#### **Study on Earnings Mobility**

### **Executive Summary**

The objective of the Special Topic Enquiry (STE) on Earnings Mobility is to study earnings mobility and intergenerational earnings mobility in Hong Kong. The report comprises two parts:

- Part One Earnings Mobility: examines the relationships between current and previous earnings of workers and the socio-economic attributes that are likely to affect these relationships. The methodology used in the current exercise is essentially the same as that used by Dr Alan Siu's and Dr James Vere's prior studies on earnings mobility conducted in 2001 and 2006, with the data updated to the fourth quarter of 2008.
- Part Two Intergenerational Earnings Mobility: a new area of enquiry, introduced in the 2006 round, focusing on the relationships between parents' and children's lifetime earnings. The 2006 study examined father-child relationships only. The current study also examines mother-child relationships.

#### **Earnings Mobility**

- 2. Employment earnings in Hong Kong are generally mobile over longer periods of time. In particular:
  - 46% of workers in the bottom quintile group (the lowest 20% of the earnings distribution) in 1998 successfully moved up the earnings ladder in 2008. This was notwithstanding that the remaining 54% of them stayed at the bottom.
  - For workers in the top quintile group (the highest 20% of the earnings distribution) in 1998, 75% managed to maintain their top position in 2008, while the other 25% moved down the earnings ladder.
  - For workers in all the quintile groups taken together, the probabilities of moving up (upward mobility), staying put and moving down (downward mobility) the earnings ladder were

estimated at 33%, 47% and 20% respectively over the period 1998-2008.

- 3. A positive development is that, due to decreases in downward earnings mobility, overall earnings mobility in Hong Kong has declined over the past decade. Although this was the overall trend, its effects were not felt evenly throughout the population. For both men and women aged 30 to 39, earnings mobility was higher in 1998-2003 than in 2003-2008 because of increases in upward mobility. For men and women in higher age groups, earnings mobility was lower in 1998-2003 than in 2003-2008 because of decreases in downward mobility. Details of the analysis are highlighted below:
  - When different segments of the earnings distribution are examined separately, there have been positive changes at the lower end (i.e., a higher chance of upward mobility for those with low income), balanced by negative changes at the higher end (i.e., a lower chance of upward mobility for those with high income). Since many highly compensated positions are in the financial sector, some of these negative changes can be attributed to the global financial crisis.
  - In terms of sex, male workers generally had higher earnings mobility than female workers. Yet a more detailed comparison showed that female workers had higher upward mobility, but lower downward mobility. This is believed to be related to the trend of improving educational attainment among female workers in recent years.
  - In terms of age, upward mobility was higher among young workers whereas older workers, in particular older male workers, were more vulnerable to downward mobility. This is a natural occurrence because earnings tend to increase quickly in the first few years of one's career and decline in the retirement years.
  - In terms of educational attainment, education is of great help in enhancing upward mobility and reducing downward mobility. Yet upward mobility for degree holders declines at older ages because, once reaching the top quintile group, there is no more potential for further advancement.

- In terms of economic sector and occupational category, upward earnings mobility was the highest among persons engaged in financing, insurance, real estate and business services and those working as clerks. On the other hand, downward earnings mobility was the highest among persons engaged in the construction sector and those working as plant and machine operators and assemblers.
- 4. Although earnings mobility has been declining since 1991, signs of stabilisation have emerged in recent years. For example, though the percentage of workers with zero mobility over a five year horizon increased from 49% to 60% between 1991-1996 and 1998-2003, the increase between 1998-2003 and 2003-2008 was only from 60% to 63%. A summary of the mobility rates calculated from the current and previous studies is given in the following table:

Mobility rates for all workers in the 2001, 2006 and current (2009) studies

	5-year Period						10-year Period		
<b>2001 study</b>	1991-96	1996-00					1991-00		
<b>2006 study</b>			1996-01		2001-05			1996-05	
<b>2009 study</b>				1998-03		2003-08			1998-08
Up	24.2%	24.0%	23.2%	24.6%	19.9%	22.0%	30.9%	29.1%	32.8%
No	49.4%	55.4%	55.9%	60.1%	62.2%	62.9%	38.3%	44.8%	47.2%
Down	26.4%	20.5%	20.9%	15.3%	16.9%	15.1%	30.1%	26.1%	20.0%

5. While earnings mobility generally increased over a longer time span, older workers (especially older female workers), persons with primary education or below, and workers in elementary occupations were more likely to be trapped in the lowest earnings quintile group. Nevertheless, education was found to be effective in reducing the chance of being trapped at the bottom earnings quintile group.

# **Intergenerational Earnings Mobility**

6. Regarding the intergenerational link, it was found that there were statistically significant, positive correlations between parents' and children's lifetime earnings. Specifically, a 1% increase in a father's lifetime earnings was associated with a 0.40% increase in his child's lifetime earnings, and a 1% increase in a mother's lifetime earnings was associated with a 0.26% increase in her child's lifetime earnings. These results are comparable to those seen in some OECD countries. When considering only father-son relationships (the

only type of relationship for which comparable international figures are available), the relationship in Hong Kong is stronger than that in Finland, Sweden, Germany, Canada, and Malaysia, though weaker than that in Great Britain. Finally, when controlling for the other parent's income, it was found that fathers' earnings had more influence on sons' earnings and mothers' earnings had more influence on daughters' earnings.

- 7. Although one's family background has a strong influence on one's career prospects, it is not destiny. Among those children whose fathers were in the lowest earnings quintile group, only 18% of sons and 26% of daughters were trapped at the bottom quintile group. Among those children whose mothers were in the lowest earnings quintile group, 17% of sons and 23% of daughters were themselves trapped at the bottom quintile group. More generally, children born to families in the lowest two earnings quintiles are more likely than not to earn more than their parents. By contrast, children born to families in the highest two earnings quintiles are more likely than not to earn less than their parents.
- 8. Further analysis by educational attainment revealed a positive correlation of intergenerational educational attainment between parents and children. In general, the more educated the parent, the higher the level of education his or her child would likely attain. As for the less educated parents with only primary education, their children still possess fairly good opportunities to receive secondary or higher education, with the chance of receiving only primary education being estimated at less than 5%. For parents with secondary education or more, the probability that a child would receive only a primary education is virtually nil. At the degree level, however, significant differences persist. For instance, if the father has a degree, the chance that his son will also receive a degree is 74%. However, if the father has only a primary education, the chance that his son will receive a degree is only 20%.
- 9. Analysed by economic sector and occupational category, the study found that there were strong links between parents' occupations and children's occupations, and weaker links between parents' industries and their children's industries. These correlations are especially strong where managerial and professional occupations are concerned. For instance, if a father is in a professional occupation, his son is 43% likely to be a professional, and his daughter is 35% likely to be a professional. For mothers, the corresponding probabilities are 42% for sons and 13% for daughters. These probabilities (except for mothers and daughters) are much higher than the probabilities in the general population. In addition, every son and daughter of a professional

mother in the sample took up a high-skilled occupation (managers and administrators, professionals, or associate professionals).

10. For children of less skilled parents, it was more difficult to enter the top two occupational categories (managers and administrators, and professionals). However, the door to an associate professional occupation is relatively open. For both sons and daughters (except those whose fathers are in elementary occupations), the chance of taking up an associate professional occupation is 25-35%, and this chance does not depend much on the father's occupation. Moreover, the children of associate professional parents have a relatively high chance of entering into managerial or fully professional occupations, though the chance is not as good as that of children whose parents are already managers or professionals. This result suggests that associate professional occupations are an important gateway for poorer families to reach the higher levels of the earnings distribution.

## **Policy Implications**

11. From a policy perspective, education continues to be a very important vehicle for social mobility in Hong Kong. At young ages (ages 30 to 39), education is a major determinant of upward earnings mobility, and it is a key defence against downward earnings mobility at any age. This includes not only formal education, but also employer-sponsored training and other types of continuing education such as the Continuing Education Fund. Education is also especially useful where it can be a gateway to associate professional occupations. These occupations are important because, though they are a meaningful step up for underprivileged families, the entry barriers are not as high as those for professional and managerial occupations. Finally, due to the fact that daughters are much more influenced by their mother's career path than their father's, there is a key role for equal opportunity policies.