Economic Letter 2020/09

## Income differences of post-secondary degree graduates by field of study across different generations

Kelvin Wong Senior Economist

## July 2020

#### Abstract

This article analyses the employment income of young degree graduates by field of study across generations based on population census and by-census data from 1991 to 2016. The results indicate that (i) by field of study, the median starting income and subsequent incomes of degree graduates in more recent generations (from 2006 onward), after discounting for inflation, were generally less favourable than those of cohorts from the 1990s, consistent with the analysis results based on the income performance of all degree graduates; and (ii) the median incomes of graduates from some popular subjects (such as medical and related studies, law) continued to perform better than other graduates. The former could be partly related to the more notable increase in the supply, relative to demand, of young higher-educated persons in the labour market over the past two decades or so. The latter was partly related to the larger proportion of graduates from these specialised fields engaged in higher-skilled occupations.

#### 按修讀科目劃分,不同世代大學畢業生的收入差異

#### 摘要

本文根據 1991 至 2016 年間人口普查及中期人口統計數據,按修讀科目劃分, 分析不同世代年輕大學畢業生的就業收入。結果顯示:(i)按修讀科目劃分,較 近世代(2006 年起)大學畢業生的起薪和後續收入中位數,扣除通脹後,一般 較 1990 年世代遜色,與分析整體大學畢業生收入的結果一致;及(ii) 來自一些 受歡迎學科(如醫療相關課程、法律)的畢業生的收入中位數表現持續較其他 畢業生為佳。前者部分源於過去二十多年來勞工市場中,相對於需求而言,受 過高等教育青年的供給更顯著增加有關。後者部分由於修讀這些專業科目的畢 業生從事較高技術職業的比例較大。

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

Prior studies on the earnings of fresh university graduates in Hong Kong found that recent cohorts earned less than those from the 1990s did<sup>1</sup>. Based on census and by-census data collected by the Census and Statistics Department from 1991 to 2016, Wong (2020)<sup>2</sup> found that the median starting and subsequent incomes of degree graduates in more recent cohorts (2006, 2011 and 2016 cohorts), adjusted by inflation, were less favourable than those of the 1991 and 1996 cohorts, though degree graduates still enjoyed better employment incomes than their lower-educated counterparts across all cohorts in question. To shed more light on this issue, this article further examines the income trajectory of young degree graduates by field of study across generations.

2. To date, only one prior study known to this author, the 2015 Study on Earnings  $Mobility^3$ , analysed the earnings performance of local post-secondary graduates by field of study. While that study focused on cohorts from 2001/02 onwards, this article makes use of survey-based census data that extend back to 1991 and are thus capable of capturing earlier generations than were examined in prior work.

3. This article is organised as follows. Section II describes the data set and the study cohorts. Section III analyses the median starting and subsequent incomes of young degree graduates in different cohorts by field of study. Section IV examines major factors for the less favourable income performance of more recent cohorts in each field across generations. Section V extends the analysis on income trajectory by skill segment. The last section concludes.

## II. DATA

4. This study uses multiple rounds of census and by-census data (from 1991 to 2016) from the Census and Statistics Department. The key outcome variable is monthly

<sup>&</sup>lt;sup>1</sup> New Century Forum. (2018, December 17). 香港各世代大學生收入比較研究 (1987-2017 年) [Research report comparing the income of university graduates of different generations in Hong Kong, 1987-2017]. Retrieved from http://www.ncforum.org.hk/file/upload/file 934 Alu.pdf Economic Analysis and Business Facilitation Unit, the Government of the Hong Kong Special Administrative Region (2016, August). Box 5.1 Earnings of youths in Hong Kong. Retrieved from https://www.hkeconomy.gov.hk/en/pdf/box-16q2-5-1.pdf

<sup>&</sup>lt;sup>2</sup> Wong, K. (2020). Income differences of post-secondary degree graduates across different generations. *Economic Letter 2020/06*, Office of the Government Economist. Retrieved from <u>https://www.hkeconomy.gov.hk/en/pdf/el/el-2020-06.pdf</u>

<sup>&</sup>lt;sup>3</sup> Economic Analysis and Business Facilitation Unit, the Government of the Hong Kong Special Administrative Region (2016, May). 2015 Study on earnings mobility. Retrieved from <u>https://www.povertyrelief.gov.hk/pdf/Information%20Paper%20-%20Bilingual%20-</u> <u>%20Main%20Text%20(12.5.2016) clean.pdf</u>

income from main employment. Another key variable is the field of study of persons with post-secondary degree education. There are 11 fields in all: business and commercial studies, tourism, and hotel management (abbreviated as business studies); arts, languages and humanities (arts); social science; fine arts and design; law; mechanical, electrical, electronic and marine engineering (engineering); architecture and construction engineering (architecture); computer studies; pure science; medical and related studies; and education<sup>4</sup>.

5. Following the analytical framework used in Wong (2020), the baseline group in this analysis is working persons aged 23-27 who have attended first-degree programmes or above<sup>5</sup>. Their median employment income is used as a proxy for the starting income of fresh university graduates when entering the labour market. The median incomes for those aged 28-32 5 years later and 33-37 10 years later are proxies for graduates' incomes after gaining 5 and 10 years of work experience, respectively. In all, the study focuses on six cohorts, ranging from those born in 1964-68 to those born in 1989-93. For more recent cohorts, however, statistics on graduates' income after 5 or 10 years of work experience are not available as the data have not yet been collected. The cohorts and data sources for each cohort are detailed in Table 1.

		Year of Census or By-census									
Years of Birth	1991	1996	2001	2006	2011	2016					
1964 - 1968 (1991 cohort)	23-27 -	>28-32 -	<b>→</b> 33-37								
1969 – 1973 ( <b>1996 cohort</b> )		23-27	28-32	33-37							
1974 – 1978 (2001 cohort)			23-27	28-32	33-37						
1979 – 1983 (2006 cohort)				23-27	28-32	33-37					
1984 – 1988 (2011 cohort)					23-27	28-32					
1989 – 1993 (2016 cohort)						23-27					

Table: 1 Age range of each cohort by year of census or by-census

Note: Figures in yellow / light blue / blue cells (23-27, 28-32 and 33-37) refer to the age range of each cohort in the respective census or by-census year.

<sup>&</sup>lt;sup>4</sup> The remaining fields are grouped as "others", such as studies in agricultural programmes; forestry; numeracy; library sciences; and laboratory technicianship.

<sup>&</sup>lt;sup>5</sup> In this study, degree graduates or degree-educated persons are those who have attended education at the first-degree level or above. Given that information on highest educational level completed is available only from the 2001 Population Census onwards, "the highest educational level attended" is used.

## III. ANALYSIS OF THE INCOME TRAJECTORY OF YOUNG DEGREE GRADUATES ACROSS GENERATIONS BY FIELD OF STUDY

#### III.1 Starting incomes

6. The median starting incomes in real terms of degree holders aged 23-27 by discipline and cohort are listed in **Table 2**<sup>6</sup>. Of these, only those in medical and related disciplines earned more in 2016 than in 1991<sup>7</sup>, whereas the median starting incomes (in constant 2018 prices)<sup>8</sup> of graduates from other disciplines in the more recent cohorts (from 2006 onwards), were generally lower than the corresponding incomes from the 1991 cohort, being consistent with the observation in Wong (2020) on degree graduates as a whole. However, the median starting income of all employed persons aged 23-27, regardless of educational level, was higher in 2016 (\$14,500) than in the 1990s (\$11,400 in 1991 and \$13,700 in 1996).

	Cohort a	Cohort aged 23-27 in respective year of Census or By-census								
(\$, 000) (in 2018 prices)	1991	1996	2001	2006	2011	2016	1991-2016			
All employed persons (regardless of educational attainment)	11.4	13.7	13.9	13.6	13.0	14.5				
All degree graduates	19.6	19.2	20.1	17.2	17.4	16.6				
Medical & related studies	21.6	24.7	29.5	23.6	27.3	27.3	$\frown$			
Law	36.1	26.8	27.8	21.5	23.0	20.8				
Architecture	20.7	20.6	20.1	17.2	18.6	19.7				
Education	19.6	24.0	27.8	22.9	23.5	18.9				
Engineering	18.6	17.9	19.4	17.2	17.4	17.7	$\checkmark$			
Computer studies	20.7	17.9	21.5	17.2	18.0	17.1	$\searrow$			
Pure science	20.7	19.2	19.4	17.2	18.0	17.1	~~			
Business studies	18.6	17.2	18.0	16.5	16.2	16.2	$\searrow$			
Social science	20.7	19.2	18.7	17.2	17.4	15.9	>			
Arts	20.7	20.6	19.4	17.2	17.4	15.6				
Fine arts & design	19.6	20.6	18.7	15.0	16.8	15.6				

Table 2: Real median starting income of degree graduates, by field of study

Source: Population Census / By-census, Census and Statistics Department, various years.

7. Against this backdrop, while the median starting income of degree graduates continued to be higher than that of all same-age employed persons (regardless of

<sup>&</sup>lt;sup>6</sup> Unless otherwise specified, all figures related to income, the labour force and employment exclude foreign domestic helpers and unpaid family workers.

<sup>&</sup>lt;sup>7</sup> Despite hitting a local trough in 2006, the real median starting income of graduates from medical and related studies rebounded in 2011 and 2016 (+26.1% as compared to that of the 1991 cohort).

<sup>&</sup>lt;sup>8</sup> Unless otherwise specified, all income figures are in constant 2018 prices, which are calculated using the Composite Consumer Price Index.

educational attainment), the earnings premium of the former relative to the latter diminished in recent cohorts, falling from 73% in 1991 to 14% in  $2016^9$ .

8. Further, as **Chart 1** indicates, graduates in traditionally favourable disciplines like medical and related studies, law, architecture, and education continued to enjoy median or above-median starting employment income relative to all degree graduates. Meanwhile, the median starting incomes of graduates in social science, arts as well as fine arts and design fell below the overall median over time, while that of graduates in business studies stayed below the overall median during the study period. By contrast, the median starting incomes of graduates from engineering, computer studies and pure science reached or advanced above the median for the 2011 and 2016 cohorts.

Chart 1: Relative difference of the median starting income between each field of study and all degree graduates





Source: Population Census / By-census, Census and Statistics Department, various years.

#### III.2 Subsequent incomes

9. Further analysis of the subsequent median incomes for degree-educated persons after 5 and 10 years in the labour force (i.e. the main employment income of degree-

<sup>&</sup>lt;sup>9</sup> For a more detailed discussion on the earnings premium of degree graduates relative to their lowereducated counterparts, please see Wong (2020).

educated persons aged 28-32 and 33-37) across generations by field of study reveals the following main observations (see **Tables 3a** and **3b** for details):

- Similar to the situation for median starting incomes, the subsequent median incomes of degree graduates in all disciplines trended downward. In other words, the subsequent median incomes of more recent cohorts still lagged behind those of the 1991 and 1996 cohorts, even for graduates in medical and related studies.
- Nevertheless, it is worth pointing out that the ensuing employment income growth of graduates in law for the 2006 and 2011 cohorts was higher than that of the 1991 cohort, reflected in the fact that the income 10 years later for the 2006 cohort almost caught up with that of the 1991 cohort.
- It can also be seen that the median incomes 5 and 10 years later in law and medical and related studies continued to be notably higher than in other fields across generations, and those in architecture and education often enjoyed above-median subsequent incomes as compared to all degree graduates.
- By contrast, the overall median income 10 years later of the 2006 cohort, regardless of educational attainment, outperformed those of the 1991 and 1996 cohorts. Similarly, the overall median income 5 years later of the 2011 cohort was higher than that of cohorts in the 1990s. This was in part related to the increasing proportion of the young labour force with better educational attainment.

(\$, 000) (in 2018 prices)	Co	1991-2011				
	1991	1996	2001	2006	2011	
All employed persons (regardless of educational attainment)	15.8	18.0	17.2	17.4	18.2	$\bigwedge$
All degree graduates	27.5	31.2	26.5	24.9	24.7	$\langle$
Medical & related studies	38.1	44.4	40.1	36.5	32.5	$\langle \rangle$
Law	48.1	51.5	43.0	41.0	41.6	
Architecture	31.6	31.9	25.8	26.3	27.3	
Education	28.8	34.7	28.6	28.6	27.0	$\geq$
Engineering	27.5	29.5	25.1	24.9	24.7	
Computer studies	27.5	34.7	25.8	24.9	26.0	
Pure science	27.5	29.5	25.8	24.9	26.0	$\langle \rangle$
Business studies	27.5	27.8	25.8	24.9	22.9	
Social science	30.2	29.1	25.1	26.1	22.9	
Arts	27.5	29.5	25.8	24.9	22.1	
Fine arts & design	24.0	27.8	22.2	24.9	20.8	$\frown$

Table 3a: Real median income 5 years later of degree graduates,by field of study

Source: Population Census / By-census, Census and Statistics Department, various years.

(\$, 000) (in 2018 prices)	Coho	1991-2006			
	1991	1996	2001	2006	
All employed persons (regardless of educational attainment)	20.1	19.3	19.3	20.8	
All degree graduates	41.6	35.8	37.3	31.2	
Medical & related studies	54.1	48.3	48.2	41.6	
Law	62.5	50.1	62.1	62.3	
Architecture	47.2	35.8	37.3	32.5	
Education	41.6	37.8	38.5	36.4	
Engineering	41.6	35.8	33.7	31.2	
Computer studies	41.6	35.8	36.9	33.2	
Pure science	44.4	35.8	34.8	32.5	
Business studies	41.6	34.0	36.3	31.2	
Social science	41.6	35.8	34.8	31.2	
Arts	36.1	32.9	33.9	31.2	
Fine arts & design	33.0	28.6	31.1	27.0	$\searrow$

## Table 3b: Real median income 10 years later of degree graduates,by field of study

Source: Population Census / By-census, Census and Statistics Department, various years.

## IV. MAJOR FACTORS AFFECTING INCOME TRAJECTORY BY FIELD OF STUDY

10. Wong (2020) found that by 2006, the number of persons aged 23-27 with postsecondary (degree and non-degree) education exceeded the number of higher-skilled jobs available for this age group, on the back of the more rapid increase in the supply of higher-educated youths relative to the demand. The evolving balance between the supply and demand resulted in an increasing share of young degree graduates engaged in lower-skilled jobs over time.

11. Likewise, **Table 4** shows that the proportion of young degree holders taking up higher-skilled jobs in all disciplines fell between 1996 and 2016<sup>10</sup> when they started

<sup>&</sup>lt;sup>10</sup> This comparison starts with 1996 because, in the early 1990s, the number of degree holders in education was very limited as the former four Colleges of Education and the Institute of Language in Education (which were amalgamated to form the Hong Kong Institute of Education in 1994) offered mainly certificate courses in education, which may distort the related statistics to some extent. In fact, taking into account post-secondary non-degree graduates in education, the share of graduates in education in higher-skilled occupations in 1991 would increase from 73.0% to 90.6%.

their careers, with the extent of the decline ranging from -3.7 to -27.7 percentage points. In particular, a significant drop also appeared in 2006 for all disciplines. Nevertheless, it is noteworthy that the decline for graduates in medical and related studies was the least over the study period (from 89.6% in 1996 to 85.9% in 2016). Further, the shares for graduates in law, education, engineering, computer studies and pure science were also notably above the overall median level of young degree-educated workers in 2016.

	Cohort a	ged 23-27 i	in respectiv	ve year of C	ensus or B	y-census
	1991	1996	2001	2006	2011	2016
All employed persons (regardless of educational attainment)	26.7%	34.8%	39.2%	38.8%	41.2%	44.0%
All degree graduates	82.7%	82.5%	79.3%	69.6%	69.2%	66.0%
Medical & related studies	90.1%	89.6%	94.2%	82.1%	88.0%	85.9%
Law	91.1%	88.0%	81.2%	75.3%	82.9%	77.6%
Architecture	89.0%	94.4%	90.9%	73.7%	75.3%	66.7%
Education	73.0%	87.0%	91.0%	85.2%	88.7%	78.9%
Engineering	85.7%	88.5%	84.7%	77.5%	77.3%	75.1%
Computer studies	90.5%	87.3%	89.2%	79.2%	78.2%	80.7%
Pure science	89.4%	84.0%	77.0%	64.7%	73.6%	75.8%
Business studies	74.6%	76.8%	71.9%	63.8%	62.2%	57.4%
Social science	82.1%	83.0%	74.5%	63.0%	65.6%	64.0%
Arts	81.6%	76.6%	73.8%	66.4%	62.6%	56.3%
Fine arts & design	78.1%	79.7%	83.8%	78.1%	75.5%	68.4%

Table 4: Share of young degree holders engaged in higher-skilled occupationsby field of study

Source: Population Census / By-census, Census and Statistics Department, various years.

12. The above further supports the idea that the generally less favourable income performance of degree graduates in more recent cohorts was related to the more notable increase in the supply, relative to demand, of young higher-educated persons in the labour market over the past two decades or so. Conceivably, when entering the labour market and starting their career, degree holders from various disciplines in earlier cohorts (e.g. the 1991 cohort) benefited from the market situation of acute demand (relative to supply) for higher-skilled workers, associated with better salaries and development opportunities. But as the supply of young persons with post-secondary education in the labour market expanded, the relative scarcity of highly-educated manpower was relieved, especially after the mid-2000s.

13. Further analysis on degree-educated workers 5 and 10 years after entering the labour force yields similar results. For the sake of space, **Table 5** only displays the corresponding proportions by field of study for the 1991 and 2006 cohorts. While the

proportion taking up higher-skilled jobs in any discipline usually increased after gaining more work experience for both the 1991 and 2006 cohorts, the proportions for the 2006 cohort generally lagged behind the proportions for the 1991 cohort in all fields of study (with the exception of education on entering the labour force and 5 years later). Furthermore, it is notable that the shares of degree graduates in several fields in the 2006 cohort, including medical and related studies, law, education and computer studies, engaged in higher-skilled occupations was relatively high, reaching nearly 90% or above after gaining 5 to 10 years of work experience. This could partly explain why their median incomes generally were higher than the overall median as well as those of graduates from other fields.

	Cohort aged 23-27 in respective year of Census or By-census									
		1991		2006						
	Starting	5 years later	10 years later	Starting	5 years later	10 years later				
All employed persons (regardless of educational attainment)	26.7%	39.1%	42.6%	38.8%	50.2%	52.9%				
All degree graduates	82.7%	88.2%	89.8%	69.6%	81.9%	82.9%				
Medical & related studies	90.1%	91.9%	96.1%	82.1%	93.7%	91.5%				
Law	91.1%	90.5%	95.0%	75.3%	86.4%	92.8%				
Architecture	89.0%	93.7%	95.7%	73.7%	84.0%	79.6%				
Education	73.0%	88.6%	93.6%	85.2%	93.3%	88.6%				
Engineering	85.7%	91.6%	92.4%	77.5%	85.0%	85.2%				
Computer studies	90.5%	92.3%	92.1%	79.2%	85.8%	90.5%				
Pure science	89.4%	90.2%	92.7%	64.7%	82.7%	84.8%				
Business studies	74.6%	85.2%	86.8%	63.8%	77.7%	79.8%				
Social science	82.1%	88.2%	90.1%	63.0%	80.6%	80.9%				
Arts	81.6%	85.4%	84.1%	66.4%	78.3%	78.5%				
Fine arts & design	78.1%	87.1%	90.1%	78.1%	85.7%	82.9%				

Table 5: Share of degree holders engaged in higher-skilled occupations over timeby field of study

Source: Population Census / By-census, Census and Statistics Department, various years.

14. As mentioned earlier, apart from starting incomes, degree graduates in all disciplines continued to earn more than all those of the same age (regardless of educational level) on average across all cohorts, and their earnings premium largely widened after accumulating more work experience (**Tables 3a** and **b**). **Tables 4** and **5** suggest that the income premium of degree holders across all cohorts was due in part to their visibly higher proportion of engagement in higher-skilled occupations throughout their career path. The proportion of all young employed persons engaged

in higher-skilled jobs was generally on the rise in the past decades when they started their careers, from 26.7% in 1991 to 39.2% in 2001 and further to 44.0% in 2016. Nonetheless, the corresponding 66.0% of young degree graduates in 2016 was still substantially higher than the overall level (**Table 4**). This gap persisted after more work experience was accumulated (**Table 5**). Furthermore, as compared to their same-age counterparts as a whole, persons with post-secondary degree education had faster earnings growth after 5 and 10 years of work experience across all cohorts, as shown in **Table 6**. This advantage largely applied to each discipline as well<sup>11</sup>.

	(	Cohort a	ged 23-2	7 in resp	ective ye	ear of Census or By-census				
	1991	1996	2001	2006	2011	1991	1996	2001	2006	
	Median income 5 years later over starting income				Median income 10 years later over income 5 years later					
All employed persons (regardless of educational attainment)	6.8%	5.6%	4.4%	5.0%	6.9%	5.0%	1.4%	2.3%	3.6%	
All degree graduates	7.0%	10.2%	5.7%	7.7%	7.2%	8.7%	2.8%	7.1%	4.6%	
Medical & related studies	12.0%	12.4%	6.3%	9.1%	3.5%	7.3%	1.7%	3.7%	2.6%	
Law	5.9%	14.0%	9.1%	13.8%	12.6%	5.4%	-0.5%	7.7%	8.7%	
Architecture	8.9%	9.2%	5.1%	8.9%	7.9%	8.4%	2.3%	7.7%	4.3%	
Education	8.0%	7.6%	0.6%	4.5%	2.8%	7.6%	1.7%	6.1%	4.9%	
Engineering	8.1%	10.6%	5.2%	7.7%	7.3%	8.7%	4.0%	6.1%	4.6%	
Computer studies	5.9%	14.2%	3.7%	7.7%	7.6%	8.7%	0.6%	7.5%	6.0%	
Pure science	5.9%	8.9%	5.8%	7.7%	7.6%	10.1%	4.0%	6.2%	5.5%	
Business studies	8.1%	10.1%	7.4%	8.6%	7.2%	8.7%	4.2%	7.1%	4.6%	
Social science	7.9%	8.7%	6.0%	8.7%	5.7%	6.6%	4.2%	6.8%	3.6%	
Arts	5.9%	7.4%	5.8%	7.7%	4.9%	5.6%	2.2%	5.6%	4.6%	
Fine arts & design	4.1%	6.1%	3.5%	10.6%	4.4%	6.5%	0.6%	7.0%	1.7%	

Table 6: Average annual growth of real median income 5 and 10 years later,by field of study

Source: Population Census / By-census, Census and Statistics Department, various years.

<sup>&</sup>lt;sup>11</sup> In addition, **Table 6** indicates that economic cyclical factors also played some role in the income performance of young degree graduates in the short term. Amid subdued economic conditions in the early 2000s, the real income growth per annum for the 1996 cohort between the 5th and 10th years in the labour market (i.e. from 2001 to 2006) in each discipline was visibly lower, and in law, income even declined in real terms. Similarly, a visible slowdown in income growth during the first 5 years in the workforce for the 2001 cohort was also seen in all disciplines, as compared to the corresponding growth rates seen in adjacent cohorts.

## V. FURTHER ANALYSIS BY FIELD OF STUDY AND SKILL SEGMENT

Table 7 displays the median starting incomes of young degree-educated 15. working persons by field of study and skill segment across cohorts<sup>12</sup>. While the pattern among the higher-skilled segment is quite similar to the overall pattern in Table 2, it should be noted that (i) besides higher-skilled graduates in medical and related studies in recent cohorts with higher incomes, the median starting incomes of higher-skilled graduates in education and architecture in recent cohorts were close to those of the 1991 and 1996 cohorts; (ii) for degree graduates from the other disciplines (except fine arts and design), the extent to which recent cohorts lagged behind was narrowed as compared to the respective overall median in each of these disciplines; and (iii) as a whole, the 4.4% decline in the median starting income of young degree holders in higher-skilled jobs between 1991 and 2016 was substantially smaller than the decline seen among all young degree holders (regardless of occupation) between these two cohorts (15.3%; Table 2). This further supports the hypothesis that the downward trend in Table 2 is partly because some degree graduates have "spilled over" into lowerskilled jobs.

16. For degree holders engaged in lower-skilled occupations, generally speaking, the median starting incomes of the 2011 and 2016 cohorts were close to or even higher than those from the 1990s in all disciplines. Nevertheless, the median starting incomes of degree graduates engaged in lower-skilled occupations were lower than those of their counterparts in higher-skilled occupations across the board.

<sup>&</sup>lt;sup>12</sup> Corresponding results for median subsequent incomes by field are not presented as they are quite similar to those based on median starting income.

Cohort aged 23-27 in respective year of Census or By-census							
(\$, 000) (in 2018 prices)	1991	1996	2001	2006	2011	2016	1991-2016
Higher-skilled occupations		1,,,,,	2001	2000		2010	
All employed persons (regardless of educational attainment)	16.5	17.2	19.4	17.2	18.3	18.1	$\bigwedge$
All degree graduates	20.7	20.6	21.5	18.6	19.8	19.7	
Medical & related studies	22.7	26.3	31.9	25.8	28.6	29.1	$\langle$
Law	39.2	27.5	33.0	23.6	26.3	23.9	$\leq$
Architecture	20.7	20.6	20.8	17.9	19.9	20.8	$\sim$
Education	20.7	24.7	27.8	22.9	24.8	20.8	$\leq$
Engineering	19.6	19.2	20.8	18.6	18.4	18.7	$\leq$
Computer studies	20.7	19.2	22.2	17.9	19.4	17.7	$\sim \sim$
Pure science	20.7	20.6	20.8	17.9	19.0	18.7	$\sim$
Business studies	20.7	19.2	20.8	19.3	18.6	20.3	$\sim \sim$
Social science	20.7	20.6	20.8	18.6	19.1	18.7	$\overline{}$
Arts	20.7	23.4	20.8	20.8	18.8	17.1	$\langle$
Fine arts & design	20.7	23.4	19.8	17.2	18.6	16.4	$\langle$
Lower-skilled occupations							-
All employed persons (regardless of educational attainment)	10.3	11.7	12.9	11.5	11.6	13.0	$\geq$
All degree graduates	13.4	13.7	13.9	14.3	13.0	14.5	$\sim$
Medical & related studies	9.9	13.7	13.9	13.6	12.4	13.5	$\langle \rangle$
Law	n.a.	15.1	13.9	14.3	14.4	14.0	$\searrow$
Architecture	13.4	11.0	13.9	14.3	12.4	16.1	$\checkmark$
Education	9.7	14.0	16.7	12.9	11.6	14.0	$\sim$
Engineering	12.4	12.4	13.9	13.6	13.7	15.6	
Computer studies	14.5	12.5	13.9	13.6	12.4	13.8	$\searrow$
Pure science	13.4	13.7	14.6	14.3	13.7	14.5	$\sim$
Business studies	13.6	13.7	13.9	13.6	12.4	14.5	
Social science	14.5	13.7	14.6	13.6	13.7	13.5	$\sim$
Arts	13.4	15.1	15.3	14.3	13.7	14.5	$\frown$
Fine arts & design	9.3	13.7	13.9	12.9	12.4	13.5	

# Table 7: Real median starting income of degree graduates,by field of study and skill segment

Note: (n.a.) Suppressed due to limited sample size.

Source: Population Census / By-census, Census and Statistics Department, various years.

## VI. CONCLUDING REMARKS

17. This study found that the median starting and subsequent incomes of young degree graduates from some popular disciplines (such as medical and related studies, law) continued to be higher than those of graduates from other disciplines. This was partly because graduates in these fields had better chances of securing higher-skilled jobs after entering the labour market.

18. Moreover, for almost all disciplines, the income trajectory of more recent degree-educated cohorts (2006, 2011 and 2016) was generally less favourable than that of graduates from the 1990s, in line with the overall income performance of all degree graduates. One major factor is related to the rapid increase in the supply of young degree-educated workers, which outpaced the number of higher-skilled jobs available for them. As a consequence, the proportion of young degree graduates engaged in higher-skilled occupations was lower for more recent cohorts as compared with those from the 1990s.

19. Notwithstanding this, the income trajectory and income growth of young degree holders continued to outperform that of their same-age counterparts as a whole (regardless of educational level). This was in part attributable to the visibly higher proportion of degree graduates taking up higher-skilled jobs, especially after gaining more work experience. Such advantages appeared to be more pronounced in popular disciplines. Against this backdrop, graduates' choice of field would become even more important in terms of determining their prospects in the labour market.

20. The above findings indicate that young people could still enjoy a considerable extent of upward earnings mobility over the course of their career, especially those with post-secondary degree education, as long as the economy continues to grow and provide more quality job positions. To this end, the Government has been working on promoting diversified economic development and exploring new economic opportunities to enrich the local industry structure, with a view to creating more high-quality employment opportunities and opening up more career choices for young people to unleash their potential.