3. Domestic economy

Economic growth in Hong Kong remained robust for the first half of 2018 as a whole, but showed more volatility within the half-yearly period. The economy is expected to expand further in the second half, but at a more moderate pace. Downside risk to growth has increased as the US-China trade conflict escalated. While still within a moderate range, local inflation is likely to edge up further in the near term, although there are potential risks on either side.

3.1 Real activities

Compared with the second half of 2017, economic growth in Hong Kong remained robust for the first half of 2018 as a whole (Table 3.A). Real Gross Domestic Product (GDP) grew at an above-par rate of 2.4% over the preceding half year. On a year-on-year comparison, real GDP growth was also strong, at 4.6% in the first quarter and 3.5% in the second, faster than the average of 3.5% in the preceding two quarters.

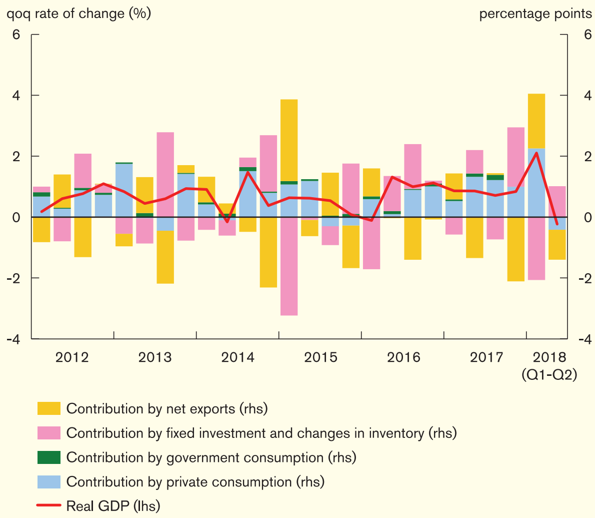
Table 3.A
Real GDP growth

	Half-yearly growth rate (%)*		Year-on-year growth rate (%)	
2017	H1	1.8	Q1	4.4
			Q2	3.9
	H2	1.6	Q3	3.6
			Q4	3.4
2018	H1	2.4	Q1	4.6
			Q2	3.5
10-year average	(2008 H1 – 2017 H2)	1.3	(2008 Q1 – 2017 Q4)	2.7

* Based on seasonally adjusted volume index of expenditure-based GDP.
Source: C&SD.

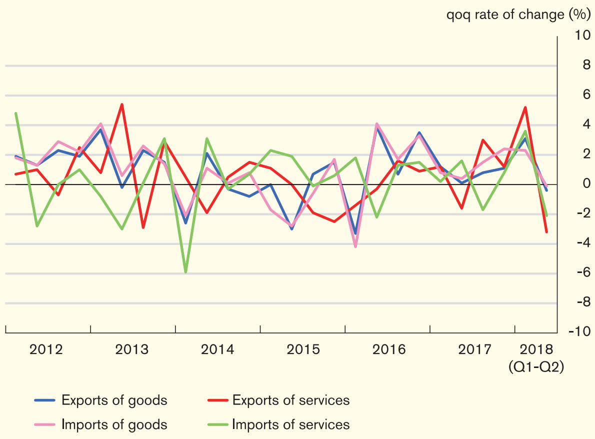
On a quarter-on-quarter basis, economic activities showed more volatility within the first half of 2018, with extraordinary growth performance followed by a slight contraction (Chart 3.1). This is in sharp contrast to roughly stable growth in the second half of 2017. More specifically, seasonally adjusted real GDP growth reached a multi-year high of 2.1% in the first quarter, driven by an outsized increase in private consumption and a pick up in net exports. In the second quarter, with market sentiments worsening amid US-China trade tensions, private consumption slowed from a high base and the external trade performance deteriorated (Chart 3.2). Consequently, real GDP contracted slightly despite a pick up in aggregate investment spending.

Chart 3.1
Real GDP growth and contribution by major expenditure components



Note: Growth rates are seasonally adjusted.
Sources: C&SD and HKMA staff estimates.

Chart 3.2
Exports and imports in real terms



Note: Growth rates are seasonally adjusted.
Source: C&SD.

The broadly robust economic performance helped create more jobs in the first half of 2018. Total employment expanded by around 0.8% during the period, to some 3,870,000, led by increases in the public administration, social and personal services sector, and the financial and business services sector. As real output grew at a faster pace than employment, labour productivity showed signs of further improvement.

Looking ahead, economic growth is expected to continue for the remainder of 2018, but at a more moderate pace compared with the first half of the year. Externally, while the rise of trade protectionism, especially between the US and Mainland China, could weigh on Hong Kong's export performance, exports of services are likely to be supported by active cross-border financial activities and the continued recovery of inbound tourism. On the domestic front, private consumption is anticipated to hold up mainly because of the robust labour market conditions. As for fixed capital formation, building and construction activities should progress steadily on the back of the continued rise in the supply of housing and ongoing infrastructure projects. The outlook for business capital spending, however, is more uncertain due to potential increases in interest rates and various external uncertainties. In addition, the recent weakening in sentiment indicators, such as the Purchasing Managers' Index for Hong Kong, signals a further decline in year-on-year GDP growth momentum in the third quarter based on their historical positive relationship. For 2018 as a whole, the Government forecasts real GDP growth in the range of 3–4%, while the latest growth forecasts by private-sector analysts averaged 3.6%.

Although the local economy is expected to remain on an expansionary path in the baseline scenario, downside risk to growth has increased along with the intensification of the US-China trade conflict. In particular, while the short-term impact on Hong Kong is estimated to be limited through the conventional trade channel[15], the local economy could be affected through other channels with a greater overall negative impact. For example, trade tensions may increase stock market volatility and tighten financial market conditions, thereby weighing on economic growth. As these trade protectionist policies are still unfolding, increased economic uncertainty could also affect macro-financial conditions (see Box 2).

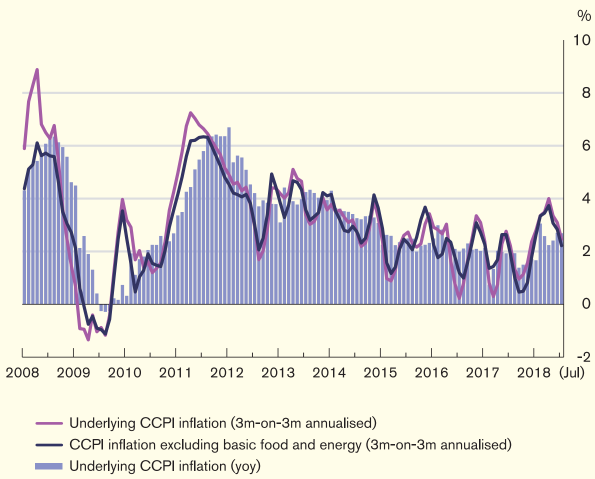
Besides trade protectionism, other major uncertainties or risks concerning the baseline economic outlook include those arising from major central banks' monetary policy normalisation, Mainland's economic performance amid its continued financial deleveraging, and potential volatility in international capital flows.

[15] For example, in a speech given by the Financial Secretary at the 2018 Hong Kong-ASEAN Summit on 9 July, he said the impact of the US' tariff measures implemented in early July on Hong Kong's economic growth this year would be a drag of around 0.1–0.2 percentage points.

3.2 *Inflation and unemployment*

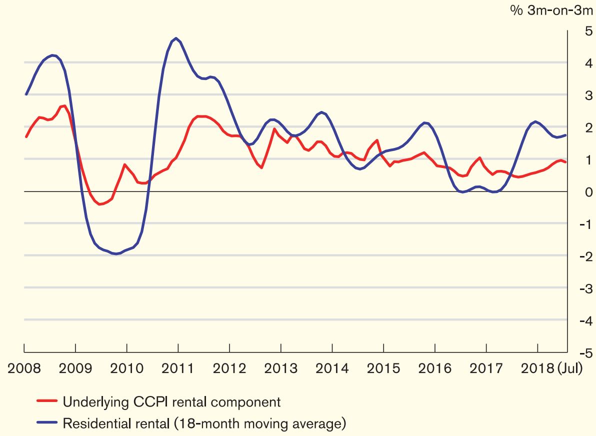
After declining to a low in 2017, local inflation edged up recently and settled around a moderate level. On a year-on-year comparison, the underlying Composite Consumer Price Index (CCPI) rose by 2.4% in both the first and second quarters, slightly higher than the average increase of around 1.7% over the preceding two quarters. Inflation momentum, as measured by the annualised three-month-on-three-month underlying inflation rate, also generally picked up in the first half of the year, to 2.5% in July 2018 from 2.4% in December 2017 (Chart 3.3). The slight increase in inflation momentum reflected both external and domestic price pressures. Within tradables, the price of basic food stuffs increased faster partly due to adverse weather conditions. As for services items, the price of meals away from home and other miscellaneous services, such as package tours, also saw accelerated increases amid favourable labour market and income conditions. More importantly, the earlier rises in fresh-letting private residential rentals continued to push up inflation momentum (Chart 3.4). However, labour cost pressures remained largely in check recently (Chart 3.5).

Chart 3.3
Different measures of consumer price inflation



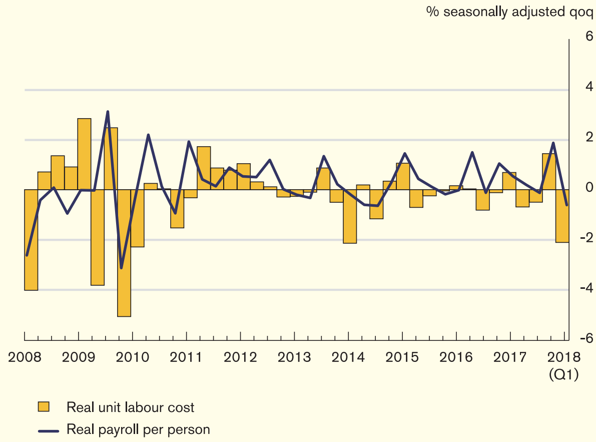
Sources: C&SD and HKMA staff estimates.

Chart 3.4
CCPI rental component and market rental



Sources: C&SD and Rating and Valuation Department.

Chart 3.5
Unit labour cost and payroll per person

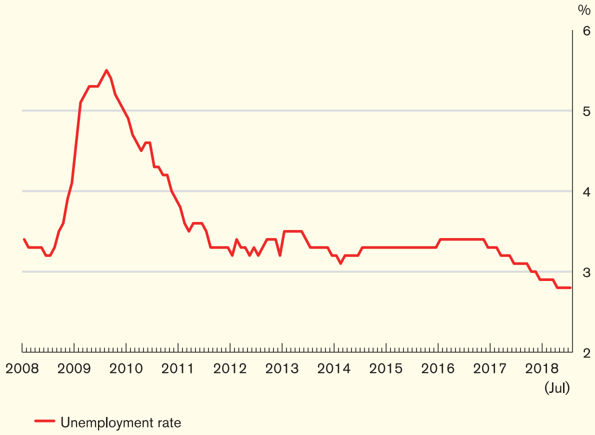


Sources: C&SD and HKMA staff estimates.

In the remainder of 2018, local inflationary pressures are expected to increase slightly, reflecting higher global inflation and the continued feed-through of earlier rises in fresh-letting private residential rentals. That said, inflation should stay within a moderate range for 2018 as a whole. The Government projects the underlying inflation rate to be 2.5% for 2018 and market consensus predicts the headline inflation rate at a still-moderate level of 2.3%.

This outlook for inflation is subject to risks on both sides. On the upside, faster-than-expected increases in global inflation could lift local inflation momentum further. Domestically, the labour market continued to tighten, with the seasonally adjusted unemployment rate edging down from 2.9% in the first quarter to 2.8% in the second quarter, the lowest level in more than 20 years (Chart 3.6). If the labour market strengthens much further, additional upward pressures on inflation may emerge, given that the current output gap is estimated to be slightly positive. On the downside, should the risks of slower-than-expected economic growth materialise, this could dampen local inflation. Meanwhile, the recent fluctuations in the US dollar and the renminbi may cloud the outlook for Hong Kong's import price inflation.

Chart 3.6
Unemployment rate



Source: C&SD.

Box 2
Macroeconomic effects of uncertainty – implications of rising trade tensions for Hong Kong

Introduction

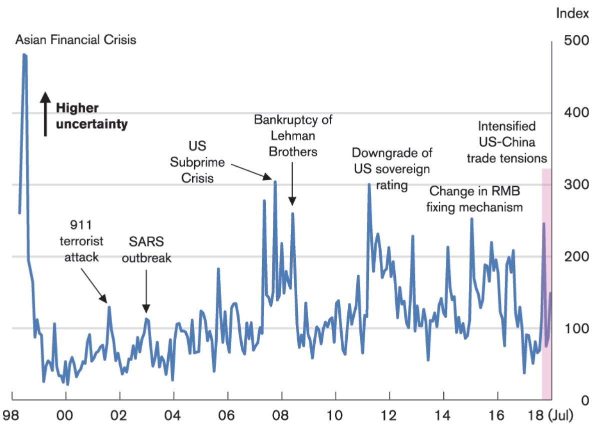
Despite the broadly robust economic performance in the first half of 2018, downside risks facing the Hong Kong economy have increased significantly compared with several months ago as the trade war rhetoric materialised into actions. Although some assessments find that the direct impact of the US-China trade conflicts on Hong Kong will be moderate, the trade conflicts could have a much broader and bigger impact on the Hong Kong economy through other channels. In particular, if the trade tensions persist or escalate, the resulting rising uncertainty could weigh on the economy. This box attempts to broaden our understanding of this transmission channel. We first discuss ways to quantify economic uncertainty and to identify the macroeconomic effects of uncertainty empirically. Based on the empirical findings, we will then draw implications of rising trade tensions for the Hong Kong economy.

The uncertainty index and the empirical model

We follow the literature to compile a monthly news-based economic uncertainty index for Hong Kong. We first identify all news articles that are related to the Hong Kong economy from ten major local Chinese newspapers for the period between April 1998 and July 2018. We then compute the share of monthly news articles containing terms relating to uncertainty for each newspaper. We standardised the ten time series to unit standard deviation, and averaged across the ten series by month. The resulting time series is expressed in an index form with a mean of 100 for the period between April 1998 and December 2009. We use the seasonally adjusted index for analysis. By construction, a higher value of the index implies a higher level of uncertainty.[16]

The movement of the index is found to be largely driven by the external environment (Chart B2.1), which is consistent with the fact that Hong Kong is a small open economy. In particular, large spikes in the index were usually associated with major external shocks. Domestic shocks, such as the outbreak of Severe Acute Respiratory Syndrome (SARS) in 2003, are also a source of economic uncertainty for Hong Kong.

Chart B2.1
The economic uncertainty index for Hong Kong



Source: HKMA staff estimates.

The economic effect of uncertainty about Hong Kong's macro-financial conditions can be analysed using the uncertainty index. Specifically, we estimate a simple Vector Autoregressive model with six endogenous variables: the year-on-year growth rates of GDP, private investment and consumption in real terms, the growth rate of private sector job vacancies, a financial condition index[17] and the economic uncertainty index for Hong Kong. To control for the influence from the external economic environment, the model includes world GDP growth rate as an exogenous variable.

---

[16] Details of the methodology can be found in Wong et al. (2017), "Measuring Economic Uncertainty and its Effect on the Hong Kong Economy", *HKMA Research Memorandum 11/2017*.

[17] A higher value indicates a loosening of financial conditions and vice versa. Here, the index is derived using the weighted-sum approach from Chan et al. (2016), "Financial Conditions Indexes for Hong Kong", *HKMA Research Memorandum 09/2016*.

The simple model can identify the channels through which economic uncertainty will affect Hong Kong's real sector. Theoretically, higher economic uncertainty could lead firms to hold off their investment or economic activities due to the presence of adjustment costs or irreversibility.[18] Labour may also face larger search friction in the labour market as firms reduce their job openings during periods with high economic uncertainty.[19] So, higher economic uncertainty is expected to reduce investment and consumption growth, and thus GDP growth.

Economic uncertainty can also affect the real economy through the financial channel. In particular, amid rising economic uncertainty, lenders may reduce credit supply and/or charge higher credit spreads, and asset markets may be subject to stronger downward adjustment pressures. The tighter financial conditions could generate a ripple effect to the real sector. This financial channel implies a negative empirical relationship between the economic uncertainty index and the financial condition index.

Empirical findings

We estimate the model using quarterly data from the third quarter of 1998 to the first quarter of 2018. The lag length is set to one based on the Schwartz Information Criterion and the consideration of the small sample size. Chart B2.2 shows the reaction of selected economic variables to higher economic uncertainty by the estimated generalised impulse response functions[20]. The empirical results are consistent with economic intuition. In particular, as expected, higher economic uncertainty weighs on economic growth through its dampening impact on private consumption and investment growth.

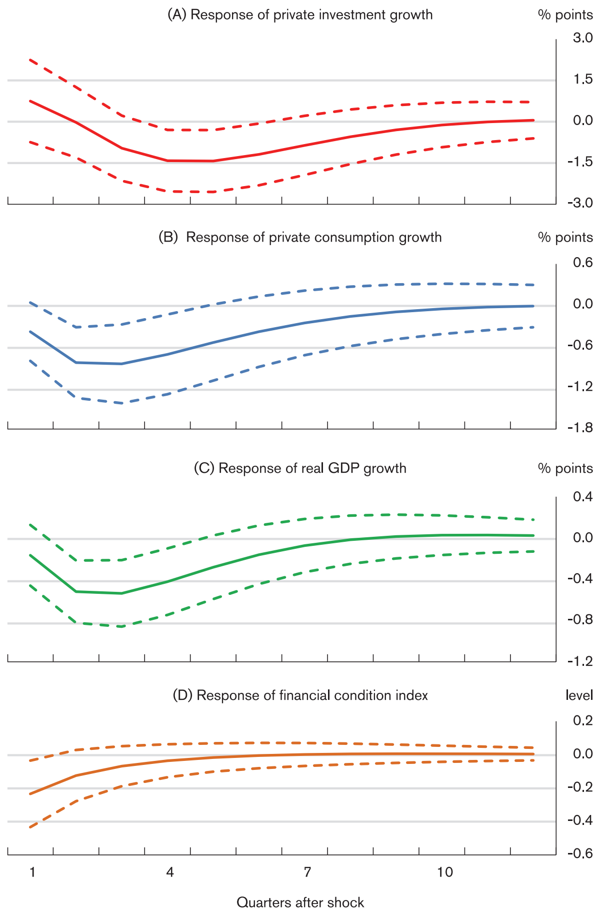
[18] See Bernanke (1983), "Irreversibility, Uncertainty, and Cyclical Investment", *Quarterly Journal of Economics*, 98(1), pp. 85–106.

[19] See Guglielminetti (2016), "The Labour Market Channel of Macroeconomic Uncertainty", *Bank of Italy Temi di Discussione Working Paper No. 1068*.

[20] The generalised impulse response function is used as it avoids the problem of ordering dependence of the impulse response function.

The estimated impulse response functions show two noteworthy features of the transmission of a shock to economic uncertainty. First, while the immediate response of the real sector will be relatively mild, the longer-term response tends to be stronger and prolonged. Specifically, the private investment response will be most notable in three to six quarters after the initial shock. The response of private consumption follows a similar pattern, with the maximum impact about two to three quarters after the shock. These findings suggest that it may take a longer time for the full impact of a shock to economic uncertainty to be felt by the real sector (Panel A-C, Chart B2.2).

Chart B2.2
Responses of selected economic variables to a shock to economic uncertainty



Note: The shock to selected economic variables pertains to a one-standard-deviation increase in the uncertainty index. The solid lines refer to the impulse response functions and the dashed lines show the standard error bands.

Source: HKMA staff estimates.

Secondly, rising economic uncertainty will produce a rapid but short-lived impact on financial conditions, as revealed from the impulse response of the financial condition index (Panel D, Chart B2.2).

Implications of rising trade tensions for Hong Kong

This analysis shows that Hong Kong's financial conditions and real sector could be subject to significant increase in downside risks if the trade tensions cause persistent and high economic uncertainty.

Although the direct impact of trade tensions has remained mild, extra vigilance on the development of this issue is required, as the economic uncertainty index for Hong Kong has increased and the magnitude of indirect impacts remains highly uncertain for three reasons. First, as shown by our empirical findings, it may take a longer time for the real sector to feel the full impact of economic uncertainty arising the trade tensions. Secondly, while our analysis can shed light on how the risk of rising trade tensions transmits through one specific indirect channel, the uncertainty channel, the transmission mechanisms through other potential channels and the size of their impacts are far from being fully understood. Finally, a further escalation of trade conflicts is hard to predict.