# 3. Domestic economy

Hong Kong's economy contracted visibly in the second half of 2022 reflecting sizeable declines in merchandise exports and investment spending. Economic growth for 2023 is expected to recover from a low base on the back of the reopening of Mainland China and Hong Kong. But the outlook is subject to risks and uncertainties relating to the US policy rate path, softer growth of the advanced economies, lingering geopolitical tensions and the recovery pace of Hong Kong's inbound tourism. Labour market conditions are likely to improve further as local economic activities return to normal. Local inflation is expected to edge up in the near term along with the economic recovery, but should stay mild in general.

### 3.1 Real activities

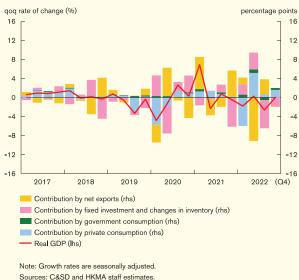
Hong Kong's economy contracted visibly in the second half of 2022. Year on year, real GDP declined further by 4.6% and 4.2% in the third and fourth quarters respectively (Table 3.A). For 2022 as a whole, real GDP dropped by 3.5%, contrasting with the 6.4% growth in 2021.

Table 3.A **Real GDP growth** 

		Seasonally adjusted quarter-on-quarter growth rate (%)	Year-on-year growth rate (%)
	Q1	6.9	8.2
2021	Q2	-2.3	7.6
	Q3	0.7	5.5
	Q4	-0.5	4.7
2022	Q1	-1.8	-3.9
	Q2	0.3	-1.2
	Q3	-2.6	-4.6
	Q4	0.0	-4.2

Source: Census and Statistics Department (C&SD).

Chart 3.1 Real GDP growth and contribution by major expenditure component



Sources: C&SD and HKMA staff estimates.

On a quarter-on-quarter basis, economic activities fell by 2.6% in the third quarter but showed little change in the final quarter (Table 3.A and Chart 3.1). Domestically, private consumption was supportive to economic growth, thanks to the progressive relaxation of social distancing measures, improving labour market conditions and a boost from the Consumption Voucher Scheme. However, aggregate investment spending dropped in the

second half of 2022 amid generally soft business sentiment<sup>22</sup> and rising borrowing costs. Externally, the deteriorated external environment and the disruptions to cross-boundary truck movements between Mainland China and Hong Kong posed visible drags on Hong Kong's merchandise export performance, while trade in services slightly edged up following the relaxation of the compulsory quarantine requirements for overseas visitors since late September 2022 (Chart 3.2). However, net trade contributed positively to GDP for the second half of 2022 as a whole partly because merchandise imports declined at a slightly faster pace than exports.

Chart 3.2 **Export and import volume** 



Note: The data are seasonally adjusted. Source: C&SD.

Hong Kong's economic growth for 2023 is expected to recover from a low base with the reopening of Mainland China and Hong Kong. While the expected weaker growth of the advanced economies will continue to weigh on Hong Kong's exports of goods, a recovery in the Mainland economy and the lifting of restrictions on cross-boundary land transportation with the Mainland could provide some support. The reopening of Mainland China and Hong Kong should also greatly benefit Hong Kong's inbound

tourism and other exports of services (e.g. crossboundary financial activities), as well as local business sentiment and capital spending. Box 4 discusses the recent revival of visitor arrivals into Hong Kong, and provides evidence that the delayed reopening of Hong Kong relative to other regional economies is expected to have a limited and transitory impact on inbound tourism, with negligible scarring effect. Private consumption will also improve further along with a stronger labour market. The Government also announced in the 2023-24 Budget fiscal measures to create a stronger impetus to economic recovery.<sup>23</sup> The Government forecasts real GDP growth for the whole of 2023 in the range of 3.5% to 5.5%, and the growth estimates by private-sector analysts average 3.7%. That said, the growth outlook is fraught with risks and uncertainties as discussed in previous chapters, especially those relating to the US Fed's policy rate path, global growth prospects, lingering geopolitical tensions and the recovery pace of Hong Kong's inbound tourism.

#### 3.2 Labour market conditions

Alongside the further relaxation of social distancing measures, local labour market conditions continued to improve in the second half of 2022 and early 2023. The seasonally adjusted unemployment rate declined further to 3.3% in February 2023 (Chart 3.3). Total employment also rebounded from a recent low in May 2022, albeit still below its pre-pandemic level. Looking ahead, the labour market is likely to improve further as local economic activities return to normal.

The Purchasing Managers' Index remained in the contractionary zone (below 50) between September and December 2022.

These measures include, among others, a one-off provision of HK\$5,000 electronic consumption vouchers to each eligible resident and tax reductions for both salaries and profits taxes. The Government estimates that the 2023-24 Budget would stimulate the economy by about 1% of GDP.

Chart 3.3 **Labour market conditions** 



### Inflation 3.3

Local inflationary pressures remained moderate in recent months. The year-on-year underlying composite consumer price index (CCPI) increased by 1.8% in both the third and fourth quarters of 2022, and by 2.1% in January and February 2023 combined,<sup>24</sup> mainly driven by prices of energy-related items, food, and clothing and footwear. Inflation momentum, as measured by the annualised three-month-on-three-month underlying inflation rate, also stayed mild recently (Chart 3.4). In conjunction with the soft housing market, the housing rental component of the CCPI has exerted downward pressure on overall inflation (Chart 3.5). Real unit labour costs remained generally soft, despite a slight pickup in the third quarter of 2022 (Chart 3.6). External price pressures were still intense amid the elevated import prices, but their pace of increase moderated in recent months (Chart 3.7).

Chart 3.4 Different measures of consumer price inflation



Sources: C&SD and HKMA staff estimates

Chart 3.5 **CCPI** rental component and market rental



Sources: C&SD and Rating and Valuation Department (R&VD).

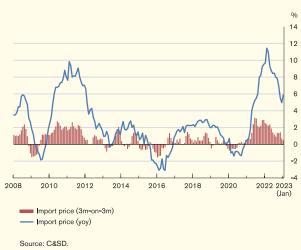
Chart 3.6 **Unit labour cost** 



Sources: C&SD and HKMA staff estimates

Inclusive of the effects of the Government's relevant one-off relief measures, the year-on-year headline inflation rate was 2.7% and 1.8% in the third and fourth quarters of 2022, and 2.1% in January and February 2023 combined.

Chart 3.7 Hong Kong's import prices



In the near term, local inflation is expected to edge up, but should stay mild reflecting offsetting forces. While external prices should remain elevated, their upward momentum will likely moderate further alongside weaker economic activities in some major economies and easing upward pressure on commodity prices. Domestic cost pressures may edge up together with the recovery in the economy and the labour market, but the soft housing rentals should provide some offset. The Government projection of underlying and headline inflation rates for 2023 is at 2.5% and 2.9% respectively, and the latest market consensus forecasts the headline inflation rate for 2023 to be 2.4%.

# Box 4 Will Hong Kong experience a scarring effect on visitor arrivals due to the delayed reopening?

### Introduction

Following the stabilisation of the local COVID-19 epidemic situation, the Government announced multiple rounds of relaxation measures, including the "0+3" arrangement<sup>25</sup> in September 2022, the lifting of the Amber Code requirement<sup>26</sup> in December 2022 and the resumption of normal travel between Hong Kong and Mainland China<sup>27</sup> in January and February 2023. As some regional economies have already gradually reopened since early 2022, there may be a concern that the delayed reopening of Hong Kong might have caused a scarring effect on Hong Kong's inbound tourism. Using network data of international visitors<sup>28</sup>, this box evaluates the effect of the relative reopening status on visitor arrivals for a panel of economies and offers insights into the recovery of Hong Kong's inbound tourism.

Recent development in visitor arrivals Before the pandemic, the peak visitor arrivals into Hong Kong were about 6.8 million (or about

"0+3" refers to the lifting of compulsory quarantine requirements for inbound persons from overseas places or Taiwan starting from 26 September 2022. Inbound

persons were subjected to three days of medical surveillance with Amber Code restrictions under the

Vaccine Pass.

- The first-phase resumption of normal travel between Hong Kong and Mainland China started on 8 January 2023 and the full resumption commenced on 6 February 2023. The full resumption arrangements include opening up all boundary control points without imposing any prescribed daily numbers of people and cancelling the pre-departure nucleic acid test requirement. In addition, the requirement for non-Hong Kong residents to be fully vaccinated when coming to Hong Kong from overseas places was lifted on 6 February 2023.
- The dataset comprises the number of visitors from one economy (departure) to another economy (arrival), instead of just the total visitor arrivals into a particular economy.

219 thousand per day) in January 2019, and about 80% of them were from Mainland China (Chart B4.1). During the pandemic, visitor arrivals dropped to only several thousand per month amid stringent COVID-19 restrictions. With the restrictions being progressively relaxed since September 2022, visitor arrivals have picked up, especially after Mainland China's reopening since January 2023, although the number is still below the pre-pandemic level (Chart B4.2).

Chart B4.1 **Share of visitor arrivals from Mainland China in** 2019 by selected Asia-Pacific (APAC) economies

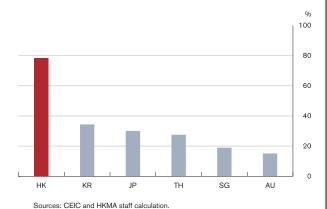
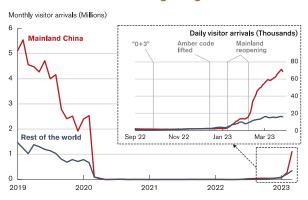


Chart B4.2 Visitor arrivals into Hong Kong

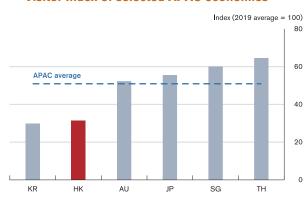


Note: Seven-day moving average for daily visitor arrivals. Sources: C&SD and Immigration Department.

Amber code restrictions were further lifted on 14 December 2022, effectively removing most restrictions for international travellers.

The recovery of visitor arrivals in Hong Kong was also lagging against other APAC destinations. For the ease of cross-economy comparison, we construct a Visitor Index which is defined as the number of visitor arrivals in each month as a percentage of monthly average in 2019 (i.e. as a percentage of the pre-pandemic level). The Visitor Index shows that visitor arrivals into Hong Kong recovered to about 31% of the pre-pandemic level in February 2023, this contrasts with many other APAC economies which recovered around 50% – 70% of visitor arrivals (Chart B4.3), in part, due to their earlier reopening.

Chart B4.3 Visitor Index of selected APAC economies



Note: Data as of Feb 2023 for HK, JP and SG, Jan 2023 for other economies. Sources: CEIC and HKMA staff calculation

# Quantifying the reopening status

To understand the reopening status of different economies and facilitate comparison, we also compile a Relaxation Index based on the dataset developed by Hale et al. (2020)<sup>29</sup> on government responses to COVID-19. In particular, we combine indicators<sup>30</sup> that are more relevant to visitors' experience as reported in Table B4.1. The Relaxation Index ranges between 0 and 100, where 0 represents most restrictive and 100 represents completely relaxed. The Index suggests that Hong Kong's COVID-19 measures

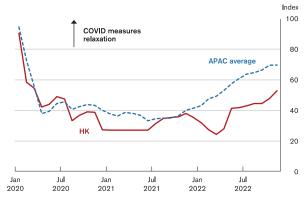
were tightening and largely in pace with the average APAC economies in 2020 and 2021 (Chart B4.4). However, when other APAC economies began to reopen in early 2022, Hong Kong had to again tighten its measures amid the fifth wave of the local epidemic, leading to the delayed reopening of Hong Kong. That said, the "reopening gap" between Hong Kong and other APAC economies is anticipated to close in 2023 alongside the rapid relaxation of COVID-19 measures in Hong Kong.

Table B4.1 **Components of Relaxation Index** 

Government responses to COVID-19	Included in the Relaxation Index?	
Schools closing		
Workplace closing		
Cancel public events	Yes	
Restriction on gathering	Yes	
Close public transport	Yes	
Stay home requirement	Yes	
Internal movement	Yes	
International travel controls	Yes	
Information campaign		
Testing policy	Yes	
Contact tracing	Yes	
Facial coverings	Yes	

Sources: Hale et al. (2020) and HKMA staff.

Chart B4.4 **Relaxation Index of Hong Kong and APAC** economies



Source: Hale et al. (2020) and HKMA staff calculation.

For more details, see Hale, Thomas, Noam Angrist, Beatriz Kira, Anna Petherick, Toby Phillips, and Samuel Webster. (2020) "Variation in government responses to COVID-19." Blavatnik School of Government, University of Oxford.

Indicators are combined using simple arithmetic average.

## Empirical analysis and major findings

To study whether the delayed reopening of Hong Kong would cause any scarring effect on visitor arrivals, we model the network data on visitors involving 19 sample economies<sup>31</sup> and estimate the following panel data model:

$$\Delta VI_t^{D,A} = \beta Reopen_t^{D,A} + \gamma Ctrl_t^{D,A} + \alpha^{D,A} + \delta_t + e_r^{D,A}$$

$$(1)$$

where  $\Delta$  is the two-month difference operator<sup>32</sup>,  $VI_t^{D,A}$  is the Visitor Index (as defined above) from departure economy D to arrival economy A in month t,  $Reopen_t^{D,A}$  is a list of "reopening" variables,  $Ctrl_t^{D,A}$  is a list of control variables,  $\alpha^{D,A}$  is the departure-arrival economy pair fixed effect,  $\delta_t$  is the time fixed effect and  $e_t^{D,A}$  is the error term. For comparison and robustness check, we estimate equation (1) with two sample periods, one starting from 2021<sup>33</sup> focusing on the pandemic period and another from 2007 onwards.

Here we explain the three "reopening" variables in equation (1) which their coefficients are of particular interest in this analysis.

• The first is a dummy variable on whether the travel between economies D and A is non-restrictive, indicating the feasibility of hassle-free movements across economies. Specifically, if there are no quarantine requirements for both departure economy D and arrival economy A, the variable will be equal to one and the situation is conducive to visitor arrivals.

- The second is the Relaxation Index (as defined above) in arrival economy A. More relaxed COVID-19 restrictions are expected to bring in more visitors.
- The third is the relative reopening status, which gauges how advanced or delayed the reopening status of arrival economy A compared with its peers in the sample.<sup>34</sup> A more negative value means a more delayed reopening. To verify if the scarring effect of the delayed reopening exists, the relative reopening status is lagged by multiple periods in the estimations. These lagged terms could shed light on the persistence of the impact of delayed reopening.

Two categories of control variables are also incorporated in the estimations. The first category measures the risk of infection to visitors when traveling to arrival economy *A*, which includes the percentage increase in confirmed cases and the vaccination rate in that economy. The second category is the conventional economic factors affecting inbound tourism, which include the percentage change of the FX cross rate (a positive number represents an exchange rate appreciation of economy A against economy D) to measure price competitiveness, the year-on-year percentage change in airfare to partially capture post-pandemic supply-side constraints on international travel and the GDP growth of departure economy *D*.

Table B4.2 reports the estimation results, which confirms that all estimated parameters of interest are of the right signs. More importantly, the non-restrictive travel between two economies and the relaxation of COVID-19 measures are significant in resuming visitor arrivals. In addition, the effects of the relative reopening

There are some missing economy pairs due to the unavailability of monthly data breakdown. However, our sample should be able to capture a majority of travelling routes in the region.

We have also used one-month difference and the results are similar.

Instead of the year 2020, we use 2021 when global travel stayed subdued in order to circumvent the potential distortion due to the abrupt slump in visitors in 2020.

Technically, it is defined as the z-score: The Relaxation Index of arrival economy A minus the average Relaxation Index of the sample economies and then the whole term divided by the standard deviation of the Relaxation Index of the sample economies.

status are significant up to three months but not beyond that, suggesting that the adverse impact of Hong Kong's delayed reopening is transitory. Additional analysis also ascertains that the magnitude of the dragging effect from a delayed reopening is small compared with the boosting effect of non-restrictive travel. Hence, the adverse effect of Hong Kong's delayed reopening is expected to be limited.

Furthermore, while the conventional economic factors (i.e. FX cross rate and airfare) are significant over the longer horizon, they do not have material impact during the pandemic. This result is intuitive as the number of visitor arrivals during the pandemic was essentially driven by policies (e.g. lockdowns), while the impact of other economic factors is expected to become more consequential only when international travel returns to normal.

Table B4.2 **Estimation results** 

Dependent variable: $\Delta VI_t^{D,A}$	Since 2021	Since 2007
Reopening variables		
Non-restrictive travel between D and A (True = 1)	+	+
Δ Relaxation Index of A	+	+
Relative reopening status of A:		
lagged for 2 months	+	+
lagged for 3 months	+	
lagged for 4 months		
lagged for 5 months		
Control variables		
%Δ Confirmed cases in A	-	
%Δ FX rate (Positive = relative appreciation in A)		-
Airfare (%yoy)		-

Note: + / - denote positive/negative coefficients at the 10% significance level using robust standard error. Other insignificant variables, including vaccination rate and GDP growth, are not shown.

Source: HKMA staff estimates.

# Implications for Hong Kong and concluding remarks

Previously, there was a concern that the delayed reopening of Hong Kong might have caused a scarring effect on Hong Kong's inbound tourism. Our estimation results suggest that the adverse effect of such a delayed reopening, although exists, is expected to have only a transitory and limited impact on Hong Kong's inbound tourism. Thus, as Hong Kong relaxes its COVID-19 measures and Mainland China reopens, the path of Hong Kong's visitor revival is expected to converge with other APAC destinations over time. In particular, Hong Kong is even likely to capture the greatest benefit from Mainland China's reopening, as Hong Kong's share of visitor arrivals from Mainland China was much higher than other economies before the pandemic.

However, the pace of recovery of inbound tourists into Hong Kong remains highly uncertain. While there has been a visible rise in tourist arrivals lately, the recent supply-side constraints, which has been partially reflected in the elevated airfare, may pose headwinds. From a broader perspective, as Hong Kong's economic growth for 2023 will significantly hinge on the pace of recovery of inbound tourists, a much faster-than-expected revival represents a major upside risk to GDP growth this year. In tandem, the limited impact of Hong Kong's delayed reopening may also bode well for local labour market conditions, which helps alleviate concerns about the potential scarring effect on the labour market (e.g. unemployment rate) due to the pandemic.