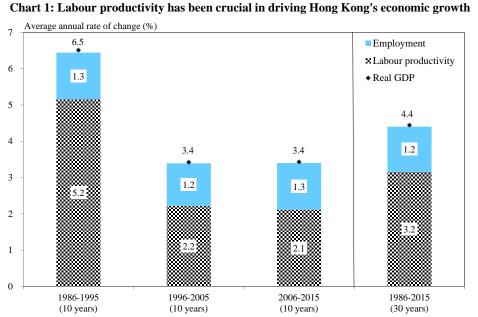
## Box 1.3

## Labour productivity growth in Hong Kong: a structural perspective

While the short-term growth of an economy is usually subject to cyclical fluctuations from the demand-side, supply-side factors are more crucial in determining its medium and long-term growth trend. Among the supply-side factors, labour productivity<sup>(1)</sup> has always been the key growth driver of the Hong Kong economy over time. This note attempts to discuss briefly, from a structural perspective, the key elements driving productivity growth.

Over the past three decades, despite undergoing several episodes of ups and downs, the Hong Kong economy grew by 4.4% per annum on average. While employment growth, steady at around an average of 1.2-1.3% per annum in the past decades, made its contribution, a more notable contribution came from labour productivity growth, which averaged 5.2%, 2.2% and 2.1% per annum during 1986-1995, 1996-2005 and 2006-2015 respectively (Chart 1).



The relatively fast growth in labour productivity over the past three decades was related to the structural transformation of Hong Kong economy, which gradually repositioned itself from a manufacturing hub to an international financial, trading and business centre, focusing more on higher value-added services. The contribution of the services sector to GDP rose from 71% in 1986 to 93% in 2014. Likewise, the share of services employment to total employment climbed up from 55% in 1986 to 88% in 2015. The structural transformation of the Hong Kong economy was particularly rapid during 1986-1995 among the three 10-year periods under study.

The tapering of the transformation pace in the recent past is not surprising as the services sector has already accounted for over 90% of GDP since 2004. Besides the structural shifts among economic sectors, productivity growth could be driven by the skill upgrades of individual sectors. The latter is reflected by the steadily rising proportion of higher-skilled employment in the services sector from around 30% in 1998 to 40% in 2015. This is also a manifestation of the further metamorphosis of Hong Kong into a knowledge-based economy under keen competition in the new era of globalisation and technological advancement.

Labour productivity in this box is defined as the real GDP per employment, which does not account for (1)working hours due to data limitation.

## Box 1.3 (Cont'd)

To analyse these effects in more detail, labour productivity growth of Hong Kong during 1986-2015 is further decomposed quantitatively into the two aforementioned components<sup>(2)</sup>, i.e. economic restructuring and sectoral upgrading. As shown in *Table 1*, economic restructuring contributed a relatively larger proportion to productivity growth during 1986-1995, i.e. 1.5 percentage points out of the 5.2% average annual growth. Such contribution then narrowed notably, to 0.3 percentage point and 0.1 percentage point respectively during 1996-2005 and 2006-2015. On the other hand, sectoral upgrading has always been the key contributor to productivity growth over the reference period. Notwithstanding its moderation from 3.8 percentage points in 1986-1995 to 2.0 percentage points over the last two decades, it became virtually the sole engine of the overall productivity growth of Hong Kong over the past 10 years.

## Table 1: Breakdown of average annual labour productivity growth (%)

|                            | 1986-1995 | 1996-2005 | 2006-2015 |
|----------------------------|-----------|-----------|-----------|
| Labour productivity growth | 5.2       | 2.2       | 2.1       |
| of which due to:           |           |           |           |
| Economic restructuring     | 1.5       | 0.3       | 0.1       |
| Sectoral upgrading         | 3.8       | 1.9       | 2.0       |

Note: Figures may not add up due to rounding and/or statistical discrepancy.

Looking ahead, from the supply-side perspective, skills upgrading will remain the key source of Hong Kong's future economic growth. This is particularly so under the threat of population ageing with the labour force being projected to dwindle after 2018, thereby further constraining the economic growth potential originating from demographic dividend.

To enhance labour productivity growth, the Government has strongly committed to investing heavily in human capital and technology and to exploring potential growth areas. In this regard, the 2016-17 Budget has proposed comprehensive measures on nurturing innovation, promoting technology and fostering talent. All in all, the continual improvement in productivity would help build a solid foundation for a more sustainable growth in the future.

On the demand side, the Government will continue to explore new markets and further deepen the economic linkage with the Mainland. The continuous economic reform in the Mainland, its Belt and Road Initiative, and its rebalancing of growth towards services and consumption will unleash massive opportunities for Hong Kong in the decades to come, supporting our move towards a high value-added, knowledge-based economy.

(2) The decomposition formula is:

$$G_t = \sum_i \left[ \frac{P_{i,t}}{P_{t-1}} \times \left( S_{i,t}^L - S_{i,t-1}^L \right) \right] + \sum_i \left( S_{i,t-1}^Y \times G_{i,t} \right)$$

where  $P_t$  and  $P_{i,t}$  denote the labour productivity of the overall economy and sector *i* in period *t* respectively,  $G_t$  and  $G_{i,t}$  denote their respective growth, and  $S_{i,t}^Y$  and  $S_{i,t}^L$  denote the share of value added and employment of sector *i*. The first summation on the right hand side represents the productivity growth due to economic restructuring, while the second summation represents the productivity growth due to sectoral upgrading.