

Intergenerational Earnings Mobility in Hong Kong

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Introduction

- The key question: how are children's earnings related to the earnings of their parents?
- By measuring intergenerational earnings mobility (IEM), we can gain an idea of whether there are opportunities to move up in society (or not).
- Main measure of IEM: elasticity of son's lifetime income with respect to father's lifetime income
- Contribution of this study
 - First estimates of IEM for Hong Kong
 - Estimates of IEM for mother/daughter pairs also

Introduction

- Background of study
 - Third round of a series commissioned by the Hong Kong government
 - Objective: to assess and monitor social mobility in Hong Kong
 - Methodology: add a special module to the 2008 Q4 General Household Survey and analyze the resulting data
- Areas of inquiry
 - Earnings mobility in Hong Kong
 - Intergenerational earnings mobility in Hong Kong
 - Effectiveness of subsidized training program

Data Collection

- Earnings mobility component
 - focus on ages 30 to 65
 - collected data on current earnings; earnings 5 years ago; and earnings 10 years ago
 - because of recall problems, earnings were imputed from data on past industry, occupation, educational attainment
- Intergenerational earnings mobility
 - focus on respondents ages 30 to 45
 - collect data on parents' lifetime income (imputed from industry, occupation, educational attainment)
- Effectiveness of government policy
 - Information on participation in the policy, and earnings trajectory before/after implementation of the policy
 - Unfortunately, <5% of sample participated

Earnings Mobility

- Main measure of earnings mobility: correlation between current log wages and log wages 5 or 10 years ago
- High correlation--> low mobility
- Key results for 1998-2008
 - Men: 0.72
 - Women: 0.79
 - Whole population: 0.75
- Key results for 2003-2008
 - Men: 0.85
 - Women: 0.88
 - Whole population: 0.87

Earnings Mobility

- General observations
 - Mobility is **greater** over longer time horizons
 - Men's earnings are **more mobile** than women's earnings
 - When compared to analogous figures from past surveys, earnings mobility in Hong Kong has been **decreasing** over the long term
 - Mobility has been declining in **manufacturing** and **construction**
 - Strong decline in 1990s; much slower decline in 2000s
- Recent observations
 - Earnings mobility has declined in the **finance sector**

Earnings Mobility

- More detailed 10 year mobility rates, for all workers:

1998 ¥ 2008	Bottom	2 nd	3 rd	4 th	Top
Bottom	54.1%	29.8%	12.2%	3.4%	0.6%
2 nd	16.5%	32.9%	35.0%	12.6%	3.0%
3 rd	10.7%	16.8%	39.9%	27.5%	5.2%
4 th	4.1%	7.7%	19.5%	43.0%	25.7%
Top	3.3%	3.6%	4.2%	14.4%	74.5%

Earnings Mobility

- Developments since last survey:
 - Mobility at low end has not changed much, or improved slightly
 - Chance of being “trapped at the bottom” was 58% in 1996-2005; now 54%
 - Mobility at middle and high end has declined significantly
 - Chance of staying in 3rd quintile increased from 26% to 40%
 - Chance of staying in top quintile increased from 68% to 75%

Earnings Mobility

- Overall, we see a pattern of **more upward mobility** at the low end, and **more downward mobility** at the high end:

Five-Year Mobility Rates by Quintile Group for All Workers in the 2006 and Current (2009) Studies

Quintile Group	2001-2005			2003-2008		
	Up	No	Down	Up	No	Down
Bottom	25.6%	74.4%		37.2%	62.8%	
2 nd	28.2%	49.7%	22.1%	36.3%	49.3%	14.4%
3 rd	25.8%	48.5%	25.7%	23.1%	59.6%	17.3%
4 th	18.0%	59.7%	22.3%	12.5%	61.3%	26.2%
Top		86.2%	13.8%		81.9%	18.1%

Earnings Mobility

- Specific observations
 - Government-subsidized training (up to HK\$10,000 subsidy for qualifying programs) was not effective in increasing participants' upward earnings mobility
 - Education is in general an important determinant of earnings mobility
 - At younger ages, educated workers have much higher rates of upward mobility
 - At older ages, educated workers have much lower rates of downward mobility
 - The lowest 10-year downward mobility rate (9%) is enjoyed by **professionals**
- After the crisis, most negative changes in earnings mobility were experienced by **managers and administrators**; downward mobility increased from 9% to 17%

Intergenerational Earnings Mobility

- Methodology
 - Target population: workers between the ages of 30 and 45, and their parents
 - Lifetime earnings were estimated based on reported industry, occupation, educational status
 - All four types of relationships studied (father/mother to son/daughter)
- IEM is generally measured in terms of the elasticity of the child's income with respect to the parent's income; higher elasticity (correlation) means lower mobility

Intergenerational Earnings Mobility

- Measurements of IEM in various countries, including Hong Kong:

Country	Elasticity of Son's Earnings w.r.t. Father's Earnings
United States (2005)	0.61
United Kingdom (1997)	0.57
Italy (2007)	0.51
Hong Kong (current study)	0.42
Germany (1997)	0.34
Malaysia (1995)	0.26
Canada (2006)	0.21
France (2003)	0.17
Sweden (2000)	0.13

Intergenerational Earnings Mobility

- More detailed intergenerational mobility rates, for fathers/sons:

	Bottom	2 nd	3 rd	4 th	Top
Bottom	18.1%	26.9%	22.4%	19.8%	12.9%
2 nd	17.1%	23.7%	23.0%	21.2%	15.1%
3 rd	15.6%	21.4%	22.9%	22.7%	17.5%
4 th	12.9%	18.9%	22.3%	24.2%	21.8%
Top	8.5%	14.9%	19.8%	25.8%	31.0%

Intergenerational Earnings Mobility

- General observations: even if the father is in the lowest lifetime earnings quintile, the son has a $\geq 50\%$ chance of being in at least the 3rd quintile.
- However, family background matters much more in terms of breaking into the top quintile.
- What about mother-son, father-daughter, mother-daughter relationships?
- After taking into account the other parent's income, mother-son and father-daughter relationships are **not significant** ($p=0.643$, $p=0.149$).
- The correlation between mother's incomes and daughter's incomes is statistically significant, but lower than that between fathers and sons (0.28 vs 0.42).

Intergenerational Earnings Mobility

- Overall, sons and daughters of parents in the lowest two quintile groups have a **greater than 50% chance** of moving up in the earnings distribution

Comparison of Parent's and Children's Lifetime Earnings Quintiles

Parent's Quintile Group	Son's LEQ Relative to Father			Daughter's LEQ Relative to Mother		
	Higher	Same	Lower	Higher	Same	Lower
Bottom	81.9%	18.1%		77.4%	22.6%	
2 nd	59.2%	23.7%	17.1%	58.6%	18.9%	22.5%
3 rd	40.1%	22.9%	37.0%	41.0%	21.0%	38.0%
4 th	21.8%	24.1%	54.1%	28.3%	23.3%	48.4%
Top		31.0%	69.0%		39.8%	60.2%

Intergenerational Earnings Mobility

- Educational attainment of fathers and sons:

Father ≠ Son	Primary or Below	Secondary	Post-Secondary	Degree or Above
Primary or Below	4.3%	58.5%	16.9%	20.3%
Secondary	0.5%	41.8%	19.0%	38.7%
Post-Secondary	1.3%	23.7%	23.4%	51.4%
Degree or Above	0.0%	16.0%	10.4%	73.6%

Intergenerational Earnings Mobility

- Hong Kong's compulsory education policy has been effective in ensuring universal secondary education
- There are good opportunities to access post-secondary education, but **significant barriers still exist** at the degree level
- In addition, significant barriers were found in terms of taking up professional occupations
- **43%** of professional fathers had sons who became professionals themselves, but only **13%** of fathers who were clerks had sons who became professionals
- However, taking up associate professional occupations was relatively easier

Conclusions

- Compared to other countries, Hong Kong has greater social mobility than the United States or the United Kingdom, but less social mobility than Western European countries
- At the low end of the earnings distribution, the situation is positive
 - good opportunities for children of the poorest families to move up, at least to the 3rd quintile
 - good access to secondary and post-secondary education
- However, access to degree education and professional occupations is still very limited, and strongly related to family background