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Explaining Socio-economic Well-being of Immigrants and Returned Migrants:
An Econometric Analysis of the Hong Kong and Canadian 2001 Censuses*

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Abstract. This paper focuses on the explanation of Hong Kong return migration based not on the economic failure of Hong Kong immigrants but on their strategic vision to accumulate human capital while abroad which they exploit upon returning to Hong Kong. We found that Hong Kong returnees with an overseas degree constituted around 20 percent of the highly educated Hong Kong resident group in 2001, with the largest flow emanating from Canada. An econometric investigation revealed that both the income and odds of being a manager were significantly higher for returned migrants than their immigrant counterparts who remained in Canada. Our Hong Kong findings suggest that return immigrants who seek local social capital enhance returns to their accumulated transnational capital, which in turn motivates their return migration.

1. Introduction

In Hong Kong's long history of immigration and emigration (Sinn, and Skeldon 1995), the latest immigration transition in the 1990s provides yet another interesting episode. In the 1980s and early 1990s, triggered by political uncertainty of the 1997 handover, about 40-50 thousand Hong Kong residents immigrated to western countries. Most of these émigrés were young, educated and wealthy (Salaff and Wong 1995) and were destined for the United States, Canada and Australia (Chiu 2004). In the early 1990s, slightly more than 12 percent of them returned (Hong Kong Government Information Service, 1995) while others continued to emigrate.

Return migration became substantial in the late half of the 1990s in the face of political transition and the Asian financial crisis. According to the Hong Kong 2001 census, there were more than eighty thousand returnees with a majority of them being highly educated. Anthropologists (Waters 2003) and economists (Chen, Chiang, and Leung 2003) have speculated on why they returned. However, a large-scale empirical study is still absent in the scattered literature on this issue. Studies on return migration based on a census or survey in a sending or hosting society are often limited to a comparison between migrants and non-migrants within a society. Ideally, data is needed to conduct a transnational analysis of return migration since we argue that inter-country or cross-society comparison form the basis for individual or family decisions to emigrate or return.

In this paper, we adopt a new approach to return migration by integrating the censuses of both the sending and host societies and explaining cross-society differences in income and promotion possibility. The structure of this paper is as follows. We first review theories of return migration. In section 3, we will briefly introduce census integration and some preliminary findings. Two statistical models are estimated in section 4. We summarize and discuss the results in section 5.

2. Theories of Remigration

In a conventional economic framework, migration is taken as a one-way trip to high (expected) income countries (Todaro 1969). Under perfect information, return migration arises from disappointments after arrival and/or a migrant's attempt to regain location-specific capital (DaVanzo 1981; Grant and Vanderkamp 1986). Return migration is also explained with notions of information asymmetry (Stark 1995) under which the employer, originally out of ignorance of skill levels, pays the immigrant too much. When information is gained by the employer, and he pays him less, he returns. These traditional theories predict that the low skilled are more prone to return because of their lack of information and the ability to process information.

In a more modern setting, Borjas (1996) argued that return migration may have been planned as part of an optimal life-cycle residential location sequence, allowing for the investment in human capital in the destination to enhance the future earnings by staying in the hosting country or returning to the home society. Based on this new perspective, Devoretz, Ma and Zhang (2003) construct a new triangular model which emphasizes the dynamic nature of return migration. They argue that immigrants enter an entrepôt country to accumulate subsidized human capital or other free public goods (e.g. citizenship) it offers. After accumulating human capital, the immigrant can choose to stay in the entrepôt country, return to sending country, or move on to the rest of the world.

Following the logic of the triangle model, we can divide a returnee's migration process into three periods. In period I, a migrant migrates to an entrepôt country in order to acquire transnational capital. In period II the migrant, while resident in the entrepôt country, acquires transnational human capital. As a result, in period III he may stay in the entrepôt country or return home depending on the rates of return available in each place for his newly acquired human capital. Hence the sending country, entrepôt country and the final destination form a triangle, which reflects a dynamic migration process.

New hypotheses about direction of the movements by high skilled immigrants can be generated from this triangular model. First, migrants with accumulated human capital are more prone to move again from the entrepôt country to seek higher returns on their invested human capital. Secondly, experienced migrants are prone to move again to improve their social status. Specifically, we predict high rates of return in the Canada-Hong Kong case. Given their accumulated transnational human capital and their endowed local social capital, returnees will earn a higher income in Hong Kong than immigrants in Canada. Moreover, the returnees will more likely be in managerial positions than both immigrants in Canada and non-migrants in Hong Kong.

3. Data and Preliminary Results

In this study, which uses two data sources, we first integrate and then weigh the micro data of Hong Kong 2001 Population Census (5% sample) with that of the Canada 2001 Population Census (2.63% sample) in order to compare representative populations. Both censuses contain the same migration information on place of birth and residence 5 years previous as well as the same socio-demographic variables on age, sex, occupation, income, level of education, field of study and employment status.

For income comparisons we used an exchange rate of 5.034 Hong Kong dollars to 1 Canadian dollar, which was the average market exchange rate in 2001.[1]

The population under study is confined to individuals in the labor force with at least a Bachelors degree. This population in turn is divided into several groups in terms of their current resident status, birthplace, and migration path. Box 1 lists the categorization and weighted frequency for each group and subgroup. Former migrants refer to those who arrived in Canada before 1996. Newly arrived refer to those who arrived between 1996 and 2001. Due to data limitation, we can only identify returnees who returned from Canada between 1996 and 2001.

BOX 1. Categorization of Selected Population in Hong Kong and Canada

Hong Kong	Weighted Frequency	Canada			Weighted Frequency
Local Stayer **HK-born** **Returnees** **from Canada** **(1996~2001)**	235,160 11,180	**Canadian Native**			1,972,137
		Chinese Immigrant from	**HK**	former migrant before 1996	44,992
				newly arrived 1996-2001	2,923
			Main-land	former migrant before 1996	30,044
Mainland-born **Returnee** **from Canada** **(1996~2001)**	820			newly arrived 1996-2001	34,410

Returnees in this paper are defined as Hong Kong-born natives who resided in Hong Kong at the time of the census (2001), with a non-local degree or with a local degree but remaining abroad for the previous five years. It should be noted that return migration is often underestimated in any census. It is true in this case since those local degree holders who worked outside Hong Kong and returned before 1996 and those who left and returned in the period between 1996 and 2001 can not be identified in the census.

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[1] For converting to monthly income, wage and salary income in Canadian census is divided by working weeks and then multiplied by 4. Other income (e.g. pension or investment revenue) is divided by 12. Their sum is the total monthly income. A negative or 0 figure of income is assigned to be 1 for the convenience of our regression analysis.

There were more than 95,000 non-local degree holders (Bachelors or above) who accounted for 18.9% of the total 506 thousand degree holders in Hong Kong (Figure 1). [Ed. note: All tables and figures located after Conclusion]. Those educated in Hong Kong constitute 48.1% of the skilled labor pool. Canada was the largest source of return migration for Hong Kong. Among the overseas educated who returned to Hong Kong between 1996 and 2001, 7,600 of them originated from Canada, accounted for 35.2% of the total (Figure 2).

Return migration by the highly educated is also important to the formation of the managerial class in Hong Kong. In this case the educated managerial class refers to degree holders who were classified as senior and middle level administrators and managers in government, companies and other corporations. The statistics show that 22.90% Hong Kong administrators and managers were returnees with non-local degrees (Figure 3). Newly returned migrants who were classified administrators and managers (Figure 4) mainly originated from Canada (39.50%), Australia and New Zealand (22.00%), and United States (17.00%).

We further classify the highly educated skills from Canada by place of birth (Figure 5). Slightly more than half (56.5%) received their non-local degree probably in Canada while slightly over a quarter (26.60%) were educated locally in Hong Kong, perhaps before their departure. Foreigners (the majority of this group are Canadians) and Chinese mainlanders accounted for 9.81% and 6.09%, respectively of those who came from Canada. In sum, Canada is the most important source of human capital for Hong Kong.

The integrated data set has two geographic portions. One covers the Canadian resident groups, including Canadian natives, former and newly arrived Chinese immigrants from Hong Kong and Mainland China. It should be noted that newly arrived immigrants are identified as Chinese immigrants who were in Canada at the time of the Census but were abroad 5 years previously. Therefore, they may not have arrived in Canada directly from Hong Kong or Mainland China. The other portion covers the Hong Kong resident groups, including HK-born newly-returned returnees, Mainland-born newly-returned returnees and Hong Kong stayers. Here stayers refer to Hong Kong natives who received local higher education and stayed in Hong Kong in both 1996 and 2001.

4. Statistical Models and Variables Included

To study the effect of migration on income changes, we first use an OLS regression model to regress (log) income on migration status (m) and personal characteristics such as gender, age and level of education.

Log (Income) = (m, s) β + ε   **…….. (1)**

To study the effect of migration on social mobility, we use a binary logit model to regress the odds of moving to a managerial position on both migration status (m) and personal factors (s).

Logit (Manager=1, others=0) = (m, s) β + ε   **…….(2)**

The column vector of coefficients β in Model (1) and (2) are estimated by an OLS method and a Maximum Likelihood method, respectively. In both models, the variable's significance is reflected directly by its level of significance (0.05, 0.01, or 0.001) while the goodness of fit is measured by either R^2 or ρ^2, respectively.[2] The odds-ratio is the exponential transformation (antilog) of the associated coefficient. For an included dummy variable representing a category X, the odds-ratio associated with X stands for the ratio of the odds of the category to that of the reference group, other things being equal. The effect of a variable is positive (negative) when the odds-ratio is larger (smaller) than one.

Explanatory factors and variables are specified in Table 1, with their expected signs and odds ratios. To control for the effects of personal characteristics, we include variables for gender (male=1, female=0), age and its square term, level of education (postgraduate=1, undergraduate=0) and major field of study (arts=0 as the reference group). Working experience is not included in our models since it is highly correlated with age (correlation coefficient >0.9). According to human capital theory, we expect a positive effect of derived from accumulating postgraduate education on both income and promotion possibility.[3] The age effect which relates to experience is likely to be parabolic, increasing until the middle ages but declining thereafter. We expect a significant gender effect in favor of males on income and promotion possibility, partly because of labor division among family members, partly because of implicit discrimination. To control the effects of various types of human capital, we divide the field of study into five main categories (1) medical science, (2) business management, (3) science and engineering, (4) social science and humanities, and (5) arts. Other fields of study are classified into (6) others. We expect that the income return to different fields is in the same order as these categories (1-6) and that graduates with business backgrounds are more likely to become managers than are those with other backgrounds.

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[2] ρ^2 in Model (2) is the difference between unit and the ratio of the logarithm of the maximum likelihood value of the given model specification to that of the null model. According to McFadden (1974), the ρ^2 has a tendency to assume low values. A value of 0.2 may indicate a very good fit.

[3] In fact, a Ph.D. degree probably reduces the possibility of promotion into management, though it may have a positive effect on income. However, here we can't distinguish Ph.D. degrees from Masters degrees due to data limitation. It doesn't lead to a serious problem as Ph.D. degree holders only constitute a small proportion even among highly educated class.

The effect of migration on income and promotion possibility is related to the possession of local social capital and the acquisition of transnational human capital. According to the cited triangular model, immigration to a country with strong educational centers facilitates the acquisition of transnational capital at the expense of acquiring local social capital. However, return migration helps to regain local social capital. It is worth noting that the educational system is to some extent westernized in Hong Kong. Thus, Hong Kong-born natives, including non-migrants and immigrants, possess more transnational human capital than those who originated from Mainland China. With the hypotheses generated from the triangular model in section 2, we predict the order of socio-economic well-being as follows: (1) returned migrants; Hong Kong stayers; (2) returned migrants; Hong Kong immigrants in Canada; (3) Canadian natives; Hong Kong-born immigrants; Mainland-born immigrants; (4) former immigrants; newly arrived immigrants. In the model, we use former Hong Kong-born immigrant residents in Canada before 1996 as the reference group.

Before presenting the main findings of our models, we tabulate the human capital composition and unemployment rate of different migrant categories (Table 2). The large share of one or two fields of study in a migrant category reflects the direction of movement of certain types of human capital. Since "social science and humanities" is a roughly defined category including multiple majors from law to literature, here we only focus on the business and "science and engineering" fields. The other three categories, arts, medical science and others, represent a minor share in the sample.

On the Canadian side, a science and engineering background is much more important for Chinese immigrants than it is for Canadian natives. The percentages of degree holders in this field for each category are listed as follows: newly arrived Mainland immigrant (72%); former Mainland immigrant (51%); former Hong Kong immigrant (39%); newly arrived Hong Kong immigrant (38%); Canadian native (19%). The dominance of scientists and engineers among Chinese immigrants was directly linked to Canadian immigration policy, which favored the inflow of engineering and science talent because of the needs of the national economy. By contrast, only 16% of former Mainland immigrants and 10% of newly arrived Mainland immigrants had business education backgrounds, which is equal to or lower than the Canadian level (16%), but much lower than the associated proportion among former and newly arrived Hong Kong immigrants (26% and 35%, respectively). The larger percentage of newly arrived HK immigrants with business education backgrounds might not indicate the competitiveness of their human capital since their unemployment rate in Canada was 17.9%. It might instead derive from the financial capital they accumulated in Hong Kong, which facilitated their application for immigration permission to Canada under the investment scheme.

Among degree holders in Hong Kong, a business education background was more important among returnees (37%) than among stayers (28%). Since local social capital can facilitate the functioning of business, it is not surprising that graduates from business schools were prone to return to Hong Kong. However, they also suffered a relatively higher unemployment rate (6.2%) than stayers (2.2%). The percentage of science and engineering backgrounds is ignorant between Hong Kong returnees (35%) and stayers (36%).

The order of the overall unemployment rates is as follows: on the Canadian side, Canadian native (3.5%); former Hong Kong immigrant (4.4%); former Mainland immigrant (4.9%); newly arrived Hong Kong immigrant (11.4%); newly arrived Mainland immigrant (15.6%); on the Hong Kong side, stayer (1.9%); Hong Kong returnee (4.8%): Mainland returnee (7.3%). In the employment rate, local natives outperformed immigrants or returnees in both Canada and Hong Kong. In Canada, more newly arrived immigrants were unemployed than former immigrants in terms of percentage since the former group had accumulated less transnational human capital than the latter. More Mainland immigrants were unemployed than Hong Kong immigrants, which can be attributed to the quality of their higher education.

5. Main Findings

5.1. Findings from Income Model

The regression results of our income model are reported in Table 3. The goodness of fit (R^2 =0.1654) was reasonable given the cross-societal nature of the analysis and the confined sample of the highly educated category, although it reduces the explanatory power of education level.[4] The coefficients for all variables in the model are highly significant ($p<0.001$), indicating strong effects of migration and personal factors.

According to the antilog of coefficients, males earn 26.6% more than females while postgraduate education enhances income by 13.1%. The age effect is parabolic, with a positive coefficient associated with the age variable but a negative one associated with the squared term. The large coefficient for age (0.114) relative to that of its square term (-0.001) indicates that the positive effect of age is overwhelming until a very old age. As we expected, the antilog of the coefficients shows that the income order of different fields of study is as follows: medical science (1.900); business (1.698); science and engineering (1.626); others (1.570); social science and humanities 1.368); arts (1.000).

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[4] We can boost the explanatory power by including occupational variables. However, such an inclusion may complicate social mobility model.

With the effects of personal factors controlled, we find strong effects from immigration and return migration. The order of expected income of different categories is as the follows: Hong Kong Stayer (2.034); Hong Kong-born Returnee (1.803); Mainland-born Returnee (1.565); Canadian Native (1.277); former Hong Kong-born Immigrant (1.000); former Mainland-born Immigrants (0.851); newly arrived Hong Kong-born immigrants (0.594); newly arrived Mainland-born Immigrant (0.222). On Canadian side, we found that former HK-born immigrants earned about one fifth less than Canadian natives. In addition, we found that former immigrants earned more than the newly arrived and HK-born immigrants earned more than Mainland-born immigrants. The poorest group was the newly arrived Mainland-born immigrants whose degree is not recognized in the Canadian market and their high unemployment rate dropped their expected income greatly, earning only 22.2% of the income of former HK-born immigrants statistically. These results are consistent with reported difficulties for immigrants attempting to find a desirable job or start a business in destination countries (Man 1995) as well as institutional discrimination (e.g. non-recognition of diplomas conferred in Hong Kong or Mainland China) that exacerbates the situation of immigrants situation (Geddie 2002).

On the Hong Kong side, the income of returnees was slightly lower than stayers, partly because of the elite education system in Hong Kong before the mid-1990s, which made overseas education selective of both the most talented and those who failed to pass the entry examination. The latter group of graduates might have reduced the overall economic performance of returnees compared with stayers.

Hong Kong-born returnees earned more than Mainland-born returnees but the difference is not substantial. The most striking difference was between former immigrants who remained outside and those who returned to Hong Kong. The income ratio between the two groups was 1.1.80. In other words, the income of Hong Kong-born highly-educated returnees was almost twice that of their immigrant counterparts in Canada, although the ratio can be decreased if we use the higher exchange rate set at 6.5 HK dollars to 1 Canadian dollar. Overall, there is a positive effect of return migration on income: immigrants who received relatively low income in Canada improve their income significantly after returning to Hong Kong.

5.2. Promotion Possibility Model

In this binary logistic regression, the effects of selected variables on social mobility are highly significant ($p < .001$) and similar to their effects on income. The ρ^2 (0.082) is low but still acceptable (Table 4).

We found that postgraduate education increased the odds of promotion by more than 10%. The odds ratio between male and female differed by a factor of 1.68, indicating the domination of males in the managerial occupation. The odds ratio is much larger for the pure age variable (1.223) than that for its squared term (0.998), indicating a largely positive effect of age effect on promotion possibility. People with business majors were 2.62 times more likely to enter management than were those with arts majors. The odds of being a manager for people in social sciences and humanities, science and technology, and others were similar but far smaller than the odds for those with business majors. The odds of promotion for those with medical degree were 45.2% of that for arts, which is the lowest one among all fields of study. This is understandable because a majority of graduates in medical sciences went alone a professional career.

After controlling for these personal factors, we still found a strong effect of return migration on improving promotion possibility. The order of the odds ratio for improving an individual's promotion possibility is list as the follows:

(1) Mainland-born returnee (1.856)

(2) Hong Kong-born returnee (1.706)

(3) Hong Kong stayer (1.490)

(4) newly arrived Hong Kong immigrants (1.204)

(5) Canadian native (1.159)

(6) former Hong Kong immigrant in Canada (reference group, odds=1),

(7) former Mainland immigrant to Canada (0.45), and

(8) newly arrived Mainland immigrant in Canada (0.666)

Canadian natives had a 15.9% advantage over former Hong Kong immigrants in promotion. Moreover, newly arrived Hong Kong immigrants to Canada had a higher ratio than Canadian natives, partly due to the increasing proportion of "investment migrants" after 1996.[5]

Lack of local social capital and transnational human capital (e.g., English proficiency) were obstacles which impeded Chinese immigrants catching up with natives in terms of managerial promotion in Canada. It can be better illustrated by the much lower odds ratio of former Mainland immigrants (0.744) than that of Canadian natives (1.158). In other words, the former are 35% less likely to be managers than Canadian natives. The odds were even lower and actually the lowest for the newly arrived Chinese Mainland immigrants (0.666).

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[5] The investment program requires immigrants to be employers with a certain amount of investment when they enter Canada. Hence, their rise in the odds of being in the managerial category.

On the Hong Kong side, the difference between Hong Kong-born returnees (1.706) and Mainland-born returnees (1.856) is significant but not considerable. Hong Kong-born returnees had a 15% advantage over Hong Kong stayers, indicating the enhancing effect of transnational human capital on promotion possibility. The lack of local social capital of Mainland returnees might be compensated given their possible Mainland business experience in the whole region.

The most striking difference was found between Hong Kong returnees and their immigrant counterparts in Canada. The odds ratio of 1.70 for the returnee group indicates that they were 70% more likely to take managerial positions as were former Hong Kong immigrants in Canada, suggesting that promotion odds can be sharply improved through a return migration.

6. Conclusion

A two-stage process was used in this paper to measure the income and promotion effects of return migration. We found that return migration brings with its transnational human capital to Hong Kong and contributes to the development of the managerial class and a rise in personal income. We found that both income and promotion possibility of returnees to Hong Kong were substantially improved through return migration. Not surprisingly, the socio-economic wellbeing of Chinese immigrants in Canada was found to be inferior to Canadian natives. After the acquisition of transnational capital, migrants return to regain their local social capital and improve their socioeconomic wellbeing. In our model, returned Hong Kong migrants outperformed stayers in their odds of promotion by 15% though their current income level was slightly lower than the latter group. The above findings suggest that seeking local social capital to enhance returns to transnational capital is one of the major reasons for return migration.

These findings have policy implications. For an immigrant hosting country, investment in integration is at least as important as educating them to serve the society. From a sending country's perspective, it is important to improve the environment for the attracting of the talented from overseas. Social mobility is as important as income in the decision of return migration.

Future research in this field will require efforts to integrate censuses from other countries (e.g. U.S. and Australia, and other Chinese societies) and analyze triangular movements such as the onward movements by Chinese immigrants from Canada to the U.S. and return migration from the U.S. to Chinese societies.

Figure 1. Composition of Degree Holders, Hong Kong, 2001

TW&Macao 2%

Foreigner 16%

Returnee 19%

Mainlander 15%

HK Local 48%
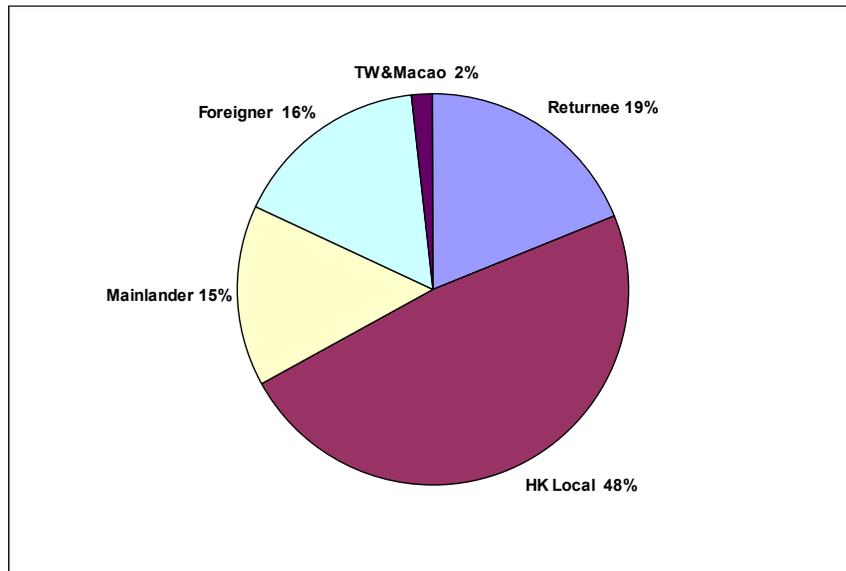
Figure 2. Newly-Returned Degree Holders by Origin, Hong Kong, 1996-2001

Others 6%

Oceania 23%

Canada 35%

East Asia 2%

West EU 17%

U.S. 17%
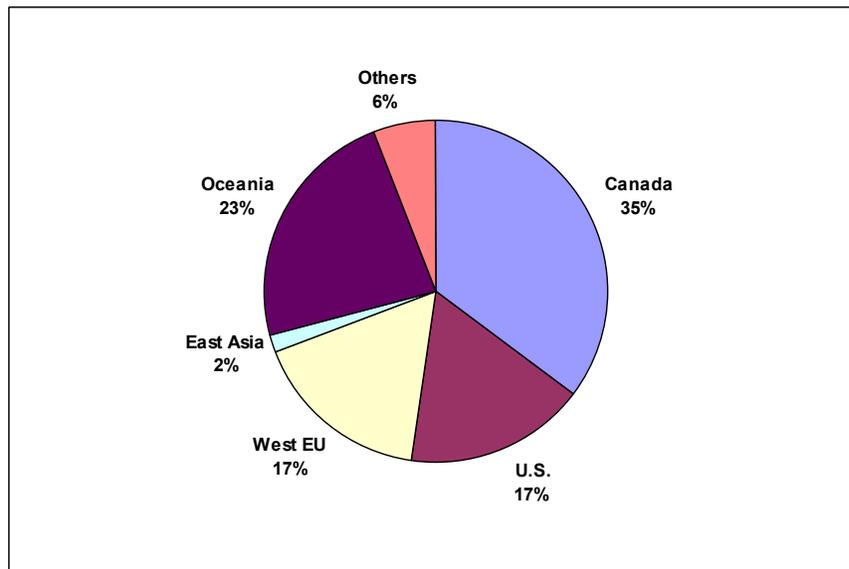
Figure 3. Composition of Managerial Class, Hong Kong, 2001
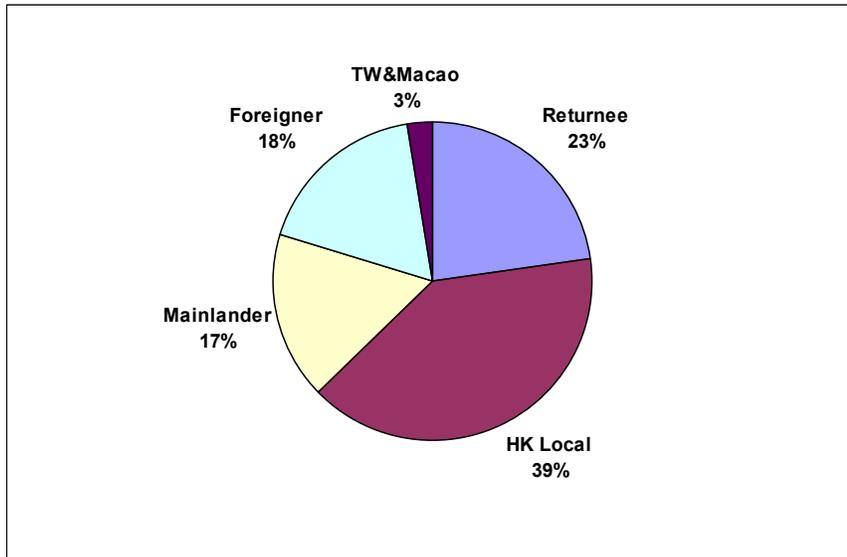

Figure 4. Newly-Returned Degree Holders in Managerial Position by Origin, Hong Kong, 1996-2001
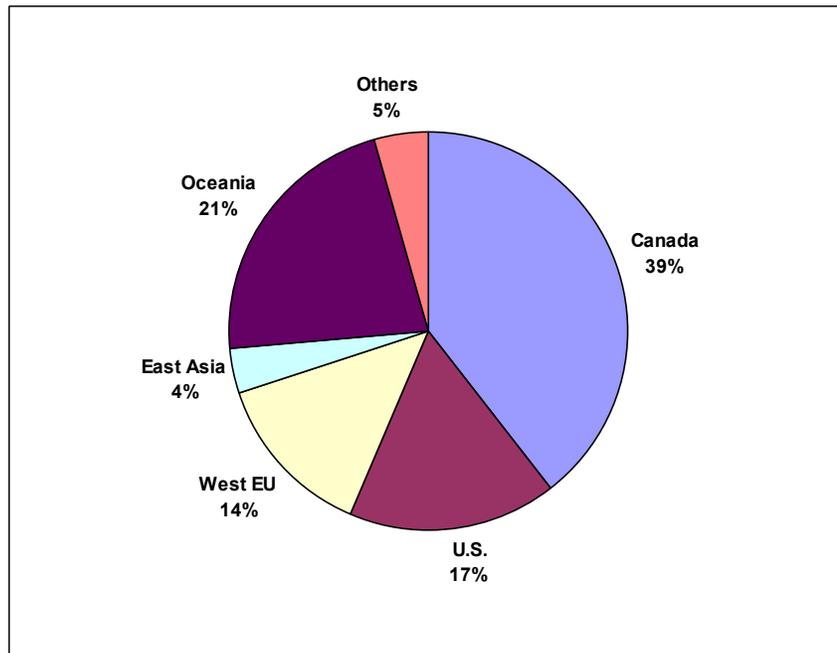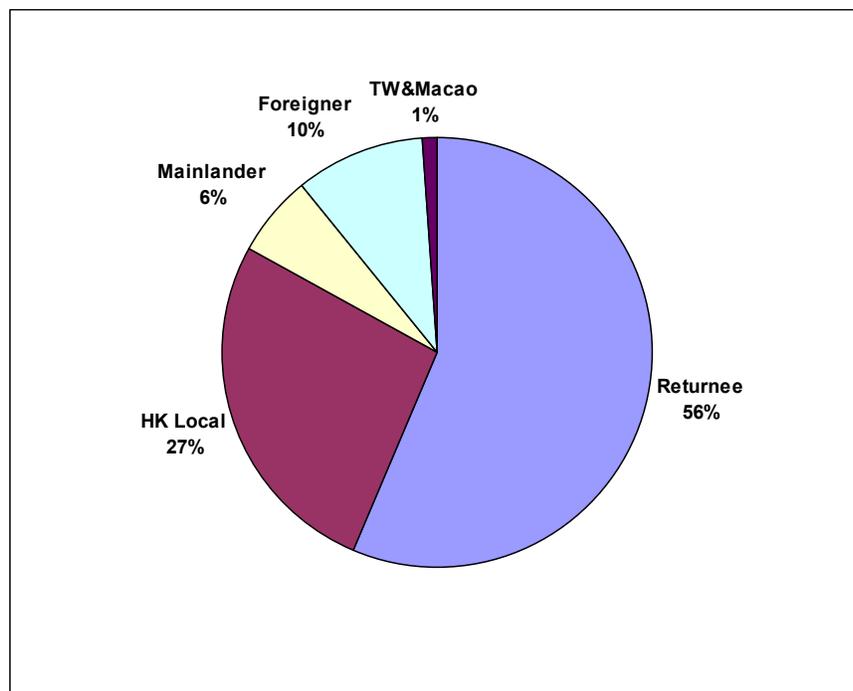
**Figure 5. Newly-Returned Degree Holders from Canada by Place of Birth,
Hong Kong, 1996-2001**

Note: 1. Returnee refers to newly-returned (1996-2001) HK native who acquired a non-local degree.
      2. HK local refers newly-returned (1996-2001) HK native who acquired a local degree.

Table 1. Explanatory Variables for Income and Promotion Possibility Model

Factor	Variables	Category*	Local Social Capital	Trans-national Human Capital	Expected Effect on income	Expected Odds-ratio on mobility
Personal Factors	Sex	Female*				
		Male			+	>1
	Age				+	>1
	Age^2				−	<1
	Education level	Undergraduate Education*				
		Postgraduate education			+	>1
Field of Study	Arts*					
	Social Science and Humanities				+	>1
	Business				++	>>1
	Science and Engineering				++	>1
	Medical Science				+++	<1
	Others					
Migration Status	Canadian native		++	0	+	>1
	HK-born former immigrant*					
	HK-born newly arrived immigrant		−	0	−	<1
	Mainland-born former immigrant		−	0	−	<1
	Mainland-born newly arrived immigrant		− −	0	− −	<<1
	HK returnee		+ +	+ +	+ +	>>1
	Mainland returnee		+	+ +	+	>1
	HK stayer		+ +	0	+	>1

* reference group

Table 2. Composition and Unemployment Rate by Major Field of Study (%)[a]

Category	Arts	Soc. Sc. & Human.	Business	Science & Engineer.	Med. Science	Others	Total
HK stayer	2.1	24.3	28.0	36.0	6.2	3.6	100
	(3.7)	(2.0)	(2.2)	(1.8)	(0.5)	(1.4)	(1.9)
HK returnee	3.4	20.0	37.0	35.0	2.5	2.2	100
	(10.5)	(3.6)	(6.2)	(4.1)	(-)	(-)	(4.8)
Mainland returnee	0	26.8	34.0	34	4.9	0	100
	(-)	(-)	(-)	(-)	(-)	(-)	(7.3)
Former Mainland immigrant	3.8	17.2	16.0	51.0	11.1	0.6	100
	(3.2)	(4.3)	(7.0)	(5.0)	(3.3)	(-)	(4.9)
Newly arrived Mainland immigrant	0.7	11.7	10	72.0	6.2	0	100
	(-)	(19.3)	(29.2)	(13.9)	(8.6)	(-)	(15.6)
Former HK immigrant	1.5	23.9	26.0	39.0	9.0	0.3	100
	(-)	(5.9)	(5.3)	(3.1)	(2.8)	(-)	(4.4)
Newly arrived HK immigrant	1.3	22.8	35.0	38.0	2.5	0	100
	(-)	(-)	(17.9)	(10.0)	(-)	(-)	(11.4)
Canadian native	2.8	52.3	16.0	19.0	8.8	0.2	100
	(5.3)	(3.7)	(3.2)	(3.6)	(1.9)	(2.5)	(3.5)
Total	2.7	47.6	18.0	23.0	8.5	0.5	100
	(5.1)	(3.6)	(3.3)	(3.6)	(1.8)	(1.5)	(3.4)

Note: The figure in parentheses is the unemployment rate of degree holders of a certain major in one category. Unemployment rate is omitted if the original observation is less 20 cases.

Table 3. Explaining Personal Total Income of Degree Holders: Hong Kong and Canada, 2001

Independent Variable	Coefficients	Antilog of Coefficient
Constant	6.28736***	
Personal Attribute		
Male (Reference group=Female)	.2354677***	1.2655
Age	.114458 ***	1.1212
Age-Square	-.0011157***	0.9988
Postgraduate education	.1234386***	
(Reference group=Undergraduate)		1.1313
Field of Study (Reference group=arts)		
Social Science and Humanities	.3134405***	1.3681
Business	.5292709***	1.6976
Science and Technology	.4858778***	1.6256
Medical Science	.6417026***	1.8997
Others	.4509182***	1.5697
Migration Status (Reference group=former HK immigrant)		
Hong Kong stayer	.7102234***	2.0344
Hong Kong returnee	.5892776***	1.8026
Mainland returnee	.447965***	1.5651
Canadian native	.244533***	1.2770
Newly arrived HK immigrant	-.5212668***	0.5937
Former Mainland immigrant	-.1607725***	0.8514
Mainland newly arrived immigrant	-1.506771***	0.2216
R^2	0.1654	

* p<.05, **p<.01, ***p<.001 (two tailed tests)
Number of Observations = 2,326,626 (weighted).

Table 4. Explaining Mobility to Managerial Class by Degree Holders: Hong Kong and Canada, 2001

Independent Variable	*Mobility Odds Ratio*
Personal Attribute	
Male (Reference group=Female)	1.680245***
Age	1.223251***
Age-Square	.9979016***
Postgraduate education	1.102733***
(Reference group=Undergraduate)	
Field of Study (Reference group=arts)	
Social Science and Humanities	1.190931***
Business	3.623159***
Science and Technology	1.478409***
Medical Science	.4523326***
Others	1.470983***
Migration Status	
(Reference group=former HK immigrant)	
Hong Kong stayer	1.489529***
Hong Kong returnee	1.70647***
Mainland returnee	1.855564***
Canadian native	1.158538***
Newly arrived HK immigrant	1.204228***
Former Mainland immigrant	.7449304***
Mainland newly arrived immigrant	.6663928***
ρ^2	0.082

*p<.05, **p<.01, ***p<.001 (two tailed tests)
Number of Observations = 2,326,626 (weighted).

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