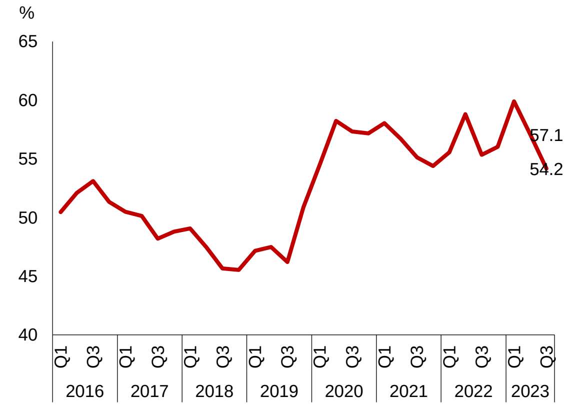
Source: RICS-Spacious

Both primary and secondary sales and purchases of properties saw a notable decline in Q3 2023.



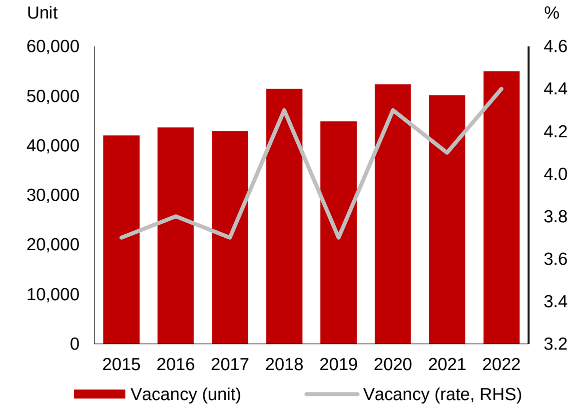
Source: Land Registry; AMRO staff calculations

The LTV ratio was recorded at 54.2 percent in Q3 2023.



Source: HKMA

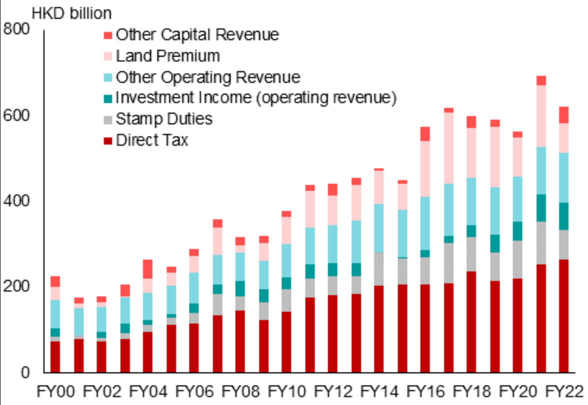
Vacancy rate increased in 2022.



Source: Hong Kong Rating and Valuation Department
Note: The vacancy rate is for private domestic property market.

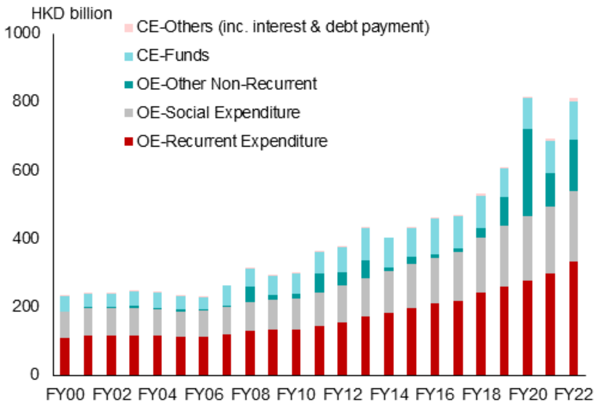
Figure 1.6. Fiscal Sector

Government revenue declined in FY2022 with the economic downturn.



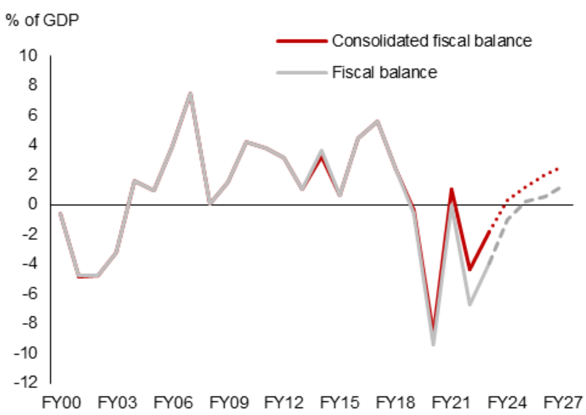
Source: Financial Services and the Treasury Bureau (FSTB); CEIC

Government expenditure expanded due to the need to support individuals, businesses, and employment.



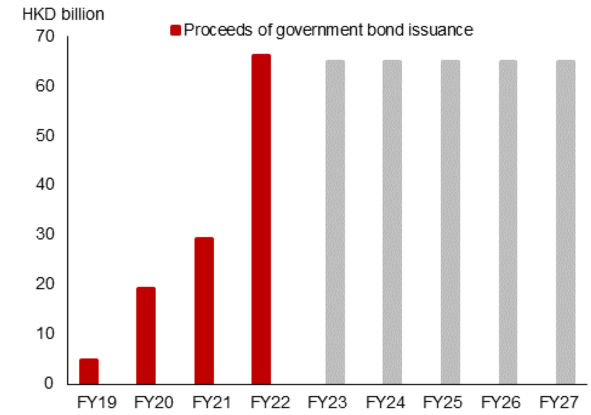
Source: FSTB; CEIC

The fiscal stance is expected to gradually tighten and return to a fiscal surplus in FY2024/FY2025



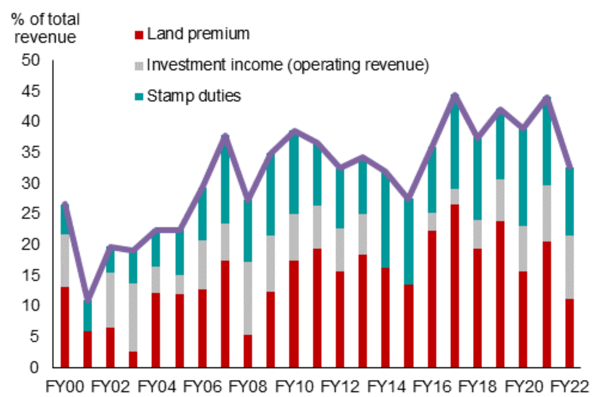
Source: FSTB; CEIC
Note: The dashed lines denote the government's medium-range forecasts announced in the 2023 February Budget Speech.

The issuance of government bonds is projected to maintain a high level.



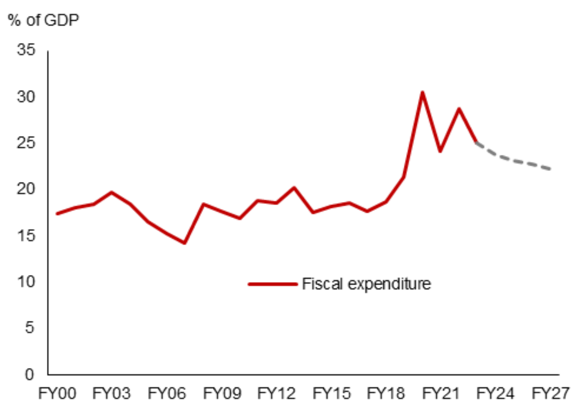
Source: FSTB; CEIC
Note: Bars in grey denote the government's medium-range forecasts announced in the 2023 February Budget Speech.

Land premiums, investment income, and stamp duties are increasingly significant sources of fiscal revenue.



Source: FSTB; CEIC

Fiscal expenditure as a percent of GDP is projected to decline.



Source: FSTB; CEIC
Note: Lines in grey denote the government's medium-range forecasts announced in the 2023 February Budget Speech.

Appendix 2. Selected Economic Indicators for Hong Kong, China

	2019	2020	2021	2022 e/	2023 p/	2024 p/
Real Sector and Prices	(in annual percentage change)					
Real GDP	-1.7	-6.5	6.4	-3.5	3.6	3.5
Private consumption	-0.8	-10.6	5.6	-1.2	8.5	4.3
Government consumption	5.1	7.9	5.9	8.2	0.0	5.2
Gross domestic fixed capital formation	-14.9	-11.1	8.3	-7.7	9.5	6.1
Exports	-6.1	-6.7	17.0	-12.6	-12.0	5.4
Goods	-5.5	-1.4	18.7	-13.9	-16.0	5.0
Services	-9.6	-34.8	3.4	-1.4	18.0	7.3
Imports	-7.2	-6.9	15.8	-12.2	-9.9	6.4
Goods	-8.2	-3.2	17.2	-13.2	-13.0	6.3
Services	0.1	-32.2	2.5	-1.7	20.0	6.9
GDP deflator	2.0	0.6	0.7	1.8	2.1	2.5
Labor Market						
Unemployment rate (In percent, period average)	2.9	5.8	5.2	4.3	3.2	3.5
Prices						
Headline inflation (Period average)	2.9	0.3	1.6	1.9	2.0	2.5
Underlying inflation (Period average, netting out one-off govt relief measures)	3.0	1.3	0.6	1.7	2.0	2.5
External Sector	(in billions of U.S. dollars, unless otherwise specified)					
Current account balance (In percent of GDP)	5.9	7.0	11.8	10.5	6.3	4.8
Goods trade balance (In percent of GDP)	-4.2	-1.5	0.9	-1.6	-6.2	-7.8
Services trade balance (In percent of GDP)	5.8	3.5	4.7	5.5	5.8	6.0
Primary income (In percent of GDP)	5.1	5.8	6.9	7.1	7.1	7.1
Exports, f.o.b.	546	542	671	617	514	539
Imports, c.i.f.	562	547	668	622	582	619
Overall balance	-1	34	-1	-47	-5	16
(In percent of GDP)	0	10	0	-13	-1	4
Gross official reserves excluding net forward position	441	492	497	424	425	441
(In months of retained imports of goods)	41	51	44	40	41	48
Total external debt	1675	1789	1871	1818	1877	2016
Short-term external debt (% of international reserves)	249	239	248	272	255	252
Fiscal Sector (General Government)	(in percent of GDP, fiscal year)					
Revenue	20.8	21.1	24.2	22.1	21.5	23.1
Expenditure	21.4	30.5	24.2	28.8	25.4	24.1
Net Issuance & Repayment of Gov Bonds & Notes	0.2	0.7	1.0	2.3	2.1	1.3
Consolidated budget balance	-0.4	-8.7	1.0	-4.3	-1.8	0.3
Public debt	0.3	1.0	2.0	4.3	6.2	7.2
Monetary and Financial Sector	(in annual percentage change, period end)					
Total loans	6.7	1.2	3.8	-3.0	2.7	3.6
Total loans (In percent of GDP)	364.7	392.4	379.9	375.1	376.9	381.9
Loan to deposit ratio (In percent)	75.3	72.3	71.7	68.5	70.0	71.0
Classified loan ratio (In percent)	0.6	0.9	0.9	1.4	1.3	1.1
Capital adequacy ratio (In percent)	20.7	20.7	20.2	20.1	20.1	20.0
Memorandum Items						
Exchange rate (LCY per USD, end-period)	7.79	7.75	7.80	7.81	7.78	7.75
GDP in billions of HKD	2,845.0	2,675.8	2,867.6	2,818.0	2,980.4	3,161.4
GDP in billions of U.S. dollars	363.1	344.9	368.9	359.8	383.1	407.9
GDP per capita (USD)	48,358	46,110	49,760	48,980	52,305	55,864
Interest rates (%, end-period)						
Three-month Hibor	2.4	0.4	0.3	5.0	5.2	4.5
10Y Govt' bond yield	1.8	0.7	1.5	3.6	3.8	3.3
Asset prices						
Hang Seng Index (end of period, 1964=100)	28,190	27,231	23,398	19,781		
(% yoy)	9.1	-3.4	-14.1	-15.5		
Residential property prices (end of period, 1999=100)	379.2	379.9	393.9	334.7		
(% yoy)	5.5	0.2	3.7	-15.0		

Source: Hong Kong authorities; IMF; Haver Analytics; CEIC; AMRO staff calculations and estimates
Note: p/ denotes projections for 2023 and 2024.

Appendix 3. Balance of Payments

	2019	2020	2021	2022
	(In percent of GDP)			
Current account	5.9	7.0	11.8	10.5
Goods	-4.2	-1.5	0.9	-1.6
Total exports of goods	149.6	156.9	182.6	170.8
Imports of goods	153.8	158.4	181.7	172.4
Services	5.8	3.5	4.7	5.5
Exports of services	28.1	19.4	21.4	23.0
Imports of services	22.3	15.9	16.7	17.5
Primary income	5.1	5.8	6.9	7.1
Secondary income	-0.8	-0.8	-0.7	-0.5
Capital account	0.0	0.0	-0.4	0.0
Financial account	8.3	9.1	12.7	10.3
Financial non-reserve assets	8.6	-0.7	13.0	23.4
Direct investment	-5.6	-9.9	-11.9	-3.9
Portfolio investment	7.6	19.7	21.6	14.7
Financial derivatives	0.0	-0.7	-1.6	-4.9
Other investment	6.7	-9.9	4.8	17.5
Reserve assets	-0.3	9.8	-0.3	-13.0
Net errors and omissions	2.5	2.1	1.2	-0.2
Overall Balance of Payments	-0.3	9.8	-0.3	-13.0

Source: C&SD; CEIC; AMRO staff calculations.

Appendix 4. Statement of Central/ General Government Operations

	2019/20	2020/21	2021/22	2022/23
	(In billions of HKD)			
Opening Balance	1171	1160	928	957
Consolidated Revenue	591	564	694	622
General Revenue	449	475	551	552
Operating Revenue	434	459	529	513
Direct Tax	214	221	253	264
Stamp Duties	67	89	100	70
Others	153	149	176	179
Capital Revenue	15	16	22	39
Land Premium	142	89	143	70
Conslidated Expenditure	608	816	693	810
Operating Expenditure	523	719	590	690
Capital Expenditure	85	97	103	121
Net Issuance & Repayment of Gov Bonds & Notes	6	19	29	66
Consolidated Surplus	-11	-233	29	-122
Closing Balance	1160	928	957	835
	(In percent of GDP)			
Opening Balance	41.2	43.4	32.4	34.0
Consolidated Revenue	20.8	21.1	24.2	22.1
General Revenue	15.8	17.8	19.2	19.6
Operating Revenue	15.2	17.2	18.4	18.2
Direct Tax	7.5	8.3	8.8	9.4
Stamp Duties	2.4	3.3	3.5	2.5
Others	5.4	5.6	6.1	6.4
Capital Revenue	0.5	0.6	0.8	1.4
Land Premium	5.0	3.3	5.0	2.5
Consolidated Expenditure	21.4	30.5	24.2	28.8
Operating Expenditure	18.4	26.9	20.6	24.5
Capital Expenditure	3.0	3.6	3.6	4.3
Overall balance	-0.6	-9.4	0.0	-6.7
Primary balance	-2.3	-11.4	-2.8	-10.0
Net Issuance & Repayment of Gov Bonds & Notes	0.2	0.7	1.0	2.3
Consolidated Surplus	-0.4	-8.7	1.0	-4.3
Closing Balance	40.8	34.7	33.4	29.6
Memorandum Items:				
GDP in billions of HKD (Calendar Year)	2,845	2,676	2,868	2,818

Source: C&SD; CEIC; AMRO staff calculations

Appendix 5. Monetary Survey

	2019	2020	2021	2022	2023*
	(In percent of change, period end)				
Total monetary base	1.8	26.2	1.6	-10.1	-2.2
Total money supply					
M1	2.6	30.1	8.0	-20.7	-7.6
M2	2.8	5.8	4.3	1.6	1.6
M3	2.7	5.8	4.3	1.6	1.6
Hong Kong dollar money supply					
Currency in circulation	6.6	8.8	6.3	0.9	-1.4
M1	-1.5	28.7	5.4	-17.8	-9.7
M2	2.4	6.5	1.5	0.6	1.0
M3	2.3	6.5	1.5	0.6	1.0
Deposit					
Total	2.9	5.4	4.6	1.7	2.3
Hong Kong dollar	2.5	6.2	1.4	0.7	1.2
Foreign currency	3.2	4.6	7.9	2.6	3.3
Loans and advances					
Total	6.7	1.2	3.8	-3.0	-3.1
Hong Kong dollar	6.6	-1.8	5.2	2.7	-1.4
Foreign currency	7.0	5.6	1.7	-11.2	-6.0
Interest rates	(In percent, period average)				
Discount window base rate	2.5	0.9	0.5	2.1	5.4
HIBOR: 1 month	1.9	0.8	0.1	1.5	4.0
HIBOR: 3 month	2.1	1.1	0.2	2.2	4.5
Composite interest rate	0.9	0.6	0.2	0.8	2.4
HSBC's best lending rate	5.1	5.0	5.0	5.1	5.7

Source: C&SD; CEIC; AMRO staff calculations
* As of end-October 2023

Appendix 6. Data Adequacy for Surveillance: a Preliminary Assessment

Criteria / Key Indicators for Surveillance	Data Availability (i)	Reporting frequency / timeliness (ii)	Data Quality (iii)	Consistency (iv)	Others if any (v)
National Account	(i) For expenditure components, yearly and quarterly data in nominal and real terms are available; (ii) for production components, yearly data in nominal terms are available, and yearly and quarterly data in real terms are available; and (iii) for income components, yearly data in nominal terms are available.	Quarterly, about 1 month for expenditure and about 2.5 months for production after the end of the reference quarter	-	-	-
Balance of Payments (BOP) and external position	Quarterly data are available	Quarterly, within three months after the end of the reference period	-	-	-
Central government budget / external debt	Monthly central government public finances are available, while quarterly external debt data are available in detail	Budget: monthly, within one month after the end of the reference period	-	-	-
Inflation, money supply and credit growth	Monthly inflation, money supply and credit growth data are available	Monthly data are released within one month after the end of the reference period	-	-	-
Financial sector soundess indicators	Available	Financial sector soundness indicators (FSIs) are available from the IMF website	-	-	-
Housing market indicators	Available	Monthly data are released within one month after the end of the reference period	-	-	-

Notes:

(i) Data availability refers to whether official data is available for public access by any means.

(ii) Reporting frequency refers to the periodicity with which the available data is published. Timeliness refers to how up to date the published data is relative to the publication date.

(iii) Data quality refers to the accuracy and reliability of the available data, taking into account the data methodologies.

(iv) Consistency refers to both internal consistency within the data series itself and its horizontal consistency with other data series of either the same or different categories.

(v) Other criteria might also apply, if relevant. Examples include but are not limited to potential areas of improvement for data adequacy.

Source: AMRO staff compilations. This preliminary assessment will form the "Supplementary Data Adequacy Assessment" in the ERPD Matrix.

Appendix 7. Climate Clipboard—Risks, Responses, and Opportunities[14]

A. Physical risks

Exposure/ Sources of risk	Potential macro-financial impact
• Sea level rise (chronic) • Extreme rainstorms and tropical cyclones (acute) • Extreme droughts (acute) • Extreme heat (acute)	• Estimated direct economic losses: HKD4.6 billion (0.2% of GDP) due to Super Typhoon Mangkhut in 2018, 3.8 times higher than that of Super Typhoon Halo in 2017 • Trading in the financial markets delayed/ cancelled' business activities suspended in severe impact scenarios • Property and infrastructure damage from city-wide flash floods and landslides • Impact on agriculture sector: Black Rainstorm in September 2023 led to estimated loss of over HKD3 million, flooding in a pig farm, resulting in thousands of pig casualties

B. Transition risks

Sources of risk	Potential macro-financial impact
• Changes in climate policy, technological changes, or a change in market sentiment • Phasing out of coal-fired electricity generation plants • Phasing out of fuel-propelled vehicles	• Increased spending on technology and infrastructure investment necessary for the development of and shift to renewable energy sources • Financial losses due to early retirement of coal-fired power plants • Heightened credit risks, especially for emission-intensive firms in disorderly transition • Increased government spending, via fiscal incentives/ subsidies, to promote private sector shift to renewable energy sources

C. Adaptation response framework and strategies

Adaptation framework	Key initiatives/strategies	Estimated financing need and sources	
• Hong Kong's Climate Action Plan 2050 (Chapter 5: Climate Change Adaptation and Resilience)	• Strengthen building and infrastructure design against extreme weather events (tropical cyclones, rainstorms) • Enhance drainage management and landslip prevention measures • Integrate water body revitalization with green and ecological conservation in drainage work • Develop policies/ plans to enhance Hong Kong's adaptive capacity based on climate science and international standards	• In the next 15 to 20 years, the government will allocate roughly HKD240 billion to implement various measures on climate change mitigation and adaptation. *Note: Separate budget for mitigation and adaptation is not available.*	
		Domestic	**External**
		• Annual budget	• N/A

D. Mitigation response framework and strategies

Nationally Determined Contribution (NDC)	National framework / Strategies	Estimated Financing and sources
• Reduce carbon emissions by 26 percent-36 percent by 2030 against the 2005 baseline **Long-term commitment** • Halve total carbon emissions from 2005 level by 2035 • Achieve carbon neutrality before 2050	• Hong Kong's Climate Action Plan 2030 (Jan 2017), outlining strategies that include: ➢ Phasing out coal in favor of natural gas for electricity generation by 2030 ➢ Scaling up renewable energy sources ➢ Enhancing energy and carbon efficiency in buildings and infrastructure • Hong Kong's Climate Action Plan 2050 (Oct 2021), with four key decarbonization strategies: 1) Achieving net-zero electricity generation 2) Promoting energy saving and green buildings 3) Advancing green transport initiatives 4) Implementing comprehensive waste reduction measures • Hong Kong Roadmap on Popularization of Electric Vehicles (Mar 2021) ➢ Provides key measures to achieve zero vehicular emissions by 2050 • Clean Air Plan for Hong Kong 2035 (Jun 2021) ➢ Outlines major areas of action to meet air quality targets from the World Health Organization's Air Quality Guidelines • Energy Saving Plan 2015–2025+ (May 2015) ➢ Assesses energy use in Hong Kong and establishes goals to reduce the city's energy intensity by 40% by 2025 • Waste Blueprint for Hong Kong 2035 (Feb 2021) ➢ Sets out key areas of action to achieve the vision of waste reduction, resources circulation and zero landfill • Climate Change Framework for Built Environment (Jun 2023) ➢ Supports building industry in achieving carbon neutrality ➢ Facilitates reporting of environmental, social and governance achievements ➢ Justifies green finance requirements ➢ Enables disclosure of climate risk strategies	• In the next 15 to 20 years, the government will allocate about HKD240 billion to implement various measures on climate change mitigation and adaptation. *Note: Separate budget for the mitigation and adaptation is not available.*

E. Enabling regulations for climate resilience

E.1. Supervisory requirement	E.3. Carbon pricing frameworks	E.4. Sustainable finance frameworks
• Supervisory Policy Manual for Climate Risk Management (Dec 2021) ➢ Provides guidance to authorized institutions (AIs) on key components of climate-related risk management ➢ Outlines the HKMA's approach and expectations for reviewing AIs' climate-related risk management **E.2. GHG accounting framework**	• Conducted a feasibility study on carbon market opportunities for Hong Kong (Mar 2022) • Launched Core Climate (Oct 2022) ➢ Serves as an international carbon marketplace established by the Hong Kong Exchanges and Clearing Limited (HKEX) ➢ Provides effective and transparent trading of voluntary carbon credits and instruments across Asia and beyond	• Securities and Futures Commission's Strategic Framework for Green Finance (Sep 2018) with aims to: ➢ Enhance climate-related corporate disclosures aligned with recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) ➢ Develop policies and guidance for asset managers' disclosures and combat greenwashing

[14] Prepared by Vanne Khut, Economist.

• Guidelines to account for and report on greenhouse gas (GHG) emissions and removals for buildings (commercial, residential or institutional purposes) in Hong Kong (2010) ➢ Ensure accurate and fair reporting of GHG emissions and removals for commercial, residential, and institutional buildings, reflecting their GHG performance • ISO 14064 1 Greenhouse Gas Accounting and Verification (Mar 2022) ➢ Provides institutions a framework for quantifying and reporting carbon emission performance to support sustainable development		➢ Facilitate development of green-related investments ➢ Support investor awareness and capacity building in green finance ➢ Participate in international sustainability initiatives to promote Hong Kong as an international green finance center

E.5. Financial system		
Initiatives	**Guidelines**	**Status**
1. Taxonomy	• Common Ground Taxonomy (CGT) – Climate Change Mitigation (Jun 2022)	• CGT Research Series Phase 1: Principles for advancing the adoption of the Common Ground Taxonomy in Hong Kong SAR and the Greater Bay Area) (June 2022) • CGT Research Series Phase 2: Understanding Use Cases of the Common Ground Taxonomy (Sep 2022) • CGT Research Series Phase 3: Operationalizing IPSF Common Ground Taxonomy in the Greater Bay Area (Sep 2023)
	• Discussion paper on "Prototype of a Green Classification Framework for Hong Kong" (May 2023)	• In May 2023, the HKMA released a discussion paper on "Prototype of a Green Classification Framework for Hong Kong" to outline its thinking and seek to gather feedback from stakeholders on its development and application.
2. Risk management assessments	• Sustainability Report (2021) • Pilot Climate Risk Stress Test Report (2021) • Sustainability Report (2022) • Guidelines for Banking Sector Climate Risk Stress Test (Apr 2023)	• Second round industry-wide climate risk stress test being conducted (over 2023 and 2024)
3. Climate-related financial disclosures	• TCFD-aligned disclosures, namely "Guidance on Climate Disclosures" (Nov 2021) • Supervisory Policy Manual for Climate Risk Management (Dec 2021)	• Mandatory disclosure based on TCFD recommendations announced in December 2020 and to commence no later than 2025 • AIs should align its climate-related disclosures with the TCFD framework no later than 2025.
4. Data availability	• Climate related data available on all websites of relevant authorities • Launched a Green and Sustainable Finance Data Source Repository which serves as a centralized source of climate related data to support the financial sector in locating data for climate risk management and other sustainable finance related analysis and research. In particular, the repository contains various government data sources relevant to the assessment of physical risks in Hong Kong, including historical data on catastrophe damages, district level micro-climate conditions (such as tropical cyclones, flooding, landslides and storm surges) as well as geographic data and a co-ordinates transformation tool".	• Latest updated data available on the websites
5. Capacity building	• Pilot Green and Sustainable Finance Capacity Building Support Scheme • Sustainable Finance Internship Programme for university students in sustainable finance policies	• Launched in FY2022 for a pilot period of three years (HKD200 million earmarked for the scheme) • Ongoing

F. Potential opportunities from the low-carbon transition		
• Green economy • Green finance hub in the region • Premier financing platform for green projects and firms	• Carbon-neutral communities • Innovation and technology center for green and sustainable development • Research and development center for green and sustainable development	• Development of relevant support infrastructure for EVs, including charging facilities/ stations • Light manufacturing, e.g., producing spare parts for EVs, solar panels, etc.

Source: Hong Kong's authorities; media reports; AMRO staff
Note: The Common Ground Taxonomy (CGT) – Climate Change Mitigation is an instruction report issued by International Platform on Sustainable Finance (IPSF), while the CGT Research Series Phase 1-3 is a series of research done by Hong Kong Green Finance Association (HKGFA).

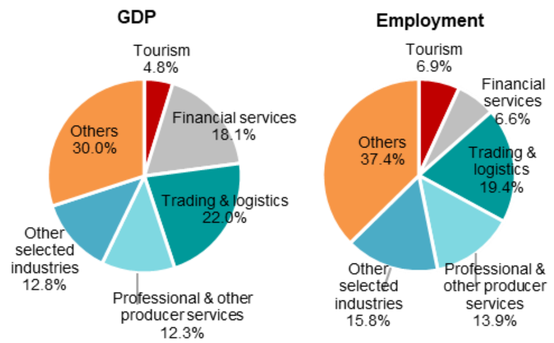
Annexes: Selected Issues

1. Reviving Inbound Tourism: Strategies for Hong Kong in Challenging Times[15]

1. Hong Kong's tourism recovery lags regional peers due to delayed reopening and other challenges, necessitating stronger measures. Alongside Mainland China, Hong Kong resumed normal travel fully on 6 February 2023. However, the economy is currently lagging its regional peers in terms of inbound tourism due to delayed reopening, a strong Hong Kong dollar, and supply-side challenges. This selected issue takes a regional perspective in examining Hong Kong's tourism recovery after three years of the COVID-19 pandemic and compares it with that of other regional economies that lifted restrictions earlier. Separately, structural trends observed before 2019 and increasing competition from the regional economies also underscore the need to enhance tourism strategies and strengthen the sector's competitiveness.

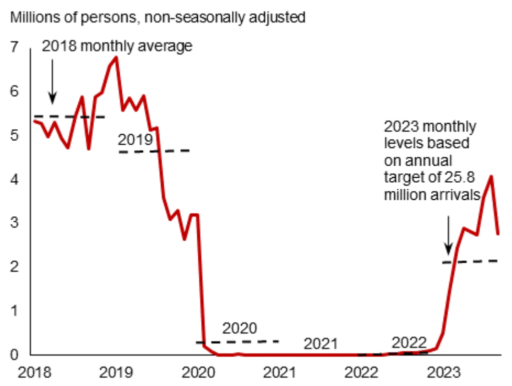
2. As one of Hong Kong's four key industries, tourism has accounted for a sizable share of economic activities and employment.[16] Between 2014 and 2018, the industry contributed an average of 4.8 percent to Hong Kong's nominal GDP and accounted for 6.9 percent of its total employment (Figure A1.1). In 2018, Hong Kong received a historical high of 65 million tourists, which translated into an increase in tourism receipts of 11 percent over 2017. The importance of tourism to the real economy was accentuated by key events in subsequent years. The protests in the second half of 2019 reduced annual arrivals to 56 million. Then in 2020, the COVID-19 pandemic resulted in the closure of international and regional borders, which decimated inbound tourism. The sharp fall in tourism receipts partly contributed to the 6.5 percent contraction in real GDP that year.

Figure A1.1 Share of Tourism Contribution, Average of 2014-18



Source: Census and Statistics Department
Note: Other selected industries include cultural and creative industries, medical services, education services, innovation, and technology, testing and certification services, environmental industries, air transport, and sports and related activities.

Figure A1.2 Monthly Tourist Arrivals



Source: Census and Statistics Department via Haver Analytics; AMRO staff calculations
Note: Data include both same-day in-town and overnight visitors. Dotted lines indicate monthly average for a particular year. Latest data as of September 2023.

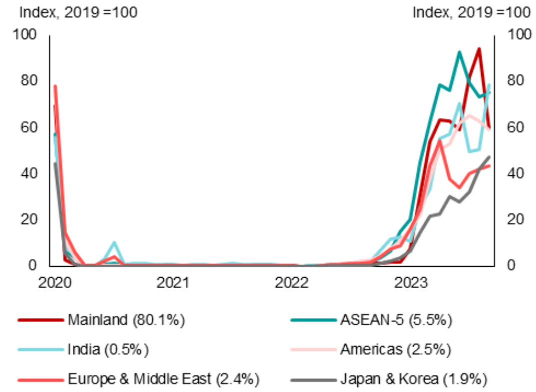
3. The return of inbound tourists has been encouraging and will likely support the recovery of the tourism industry and Hong Kong's economy. The social unrest in the second half of 2019 led to a decline in the number of arrivals, with an average of 3.5 million per month in that period, down from an average of 5.6 million per month in the previous

[15] Prepared by Chiang Yong (Edmond) Choo, Associate Economist.
[16] The other three key industries are financial services, trading and logistics, and professional and other producer services. Together with tourism, they accounted for around 57 percent of Hong Kong's economy before the pandemic.

eighteen months. This was followed by the suspension of cross-boundary travel due to the pandemic, causing a significant decrease in visitor numbers over the next three years. Borders reopened in early February 2023. Since then, the monthly number of inbound tourists rebounded to an average of 3.1 million between March and September 2023, around sixty-fold of the 2022's monthly average (Figure A1.2). Year-to-date arrivals up to September 2023 have reached 50 percent in the same period of 2019, and tourism receipts for the first half of 2023 have reached 47 percent in the same period of 2019. At the current pace, it is likely that annual arrivals in 2023 will surpass the government's earlier estimation of 25.8 million and their spending is projected to contribute close to 6 percent of 2023 GDP.[17]

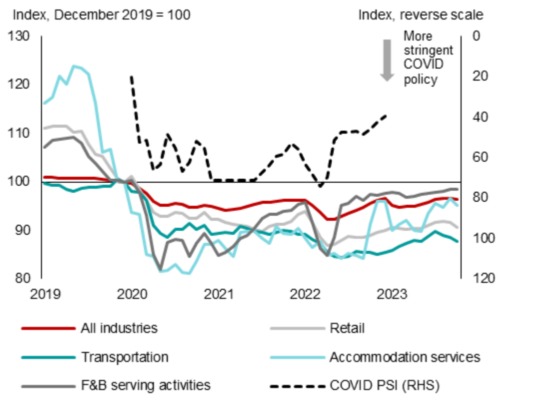
4. However, recovery momentum remains uneven across source markets. The monthly average number of tourists from the mainland, who represent a major share in Hong Kong's pre-pandemic arrivals, rebounded strongly to 2.9 million in Q3 2023 (or 78 percent of 2019's monthly average). A large-scale marketing campaign "Hello Hong Kong" that targeted ASEAN markets appeared to be effective in attracting tourists from the region, in particular the Philippines and Thailand. The average monthly arrivals hovered at around 80 percent of the levels four years ago. In contrast, the return of tourists from the Americas, Europe, the Middle East, Japan, and Korea has remained slow (Figure A1.3). The outlook continues to be clouded by several headwinds. Supply-side issues precipitated by the pandemic, such as labor shortages and limited airline capacity, have not been fully resolved. The strong Hong Kong dollar, compared to currencies in source markets, could continue to deter tourists seeking value destinations. Furthermore, slower growth momentum and ongoing property market stress in Mainland China could dampen a stronger rebound in Mainland tourists.

Figure A1.3 Monthly Tourist Arrivals by Residence Economy



Source: Census and Statistics Department via Haver Analytics; AMRO staff calculations
Note: Numbers in parentheses refer to the percentage shares of accumulated year-to-date arrivals. Data as of September 2023.

Figure A1.4 Employment and COVID Policy Stringency Index (PSI)



Source: Census and Statistics Department; Oxford COVID-19 Government Response Tracker via Haver Analytics; AMRO staff calculations
Note: F&B = food and beverages. Data as of October 2023.

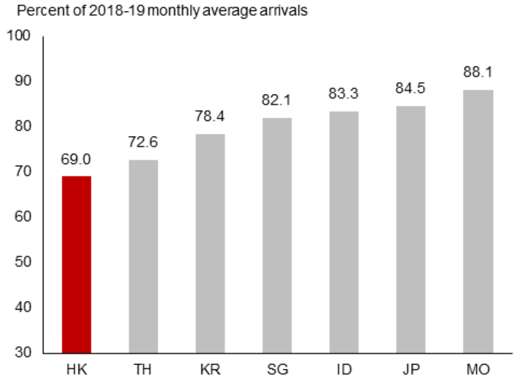
5. The current labor shortages in the tourism sector are mainly a consequence of the pandemic. While employment began to fall starting in May-July 2019, it was the impact from COVID-19 restrictions on contact-oriented activities in particular that forced businesses to let go of their staff in the tourism industry. Figure A1.4 shows that sectors such as food and beverage (F&B) services, retail, and accommodation services were severely affected, with employment falling sharply whenever the authorities tightened social distancing measures in an effort to contain the spread of the virus and its strains. As a result, employees either

[17] The 6 percent contribution to GDP is calculated as the product of the HKTB's 2023 estimation of 25.8 million visitors and the average per capita spending of HKD6,970 between 2014 and 2018, assuming tourists would spend the same amount of money as in non-downturn years. It is then scaled by the annual nominal GDP of HKD2,990.7 billion for 2023, estimated by AMRO staff.

switched industries or returned to their home countries. The manpower crunch in the tourism industry currently persists as workers have yet to return and there is a lack of experienced staff in the domestic job market. Employment in transportation in August-October 2023 remained around 12 percent lower than the fourth quarter of 2019's level, for example. In the retail, accommodation and food services sector, employment levels in August-October 2023 were about 15 percent lower than their recent high in the first quarter of 2019.

6. In addition to these headwinds, Hong Kong also faced stiff competition from other tourist destinations. As the city reopened later than most regional peers, it is still trailing in terms of inbound visitors despite strong growth momentum. Given the greater diversification in their source markets,[18] Indonesia, Japan, and Singapore continued to lead the region in tourism recovery. The early lifting of all travel restrictions in April 2022 also aided in Singapore's rebound. As in Hong Kong, Korea and Thailand are more dependent on Mainland tourists than on tourists from other economies, and hence the recovery in their inbound arrivals has been relatively slower. However, another of China's Special Administrative Regions, Macao, China[19] has already seen its tourist arrivals average 88.1 percent of pre-pandemic monthly arrivals between July and September 2023, despite reopening at around the same time as Hong Kong (Figure A1.5). Many Mainland and Hong Kong tourists have been drawn by Macao's rich Portuguese-influenced local cultural and culinary attractions, apart from its gaming offerings. In the near term, Hong Kong could face stronger competition as other tourism markets continue to boost their appeal. For instance, Thailand has recently allowed visa-free travel to Mainland visitors to make border entry less of a hassle (CNA 2023).

Figure A1.5 Average Monthly Arrivals for July-September 2023



Source: Census and Statistics Department via Haver Analytics; AMRO staff calculations.
Note: HK = Hong Kong; ID = Indonesia; JP = Japan; KR = Korea; MO = Macao; SG = Singapore; TH = Thailand.

Figure A1.6 Four Strategic Focuses of Hong Kong Tourism Board, 2023-24

Source: Hong Kong Tourism Board Work Plan for 2023-2024

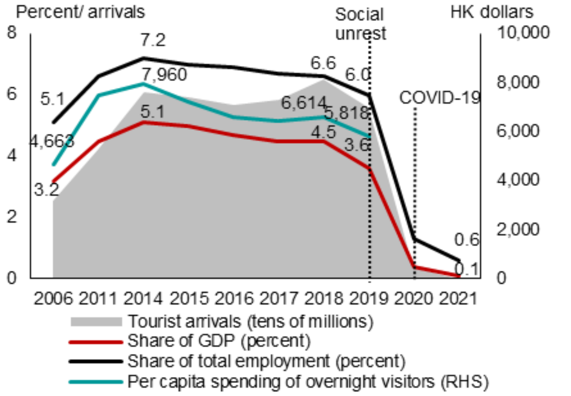
7. The authorities have devised four strategic focuses in the 2023–24 Work Plan, taking these developments into account. To drive a strong recovery, the USD12.7 million "Hello Hong Kong" campaign, which includes giving away 500,000 free air tickets and generating positive word-of-mouth feedback, was launched in March. The government has also earmarked HKD400 million in funding to stage flagship international and home-grown events and strengthen Hong Kong's position as the "Events Capital of Asia". The line-up for 2023 includes Art Basel, Rugby Sevens, the International Dragon Boat Festival, the Wine and Dine Festival, and the Belt and Road Summit. In line with the direction set out in the National 14th

[18] Based on United Nations World Tourism Organization (UNWTO) data for 2018. https://www.unwto.org/tourism-data/global-and-regional-tourism-performance.
[19] Macao, China will be referred to as Macao or MO (ISO Alpha-2 code) hereafter.

Five-Year Plan, the Hong Kong Tourism Board (HKTB) is also promoting multi-destination trips to other cities in the GBA through Hong Kong while banking on the diversity of unique characteristics within the bay area. Finally, the government continues to prepare the travel industry for changes in travel preferences by subsidizing the training of frontline staff in IT skills and equipping them with knowledge of cultural heritage and historical sites (Figure A1.6).[20] In April, the Hong Kong Mortgage Corporation Insurance Limited (HKMCI) also launched a Dedicated 100-percent Loan Guarantee Scheme for the cross-boundary passenger transport trade and travel sector to support firms in expanding or meeting cashflow needs.[21]

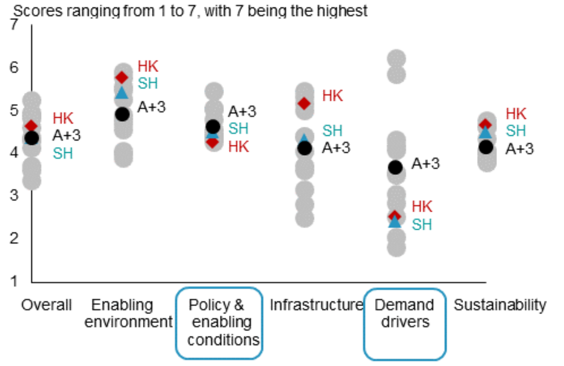
8. In addition to addressing immediate concerns, trends leading up to 2019 have highlighted a gradual decline in Hong Kong's competitiveness as a tourist destination. In the years before 2019's economic downturn, tourism's shares in Hong Kong's GDP and employment had already begun to decline. The industry's contribution to the economy had dropped from the peak of 5.1 percent in 2014 to 4.5 percent in 2018, before sliding to 3.6 percent in 2019. Likewise, its share of total employment fell from 7.2 percent in 2014 to 6.6 percent and 6 percent in 2018 and 2019, respectively. Additionally, tourists have generally spent less over the years. The average per capita spending by inbound visitors staying overnight slowed from nearly HKD8,000 in 2014 to HKD6,614 in 2018, even though tourist arrivals remained broadly stable over the same period (Figure A1.7). These trends illustrate that tourism's competitiveness could have been affected by shifting travel preferences and the fading appeal of offerings.

Figure A1.7 Tourism's Shares in GDP and Employment, Tourist Arrivals and Per Capita Spending of Overnight Visitors



Source: Census and Statistics Department
Note: Data on per capita spending after 2019 are not included due to the distortions from the pandemic and the resulting declines in arrivals.

Figure A1.8 Travel and Tourism Development Index, 2021 (Hong Kong Scores vs Other Economies)



Source: World Economic Forum (WEF) "The Travel & Tourism Development Index 2021 dataset" (version 24 May 2022); AMRO staff calculation
Note: Red diamonds represent Hong Kong (HK) scores. Grey dots represent scores of individual ASEAN+3 economies – Cambodia, China, Hong Kong, Indonesia, Japan, Korea, Malaysia, the Philippines, Singapore, Thailand, and Vietnam. Black dots represent the average for the ASEAN+3 economies (A+3). Teal triangles represent the average scores for small population and high-income economies (SH), which comprise 26 economies including Hong Kong, Singapore, Iceland, Ireland, New Zealand, Uruguay, etc. A small population is defined as one of <10 million people. The level of income is defined by World Bank's income classification. High-income refers to a gross national income per capita of USD12,696 or more.

[20] Link to HKTB 2023-24 Workplan: https://www.legco.gov.hk/yr2023/english/panels/edev/papers/edev20230327cb4-193-4-e.pdf

[21] The loan guarantee schemes aim at helping local firms to obtain financing from participating lenders and were started during the pandemic for tiding them over financial difficulties. On 29 April, the HKMCI launched the 100-percent schemes to provide full guarantee coverage to the loans of eligible transport and travel industry borrowers approved by the lenders. This is to facilitate the acceleration of operational capability for firms to keep up with the resumption pace of inbound and outbound tourism activities.

9. Furthermore, we can identify development gaps in Hong Kong by contrasting it with other comparable tourist destinations. Using the Travel and Tourism Development Index (TTDI) 2021 published by the World Economic Forum, we compare Hong Kong scores with other ASEAN+3 and other global small and high-income economies.[22] Based on the overall TTDI score, Hong Kong is ranked 19th globally and 5th within the ASEAN+3 region. While the city fares well in the enabling environment and infrastructure development categories, it scores lower in the policy and enabling conditions' and demand drivers' categories (Figure A1.8). Drilling down to more granular sub-indices shows that Hong Kong scores lower in the price competitiveness[23] pillar for the policy and enabling conditions category. Within the demand drivers' category, the scores reveal that Hong Kong lacks natural and cultural resources and the associated protection,[24] even compared to global small and high-income economies.

10. In the near term, policy should focus on addressing supply-side constraints to facilitate a fuller recovery. Most of the airline capacity issues are closely related to the ongoing shortages in manpower, including that of pilots and support staff (Westbrook 2023, Yiu 2023). The labor crunch is also evident at the airport, in the land transport sector, in restaurants, accommodations and places of interest. It is commendable that the government has rolled out different labor importation schemes for various industries to attract foreigners to work in Hong Kong. The first batch of workers will start work in the aviation sector by December 2023 and should somewhat ease shortages (Lin and Westbrook 2023). To complement these schemes, the government could work with mainland authorities in accelerating the flow of workers to fill the gaps. Additionally, large-scale recruitment drives could efficiently match workers who are interested in returning to the industry with prospective employers. Artificial intelligence and digitalization could also be utilized to automate manual and repetitive processes ranging from airport operations to restaurant payments, leaving staff to concentrate on providing personalized services. Finally, initiatives such as loan Guarantee schemes could be retained for targeted segments until recovery momentum becomes more entrenched.

11. In the medium term, Hong Kong should persist with the strategy of enhancing its attractiveness and stimulating increased spending by strategically targeting specific markets. According to the HKTB, meetings, incentives, conferences, and events (MICE) visitors spent around 25 percent more than other overnight visitors. Therefore, strengthening the city's position as the "Events Capital of Asia" is a move in the right direction. To attract major sporting events and concerts, the construction of the Kai Tak Sports Park, which includes a 50,000-seat stadium, is set to be completed by 2025. Years ago, travel preferences, in particular those of Mainland tourists, began to change, leaning towards more experiential experiences and less shopping (Dichter and others 2018). The pandemic has accelerated the preferences for cultural and natural tourism. Hong Kong could provide more localized and customized tours to showcase traditions and daily activities of its people to cater to such demand. In this regard, zoning of areas with rich heritage and bringing back night bazaars are good ways to enliven the itinerary. In addition, Hong Kong should also diversify its source markets beyond the mainland and other parts of Asia, to other regions such as the Middle East. Tourists from the Middle East were the highest spenders per capita in Hong Kong, according to official data up to 2019; it therefore makes sense to concentrate marketing efforts

[22] A population of 10 million people or less classifies as a small population in this case. The level of income is defined by World Bank's income classification. A high-income level refers to gross national income per capita higher of USD12,696 or more.
[23] This pillar includes sub-pillars on hotel, fuel prices and purchasing power parity, on which Hong Kong scored lower. The other sub-pillars are ticket taxes and airport charges, and short-term property rental prices.
[24] These two pillars include sub-pillars on the number of UNESCO World Heritage sites, protected natural areas, large sport stadiums, diversity in intangible cultural expressions, on which Hong Kong scored lower.

in the Middle East, make offerings more Muslim-friendly, and inviting them to explore the GBA through the city.

12. Over the longer term, Hong Kong should strengthen its capacity to deliver value for tourists and enhance its competitiveness as a preferred tourist destination. Tourism could be expanded beyond solely for leisure purposes. As tourists these days tend to travel for a variety of reasons (Dichter and others 2018), synergizing leisure with Hong Kong's strengths, such as in financial, insurance services and movie-making expertise, could offer more value to tourists and open new opportunities. It was reported that thousands of mainland travelers flocked to Hong Kong's financial institutions during the Golden Week holiday in May to open accounts and procure insurance (Wee and others 2023). This highlights the potential in organizing trips surrounding these services and thus urging tourists to spend more days and money in Hong Kong. Additionally, periodic refreshing of physical and digital infrastructure could bring about new experiences for repeat tourists and could be incentivized through government and private co-funding. For instance, the Hong Kong International Airport is financing the new three-runway system through a combination of operating surplus, green and retail bonds, bank loans and equity (Legislative Council 2023).

13. Accelerating the recovery of tourism should not be achieved at the cost of compromising growth sustainability, environmental protection, and cultural preservation. Promoting Hong Kong's niche attractions, in particular cultural and natural resources, should be the priority as these are difficult to emulate elsewhere. However, recent cases of regional peers taking actions to limit the number of tourists in popular tourist spots to prevent "over-tourism" warrants consideration and careful thought being given to reopening, and strategic multi-ministry coordination. Thoughtful spatial planning served the purpose of crowd dispersion well in 2018 when the number of arrivals peaked and should continue to work for Hong Kong if planning is done pre-emptively. Authorities could also consider applying for UNESCO inscriptions which, if awarded, could help drive tourism activities and at the same time, strengthen the public and private sectors' resolve in protecting tangible and intangible heritage. Finally, a long-term framework incorporating business continuity strategies and ensuring sustained labor supply would help to reduce severe disruptions to the tourism industry in view of future pandemics.

References

Channel News Asia (CNA). 2023. "Thailand to Offer Chinese Tourists Visa-Free Entry." News article. 13 September.

Dichter, Alex, Guang Chen, Steve Saxon, Jackey Yu and Peimin Suo. 2018. "Chinese Tourists: Dispelling the Myths (An In-depth Look at China's Outbound Tourist Market." McKinsey and Company report. September.

Legislative Council. 2023. "Updated Background Brief on the Development of the Three-Runway System at the Hong Kong International Airport." Panel on Economic Development Meeting on 10 July 2023. Legislative Council LC Paper No. CB(4)662/2023(05). 10 July.

Lin, Edith and Laura Westbrook. 2023. "Hong Kong's First Batch of Imported Labour for Aviation Sector to Start Work at Airport Earliest by December." South China Morning Post article.15 August.

Wee, Denise, Krystal Chia, Bei Hu and Lulu Yilun Chen. 2023. "China Opening Revives Wealth Pipeline to Hong Kong Finance Hub." Bloomberg News article. 9 May.

Westbrook, Laura. 2023. "Airlines Warn High Operational Costs at Hong Kong's Airport and Labour Shortages Make It Harder for Recovery to Get Off Ground." South China Morning Post article. 3 August.

Yiu, Pak. 2023. "Cathay Pacific Short of 1,400 Senior Pilots: Union." Nikkei Asia article. 30 June.

2. Hong Kong's Transport Infrastructure-Tourism Nexus: Efforts, Success Factors and Challenges[25]

1. Hong Kong is an established tourism hub, with its exceptional transport infrastructure playing a pivotal role in its attractiveness. This selected issue briefly outlines recent transport infrastructure initiatives aimed at boosting Hong Hong's strong status as a tourism hub, examines their synergy with other key success factors, and considers some innovative and technologically advanced solutions that may be necessary to address future challenges and ensure Hong Kong's continued prominence in global tourism.

<u>Hong Kong's recent efforts in building tourism-related transport infrastructure</u>

2. Over the past few years, authorities in Hong Kong have dedicated significant efforts to enhance the city's tourism infrastructure. The Travel and Tourism Development Index (TTDI) framework, as defined by the World Economic Forum, identifies infrastructure as one of five key overarching elements crucial for progress in this sector. Extensive research confirms that advanced countries with relatively well-developed infrastructure are better equipped to manage and sustain a rapid growth in tourism. The remaining four elements include the enabling environment, policy and enabling conditions, demand drivers, and the sustainability factor (Figure A2.1). Each of these five core elements comprises several sub-elements. For infrastructure, there are three specific sub-elements: air transport infrastructure, ground and port infrastructure, and tourism service infrastructure. In recent years, Hong Kong has implemented several remarkable projects to strengthen its tourism infrastructure across these three sub-elements. These include: (a) the high-speed rail network, which connects Hong Kong with other cities in Mainland China seamlessly; (b) the Hong Kong–Zhuhai–Macau bridge, a vital transportation link between these key regions; (c) an additional runway at the airport, enhancing air travel capacity; (d) the Sha Tin–Central Link, a critical rail link bridging the eastern and western regions of Hong Kong; and (e) a new electronic toll system, effectively alleviating road traffic congestion issues.

Figure A2.1 Travel and Tourism Development Framework

Enabling Environment	Travel and Tourism Policies and Enabling Conditions	Infrastructure	Travel and Tourism Demand Drivers	Travel and Tourism Sustainability
Safety & Security Health & Hygiene Human Resources & Labor Market ICT Readiness	Prioritization of travel and tourism International openness Price competitiveness	Air transport Ground and port infrastructure Tourism services infrastructure	Natural resources Cultural resources Non-leisure resources	Environmental sustainability Socioeconomic resilience & conditions Travel and tourism pressure & impact

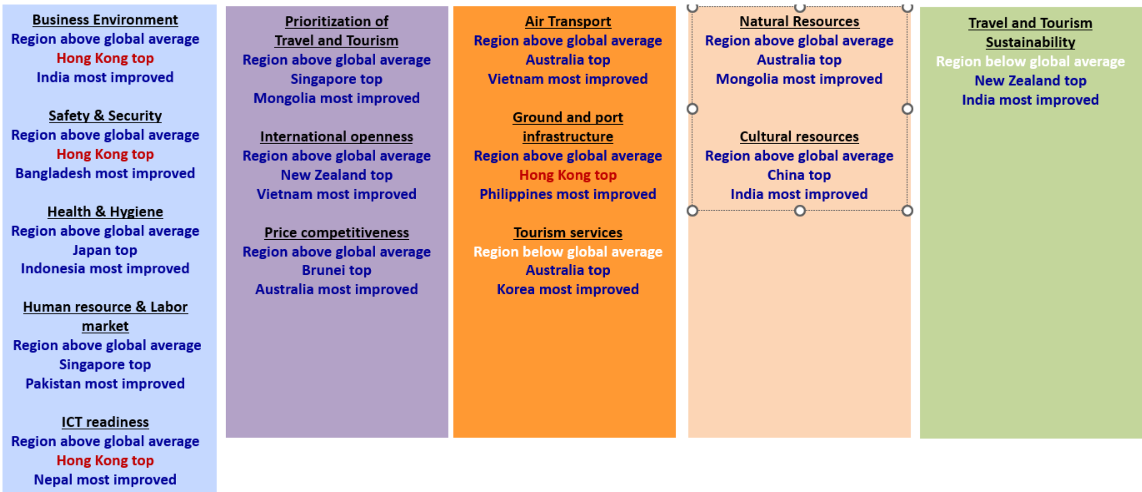
Source: World Economic Forum

3. Hong Kong's tourism infrastructure and the degree of its tourism development are among the best in the world. According to the comprehensive assessment conducted by the World Economic Forum within its framework, Hong Kong ranks on top in the Asia-Pacific region across key categories such as business environment, safety and security, ICT readiness, and ground and port infrastructure (Figure A2.2). Among the many elements affecting tourist destinations' overall competitiveness, Hong Kong is (relatively) weak in only

[25] Prepared by Suan Yong Foo, Senior Economist.

two areas – price competitiveness and service infrastructure, ranked in the fifth quintile for the former and third quintile for the latter. In the broader context of global travel and tourism development, Hong Kong is ranked 19th. Notably, only Japan, Singapore, Mainland China, and Korea from the ASEAN+3 group of economies are with Hong Kong in the global top 20 (Figure A2.3). It is worth highlighting that Indonesia, Thailand, and Malaysia, also representing the ASEAN+3 region, have commendable rankings in the global top 40.

Figure A2.2 Travel and Tourism Development Framework



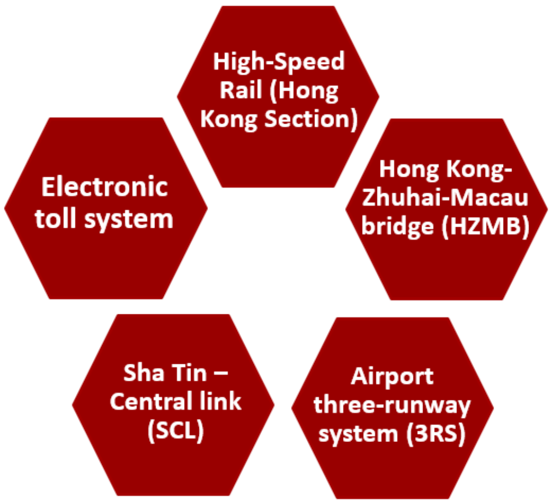
Source: World Economic Forum

Figure A2.3 Travel and Tourism Development Index: Selected Rankings

Rank	Tourism Destination		
1	Japan	26	Czech Republic
2	US	27	New Zealand
3	Spain	28	Greece
4	France	29	Estonia
5	Germany	30	Poland
6	Switzerland	31	Cyprus
7	Australia	32	Indonesia
8	UK	33	Saudi Arabia
9	Singapore	34	Chile
10	Italy	35	Malta
11	Austria	36	Thailand
12	China	37	Hungary
13	Canada	38	Malaysia
14	Netherlands	39	Slovenia
15	Korea	40	Mexico
16	Portugal	41	Bulgaria
17	Denmark	42	Lithuania
18	Finland	43	Qatar
19	Hong Kong	44	Georgia
20	Sweden	45	Turkey
21	Luxumborg	46	Croatia
22	Belgium	47	Israel
23	Iceland	48	Latvia
24	Ireland	49	Brazil
25	UAE	50	Costa Rica

Source: World Economic Forum

Figure A2.4 Some Key Tourism-Related Transport Infrastructure Projects



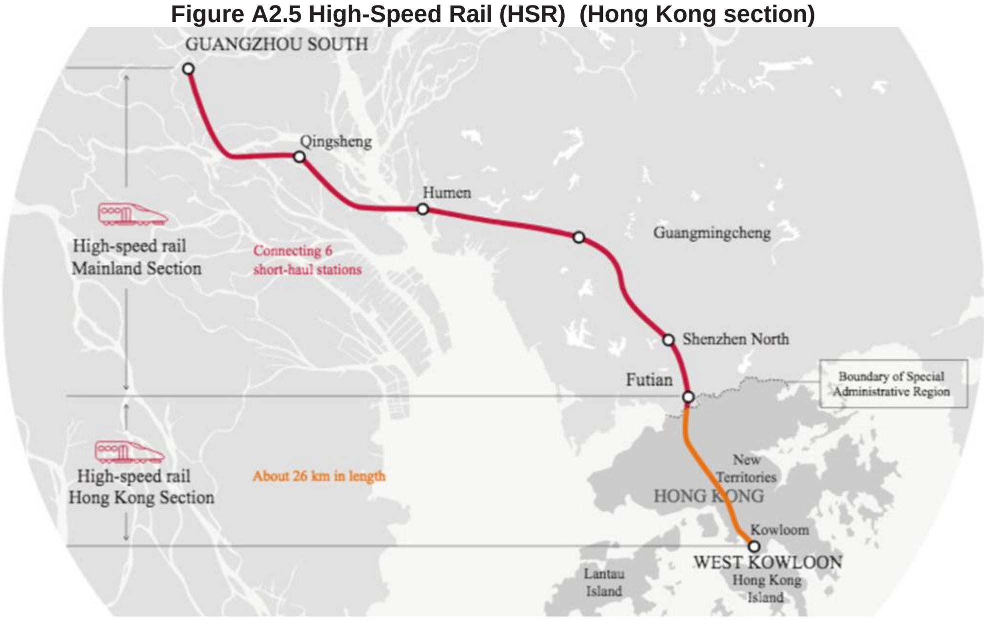
Source: Hong Kong authorities

4. In this context, Hong Kong authorities' initiatives reflect a forward-looking approach, aiming to ride on the anticipated rapid growth of demand for tourism from Mainland China, other ASEAN+3 countries, and the global market. The objective is to strengthen the city's tourism infrastructure, thereby creating a robust foundation to further boost the growth of its travel and tourism sector. (See Figure A2.4 for some of the key projects.)

5. The High-Speed Rail (HSR) (Hong Kong section) enhances convenience, cost-efficiency, comfort, and renders the array of tourist destinations accessible to visitors. (Figure A2.5)

- About 26km in length, the HSR route runs from West Kowloon, seamlessly connecting Hong Kong to Mainland China's extensive 42,000-km national high-speed rail network.
- This system delivers swift and reliable transportation services to both business and leisure travelers. In the Hong Kong section, trains maintain speeds of 200km/h, while in the Mainland section, they can reach speeds of up to 350km/h. Passengers can travel from Hong Kong to many mainland cities without changing trains.
- The Hong Kong West Kowloon Station serves as a hub offering many station facilities and shopping options.
- The HSR offers various classes of travel and on-board facilities, accommodating passengers with different needs and budget considerations.

Figure A2.5 High-Speed Rail (HSR) (Hong Kong section)



Source: Hong Kong Tourism Board

6. The Hong Kong-Zhuhai-Macau bridge (HZMB) plays a pivotal role in enhancing Hong Kong's integration within the GBA, bolstering inbound tourism. (Figure A2.6)

- The HZMB has three vital components: the 12km Hong Kong Link Road, the 29.6km Main Bridge, and the 13.4km Zhuhai Link Road. It is the world's longest bridge-tunnel sea crossing.
- The HZMB brings major cities in the Pearl River Delta within a three-hour commuting distance from Hong Kong. The journey spanning approximately 42km from Hong Kong Port to Zhuhai Port and Macao Port can be completed in just 40 minutes.
- The HZMB effectively links Hong Kong to two of the other 10 cities in the GBA, opening access to nearly 100 tourist destinations. These include shopping districts, theme parks and cultural and historical sites, event venues, resorts, and gaming establishments.
- The improved connectivity among the three cities reduces costs for travelers, as they can stay in one city and easily make day trips to explore the others.

Figure A2.6 Hong Kong-Zhuhai-Macau bridge (HZMB)

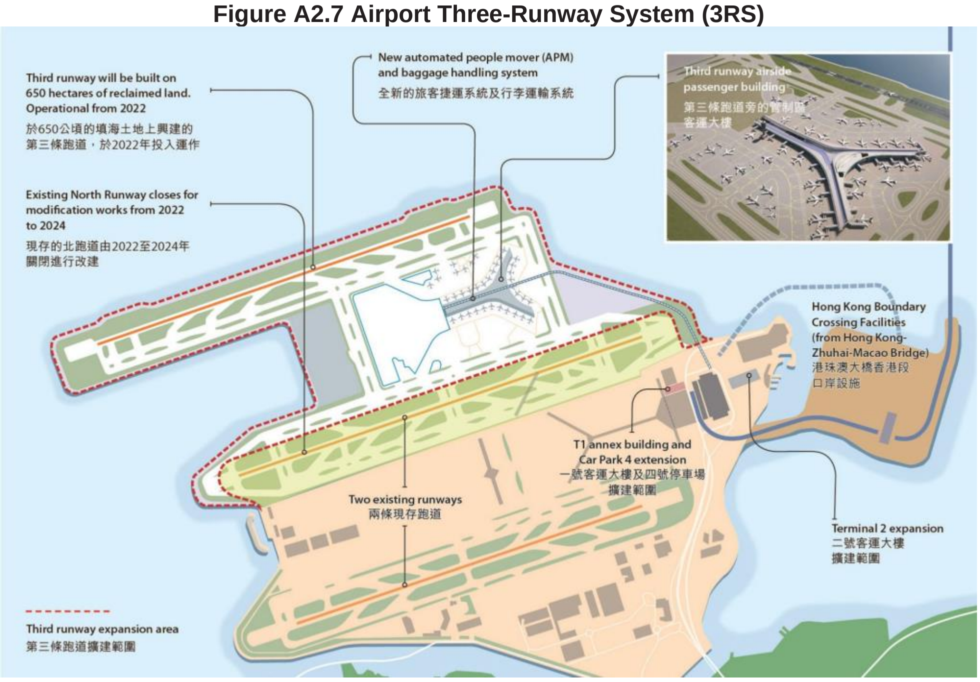
Source: Travel China Guide

7. The Airport Three-Runway System (3RS) is a large-scale, multi-year infrastructure project aimed at strengthening Hong Kong's position as a tourism hub and solidifying its standing as an international aviation, logistics, and business center. (Figure A2.7)

- The 3RS involves seven core projects:

(i) Reclaiming approximately 650 hectares of land north of the existing airport island;
(ii) Constructing the T2 Concourse and its associated apron;
(iii) Establishing a new, 3,800-meter-long runway and its supporting taxiway systems, alongside reconfiguring the existing North Runway;
(iv) Expanding Terminal 2 to provide full-fledged passenger services;
(v) Building a new Automated People Mover system connecting Terminal 2 with the T2 Concourse, to transport up to 10,800 passengers per hour;
(vi) Creating a new Baggage Handling System linking Terminal 2 with the T2 Concourse, designed to handle 9,600 bags per hour; and
(vii) Developing support infrastructure, road networks, and transportation facilities.

Figure A2.7 Airport Three-Runway System (3RS)



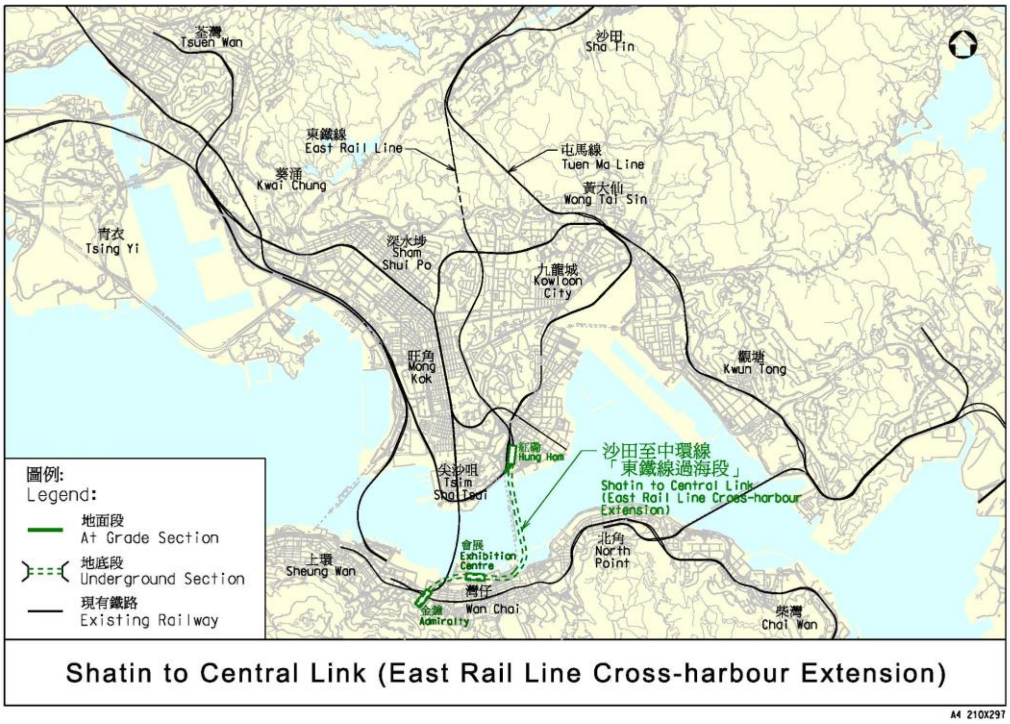
Source: Cathay Pacific

- The 3RS can be transformational in several important ways. First, it can greatly boost the number of visitors that Hong Kong can receive and accommodate. Second, it can markedly improve the city's logistics network, creating more possibilities for tourists to shop and ship. Third, it can amplify spillover effects from MICE events, fuelling growth in other tourism-related activities and higher-end shopping, thereby stimulating increased consumption in the city.

8. The Sha Tin–Central link (SCL) helps entice visitors to explore diverse locations within the two halves of Hong Kong, while maintaining the overall livability of the city. (Figure A2.8)

- The SCL connects the eastern and western side of Hong Kong, featuring a 17km metro railway comprising six new stations and the upgrade of three interchange stations.
- This extensive route encompasses an 11km stretch from Shatin, traversing the densely-populated East Kowloon area, and a 6km route that includes an immersed section under Victoria Harbor, linking to Causeway Bay and the Admiralty business area.
- An integral component of the SCL's strategic railway line, the East Rail Line cross-harbor extension started operations in May 2022.
- The SCL circumvents some physical constraints posed by Hong Kong's relatively compact and densely-populated urban landscape, characterized by diverse real estate.

Figure A2.8 Sha Tin–Central link (SCL)



Source: Hong Kong Highways Department

9. A new electronic toll system improves the overall travel experiences for tourists.

- HKeToll connects various segments of Hong Kong's land transport network.
- It eliminates the need for drivers to stop at toll booths to pay tunnel fees, instead automatically deducting tolls for vehicles equipped with a registered electronic tag.

- This is a significant upgrade from the initial Automatic Toll Collection System for road tunnels, first introduced in Hong Kong in 1993 and later expanded to cover all tolled tunnels and Control Areas.
- As of April 2023, more than 349, 000 electronic toll tags have been issued by the service provider of Automatic Toll Collection System, with about half of the vehicles using the system when passing through the tolled tunnels or roads.
- The system improves traffic flow and encourages some tourists to rent vehicles during their visits to Hong Kong, providing an additional transport option to explore the city.

Success factors

10. There are several key factors in boosting tourism, and Hong Kong has excelled across all these, amplifying the advantages of its robust transport infrastructure. These include different types of attractions to captivate visitors, a vibrant services sector, effective marketing and advertising, hassle-free entry, safety, convenience, and connectivity. In summary, Hong Kong has chosen to build a model of tourism business which leverages its competitive advantages and creates services and experiences tailored to the evolving preferences of tourists who constitute long-term demand.

Embracing technological advancements for future challenges

11. Like any other tourist hub, Hong Kong faces several challenges in maintaining and enhancing competitiveness. With its advanced economy, strong services sectors, and tech-savvy workforce, Hong Kong is well-placed to use more innovative and high-tech solutions for developing tourism-friendly infrastructure to address these challenges. (Figure A2.5)

Figure A2.5 Some Future Challenges: End-Demand, Factor Inputs, and Financing

Source: AMRO staff.

- Competition from other cities creating newer or different types of tourist attractions. The tourism-related transport infrastructure developed in the city should aim to maximize Hong Kong's competitive advantages, including its status as a MICE hub, its reputation as a shopping and culinary hub, and its highly sought-after attractions not commonly found elsewhere in the world.[26]

- Space that can be allocated for the further development of tourism infrastructure, including tourism service infrastructure for which Hong Kong is ranked in the third quintile of tourism destinations, is limited due to its dense population and small size.[27] To address this constraint, Hong Kong can harness artificial intelligence tools to map spatial demand within the city, both in the near term and long term. This approach enables more efficient urban planning and helps the development of tourism-related infrastructure that can be integrated seamlessly with other infrastructure.
- Population aging[28] and workforce shrinkage are constraints in the development of the tourism sector. Demographic projections, policy measures to promote healthier aging and increased mobility, and the construction of age-friendly infrastructure, including transport infrastructure, can enhance Hong Kong's competitiveness as a tourism hub.
  Sustainable long-term funding is important as Hong Kong wants to develop several sectors of the economy and strengthen its long-term socioeconomic resilience. These include investments in "new economy" activities and spending to address issues related to population aging, and social welfare. Given the need to rising fiscal expenditure over the next decade and beyond, it is important to explore more sources of funding. The levy on departures from Hong Kong's airport to finance the building of the 3RS is a good example. In future, operators of tourism-related businesses may need to make modest contributions to the development of tourism-related infrastructure. These contributions could be directed into a dedicated tourism infrastructure fund. Hong Kong authorities, with their extensive experience in managing the city's fiscal reserves, are well-equipped to effectively manage and grow such a fund over the long term.[29]

References

Hong Kong Chief Executive's Office. October 2022. Chief Executive's Policy Address.

Hong Kong Treasury. February 2023. The 2023-24 Budget.

Hong Kong Government. August 2023. Hong Kong: The Facts: Tourism.
https://www.gov.hk/en/about/abouthk/factsheets/docs/tourism.pdf

Meetings and Exhibitions Hong Kong. August 2023. World-Class MICE Infrastructure.
https://www.mehongkong.com/eng/home/why-hong-kong/MICE-infrastructure.html

Hong Kong Government News. December 2018. "Infrastructure Important for Tourism".
https://www.news.gov.hk/eng/2018/12/20181212/20181212_165617_507.html

World Economic Forum (WEF). Tavel and Tourism Competitiveness Report 2019.
https://www3.weforum.org/docs/WEF_TTCR_2019.pdf

[26] Some examples include: the Goldfish Market located at Tung Choi Street; the New Territories Cycle Network, a 60-kilometer, six-hour-long cycling adventure; the Old Town Central, where tourists can visit heritage buildings and see street art, sample local food, and buy exquisite souvenirs; Lamma Island, where visitors can experience outdoor activities and visit boutiques, novelty stores, casual restaurants, and cafes; and Tai Long Wan, which has sandy beaches, blue waters, long hiking trails, and waterfalls.
[27] Hong Kong's population density, at 6,740 people per square kilometer in 2022, makes the city the eighth-most densely populated city in the world.
[28] Excluding foreign domestic helpers, the number of elderly persons in Hong Kong will increase from 1.45 million in 2021 to 2.74 million in 2046. The corresponding proportion of the population is projected to increase from 20.5 percent to 36 percent, implying that more than one in every three Hong Kong people will be elderly.
[29] For example: In New Zealand, the Tourism Infrastructure Fund (TIF) provides up to NZD25 million annually to develop tourism-related infrastructure that supports regions facing pressure from tourism growth, and in Wales, a GBP5 million Brilliant Basics tourism fund for 2023 to 2025 was launched in 2023, as a capital fund, which delivers small-scale tourism infrastructure improvements across Wales, and is open to local authorities and national park authorities.

World Economic Forum (WEF). Tavel and Tourism Development Index 2021: Rebuilding for a Sustainable and Resilient Future.
https://www3.weforum.org/docs/WEF_Travel_Tourism_Development_2021.pdf

McKinsey. Infrastructure Technologies: Challenges and Solutions for Smart Mobility in Urban Areas. March 2023.

CBRE Ellis. Hong Kong Infrastructure Outlook: Opportunities in the Future Metropolis. March 2022.
https://mktgdocs.cbre.com/2299/6f078b24-1e85-4d29-be16-0408521a0673-196038605/Hong_20Kong_20Infrastructure_2.pdf

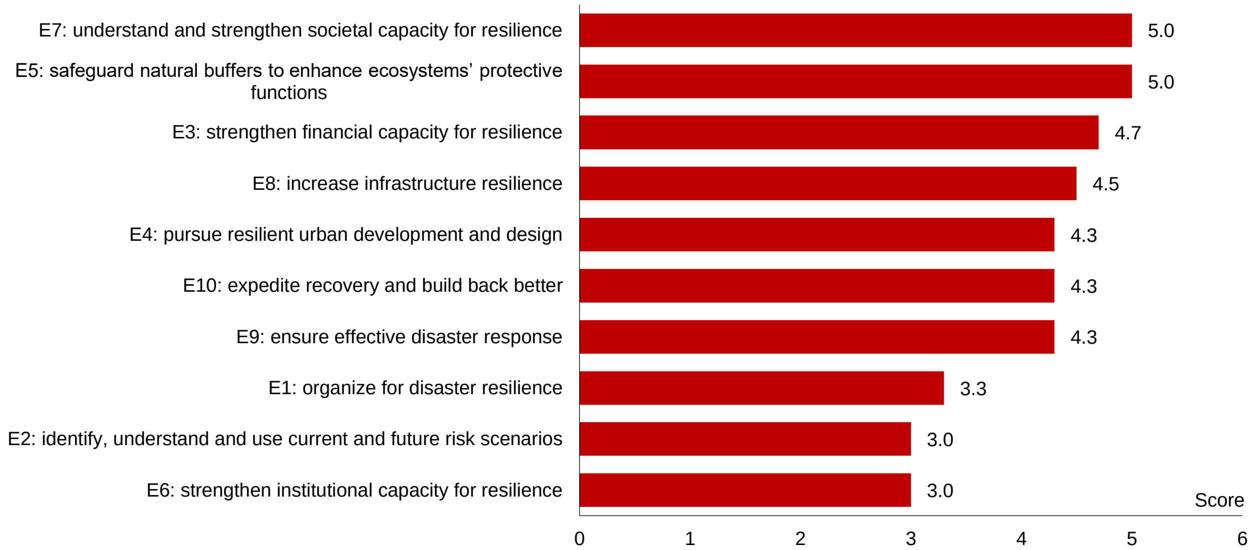
New Zealand Government. Tourism Infrastructure Fund.
https://www.mbie.govt.nz/immigration-and-tourism/tourism/tourism-funding/tourism-infrastructure-fund/

Wales Government. "Getting the basics right: £5 million tourism fund launched"
https://www.gov.wales/getting-basics-right-5-million-tourism-fund-launched

3. Hong Kong's Transition to Net Zero: Recent Developments and Policy Implications[30]

1. Hong Kong has experienced a discernible escalation in extreme climate events, necessitating the government's continuous efforts to enhance climate resilience. Despite being a climate-resilient megacity[31] (Figure A3.1), Hong Kong remains susceptible to the impact of climate change. Over the past few decades, there has been a noticeable increase in the intensity of hourly rainfall[32] and a rapid rise in the number of very hot days and hot nights in Hong Kong (Figures A3.2),[33] while its annual mean temperature saw an average increase of 0.28°C per decade from 1993 to 2022. More recently, Hong Kong was also affected by two major natural catastrophes: Super Typhoon Saola and Black Rainstorm,[34] both of which had adverse impacts on its economic activities. According to the Hong Kong Observatory, under the intermediate and very high greenhouse gas (GHG) emissions scenarios, the annual mean sea level in Hong Kong in 2100 is likely to rise by 0.37– 0.82 meters and 0.57 – 1.08 meters, respectively, relative to the average of 1995-2014. These projections are mainly driven by ongoing melting of glaciers and ice sheets and thermal expansion of sea water. In pursuit of sustainable economic growth, the Hong Kong government has implemented several related policy initiatives aimed at strengthening climate resilience and achieving its net-zero carbon emission objective. This selected issue aims to examine some of the government's efforts to date, primarily in the areas of energy transition and green finance, followed by policy discussions.

Figure A3.1 Hong Kong: Disaster Resilience Performance by Essential Area

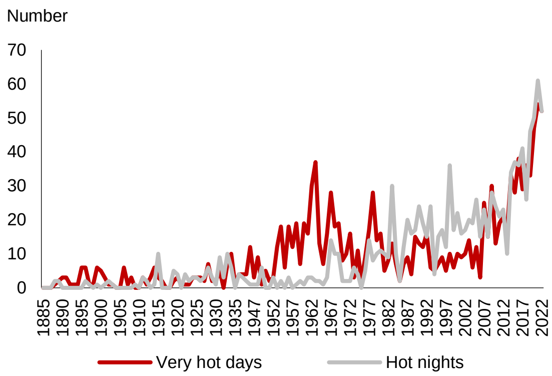


Source: (Sim, Wang, & Han, 2018)
Note: This study adopted the Sendai Framework Local Urban Indicators (LUI) Tools—developed by the United Nations Office for Disaster Risk Reduction—to evaluate a city's disaster resilience performance. There were 31 LUI indicators selected and categorized into 10 essential components from the 'Ten Essentials for Making Cities Resilient' framework.

---

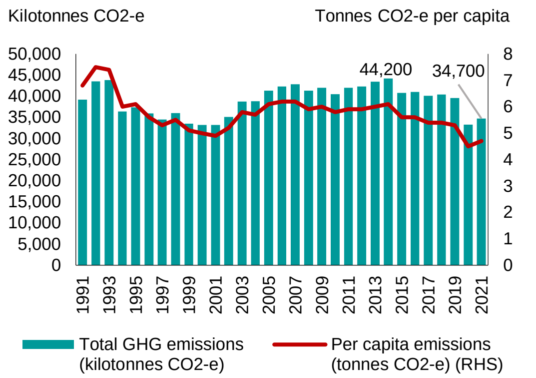
[30] Prepared by Vanne Khut, Economist.
[31] A study by Sim, Wang & Han (2018) suggests that Hong Kong remains a resilient megacity, with its satisfactory integrated disaster resilience score of 4.2 out of 5.
[32] The hourly rainfall recorded at the Hong Kong Observatory Headquarters increased from 88.4 mm in 1886 to 158.1mm in 2023. (Source: **Hong Kong Observatory**)
[33] According to the **Hong Kong Observatory**, the hourly rainfall record was broken several times in the past few decades, while it used to take several decades for the record to be broken previously.
[34] Super Typhoon Saola, the second most intense tropical cyclone affecting the South China Sea since 1950, ferociously struck Hong Kong on 1-2 September 2023 and necessitated the issuance of the Hurricane Signal No. 10. The heavy rain associated with the remnant of tropical cyclone Haikui brought record-breaking rainfall to Hong Kong on 7-8 September 2023 with the Black Rainstorm Warning in force for over 16 hours, setting the longest record since the introduction of the rainstorm warning system in 1992 (HKO, 2023).

Figure A3.2 Number of Very Hot Days and Hot Nights



Source: Hong Kong Observatory
Note: Criteria for very hot day and hot night is daily maximum temperature >= 33.0°C and daily minimum temperature >= 28.0°C, respectively.

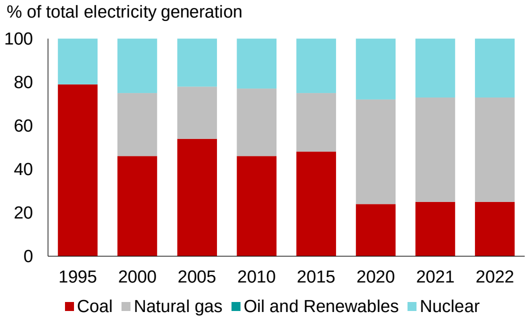
Figure A3.3 Hong Kong: Green House Gas (GHG) Emissions



Source: Climate Ready

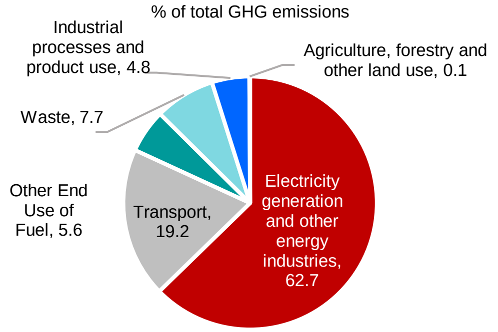
2. Hong Kong's GHG emissions have trended down after reaching their peak in 2014, mainly attributable to a reduction in coal usage for electricity generation. GHG emissions peaked at 44.2 million tonnes of carbon dioxide equivalent (CO2-e) in 2014 but have since declined as the government has been phasing out coal-fired generation units (Figure A3.3).[35] As a result, the share of coal in the fuel mix for electricity generation has shrunk to just 25 percent in 2022 from around 50 percent in 2015 (Figure A3.4). It should be noted that the slight uptick in GHG emissions by 4.2 percent to 34.7 million tonnes of CO2-e in 2021 was mainly due to increased electricity demand in tandem with improving economic activities when the pandemic situation became relatively stable during that period (Figure A3.3). Electricity generation remained the largest source of GHG emissions, constituting 62.7 percent of total GHG emissions in 2022, followed by the transport sector (19.2 percent), and waste management (7.7 percent) (Figure A3.5).

Figure A3.4 Hong Kong: Electricity Generation by Source



Source: Environment and Ecology Bureau (EEB)

Figure A3.5 Hong Kong: Share of GHG Emissions by Sector, 2022



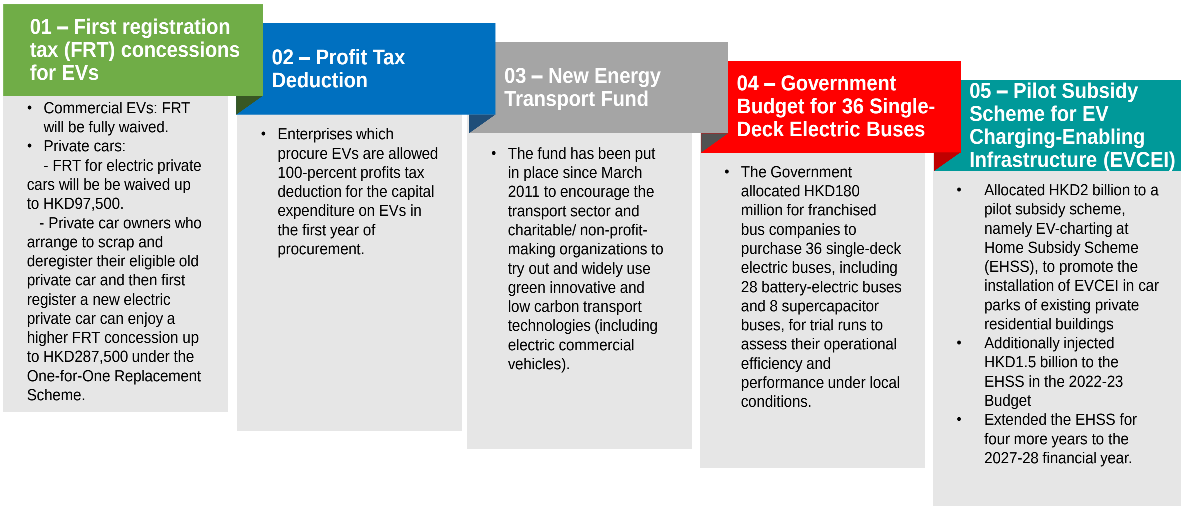
Source: Climate Ready; AMRO staff calculations

3. In the area of energy transition, the Hong Kong authorities have been stepping up their efforts to drive domestic EVs adoption to reduce GHG emissions. As outlined in the Hong Kong Roadmap on the Popularisation of Electric Vehicles launched in March 2021, the government aims to achieve zero vehicular emissions by 2050. To date, the domestic EV deployment has been progressing well, thanks to the government's strong support measures, ranging from tax concessions to subsidies for the development of EV charging infrastructure

[35] The government has stopped building coal-powered generation units since 1997 and been steadily phasing out the existing units. (Source: Climate Action Plan 2050)

(Figure A3.6). As of November 2023, the total number of EVs in Hong Kong reached 73,299, representing approximately 8.0 percent of total number of vehicles, up from around 18,500 in 2020 and just around 180 in 2010. The number of EV chargers for public use also increased from 5,300 in September 2022 to 7,415 as of the end of December 2023 which exceeds the initial target of 5,000 by 2025. Meanwhile, in order to expand the network of charging facilities, the government aims to increase the number of public and private parking spaces with charging infrastructure to about 200,000 by mid-2027. To expedite the expansion of private charging network, the government has been accelerating the marketisation of EV charging services. For instance, charged EV charging services have been progressively introduced at government car parks since end-2023 to drive the participation of the private sector in providing more charging facilities for EV drivers. The government will also refine the land lease conditions for petrol filling stations (PFS) with a view to offering incentives to retrofit EV charging facilities in the stations and convert PFS into green energy refuel stations in the longer run.[36]

Figure A3.6 Government Support Measures to Promote the Use of EVs

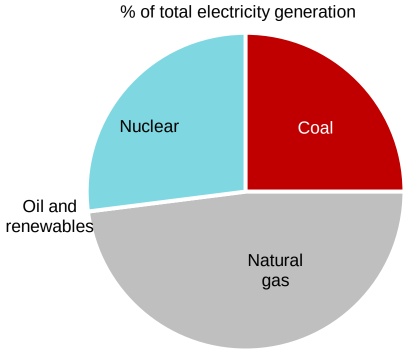


Source: Hong Kong Roadmap on the Popularisation of Electric Vehicles; Environmental Protection Department

4. The development of the renewable energy sector has been progressing steadily. Combined, renewable energy sources accounted for less than 1 percent of Hong Kong's total electricity production in 2022 (Figure A3.7). Nevertheless, notable progress has been observed in solar panel development in Hong Kong, as reflected in the increased share of solar energy in the electricity generation from renewable sources (Figure A3.8). The government is developing a large-scale floating solar system at Plover Cove Reservoir with a capacity of 5 megawatts (MW). Upon completion of the project in 2026, it is expected to supply 6 million kilowatt-hours (kWh) of electricity per annum for direct use by the nearby waterworks facilities, which is roughly equivalent to the annual consumption of around 1,800 households. Besides, the government is developing a 10 MW solar farm at the South East New Territories Landfill in Tseung Kwan O, which is expected to supply 10 kWh of electricity per annum with a view to promoting the wider application of renewable energy and the meaningful after-use of restored landfills in a sustainable manner. Upon completion in 2026, it is expected to supply 10 million kWh of electricity per annum to allow the on-site consumption of electricity by the future Tseung Kwan O Desalination Plant in full, which is roughly equivalent to the annual consumption of around 3,000 households. Both projects are expected to reduce carbon emissions by 11,200 tonnes per annum.

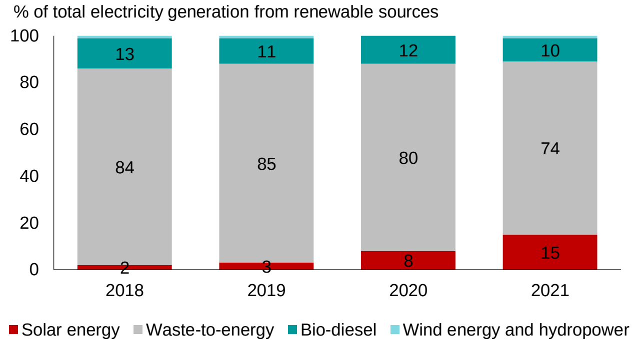
[36] Source: LegCo's EA Panel Meeting on 30 October 2023

Figure A3.7 Hong Kong: Electricity Generation by Source, 2022



Source: EEB

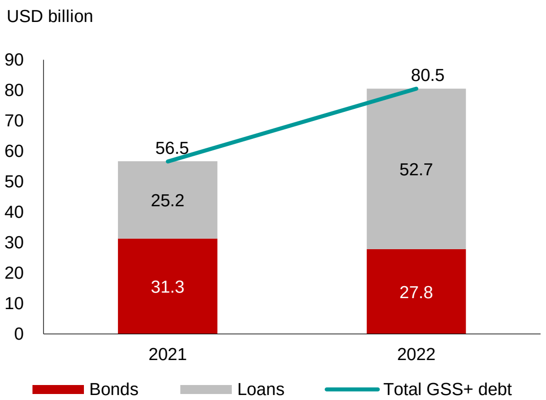
Figure A3.8 Hong Kong: Electricity Generation from Renewable Sources



Source: EEB

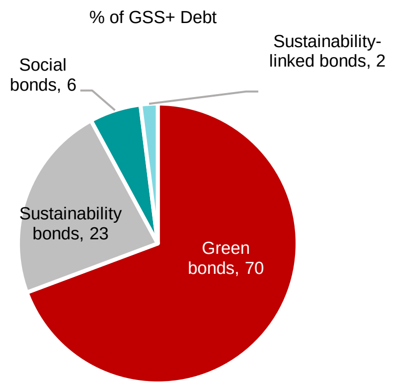
5. Leveraging its established presence as an international financial center, Hong Kong is committed to strengthen its role as a hub for green and sustainable finance (GSF). To realize this ambition, the government established a Green and Sustainable Finance Cross-Agency Steering Group in May 2020 to support the GSF market. In 2022, Hong Kong witnessed a significant increase in green, social and sustainability (GSS+) debt issuance, surpassing USD80 billion – growth of over 40 percent year-on-year. Among which, the volume of GSS+ bond arranged in HK accounted for more than one-third of the Asian market,[37] with 70 percent allocated to green bonds (Figures A3.9, A3.10). Notably, Hong Kong maintains its position as the leading issuer of government green bonds in the Asia-Pacific region.[38] In February 2023, the government announced a successful offering of the HKD-denominated Tokenised Green Bond valued at HKD800 million—the world's first such issuance by a government (HKMA, 2023). This issuance demonstrates the compatibility of Hong Kong's legal and regulatory environment to support the tokenised issuance format.

Figure A3.9 Hong Kong: Green, Social and Sustainability (GSS+) Debt Issuance



Source: International Capital Market Association (for bonds); LoanConnector and HKMA staff calculations (for loans)

Figure A3.10 Breakdown of Hong Kong's GSS+ Debt Issuance, 2022



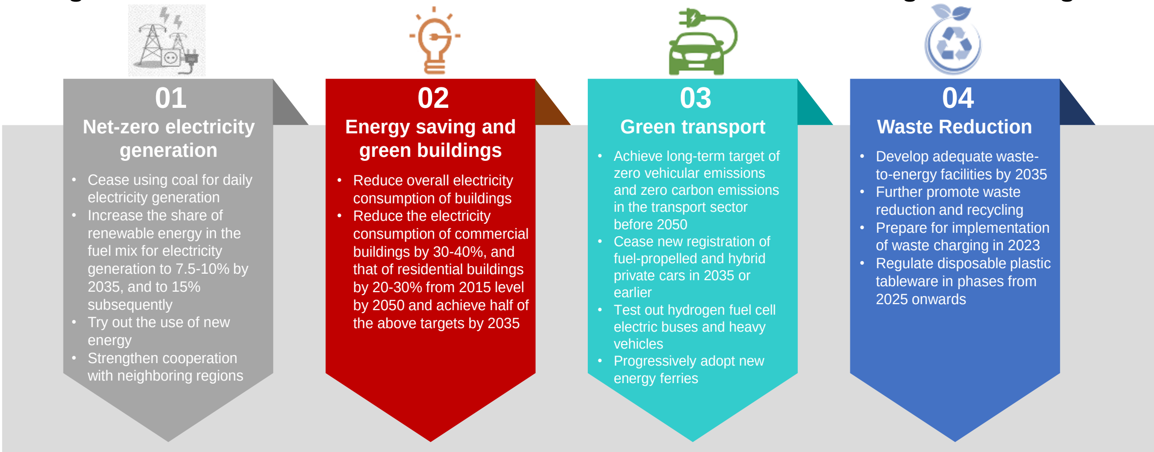
Source: Climate Bonds Initiative

6. Hong Kong has developed various climate action plans and strategies corresponding to the Paris Agreement and the decarbonization agenda of the Central People's Government. In particular, the Climate Action Plan 2030+ was announced in

[37] Source: (International Capital Market Association, 2023)
[38] Source: Hong Kong Green and Sustainable Debt Market Briefing 2022

January 2017, with the aim of reducing Hong Kong's carbon emissions by 26–36 percent by 2030 against the 2005 baseline.[39] Launched in October 2021, the Climate Action Plan 2050 outlines necessary strategies and targets to tackle climate change and achieve carbon neutrality, focusing on net-zero electricity generation, energy saving and green buildings, green transport, and waste reduction (Figure A3.11).

Figure A3.11 Climate Action Plan 2050: Four Decarbonization Strategies and Targets



Source: (Hong Kong SAR Government, 2021)

7. The authorities' efforts to promote the development of the green bond market are commendable. In support of fostering sustainable development and addressing climate change, the Government Green Bond Programme (GGBP) was launched in 2018, and its borrowing ceiling was subsequently raised to HKD200 billion in 2021 from the initial HKD100 billion. As a key element of the GGBP, the Green Bond Framework was first adopted in March 2019 and updated in February 2022, setting out how green projects can be financed or refinanced under the GGBP. Moreover, several key financial grant schemes have been implemented to provide financing to green bond issuers and market practitioners. Specifically, through the Green and Sustainable Grant Scheme, eligible bond issuers receive subsidies for fees incurred from their bond issuance and external reviews.[40] Launched in December 2022, the Pilot Green and Sustainable Finance Capacity Building Support Scheme is designed for market practitioners and students interested in equipping themselves with related trainings and obtaining professional qualifications.[41] Moreover, the Hong Kong Exchange launched Core Climate last year, marking the inauguration of the world's first international voluntary carbon credit trading market that facilitates settlement in both HKD and RMB currencies.

8. AMRO staff welcome the authorities' intention to embrace international sustainability standards. In June 2023, the International Sustainability Standards Board (ISSB) issued its inaugural Global Sustainability Disclosure Standards (IFRS S1) and Climate-related Disclosures (IFRS S2),[42] which Hong Kong also plans to adopt as appropriate. The primary objective of this adoption is to align with international standards, thereby instilling investor confidence in the green and environmental initiatives of publicly listed companies in Hong Kong and attracting more investors to support Hong Kong's journey toward achieving

[39] Source: Hong Kong's Climate Action Plan 2050; **Climate Ready**.
[40] For the bond issuance fees, eligible issuers can obtain up to HKD2.5 million per each of their first two green and sustainable bond issuances. For the external review fees, eligible issuers (both debut or repeated) can receive up to HKD800,000 per each issuance (Source: **HKMA**).
[41] After obtaining relevant qualifications or trainings, practitioners and students can reimburse their training fees up to HKD10,000. (Source: **Pilot Green and Sustainable Finance Capacity Building Support Scheme**).
[42] Under IFRS S1 and IFRS S2, entities are required to disclose material information on all sustainability- and climate-related risks, and opportunities that could affect their prospects. The required specific closures are grouped into four categories, such as governance, strategy, risk management, and metrics and targets (Forrester, Carpenter, Baines, & Williams, 2023).

carbon neutrality. A roadmap for Hong Kong's adoption of the ISSB standards is expected to be developed in the near term.

9. While the share of renewable energy sources in electricity generation is gradually increasing, it is imperative for the government to accelerate its efforts in fostering renewable energy development. Although having to grapple with Hong Kong's geographical and environmental constraints in driving the development of renewable energy, the government still aims to increase the share of renewable energy sources in electricity generation from below 1 percent to 7.5 percent to 10 percent by 2035 (Figure A3.11). This objective can be achieved by discontinuing the use of coal for daily electricity production and replacing it with lower carbon-emission natural gas, renewable energy, and nuclear energy. Increased collaboration with the private sector within the industry is essential to realize this ambition. The government has all along endeavored to create favorable conditions that are conducive to facilitating the installation of renewable energy systems by the private sector on their land and properties and encouraging the private sector to develop renewable energy.[43] The commendable cooperation between the authorities and several power companies in developing offshore wind farms is expected to help generate the wind energy capable of meeting approximately 3.5 percent to 4 percent of Hong Kong's power demand (Hong Kong SAR Government, 2021).

References

Forrester, J., Carpenter, D., Baines, T., & Williams, O. (2023). *ISSB Issues Inaugural Global Sustainability Disclosure Standards.* Mayer Brown, Illinois. Retrieved September 26, 2023, from https://www.mayerbrown.com/en/perspectives-events/publications/2023/06/issb-issues-inaugural-global-sustainability-disclosure-standards#:~:text=On%2026%20June%202023%2C%20the%20International%20Sustainability%20Standards,Sustainability%20Standards%20Naviga

HKMA. (2023, February 16). *HKSAR Government's Inaugural Tokenised Green Bond Offering.* Retrieved September 26, 2023, from https://www.hkma.gov.hk/eng/news-and-media/press-releases/2023/02/20230216-3/

HKO. (2023). *Monthly Weather Summary of September 2023.* Retrieved from https://www.hko.gov.hk/en/wxinfo/pastwx/mws2023/mws202309.htm

Hong Kong SAR Government. (2021). *Hong Kong's Climate Action Plan 2050.* Retrieved September 24, 2023, from https://cnsd.gov.hk/wp-content/uploads/pdf/CAP2050_booklet_en.pdf

International Capital Market Association. (2023). *The Asian International Bond Markets: Development and Trends.* Retrieved from https://www.icmagroup.org/assets/The-Asian-International-Bond-Markets-Development-and-Trends-brochure_March-2023.pdf

[43] In line with the Feed-in Tariff (FiT) Scheme introduced in 2018, the government has launched a series of support measures, such as facilitating the private sector in installing solar systems at open car parks, suitably relaxing the requirements on the installation of solar energy generation systems on the rooftops of New Territories Exempted Houses (i.e. village houses), introducing legislative amendments to provide exemption from the requirements to apply for business registration and pay profits tax in respect of participation in and the payments received under the FiT Scheme, etc. The facilitation measures which have introduced, coupled with FiT, have been effective in spurring the development of renewable energy in Hong Kong. The two power companies have received a total of over 24 000 applications from end 2018 to the third quarter of 2023 following the introduction of the FiT Scheme, of which over 23 000 applications have been approved. In comparison, only some 200 private renewable energy systems were connected to the power companies' grids in the decade prior to the introduction of the FiT Scheme. This proves that the FiT Scheme and the related facilitation measures have been very effective.

Jessie, Y. (2023). *Hong Kong paralyzed by flash flooding after heaviest rainfall since 1884.* Retrieved September 25, 2023, from https://edition.cnn.com/2023/09/07/asia/hong-kong-black-rainstorm-flooding-intl-hnk/index.html

Sim, T., Wang, D., & Han, Z. (2018). *Assessing the Disaster Resilience of Megacities: The Case of Hong Kong.* Retrieved September 25, 2023, from https://www.mdpi.com/2071-1050/10/4/1137/xml#:~:text=However%2C%20evaluating%20the%20resilience%20of%20megacities%20is%20not,effort%20of%20assessing%20the%20resilience%20of%20a%20megacity.

Tara, S., Ward, T., Gan, N., Yeung, J., & Lau, C. (2023, September 02). *Trees fall, scaffolding collapses as Typhoon Saola hits Hong Kong.* Retrieved September 25, 2023, from CNN: https://edition.cnn.com/2023/08/31/asia/hong-kong-china-macau-typhoon-saola-intl-hnk/index.html

The Hong Kong University of Science and Technology. (2020). *HKUST LAUNCHES THE LARGEST-SCALE SOLAR POWER SYSTEM IN HONG KONG.* Retrieved September 25, 2023, from https://sust.hkust.edu.hk/news/hkust-launches-largest-scale-solar-power-system-hong-kong

Tom, G. (2023). *Super Typhoon Saola: Hong Kong issues rare T9 storm signal, as city bunkers down.* Retrieved September 25, 2023, from https://hongkongfp.com/2023/09/01/breaking-super-typhoon-saola-hong-kong-issues-rare-t9-storm-signal-as-city-bunkers-down/

Address: 10 Shenton Way, #15-08
MAS Building, Singapore 079117
Website: www.amro-asia.org
Tel: +65 6323 9844
Email: enquiry@amro-asia.org

LinkedIn | **Twitter** | **Facebook**