

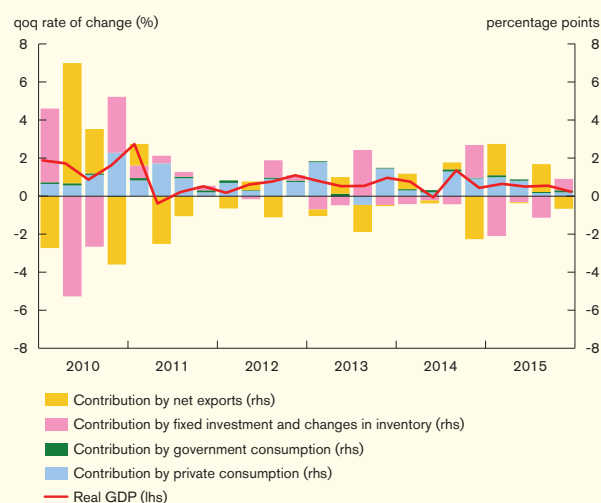
## 3. Domestic economy

The Hong Kong economy saw slower growth momentum towards the end of 2015, dragged by soft private consumption growth, subdued capital investment and continued decline in exports of services. Economic growth for 2016 is expected to remain soft, with the outlook clouded by high uncertainties surrounding the global macro-financial environments. Local inflationary pressure is likely to stay contained amid the modest domestic growth momentum, moderating housing rentals and benign import price inflation.

### 3.1 Real activities

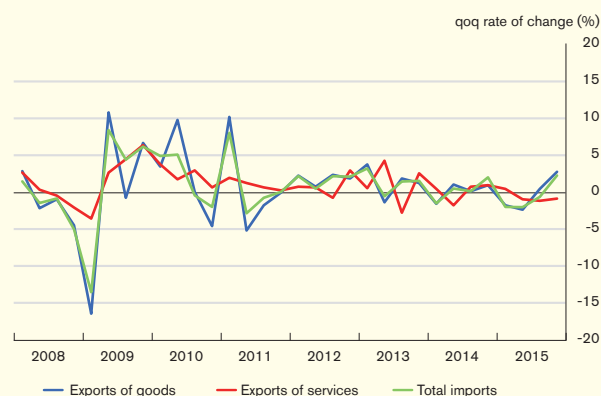
The growth momentum of the Hong Kong economy slowed towards the end of 2015, with the real GDP growth rate softening to 0.2% on a seasonally adjusted quarter-on-quarter basis in the fourth quarter from around 0.6% in the previous three quarters (Chart 3.1). Despite support from broadly stable job and income conditions, private consumption growth shifted to a lower gear in the last two quarters, partly reflecting weak consumer confidence and softer financial services demand. Box 3 analyses how interest rate hikes would affect private consumption through different channels. As for fixed investment, capital spending remained subdued amid deteriorating business sentiment while building and construction activities showed moderated momentum alongside slower progress in public projects. Destocking continued but its pace slowed considerably. On the external front, net exports turned to a drag on GDP growth in the fourth quarter. In particular, exports of services continued to shrink, restrained by weaker inbound tourism and reduced financial market activities, but exports of goods and total imports picked up sequentially after contracting in the first half of 2015 (Chart 3.2).

**Chart 3.1**  
Real GDP growth and contribution by major expenditure components



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

**Chart 3.2**  
Exports and imports in real terms

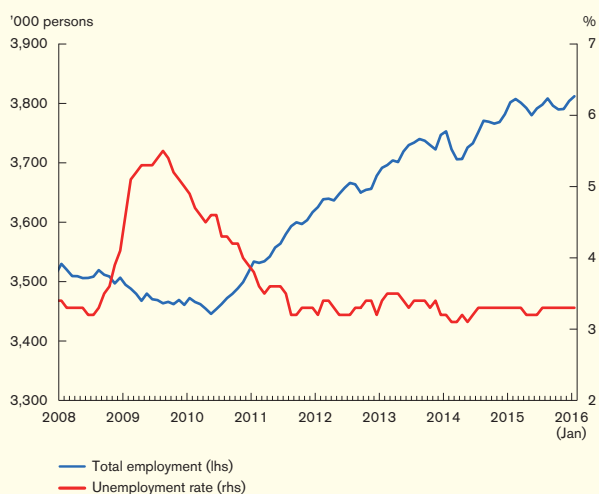


Source: C&SD.

## Domestic economy

On a year-on-year basis, real GDP growth moderated to 2.2% in the third quarter and 1.9% in the fourth quarter, compared with 2.7% in the first half of the year. For the whole of 2015, real economic growth also slowed to 2.4%, down from 2.6% a year earlier. The weaker economic performance was mainly attributable to slower growth in domestic demand although net exports reverted to a positive contributor to GDP growth as total imports declined faster than total exports. Despite weaker economic conditions, the seasonally adjusted unemployment rate continued to stay low at 3.3% in recent months (Chart 3.3). However, total employment appeared to be levelling off, signalling softer labour demand. The main drag came from the retail, accommodation and food services sector.

**Chart 3.3**  
Unemployment rate and total employment

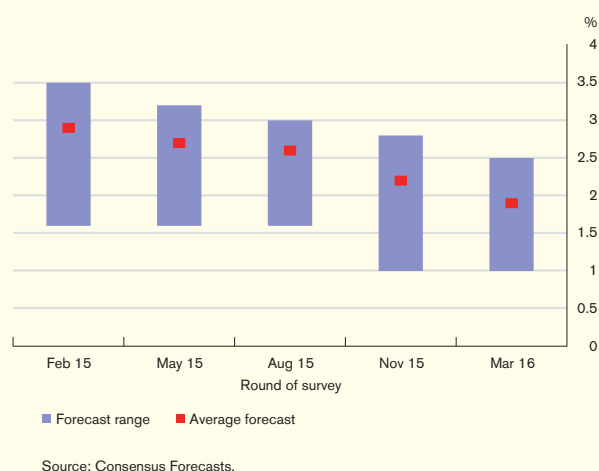


Real economic growth for 2016 is expected to remain soft. The lacklustre global growth prospects, sustained weakness in inbound tourism, and negative spill-overs from turbulent global financial market conditions will continue to restrain Hong Kong's exports performance. Domestically, private consumption is anticipated to grow moderately, as labour market conditions will likely face some pressures amid weaker economic momentum, and local asset price adjustments may dent consumer confidence and induce negative wealth effects. Building and

construction activities in the private sector should continue to hold up, but those in the public sector will be more uncertain due to possible gridlock in funding approvals. Weak business sentiment and interest rate rises would also weigh on capital investment. That said, the moderately expansionary fiscal stance in the 2016/2017 Budget will help cushion the slowing economic momentum.

The HKMA in-house composite index of leading indicators suggests that economic growth momentum may remain sluggish in the first half of 2016. For 2016 as a whole, the Government forecasts real GDP growth in the range of 1–2% while private sector analysts project the economy to grow by a wide range between 1.0% and 2.5%, averaging at around 1.8% (Chart 3.4).

**Chart 3.4**  
Consensus forecasts for 2016 real GDP growth

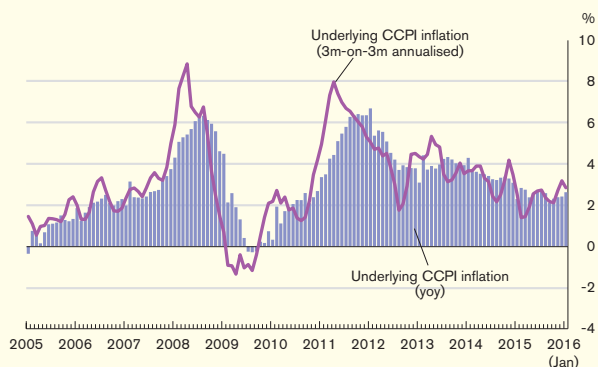


This growth outlook is subject to a number of uncertainties and risks. In particular, the pace and magnitude of further US interest rate hikes, the macro-financial developments in Mainland China, as well as their impact on the global economies, fund flows and asset markets are still highly uncertain. Higher financial volatilities, sudden tightening in local monetary conditions or sharper-than-expected adjustments in the property market could pose downside risks to the outlook. However, faster progress in local public projects could help cushion the downward pressures on GDP growth.

### 3.2 Consumer prices

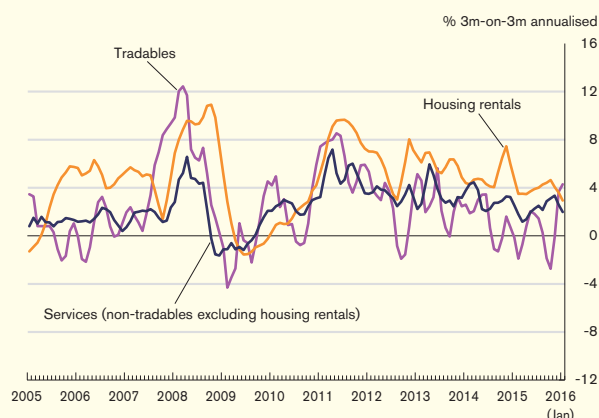
Consumer price inflation has largely remained on a downtrend since 2012, although the sequential momentum has picked up recently due to higher food prices and a rebound in the costs of utilities. On a year-on-year comparison, the underlying inflation rate held steady at 2.4% in both the third and fourth quarters, before rising slightly to 2.6% in January 2016 as the unusually cold weather drove up fresh vegetable prices (Chart 3.5). Meanwhile, inflation momentum, as measured by the annualised three-month-on-three-month underlying inflation rate, picked up from 2.2% in third quarter to 2.8% in January on the dissipation of the special fuel rebate in electricity provided in August. Analysed by main components, both housing rentals and services inflation have eased, while the volatile prices of tradables increased on the back of higher clothing and footwear prices (Chart 3.6).

**Chart 3.5**  
Different measures of consumer price inflation



Sources: C&SD and HKMA staff estimates.

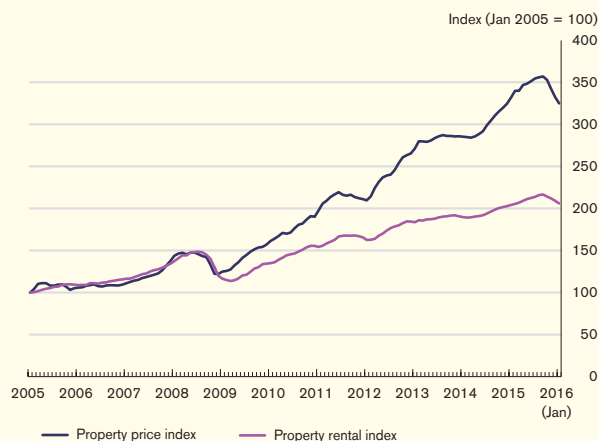
**Chart 3.6**  
Consumer price inflation by broad component



Sources: C&SD and HKMA staff estimates.

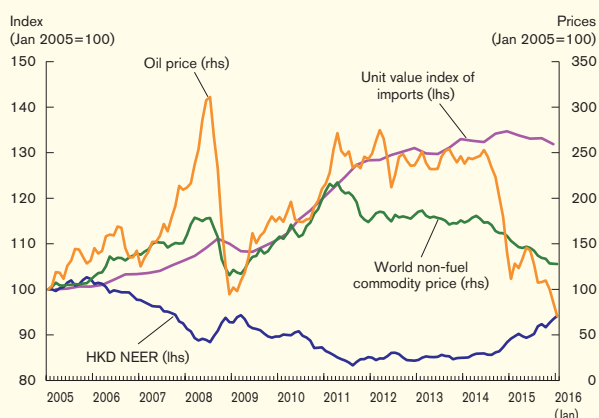
Looking ahead, sequential inflation momentum is likely to remain contained, due in part to the expected pass-through from the recent easing of fresh-letting residential rentals (Chart 3.7). Moreover, the output gap, which is estimated to be negative in the fourth quarter of 2015, should restrain domestic business costs and keep services inflation in check. On the external front, import price inflation will likely remain benign, on the back of the strong Hong Kong dollar and subdued global commodity prices (Chart 3.8). On the whole, local inflation is expected to ease further in 2016, with the Government forecasting an annual underlying inflation rate of 2.0% for 2016, down from 2.5% in 2015.

**Chart 3.7**  
Residential property price and rental indices



Source: Rating and Valuation Department.

**Chart 3.8**  
**Commodity and import prices**



Sources: C&SD and IMF.

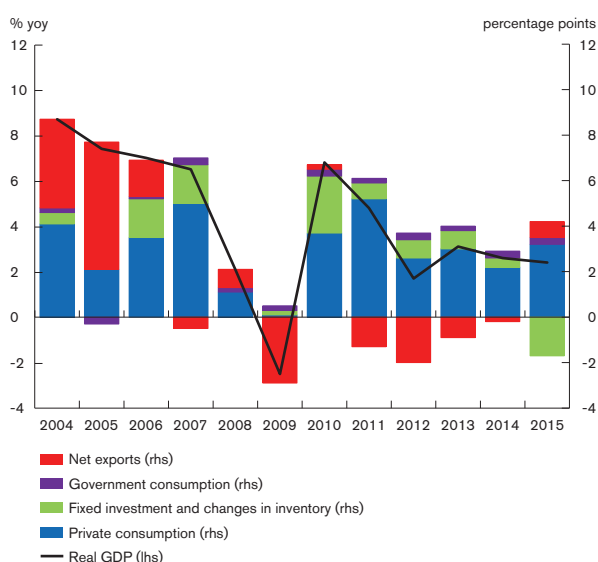
The outlook for inflation could be subject to downward pressures. Firstly, the global economic outlook is confronted by various challenges and difficulties, and a weaker-than-expected growth performance in major advanced and emerging market economies would weigh on global commodity prices and pose downside risks to Hong Kong's growth outlook. Secondly, uncertainties over the future monetary policy path in the US and the growth outlook in major economies may trigger spikes of global financial market volatility, which could spill over to the local property market. This possibility, coupled with rising housing supply, could put downward pressures on local housing prices, and hence residential rentals and consumer sentiment. At the same time, the weakening trend of inbound tourism, if continues, could erode the pricing power of local retailers while posing a drag on the retail property market and the labour market, thereby pointing to the possibility of weaker-than-expected domestic inflation.

### Box 3

## Examining the impact of interest rate hikes on Hong Kong's private consumption

As the US interest rate normalisation process has begun, Hong Kong dollar interest rates are expected to pick up alongside the rises in US interest rates under the Linked Exchange Rate System (LERS). This box examines the impact of interest rate hikes on Hong Kong's domestic demand. Conceptually, higher interest rates could reduce domestic demand through dragging private consumption and investment. Private investment constitutes a relatively small share of GDP and is volatile for modelling, while private consumption is a major component of Hong Kong's GDP (amounting to 66% of GDP in 2015) and has been a key driver of GDP growth over the past few years (Chart B3.1). Therefore, analysing the impact of interest rate hikes on private consumption can provide a better sense of how the US interest rate normalisation process would affect the domestic economy.

**Chart B3.1**  
Hong Kong: contribution to real GDP growth by major expenditure components



Source: C&SD.

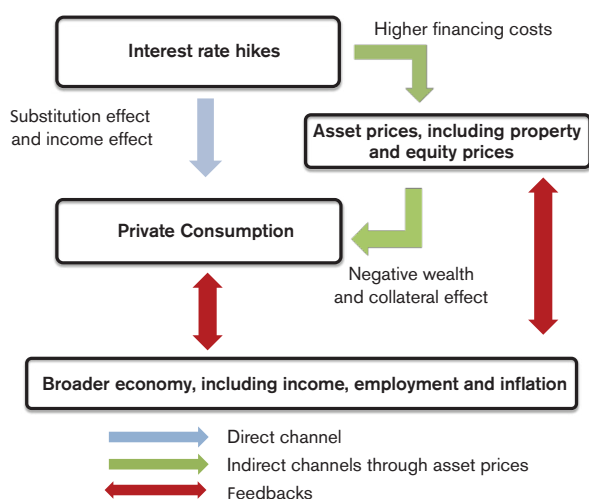
### *Transmission channels of interest rate hikes to Hong Kong's private consumption*

Interest rate hikes can be transmitted to private consumption through direct and indirect channels. The direct channel, which works through the substitution and income effects, reflects households' decisions on whether to consume today or save for tomorrow. For the substitution effect, higher interest rates would increase the relative price of today's consumption (i.e. intertemporal substitution), inducing households to consume less and save more today. For the income effect, its impact on consumption depends on whether households are net creditors or debtors. For net creditors, higher interest rates would raise their interest income and prompt them to consume more and save less today. But for net debtors, higher interest rates would raise their debt-servicing burden, reducing their income and consequently consumption.

As for the indirect channels, higher interest rates could dampen equity and property prices, which in turn would affect private consumption via negative wealth and collateral effects. Among different types of assets, property assets are expected to be a key transmission channel, as residential property usually constitutes a major portion of household assets.

Apart from the abovementioned, higher interest rates, through affecting private consumption and asset prices, would also influence the broader economy (e.g. labour market), which in turn would have repercussions on private consumption. Chart B3.2 illustrates how interest rate hikes could be transmitted to private consumption through these direct and indirect channels.

**Chart B3.2**  
**Transmissions of interest rate hikes to private consumption**

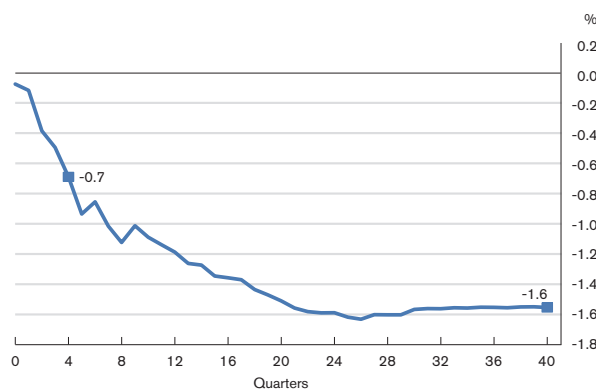


*Empirical analysis*

To analyse the impact of interest rate hikes on private consumption, we construct a vector auto-regressive (VAR) model with the following six variables: real private consumption, real labour income (constructed by multiplying real payroll per person with total employment), real housing prices, real equity prices (proxied by the Hang Seng Index), Hong Kong dollar interest rate (proxied by the three-month HIBOR), and underlying Composite Consumer Price Index (CCPI) inflation rate. Hong Kong dollar interest rate and underlying CCPI inflation rate are expressed in quarterly changes, while the remaining variables are expressed in quarter-on-quarter growth rate.

Through simulating the transmission of an interest rate shock and taking into account the consequent interaction between the variables, we derive the total impact on private consumption from the accumulated impulse response. Our simulation shows that a hypothetical 100 basis points rise in the Hong Kong dollar interest rate would cumulatively decrease private consumption by 0.7% at the one-year horizon and 1.6% in the long run (Chart B3.3).

**Chart B3.3**  
**Total impact of interest rate hikes on private consumption**

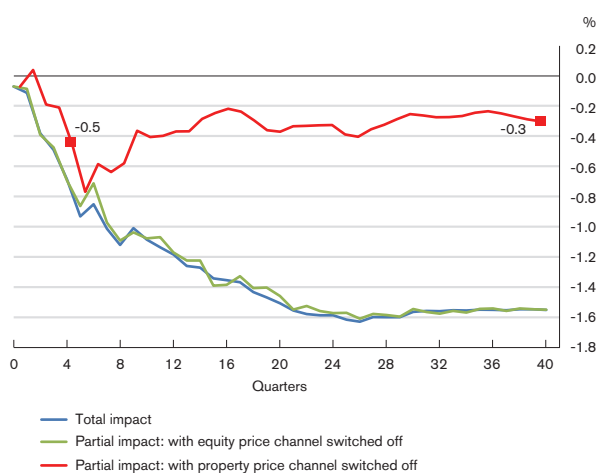


Source: HKMA staff estimates.

To dissect the impact of interest rate hikes through the asset price channels, we switch off counterfactually the effects of asset prices on private consumption (i.e. by setting the coefficients on the lags of housing prices and equity prices to zero) and simulate an interest rate shock again. By comparing this partial impact of interest rate hikes with the total impact (i.e. in Chart B3.3), we can draw insights on the interest rate transmission through the asset price channels. We switch off the effects of housing prices and equity prices in turn to estimate the influence of the property price channel and equity price channel respectively.

On switching off the property price channel, we find that the impact of interest rate hikes would become slightly smaller than the total impact at the one-year horizon, and much smaller in the long run (red line, Chart B3.4). This implies that the interest rate transmission works through the property price channel with a time lag, and the property price channel would eventually pose a strong drag on private consumption. On the other hand, we find that switching off the equity price channel would not affect much the estimated impact of interest rate hikes whether in the short or long run (green line, Chart B3.4). The very limited transmission through the equity price channel may in part be due to the fact that equity prices are volatile in nature and difficult to model.

**Chart B3.4**  
Total and partial impact of interest rate hikes on private consumption



Source: HKMA staff estimates.

### Concluding remarks

Our simulations illustrate the possible impact of interest rate hikes on private consumption. The findings suggest that the ultimate impact of interest rate hikes on private consumption would depend crucially on how far property prices are being affected by the rate hike. This finding is consistent with the fact that property is the major type of household assets, which can act as the key transmission channel of interest rate shocks to the domestic economy.

The empirical results above, however, are based on the average relationship between private consumption and asset prices across different economic and property cycles. At the current cycle, the property valuation is stretched, so higher interest rates would likely induce bigger and non-linear negative effect on property prices. This means that the actual impact of interest rate hikes could be larger than shown by our results. Moreover, rises in the households' debt servicing burdens in recent years may make the decline in private consumption more sensitive to a property market downturn.