Box 6.1

Compositional changes in Hong Kong's labour force

The composition of labour force is closely related to the demographic profile of the underlying population. An older population normally implies an older labour force, and similarly, a more educated population generally results in a more educated labour force [1]. With the composition of Hong Kong's population having undergone substantial changes over the past couple of decades, it is worthwhile to examine the trends in the make-up of the labour force. Observations on these past trends may help shed some lights on the future composition of the labour supply in Hong Kong along with the ongoing change in demographics.

Changes in the make-up of the labour force

Charts 1(a) and *1(b)* show the population pyramids of Hong Kong in 1996 and 2016 respectively [2]. Population pyramids are often used to illustrate the shift in age and sex composition of population over time in a graphical way. The educational make-up of the labour force is superimposed on the standard population pyramid to provide additional information on the size and composition of the labour force. Darker colours indicate higher educational attainment within the labour force. The larger the proportion of the hatched area within each age-sex category (i.e. the share of persons not in the labour force), the lower the corresponding labour force participation rate (LFPR). A few salient observations on the changes in the composition of the labour force can be made by comparing the two pyramids in *Chart 1*.

(a) Older labour force

Hong Kong's population aged considerably over the last twenty years. Due to a low fertility rate, the number of younger persons decreased over time, as reflected by the shrinking base of the population pyramid in 2016. At the same time, the middle and top parts of the pyramid became wider. The proportion of persons aged 45-64 increased from 19.6% in 1996 to 32.4% in 2016, while that of those aged 65 and above also went up significantly by 6.2 percentage points to 16.6% over the same period, thanks in part to the rising life expectancy.

Similar trend is also observed in the labour force as the underlying population became older. While the labour force comprised workers mostly in their 20's and 30's in 1996 (58.7% of the total labour force), 54.3% of the labour force was between 40 to 64 years old in 2016. On the other hand, workers aged 60 and above accounted for 9.0% of the labour force in 2016, more than doubled the share in 1996. These trends can be seen graphically with the somewhat triangular-shaped labour force in *Chart 1(a)* as against a more rectangular-shaped one in *Chart 1(b)*.

Another factor contributing to an older labour force is the increase in LFPR of older age groups over the period. Specifically, the LFPR for those aged 60-64 went up notably from 31.4% in 1996 to 44.7% in 2016 and those aged 65-69 also saw an increase in their LFPR by 5.7 percentage points to 20.7% over the same period. These changes can be seen by comparing the shares of the hatched areas within each of the corresponding age groups in *Charts 1(a)* and *1(b)*.

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(1) The compositional changes in the population do not necessarily translate proportionally to that in the labour force. At an aggregate level, the tendency to participate in the labour market varies across persons of different age, sex, and educational attainment. This in turn affects the size and make-up of the labour force, on top of the impact stemming from compositional changes in the underlying population.

(2) All charts and statistics in this article exclude foreign domestic helpers (FDHs).

Box 6.1 (Cont'd)

Chart 1: Population pyramids with educational attainment of the labour force

(a) 1996

(b) 2016

Notes: Population figures are mid-year figures.   Labour force aged 75 and above is grouped under 75-79, for the purpose of compiling the above charts.   Post-secondary education includes both degree and non-degree courses.

Source: Demographic Statistics Section and Social Analysis and Research Section, Census and Statistics Department.

The reasons for such increase in LFPR are manifold.   First, older workers can stay in the labour force longer because of their better health in general.   In addition, as Hong Kong has developed into a highly service-oriented and knowledge-based economy, many jobs become less physically demanding yet require higher skills instead.   This coupled with the education upgrade of the older population over time implies that there are more employment opportunities for older workers than before.   At the same time, the more favourable labour market conditions and income prospects in the lower-skilled segment since the implementation of the Statutory Minimum Wage (SMW) in 2011 have also attracted some older persons, especially those with lower education level and female workers, to stay in or re-enter the labour market.
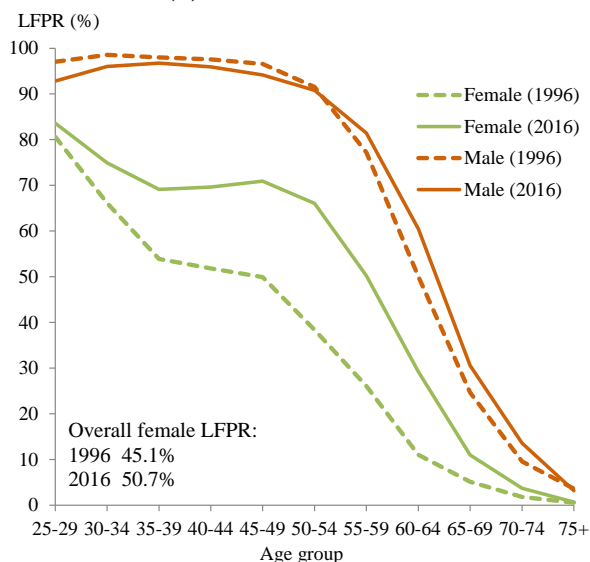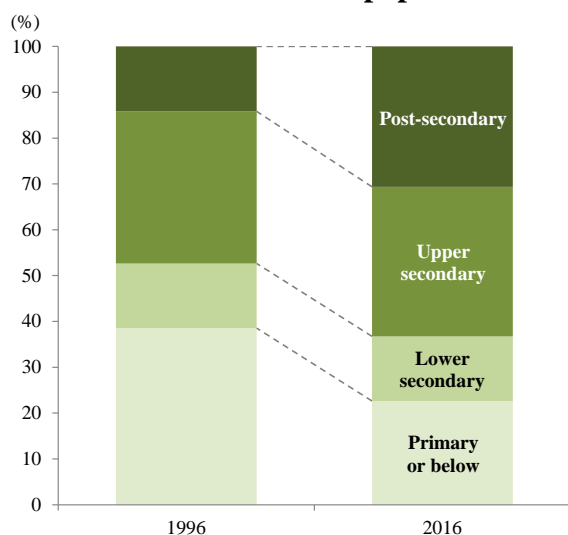
Box 6.1 (Cont'd)

(b) Fewer youth workers

Fewer youths (i.e. persons aged 15-24) were in the labour force in 2016. Not only the number of persons aged 15-24 decreased over the period, but so did their corresponding LFPR.   In 1996, 20.1% and 77.3% of those aged 15-19 and 20-24 participated in the labour market, while only 12.6% and 61.3% did so respectively in 2016.   This was conceivably due to more youngsters delaying employment in favour of pursuing further study, owing to better and wider education opportunities in recent years.

(c) More educated labour force

Hong Kong's labour force became much better educated compared with two decades ago. The proportion of labour force with post-secondary education (as indicated by the share of the darkest-coloured area in *Chart 1*) increased substantially from 20.4% in 1996 to 41.1% in 2016.   Meanwhile, only 9.0% of the labour force had primary or below education in 2016, down from 22.1% in 1996.   Not surprisingly, the younger workforce was more educated than the older, as shown by the higher share of darker-coloured area (indicating higher educational attainment) in the lower portion of the labour force pyramid in 2016.

(d) More women in the workforce

More women were in the labour force in 2016 than in 1996.   Comparing *Charts 1(a)* and *1(b)*, it is noted that for 2016, the area representing female labour force (i.e. the solid area on the right-hand side) is substantially larger.   Its size was also more comparable to that of the male counterpart in 2016 than in 1996.   The driving force behind a larger pool of female workers was not only the faster growth in female population, but also the increase in female LFPR, as manifested in the much larger change in the gender ratio of the labour force than that of the population.   *Chart 2(a)* shows that the female LFPR went up for all age groups above 25 years old [3] between 1996 and 2016, while that of male held relatively stable over the same period.

Chart 2(a): Female LFPR increased

LFPR (%)

Female (1996)
Female (2016)
Male (1996)
Male (2016)

Overall female LFPR:
1996   45.1%
2016   50.7%

Age group

Chart 2(b): Upgrade in the educational attainment of the female population[*]

(%)

Post-secondary

Upper secondary

Lower secondary

Primary or below

1996   2016

Notes: (*) Includes only female land-based non-institutional population aged 15 and above.
            Post-secondary education includes both degree and non-degree courses.

Source: Social Analysis and Research Section, Census and Statistics Department.

(3)   Female LFPR for the age groups 15-19 and 20-24 were lower in 2016 than in 1996, likely due to delayed employment for more education as discussed above.   Similar trend is also observed for male LFPR in the same age groups.

Box 6.1 (Cont'd)

The higher LFPR of female is partly attributable to their higher education level in general. There was a major education upgrade in the female population over the past twenty years (*Chart 2(b)*). Typically, persons with higher education level are more likely to seek jobs because of their higher opportunity cost of not working[4]. By the same token, women with higher education level are less likely to drop out of the labour force after getting married or having children. Besides, the increased availability of foreign domestic helpers has helped lessen some of the household responsibilities of women, particularly those living with children, thus allowing more of them to participate in the labour market than before[5].

Implications for the future labour supply

According to the latest projection by the Census and Statistics Department (C&SD), Hong Kong's labour force is projected to decrease after reaching a plateau during 2019 to 2022, amid a slow-growing and ageing population[6]. The latest projection has taken into account the increasing trends of LFPR among female and older age groups in the past, especially in the more recent years. Indeed, the rising LFPR of these groups has helped counteract in part the effects of other factors contributing to reducing the labour force (such as the shrinking young cohorts). Given the education upgrade of the population in general and the evolving employment structure towards less physically demanding jobs, the elevated levels of LFPR for female and older age groups are likely to sustain in the future.

Apart from the decline in size, the composition of the labour force will also continue to change. Population ageing is expected to persist with low fertility rate and increasing life expectancy in Hong Kong, with the median age of the population projected to rise from 44.3 in 2016 to 50.9 in 2036. At the same time, the trend of youngsters preferring more education thus delaying employment till a later age is expected to continue. As a result of these trends, a generally older workforce is to be expected in the future.

Traditionally, an ageing workforce is regarded as a less productive one. However, because of the structural changes in the Hong Kong economy, relatively more emphasis is now put on the experience and knowledge of the workers, instead of their physical ability which deteriorates as one gets older. The lost productivity due to fewer younger workers can hence be somewhat compensated by the productivity gain in having more experienced workers[7].

At the same time, the labour force will become generally more educated with the older, less educated workers retiring and the younger, more educated cohorts joining the labour market. This will to some extent mitigate the negative effect of an older labour force on productivity, as more educated workers are typically considered to be more productive since they are generally more skilled and able to better adapt to changes in the market.

Facing the challenges of an ageing population and shrinking labour force, the Government will spare no effort in assisting different groups to participate in the labour market. For example, the Labour Department provides comprehensive and free employment services to job-seekers through its job centres, industry-based recruitment centres, and other telephone and online platforms. In addition, the Government will continue to invest vigorously in education and training with a view to further strengthening Hong Kong's human capital base which is crucial to long-term sustainable development.

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(4) For a discussion of the relationship between educational attainment and labour force participation, see Box 5.1 in the Third Quarter Economic Report 2014.

(5) For a related discussion, see Box 5.1 in the Half-yearly Economic Report 2014.

(6) The population is projected to grow at an annual rate of 0.4% till mid-2043 and then decline at a rate of 0.3% per annum from mid-2043 to mid-2066. Besides, the number of persons aged 65 and over is projected to more than double in twenty years' time. By 2043, about one in three persons in Hong Kong will be aged 65 or over.

(7) To what extent these opposite forces affect the overall labour productivity will require closer investigation in further research.