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Labour market participation and employment composition of youths in Hong Kong: 1993-2020

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Abstract

This article analyses the dynamics of youths' labour market participation in Hong Kong and their employment composition from 1993 to 2020 as higher education became more popularised. The results suggest that (i) the overall labour force participation rate of youths declined along with the increase in the share of youths in full-time education, as full-time students were less likely to participate in the labour market; (ii) most full-time students who opted to join the labour force engaged in part-time jobs, which was reflected in their sectoral and occupational compositions of employment; and (iii) an increasing proportion of youths not in full-time education engaged in the financing, insurance, real estate, professional and business services sector and higher-skilled occupations over time, especially for the older youths (aged 25-29). This was partly attributable to the educational upgrading of youths during the period.

香港青年的勞工市場參與及就業構成:1993至 2020年 摘要

本文分析在高等教育普及化下,香港青年在 1993 至 2020 年間的勞工市場參與 及就業構成的變化。結果顯示: (i) 隨着接受全日制教育的青年比例上升,而他 們參與勞工市場的比例相對較低,整體青年的勞動人口參與率下跌; (ii) 大部分 選擇加入勞動市場的全日制學生投身兼職工作,這反映在他們行業及職業方面 的就業構成;以及 (iii) 非正在接受全日制教育的青年投身金融、保險、地產、 專業及商用服務業以及從事較高技術職業的比例隨時間推移而上升,而這情況 在較年長的青年 (25-29 歲) 之中尤其明顯。這部分歸因於該時期青年的教育水 平提高。

The views and analysis expressed in this article are those of the author and do not necessarily represent the views of the Office of the Government Economist.

I. INTRODUCTION

One of the most striking changes among our youths¹ over the past three decades occurred on the education front. With the Government's endeavour to broaden pathways to and the associated investment in higher education over the years, a lot more opportunities were opened up for youths in Hong Kong to receive higher education. Moreover, the continuous upgrading of Hong Kong's economy demanded high-skilled labour and thus higher-educated persons. Consequently, the share of youths who had received post-secondary education increased considerably between 1993 and 2020, and the proportion of youths who were receiving full-time education also showed a noticeable rise during the same period. Against this backdrop, this article analyses the dynamics of youths' labour market participation and their sectoral and occupational compositions of employment from 1993 to 2020².

2. The rest of this article proceeds as follows. **Section II** provides background information on the educational upgrading of youths from 1993 to 2020. **Section III** describes the characteristics and trends of the youth labour force participation rate (LFPR) and the youth labour force. **Section IV** studies the sectoral and occupational compositions of employment for youths in full-time education. **Sections V** and **VI** discuss the salient features of working youths not in full-time education by sector and occupation respectively. **Section VII** concludes.

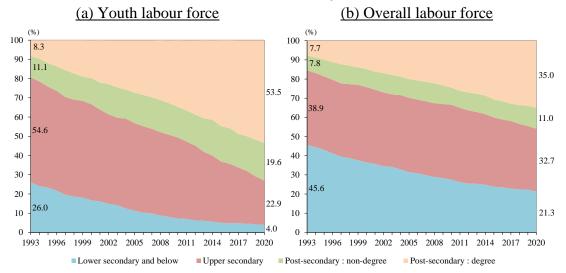
II. EDUCATIONAL UPGRADING OF YOUTHS FROM 1993 TO 2020

3. Benefitting from the popularisation of higher education over the years, the share of post-secondary-educated youths in the labour force increased substantially from 1993 to 2020. As seen in *Chart 1(a)*, while only 19.4% of youths in the labour force had received post-secondary education in 1993, the share increased markedly to 73.1% in 2020. In particular, the share of youths with degree education increased sizably from 8.3% to 53.5%. Compared with the overall labour force, the youth labour force witnessed a much larger increase in the share of persons with post-secondary education from 1993 to 2020 (up 53.7 percentage points, versus up 30.4 percentage points in the overall labour force), thereby resulting in a much higher share in 2020 (*Chart 1*).

¹ Unless otherwise stated, youths in this article are those aged 18-29.

² Figures quoted in this article exclude foreign domestic helpers, and are only available from 1993 onward. Percentage shares shown in the charts may not add up to 100% due to rounding.

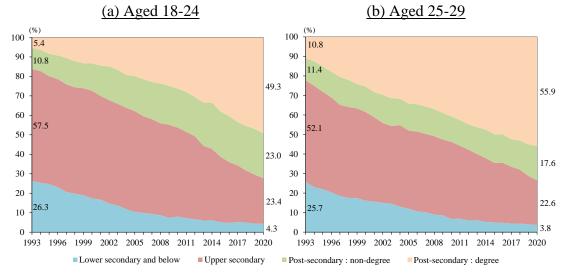
Chart 1: Share of labour force by educational level



Source: General Household Survey, Census and Statistics Department.

4. Within the youth labour force, as one would expect, those in the older sub-group (aged 25-29) were in general more educated than those in the younger sub-group (aged 18-24). For instance, 55.9% of those aged 25-29 in the labour force had received degree education in 2020, whereas the share was 49.3% among those aged 18-24. In addition, the increase in the share of youths with degree education from 1993 to 2020 was somewhat larger in the older sub-group (up 45.1 percentage points) than in the younger sub-group (up 43.9 percentage points) (*Chart 2*).

Chart 2: Share of youth labour force by educational level



Source: General Household Survey, Census and Statistics Department.

III. LABOUR MARKET PARTICIPATION OF YOUTHS

Along with the educational upgrading of youths, the share of youths in full-time education was visibly higher in 2020 as compared with 1993. The share trended up from 14.0% in 1993 to 31.8% in 2010, and hovered at 30-32% in the following years (*Chart 3(a)*). The above pattern could be due to several factors. With support from the Government, intake places for post-secondary education witnessed rapid expansion in the 1990s and 2000s³, enabling more youths to receive post-secondary education and pushing up their share in full-time education. However, this expansion tapered off in the last decade, as the increase in degree intake places was partly offset by the decline in self-financing sub-degree places⁴. Further, the share of 18 to 24 year olds of prime school-going age within the youth population, previously stable at around 56% (e.g. 56.3% in 2010), started to decline in recent years and eventually reached 52.6% in 2020. The share of youths in full-time education therefore flattened since around 2010.

Chart 3: Share of youth population in full-time education and youth LFPR (a) Share of youth population (b) Youth LFPR 100 100 91.0 86.0 78.7 80 80 69.0 68.2 (2010) 66.2 65.7 (2010) 60 60 40 40 31.8 (2010) 20 20 14.0 0 1993 1996 1999 2002 2005 2008 2011 2014 2017 2020 1993 1996 1999 2002 2005 2008 2011 2014 2017 2020 Not in full-time education In full-time education — Not in full-time education · · In full-time education

Source: General Household Survey, Census and Statistics Department.

The Government announced in 1989 that it would expand opportunities for youths in Hong Kong to receive undergraduate education. As a result, the number of subsidised first-year-first degree (FYFD) places increased from about 10 000 in the early 1990s to 14 500 in academic year (AY) 1994/95. In addition, following the Government's announcement in the 2000 Policy Address the target that 60% of secondary school leavers could receive tertiary education within 10 years, the number of self-financing sub-degree places increased sharply, from 2 468 in AY 2000/01 to 26 692 in AY 2010/11.

From AY 2010/11 to 2020/21, self-financing sub-degree intake places dropped by 8 231 to 18 461, partly offsetting the rise in degree intake places (up 16 138 to 39 386, primarily due to increases in self-financing FYFD and top-up degree places and publicly-funded senior year places).

- 6. In tandem with the increased share of youths in full-time education, the LFPR of these youths increased visibly from 3.2% in 1993 to 19.4% in 2019 (*Chart 3(b)*). The reasons behind this increase may be manifold. One possible cause is the need to work in order to pay for the cost of study, especially with the expansion of self-financing programmes in post-secondary education since the early 2000s. Another is that employers generally became more receptive to engaging voluntary part-time (VPT) employees⁵, thereby providing more opportunities for these youths to enter the labour market. More specifically, the labour market was rather tight for most of the time in the last decade. This, together with the implementation of Statutory Minimum Wage (SMW) since 2011 with the purpose of forestalling excessively low wages, might have enticed more of these youths to join the labour market during that period. In 2020, however, the LFPR of these youths fell visibly to 13.6%, possibly because some of them chose to leave or stay away from the labour market for the time being when the economy and the labour market deteriorated sharply due to the COVID-19 pandemic.
- 7. Despite the visible increase in the LFPR of youths in full-time education, their LFPR remained much lower than that of their same-age counterparts who were not in full-time education, which stayed at a high level of over 90% during 1993 to 2019 and only went down slightly to 89.1% in 2020. The trend of the overall youth LFPR over the years was therefore opposite to that of the share of youths in full-time education. The overall youth LFPR trended down from 78.7% in 1993 to a low of 65.7% in 2010, then stabilised and increased marginally to reach 67.5% in 2019, before edging down to 66.2% in 2020 amid the pandemic (*Chart 3(b)*). In fact, of this total decline of 12.6 percentage points in the overall youth LFPR from 1993 to 2020, a simple decomposition of shows that the increase in the share of youths in full-time education during the period contributed a drag of 13.9 percentage points, which more than offset the positive effect of 1.3 percentage points due to the higher LFPR of youths in full-time education.

$$\begin{aligned} & \text{LFPR}_{t+1} - \text{LFPR}_t = \\ & \sum_{i} \left(\text{LFPR}_t^i \times \left(\text{Pop_share}_{t+1}^i - \text{Pop_share}_t^i \right) \right) + \sum_{i} \left(\text{Pop_share}_{t+1}^i \times \left(\text{LFPR}_{t+1}^i - \text{LFPR}_t^i \right) \right) \\ & \text{where LFPR}_t \text{ refers to the overall LFPR in year } t; \\ & \text{LFPR}_t^i \text{ refers to the LFPR of group } i \text{ in year } t; \\ & \text{Pop_share}_t^i \text{ refers to the share of group } i \text{ in the population in year } t; \end{aligned}$$

Group *i* refers to youths in or not in full-time education.

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Reflecting this, the share of VPT employment in total employment increased from 2.8% in 1993 to 10.0% in 2020.

As the overall youth LFPR can be viewed as the weighted average of the LFPRs of youths in or not in full-time education, a shift-share analysis can be used to estimate the compositional effect by keeping the LFPR of these two groups of youth constant, while allowing the share of these two groups in the youth population to change. Specifically, the following formula is adopted to decompose the year-on-year change in the overall youth LFPR (from year *t* to year *t*+1, where the term in red is the effect of changing population shares and the term in blue is the effect of changing LFPRs):

8. Looking at the youth labour force, the number of youths in full-time education expanded from about 5 000 in 1993 to slightly over 60 000 in 2019, but then fell to 38 700 in 2020 (*Chart 4(a)*). This largely mirrored the trend of their LFPR. The share of these youths in the total youth labour force also rose from 0.6% in 1993 to 9.1% in 2019, before falling to 6.3% in 2020. Most of them (close to 70% in 2020) participated in the labour market through voluntary part-time (VPT) employment 7 . This is consistent with the fact that part-time jobs offer a more flexible work schedule, which allows them to work while pursuing further study on a full-time basis.

(a) In full-time education (b) Not in full-time education 0.9 80 0.8 70 0.7 60 0.6 50 0.5 0.3 20 0.2 10 0.1 1993 1996 1999 2002 2005 2008 2011 2014 2017 2020 1996 1999 2002 2005 2008 2011 2014 2017 2020 1993 UnemployedUnderemployed In voluntary part-time employment
 In full-time employment

Chart 4: Youth labour force by whether in full-time education

Source: General Household Survey, Census and Statistics Department.

9. In contrast, the labour force of youths not in full-time education generally declined between 1993 and 2020 (*Chart 4(b)*), mainly because their population shrank from 0.94 million to 0.65 million. Nevertheless, standing at about 0.58 million in 2020, it was still much larger than the labour force of youths in full-time education (*Chart 4(a)*). Further, full-time (as opposed to part-time) employment remained the most common form of participation in the labour market for youths not in full-time education during the period, even though its share in the labour force of these youths declined somewhat from 94.5% to 79.4% during the period.

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Voluntary part-time employed persons are those working less than 35 hours voluntarily during the 7 days before enumeration for reasons other than vacation. Full-time employed persons are persons working at least 35 hours or those working less than 35 hours due to vacation during the 7 days before enumeration.

IV. EMPLOYMENT COMPOSITIONS FOR YOUTHS IN FULL-TIME EDUCATION⁸

10. As mentioned, most youths in full-time education who opted to join the labour force were engaged in voluntary part-time employment. This feature is reflected in the sectors and occupations in which they worked (Chart 5). Most worked in the public administration, social and personal services sector (which includes private tutoring), the retail sector and the accommodation and food services sector, likely because more jobs in these sectors allow a flexible work schedule. In terms of occupation, the majority worked as service and sales workers, echoing the sectoral mix of their employment. It is also worth noting that in the last decade, the share of youths in fulltime education working as associate professionals rose from 13.1% to 24.3%, and the number of these youths increased from 4 600 to 8 200. The increase might in part due to the replacement of clerical support workers by associate professionals, indicating that companies were more willing to offer part-time job opportunities for this occupational category amid the secular trend of rising educational levels of youths, for instance in the form of internships.

(a) Share of employment by industry (b) Share of employment by occupation 100 Public administration, social and ■ Other occupations personal services Financing, insurance, real estate, ■ Elementary occupations professional and business services
Information and communications 80 80 ■ Plant and machine 54.4 44.8 55.7 70 70 50.3 operators and assemblers

Craft and related workers ■ Transportation, storage, postal 54.5 50.0 60 and courier services 60 Accommodation and food Service and sales workers 50 10.1 50 2.2 40 10.7 Clerical support workers 28.3 ■ Import/export trade and wholesale 15.3 18.3 25.8 30 30 Associate professionals 20.1 6.0 13.9 ■ Construction 20 20 ■ Professionals 10.6 10.3 24.3 16.3 ■ Manufacturing 14.6 14.0 10 10 ■ Managers and Other industries 2020

Chart 5: Youths in full-time education

General Household Survey, Census and Statistics Department. Source:

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Notwithstanding the pandemic, the sectoral and occupational compositions of employment for both youths in/not in full-time education were largely the same in 2019 and 2020. Therefore, a separate discussion of the situation in 2019 is not included in **Sections IV** to **VI** for the sake of simplicity.

V. SECTORAL COMPOSITION OF EMPLOYMENT FOR YOUTHS NOT IN FULL-TIME EDUCATION

11. The sectoral pattern of the employment of youths not in full-time education (hereafter referred as "youths" in **Sections V and VI** if not otherwise specified) was more diverse, and showed persistent and visible changes over time (*Chart* 6(a)). Comparing 2020 with 1993, visibly higher proportions of youths were engaged in the public administration, social and personal services sector, and the financing, insurance, real estate, professional and business services sector, with the combined share of these sectors in youth employment rising from 28.4% in 1993 to 53.6% in 2020. The expansion of the latter coincided with the rising importance of the financial services sector to the Hong Kong economy during that period. On the other hand, youths became much less likely to work in the import/export trade and wholesale and manufacturing sectors over time, and the combined share of these sectors in youth employment contracted from 36.6% in 1993 to just 7.5% in 2020.

Chart 6: Share of employment by industry

(a) Youths not in full-time education (b) Overall employment (%) 100 100 Public administration, social and 15.1 17.0 19.4 90 90 19.9 23.3 263 Financing, insurance, real estate, professional and business services 80 13.3 10.7 ■ Information and communications 17.8 14.9 1.3 1.9 19.8 21.1 10.3 9.3 Transportation, storage, postal and 25.4 2.8 27.3 9.9 3.3 7.9 4.5 8.3 Accommodation and food services 9.8 50 8.1 50 7.7 7.8 8.1 4.1 9.5 8.0 6.0 8.9 9.3 10.7 9.3 7.3 ■ Import/export trade and wholesale 12.7 30 15.6 8.0 8.3 17.7 ■ Construction 16.9 9.5 20 20 9.8 9.9 16.0 ■ Manufacturing 8.6 5.7 10 9.3 11.0 Other industries 2000 2010 2020

Source: General Household Survey, Census and Statistics Department.

12. The sectoral composition of youth employment resembled that of overall employment. Both experienced similar compositional shifts across sectors over time, yet the increase in the share of the public administration, social and personal services sector over time was larger for youths than for workers in general. Meanwhile, a larger decline in the share of the import/export trade and wholesale sector over this period was also registered among youths (*Chart 6*). This is generally as expected, since fastergrowing industries will naturally tend to accept more new entrants than others.

13. Further separating youths into two age groups (aged 18-24 and aged 25-29) and comparing the two, youths in the older sub-group (aged 25-29) were much more likely to work in the financing, insurance, real estate, professional and business services sector, but much less likely to work in the retail sector and the accommodation and food services sector. This was partly because the older youths, being more educated in general as mentioned in **Section II**, were more likely to work in higher-skilled jobs than the younger youths (see **Section VI** for details). Elsewhere, changes in the sectoral composition of employment of these two age groups over time were broadly similar to those described in *para*. 11 (*Chart 7*).

(a) Aged 18-24 (b) Aged 25-29 (%) 100 Public administration, social and 17.4 personal services 18.2 20.3 90 20.7 Financing, insurance, real estate. 27.0 professional and business services 13.0 13.5 Information and communications 14.6 20.4 2.1 18.2 1.7 70 22.8 9.2 ■ Transportation, storage, postal and 24.5 60 3.2 courier services 28.6 6.6 9.5 Accommodation and food services 8.3 5.2 8.3 6.2 8.0 6.3 10.9 14.2 6.5 5.9 6.5 8.3 40 17.3 ■ Import/export trade and wholesale 15.8 11.5 10.7 30 30 16.1 6.5 ■ Construction 11.0 88 20 20 18.1 12.4 6.0 9.5 5.1 ■ Manufacturing 21.1 10 10 8.8 Other industries 2010 2010 2020 2020

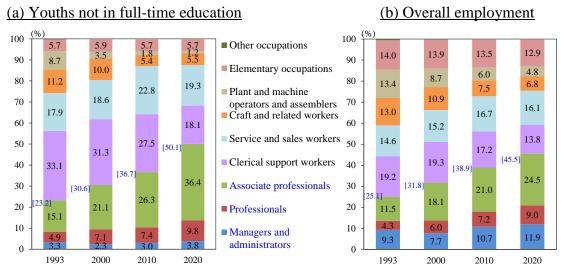
Chart 7: Share of youth employment by industry

Source: General Household Survey, Census and Statistics Department.

VI. OCCUPATIONAL COMPOSITION OF EMPLOYMENT FOR YOUTHS NOT IN FULL-TIME EDUCATION

14. The occupational composition of youth employment also showed significant changes over time. Between 1993 and 2020, the share of youths engaging in higher-skilled occupations (viz. associate professionals, professionals, and managers and administrators) more than doubled, from 23.2% to 50.1%. The increase in the share of associate professionals in youth employment was particularly distinct, rising from 15.1% to 36.4% during the period and accounting for about four-fifths of the overall increase in the share of higher-skilled occupations (*Chart 8(a)*). This rising proportion of youths taking up higher-skilled occupations closely aligned with their educational upgrading. As discussed in **Section II**, from 1993 to 2020, there was a noticeable increase in the share of youths in the labour force who had attended post-secondary education, especially in terms of degree education. Since better-educated persons are more likely to work in higher-skilled jobs⁹, the share of higher-skilled occupations among working youths rose along with the popularisation of higher education during this period.

Chart 8: Share of employment by occupation



Note: [] The proportion of higher-skilled workers (associate professionals, professionals, managers and administrators) in youth/overall employment. There may be a slight discrepancy between the sum of individual items and the total owing to rounding.

Source: General Household Survey, Census and Statistics Department.

For instance, the share of higher-skilled occupations among youths (not in full-time education) with post-secondary degree education was 73.8% in 2020; the corresponding figures for youths with post-secondary non-degree, upper secondary and lower secondary and below education were 36.1%, 14.1% and 5.4% respectively.

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- 15. Among the lower-skilled occupations, the share of youths engaged as clerical support workers recorded the largest decline between 1993 and 2020, followed by plant and machine operators and assemblers, and craft and related workers ($Chart\ 8(a)$). The decline in the first type of occupation was in line with the broad trend of automating clerical tasks, and to certain extent reflected the upskilling of youths amid the continuous enhancement of their educational levels, so that entry-level jobs for them switched from clerical jobs to jobs that demand some higher skill levels (e.g. those classified as associate professionals), especially in the last decade. The declines in the latter two types of occupation were consistent with the fall in the importance of sectors that employed many of these workers (e.g. manufacturing and construction) to Hong Kong's GDP during the period.
- 16. Comparing 2020 with 1993, the shares of higher-skilled occupations in both youth and overall employment increased. The share in youth employment in particular showed a larger increase (up 26.9 percentage points, versus up 20.4 percentage points for overall employment) (*Chart 8*). This was partly attributable to the fact that a much greater extent of educational upgrading occurred among youths over time (as discussed in **Section II**). Since better-educated persons have a higher chance to work in higher-skilled jobs, the gap in educational upgrading conceivably translated into a gap in occupational upgrading.
- 17. Meanwhile, although the shares of higher-skilled occupations in youth and overall employment were broadly similar, as shown in each of the four selected years in *Chart 8*, their compositions within higher-skilled occupations showed persistent differences. Specifically, compared with overall employment, a larger proportion of youths worked as associate professionals or professionals, but a smaller proportion as managers and administrators. A possible reason is that although youths were better-educated on average, they also had worked fewer years and thus lacked the necessary experience for management level work. Meanwhile, within lower-skilled occupations, youths were more likely than the overall population to work as service and sales workers or clerical support workers, possibly because these occupations place a higher demand on computer and language skills, on which youths tend to have a competitive edge given their higher educational levels.

18. Breaking down youths into two age groups (aged 18-24 and aged 25-29) and comparing, both sub-groups enjoyed a higher share of employment in higher-skilled occupations in 2020 as compared with 1993, but the older sub-group saw a slightly larger increase in that share. In addition, the older sub-group had a higher share than the younger sub-group in every higher-skilled occupation in each of the four selected years (*Chart 9*). Since those aged 25-29 were better-educated than those aged 18-24 in general, and saw a larger extent of education upgrading from 1993 to 2020, this once again hinted at the influence of better education on occupational upgrading. The higher share of those aged 25-29 in higher-skilled jobs, especially as managers and administrators, also indicated the upward mobility available to youths in general. Moreover, since those aged 25-29 were more likely to work in higher-skilled jobs than those aged 18-24, they were also more likely to work in sectors that had a larger share of employment consisting of higher-skilled jobs, for instance the financing, insurance, real estate, professional and business services sector, as discussed in *para. 13*.

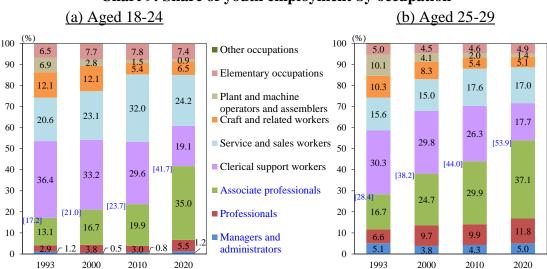


Chart 9: Share of youth employment by occupation

Note: [] The proportion of higher-skilled workers (associate professionals, professionals, managers and administrators) in youth/overall employment. There may be a slight discrepancy between the sum of individual items and the total owing to rounding.

Source: General Household Survey, Census and Statistics Department.

VII. CONCLUDING REMARKS

- 19. This article reviewed the changes in the labour force participation of youths during 1993-2020 amid the popularisation of higher education. As the share of youths in full-time education went up, the overall youth LFPR declined during 1999-2010. It then stabilised in 2010-2019 along with the stabilisation of that share, before declining slightly in 2020 amid the record economic contraction. For youths in full-time education, their LFPR and labour force were mostly on the rise between 1993 and 2019, but both fell in 2020 owing to the downturn. As full-time students, they joined the labour market mostly as part-time workers, and worked predominantly in the public administration, social and personal services sector and as service and sales workers, reflecting the part-time nature of their employment.
- 20. Persistently around 90% of youths not in full-time education participated in the labour market between 1993 and 2020, and most of them worked full-time. Over time, youths not in full-time education were more likely to work in the public administration, social and personal services sector, and the financing, insurance, real estate, professional and business services sector, and less likely to work in the import/export trade and wholesale sector and the manufacturing sector. This largely mirrored the shifts in employment composition across sectors in overall employment, though the trends were magnified for youths as they were more likely to find their first job in faster-growing industries. Meanwhile, a larger proportion of these youths took up higher-skilled occupations over time, primarily as associate professionals. A further breakdown by age group revealed that the older sub-group (aged 25-29), with higher educational attainment on average and over time, were more likely to work in higher-skilled occupations than the younger sub-group (aged 18-24), and enjoyed a larger increase in the share of higher-skilled jobs over time.
- 21. In view of the above, changes in the labour force participation and employment patterns of youths during 1993-2020 partly demonstrated the impacts of educational upgrading on youths, especially the larger share and faster increase in the proportion of youths taking up higher-skilled jobs over the years. Through educational upgrading, youths are therefore able to take advantage of and foster the development of Hong Kong towards a knowledge-based economy.