ABSTRACT

Title of dissertation: MORE THAN HUMAN CAPITAL: GLOBAL SOCIAL MOBILITY AND CATEGORICAL INEQUALITY AMONG SOUTH KOREANS

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Social scientists in the modernization school argue that industrialization and modernization lead societies to be "open" societies characterized by equal opportunities and a central importance of individual efforts and achievements in social mobility. They assume, using nation-states as the unit of analysis, that stratification takes place primarily and exclusively *within* nations. This study, by contrast, perceives stratification and social mobility as processes taking place globally. Shifting its focus from national dimensions to global and transnational dimensions, this study investigates the global social mobility of South Koreans, including Korean immigrants in the United States.

This study situates income earnings and social mobility of non-migrant South Koreans and Korean immigrants in the United States within broader patterns of transnational and global social mobility, and reassesses the relative weight of categorical attributes (e.g. country) with that of human capitals (e.g. college education). The results suggest that how social stratification, despite the modernization of South Korea and the United States, remains shaped by categorical inequalities. In this sense, achievement and

ascription, as criteria of selection, continue to be fundamental to global stratification. The role of achievement is far more modest than usually assumed when compared to the continuing impact of categorical attributes such as race/ethnicity and nationality.

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by

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Chapter 1: Introduction

Modernization and the roles of achievement: The traditional understanding

"No industrial societies can be viewed as closed or static" (Lipset and Bendix 1959:11). As Lipset and Bendix posited earlier, the majority of social scientists have believed that industrial societies are distinctively open societies. Western industrial societies have been characterized by a "modernization" package of political democracy, low-income inequality, and achievement-based social mobility (Lipset and Bendix 1959; Blau and Duncan 1967). The mainstream development sociologists and economists (the modernization school, particularly) claim that such modern institutional arrangements led to the economic growth of those Western industrial countries, and vice versa (Kuznets 1955). And they argue that there is commonly found among modern societies a strong association between individual achievements and social status, while the diminishing association between them. Many following empirical studies supported this hypothesis. They (e.g., Treiman 1970) commonly found that, in industrial countries, industrialization created many higher-status jobs that required higher education so that education played a greater role in social mobility than family background or other ascribed characteristics. Scholars in the modernization school tend to see the transformation into a (Western-style) modern society as a *universal* pattern that every society would eventually go through in the process of economic growth (e.g., Rostow 1959).

International migration and the changing roles of human capital

Much of social mobility literature has paid attention to people in wealthy industrialized nations in the West. Developing countries have often been mentioned, but

it was usually for highlighting “modern” characteristics of the wealthy nations by contrasting them to “traditional” elements of Third-World countries. The roles of human capital in stratification have been understood in this dichotomous scheme: more important in modern societies and less important in traditional ones. Meanwhile, despite a considerable volume of international migrants and resultant racial/ethnic minorities in countries of destination, the roles of human capital for migrants/minorities have not been placed on the center in stratification and social mobility research. What follows is an anecdote I experienced that raises some questions about the role of human capital for migrant/minority workers.

Shayan is my Pakistani friend. When I first met him in Seoul, South Korea, in 1997, he was an undocumented worker. He was working as an outdoor laborer of a steel company. He was a full-time worker, yet his hourly wage was much less than that of Korean part-time workers. My roommate, who was my college colleague as well as a part-time worker of the same company, brought the Pakistani friend to our home as another roommate. I was surprised that he claimed that he had an MBA degree from the National University of Singapore. Moreover, his father was an executive member of a bank in Pakistan. Nonetheless, he moved to South Korea as an undocumented worker. When I told him that he was being discriminated by the managers of the steel company, he said “I know that. But even though I got paid less than other Korean co-workers, it is still big money in my home country.” He wanted to save enough money to start his own carpet business.

Feeling his case was unfair, my roommate and I suggested that he open a small English class for college students. We thought that teaching English would be a better

way to utilize his human capital as well as for earning much more money. We had no doubt about his qualification for teaching English, considering his fluent English-speaking skills and the MBA degree granted from a prestigious institute. We posted an advertisement throughout our college and began open registration for students. Finally, twelve students gathered in a classroom. However, the first meeting became the last meeting. Ten students cancelled their registration after seeing that the instructor was a Pakistani. Some of the students secretly told me, "It is a problem that he is neither white nor American. We want to learn from a real American or Caucasian person. His English is not good to learn. He probably speaks *Pakistani* English that is not recognized as first-class English in the world stage." My Pakistani friend was so frustrated and went back to physical labor at an apartment construction site.

The Pakistani worker achieved significant human capital during his life. He had a master's degree from a prestigious university and his English was fluent. Yet, these human capitals did not matter at all in South Korea. The only thing that mattered was his nationality and skin color. He attempted to utilize his skills in South Korea to acquire a better job, but his skin-color and/or his nationality became a big obstacle. He was disqualified from teaching English due to his skin color and national origin. His skin color and national origin were qualified only in so-called 3D (dangerous, difficult, and dirty) industries where Koreans were reluctant to work. In the 3D industries, his high-skills were no longer counted. In the steel company, for instance, they hired him just for his physical ability to do manual labor and treated him accordingly, no matter what degree he had. His wage level was determined not based on skill level, but based on his categorical status as an undocumented foreign worker from a poor country. His race and

nationality mattered more than whatever he had achieved. He could hardly overcome the legacies of being born in Pakistan.

This story deviates from the mainstream stratification theory (i.e., modernization theory) – that is, "in modern societies, one's social status is associated more with his or her effort and achievement, but less with ascription. Further, this is a universal pattern" (e.g., Blau and Duncan 1967; Lipset and Bendix 1959). From the view of some people, the case of the Pakistani worker does not necessarily mean that the traditional modernization perspective is wrong. They may argue that South Korea has not been fully modernized enough to embrace foreign workers into its meritocratic system. They may believe that if South Korea, like the United States and other immigrant-receiving countries, gives up nationalist policies such as prohibiting permanent immigrations of foreign workers, foreign workers such as the Pakistani workers would be rewarded for his human capital.

Further, if the United States is a country known as an open society, then does the meritocratic system apply universally to all people in the United States? Significant numbers of South Koreans ride on international airplanes toward the United States every year, especially since the pass of the 1965 immigrant act abrogating the national origin-based quota system. Annually, about 30,000 Koreans immigrated to the United States during the 1970s. The majority of these immigrants were college-educated, white-collar, and middle-class people in South Korea (Yoon 1997:5). They immigrated to this new country, hoping to achieve upward social mobility, with the American Dream promising the possibility of prosperity and success "according to ability and achievement regardless of social class or circumstances of birth" (Adams 1938). What they faced after arrival

were limited opportunities. Cultural and linguistic unfamiliarity, non-transferability of human capital from the country of origin to the new country (Chiswick and Miller 2009), and prejudice and discrimination against immigrants and racial minorities (Chou and Feagin 2008), all contributed to their difficulties in finding white-collar and professional employment in the U.S. labor market. Most that was available to the immigrant workers were jobs at the bottom (characterized by low-skilled, low-paying, and dead-end jobs) (Light and Bonacich 1988; Min 1984, 1996). This portrait was not only true in scholarly discussions, but it was also true in typical stories often reported in the mass media about Korean immigrants to the United States. Some college-educated Korean immigrants with middle-class backgrounds (such as bank clerks or owners of private education institutes or *hakwon*) migrated to the United States and began their new lives at the bottom as less-skilled working-class workers (such as poultry workers), and after some years, opened their own laundries, grocery stores, or liquor shop. It seems that the purportedly most advanced modern nation, which was supposed to provide universal and equal opportunities to everyone, provided limited opportunities to Korean immigrants (Yoon 1997:251-252).

Stratification as a global process: Notes on the unit of analysis

The cases of social mobility practices of international migrant workers bespeak that the processes of stratification and social mobility are global in character (Korzeniwicz and Moran 2009). The global processes of stratification and social mobility, however, have little been researched because of the industrialization/ modernization school's methodology that has been a paradigm in that field. The traditional methodology

has taken stratification and social mobility is processes that take place within a discrete and independent nation. Such national frameworks, however, have been criticized. Collins (2003:16) argued that "place-bound analytical categories impede our comprehension of emerging global processes." By contrast, a global perspective, in methods, brings global processes into an analysis on stratification and social mobility. In this perspective, international migration is also understood as a product of global process - or a global labor supply system (Burawoy 1976). Global systems shape peoples' rational calculations and decision-making on international migration. Without considerations of global systems including global opportunity structure, stratification and social mobility involving international migration is not fully understandable. Thus, it is methodologically important to situate stratification and social mobility of individuals within broader patterns of transnational and global social mobility.

Research questions

Employing a global stratification perspective, this study aims to illustrate how social selection mechanisms look differently when seen in a global perspective. The study particularly focuses on how different the *relative* weight of achievement and ascriptions are in a global analytical frame. Is the conventional argument of the within-country approach (that is, in industrial societies, one's status is determined mostly by achievement) still valid in a global perspective? Otherwise, are there some ascribed characteristics that emerge as an important criterion scale, but were invisible in the national analytical frame? And, what is the most determining attribute in one's status on a global scale? These questions would help us discuss on how the roles of human capital

(as a criterion through which returns are distributed to various populations) are shaped in transnational and global contexts.

South Korean international migrants in the United States: The subject

Ideally, all sending and receiving countries and migrants between them should be analyzed to find a general pattern in global stratification. However, this seems to be beyond the scope of a single project by a single author. Instead, I have selected Korean immigrants to the United States as the subject of the project. This group is informative to the research questions (i.e., whether and how the stratification mechanisms addressed by the within-nation perspective of the modernization school can be described differently in a global perspective, and whether the stratification at a global level is more achievement-based in the contemporary modern world) in two ways. First, South Koreans have experienced rapid industrialization and at the same time followed the income inequality pattern predicted by the modernization school (i.e., the Kuznets' inverted-U curve). Besides, human capital (especially education) has received an increasing importance in the "modern" South Korean society. During the industrializing period, the Korean government believed that, with the lack of natural resources, education was the key for the successful industrialization and exerted expansion of basic education to everyone in the country. South Koreans observed a considerable role of education for social mobility. As a result, according to Statistics Korea and the Center for Education Statistics, while only 6.6 percent of South Korean adults (aged 20 years old or older) attended college in 1970, as of 2010, more than four out of 10 adults (43.2%) in South Korean have college

education[1] (The Korea Times, 10.29.2012). On the other hand, South Korea's rapid development brought rapid changes in industrial structures. The combination of the dynamic development of the South Korean economy and its population's immediate educational response to demand for labor provides a good context for examining how human capital is being constructed and reconstructed in the processes of creative destruction of world systems.

Second, South Korean immigrants to the United States provide a case of migration between two modern societies (between the wealthiest nation and a little bit less wealthy, but not poor, nation). It is not difficult to expect that the relative income gain of international migration (to the United States) is very high for people from Haiti and Nepal. However, migration between South Korea and the United States is not easily predictable. The South Korean economy rapidly grew so much that the middle class was expanded and their income also has much improved over the last four decades. The richest 10 percent of South Koreans may be better off than the bottom 60 percent of Americans. Thus, it is hard to expect how much South Korean migrants experience upward or downward income mobility attributable to the location premium of the United States. This research also examines who gains from the migration and who are disadvantaged, which reveals what is a more important social criterion through which opportunities and resources are distributed to populations on a transnational and global scale.

[1] This rate of college education includes all types of college includes two-year colleges; it also includes the drop –out and completion without a degree.
(Source://www.Koreatimes.co.kr/www/news/nation/2012/10/116_123440.html)

Organization of following chapters

In the following chapter, I discuss a national frame of the modernization and its problems and elaborate on a global perspective as an alternative approach to stratification and social mobility. I also introduce three paths to social mobility at a global level. Chapter 3 evaluates three paths to social mobility based on the effect of each path on global income positions of South Koreans. In this chapter, I also examine the *global* income position of South Koreans and Korean immigrants in the United States, by placing their income in a map of global income deciles distribution. Knowing the global positions makes possible comparative assessments of the three paths to social mobility. Chapter 4 investigates the social mobility of Korean immigrants at a transnational level, and I compare it with the social mobility of South Koreans remaining in their home country. Particularly, I examine the relative weight of human capital to that of the country of residence on the income status. Chapter 5 is about stratification and social mobility of migrant minorities in the country of destination. Especially, I focus on the inequality and social mobility among Korean Americans, and investigate the roles of human capitals and categorical attributes (race/ethnicity, gender, citizenship, and nationality) among Korean Americans compared to those among non-Hispanic whites in the U.S. labor market. In this study, I argue that the effects of human capitals revolve around categorical boundaries.

Chapter 2: Theoretical Background

2.1. Stratification in the Modernization perspective

Scholars in the modernization school tend to believe that industrialized wealthy nations are more equal and inclusive than developing countries, characterizing these societies with democracy, low inequality, and porous class structure with achievement-based social mobility. They believe that these modern societies are less likely to exclude people based on ascribed characteristics such as race/ethnicity, gender, or class, compared to developing or poor countries so-called traditional societies. These societies, through industrialization and modernization, experienced an expansion of education and an enhancement of social welfare. As a result, people have equal opportunities to access resources and achievements play a central role in an individual's social mobility. Consequently, the association between one's social origin and eventual destination diminishes.

Treiman (1970:221) described this as the "transition from particularistic to the universalistic bases of achievement." Citizenship is a good example of a universalistic institution. The original meaning of citizenship in society lies in its universality: "Citizenship shifted from a restrictive definition of membership that categorically excluded major classes of people, including non-whites, women, and those without property, to one that was ostensibly inclusive… " (Glenn 2002:236).[2] The modernization school believes that the establishment of inclusive institutional arrangements is a

[2] This citation does not show her main position. Glenn does not see citizenship as inclusive. What she argues is that citizenship is inclusive in principle, but exclusive in practice. Her work demonstrates how citizenship excludes race-gender minorities (Glenn 2002).

universal and unidirectional pattern among countries experiencing industrialization and modernization in their developmental process. In *Social Mobility in Industrial Societies,* Lipset and Bendix (1959) argue that all of the industrialized countries they studied went through a similar pattern of a diminishing association of ascribed status with one's final status. In his famous work, *The Stages of Economic Growth: A Non-Communist Manifesto,* Rostow (1959) identified five developmental stages (i.e., the traditional society, the preconditions for take-off, the take-off, the drive to maturity, and the age of high mass-consumption) as the universal path to be followed by all countries. According to this perspective, the eventual ending point of the development of all countries would be the modern society characterized by the central importance of achievement. Moran summarizes the characteristics of the modernization paradigm as follows:

> "Crucial to the modernization paradigm, and underlying the literature on social mobility from the start, is the claim that modernity transforms the process through which individuals are allocated within the division of labor. This transition is seen as singular, linear, and national in scope. … A more complex division of labor (e.g., as accompanying industrialization) requires a shift away from ascription and toward performance and achievement as universalistic criteria shaping stratification" (Moran 2012:275).

Problems of the modernization perspective

During the latter half of the twentieth century, many countries in the world underwent decolonization, independence and industrialization. Contradicting some of the core tenets proposed by modernization theory, however, the late industrializers have not become more meritocratic nor have they experienced a reduction of inequality. Within-country income inequality continues to be high (Korzeniewicz and Moran 2009), and in some cases, it has increased (Alderson and Nielsen 2002; Bluestone and Harrison 1990; Levy and Murnane 1992; Nielsen and Alderson 1997). In Latin America, for example, access to education or other resources is still limited to exclusive groups sharing similar ascribed statuses (De Ferranti et al. 2004). Even within wealthy nations, some groups are excluded from participating in the meritocracy. The U.S., for instance, still faces considerable disparities not only between the rich and the poor, but also between whites and other racial/ethnic minorities, between men and women, and between citizens and non-citizens, immigrants and the native born (for various examples, see Andersen and Collins 2009). The official poverty rate has remained stubbornly at the same high level despite decades of economic growth. In particular, poverty is especially high among racial/ethnic minority and female householders (Iceland 2003). The modernization paradigm discounts or downplays theories that inequality and poverty among racial minorities reflects a structural or institutional problem embedded in modern societies like the United States. This paradigm, as (Wacquant 2007:17) points out, "construe[s] poverty as a mere residue of past inequalities and backwardness or as the product of individual *deficiencies* liable to remedy – at any rate, as a phenomenon bound to recede and disappear with the full 'modernization' of the country." The modernization school applies this perspective, in the same manner, to poor countries and construes their

poverty as the product of *deficiencies* of the individual countries and so as remediable by the full modernization of the country (e.g., Inkeles and Holsinger 1974; Inkeles 1983).

The modernization perspective is the logical offspring of studies that adopt the traditional unit of analysis. In the mid-20th century, when the modernization paradigm was established, many studies disproportionately paid attention to the white male population. For instance, Blau and Duncan's (1967) survey sampled full-time employed male workers only: It excluded women and part-time and unemployed workers. Given that these groups are overrepresented by black and Hispanic Americans, Blau and Duncan's thesis (i.e., increasing importance of achievement) may be applicable only to a small segment of population (white middle-class male workers) (Brym and Lie 2006:234-235).

More serious is that the modernization perspective presupposes that "inequality results from variation at the *individual* level." (Tilly 1999:31, *Italics* added).[3] Status attainment model and human-capital theory, for example, "radically individualized the mobility process while obscuring such causes as changes in hiring practices and the formation of job-finding networks by migrants" (Tilly 1999:32-33). What are crucial to these approaches (status attainment model and human-capital theory) are individual characteristics such as family background and human capital. They treat these individual characteristics as independent from their categorical status. That is, they assume that the

[3] According to Tilly (1999:29), "classical economists and sociologists [such as Adam Smith and Karl Marx] generally analyzed categories and relations among them. They examined returns to these factors [labor, capital, land, etc.] considered collectively and situated socially rather than returns to individual effort (Tilly 1999:29, [ ] added)." However, "by the middle of twentieth century, social scientists had almost completely switched their gaze from inter*group* distributions to inter*individual* distributions" (Shanahan and Tuma 1994:75, in Tilly 1999:30).

effects of these variables are not affected by the categorical status of individuals. Due to the individual-level approach, the status attainment model and human-capital theory rule out (unequal) relations between categorically bounded populations from possible independent causes of inequality (Tilly 1999:33).[4]

Critical sociologists have identified enduring inequalities in which race and/or gender have played a significant role (see Andersen and Collins 2009, for various examples). Racial and/or gender minorities are on average less paid, less employed, and underrepresented in higher-ranked occupations when compared with equally qualified white male workers. Higginbotham and Andersen (2005:174) note, "With an education, some segments of the population could advance from working-class origins to middle-class status, especially as access to education and white-collar jobs increased for *White* Americans. But *race* continues to affect career paths, as well as the educational opportunities required to become upwardly mobile (*Italics* added)."

The persistent importance of race and gender in social mobility challenges the claim of the United States as an open society or the society of meritocracy. Meritocracy is, unlike the belief of the modernization, not universal, but limited only to some segments

[4] The following quotation illustrates how the individualized approach of the modernization paradigm shapes research: "Noticing that school performances of children correlate with the social positions of their parents, researchers attribute those differences in performance to "family background" rather than considering that teachers and school officials may shape those performances by their own categorical responses to parental school positions"(Tilly 1999:30). This tradition of individualistic approaches (correlating occupational status with family background and education) prevails in the labor market research as well. Stinchcombe argues, "This tradition has however given a very queer tone to the mobility literature, since it deliberately starts off by talking as if people promoted themselves instead of being promoted by employers…" (Stinchcombe 1978a:1 in Tilly 1999:32)

of the population. Moreover, the meritocracy was not established independently, but at the cost of the underdevelopment of meritocracy for categorical minorities. That is, in such interrelated circumstance, while there may be meritocratic systems that enhance the roles of achieved human capital among white male workers, the very systems contribute to diminish the importance of achievement among categorical minorities. Thus, a comprehensive understanding of stratification should include categorical minorities and relations between the majority and the minorities and between the minorities.

Another problem of the traditional modernization paradigm lies in its *nation-bounded* approach. Due to this boundary, this paradigm often fails to account for outside-nation opportunity structures. The modernization school understands stratification as the processes of social selection taking place primarily and exclusively *within* national boundaries, and takes nation states as a natural unit of analysis (Korzeniewicz and Moran 2009; Wimmer and Glick Schiller 2003).[5] However, in the real world, social mobility strategies increasingly involve cross-national movements for better opportunities *outside* the country (see Kaye 2010, for numerous examples). The Pakistani worker (in the chapter 1) turned his eyes to South Korea for better income opportunities. Likewise, a significant number of South Korean emigrants already looked ahead into future economic opportunities in the United States before the migration. At the same time, the

[5] This approach is often called "methodological nationalism" (see Beck and Sznaider 2006; Wimmer and Glick Schiller 2003; Martin and Beittel 1998; Levitt and Jaworsky 2007). According to Beck and Sznaider (2006:3), it has the following taken-for-granted premises: "it equates societies with nation-state societies and sees states and their governments as the primary focus of social scientific analysis. It assumes that humanity is naturally divided into a limited number of nations, which organize themselves internally as nation-states and externally set boundaries to distinguish themselves from other nation-states … believing that social action occurs primarily within and only secondarily across, these divisions …"

international migrants (as we saw in the cases of the Pakistani worker in South Korea and South Koreans in the United States) often experience the devaluation of their human capital in new (more industrialized) societies. Thus social mobility among international migrants can be portrayed as upward mobility economically and downward mobility in terms of occupational prestige. This portrayal implies that migrant workers often sacrifice occupational prestige for higher wages in the richer destination. This location premium, however, is not visible in *within*-nation approaches.

Finally, the modernization perspective treats the roles of education and other human capital as an independent variable to explain labor-market outcomes. However, as argued by Korzeniewicz and Moran (2009:103), "the human capital criteria that underpin inequality are themselves an outcome of institutional arrangements linked to Schumpeterian processes of creative destruction." That is, the roles of human capital keep changing in the processes of creative destruction ('creative destruction' will be discussed below). Some skills and human capitals are perceived as valuable high skill in one time or in a society, but the same skills and human capitals are not treated as the same way in other time or in other societies. For example, call-center jobs are deskilling in the United States and outsourced to other countries, especially India. This call-center job is a desired high-skill job in India. There are many institutes that train people who want to work at call-centers. Taking the roles of human capital as an outcome leads us to reframe our focuses to "what are they that construct the roles of human capital."

2.2. Creative Destruction and Enduring Categorical Inequality

The Modernization perspective was influenced by an evolutionary theory that was born in the early nineteenth century. The evolutionary perspective assumes that "social change is unidirectional, progressive (the latter phase is better than the former), and evolutionary (not revolutionary)" (So 1990:19). For modernization theorists, the modern industrialized country was the model to aspire to. The way to catch up to the wealth of the First World countries was to follow or imitate the process that these countries had gone through. They assume that other developing countries want to become the rich world and there are no other ways than the ways that the rich world went through (unidirectional). It is a slow and gradual process because the transition from primitive or traditional society to a complex, modern society sometimes takes centuries to complete. Revolution is not effective in transition to a modern society (evolutionary).

The evolutionary assumptions of the modernization perspective – unidirectional, progressive, and evolutionary – have been challenged by institutionalists and political economists. From their perspectives, economic and social changes (including growth and distributional outcomes) are neither unidirectional nor progressive but contingent and dependent upon institutions (North 1990;Polanyi 1944/2001). Institutions in capitalist systems, contrasting to the perspectives of Rostow (1959) and Fukuyama (1992) who claimed "the end of history," do not progress to a certain final destination. Schumpeter (1942/1994) depicts capitalism as *incessantly* transformative through creative destruction; there is no ending point:

> "Capitalism... is by nature a form or method of economic change and not only never is but never can be stationary. ... The fundamental impulse that sets and keeps the capitalist engine in motion comes from the new consumers' goods, the new methods of production or transportation, the new markets, the new forms of industrial organization that capitalist enterprise creates. ... The opening up of new markets, foreign or domestic, and the organizational development from the craft shop and factory to such concerns as U.S. Steel illustrate the same process of industrial mutation – if we may use that biological term – that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one. This process of Creative Destruction is the essential fact about capitalism. It is what capitalism consists in and what every capitalist concern has got to live in" (Schumpeter 1942/1994:82-83).

Creative destruction – "incessantly destroying the old one, incessantly creating a new one" – is the processes to create new sources of profit, responding to changing political, economic, and technological constraints. World history reveals such processes of creative destruction – from slavery to serfdom and from Fordism to post-Fordism, for instance. This institutional transformation entails selectivity: in newly "emerging" institutional arrays, some segments of the population would become newly selected in accessing to resources and opportunities, while others would be excluded from such access to those.

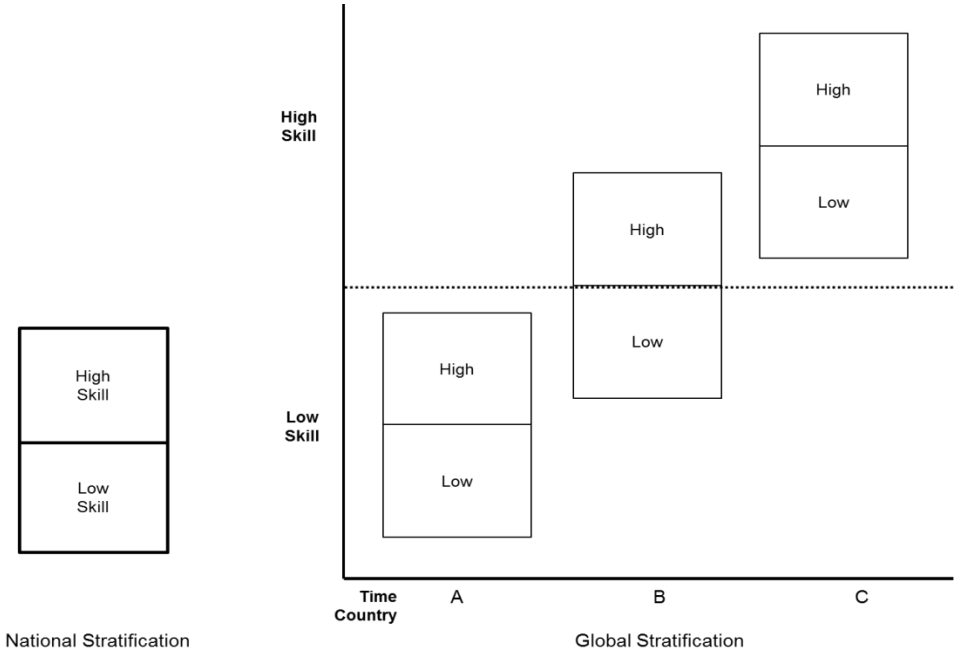
The transformation from agricultural to industrial society, for example, gave rise to unequal outcomes between the landowning aristocracy and the bourgeoisie.

Through creative destruction, the definitions of "high" skill and "low" skill also continue to change. Figure 2.1 stylizes the changing concepts of "high" and "low" skills through creative destruction. The x-axis has both time and space dimensions: each of A B C refers to a different country and/or a different phase in one country. Suppose that A is an agricultural phase or society, B is an industrial phase or society, and C is a post-industrial phase or society. Through processes of creative destruction, a single country can be transformed from the phase A to B and to C. This has been an exceptional case in the world history. Only a few countries such as South Korea went through such transformation over the last century. According to this transformation of the industrial structure, "high" skills in the phase A may be re-categorized as "low" skills in the B or the C stages. In South Korea, for instance, the high-school graduates in the era of light labor-intensive manufacturing (between the 1960s and the early 1970s) were able to work as a supervisor or a manager. In that period, they were less likely to be considered uneducated or unskilled. Since the 1990s, the South Korean industrial structure has changed into the knowledge- and technology-intensive industries (such as semiconductor or information and communication-based industries). This transformation devaluated the high-school graduates as low-skilled workers.

The creative destruction processes have a spatial dimension as well. At present, there coexist agricultural societies (A), industrial societies (B), and post-industrial societies (C) in the world. If the Korean high-school graduates moved to A (e.g., agricultural) society in Africa, they would be counted as high-skilled. On the other hand,

if the Korean college graduates migrated to the United States, some of them would be considered low-skilled. That is, the skills of individuals can be differently valued depending on which country they live. However, in contrast to global stratification, the national framework (in the left) tend to treat the categories of the "high" and "low" skill as more fixed.

Figure 2.1. Creative Destruction and Changing Definition of "High" and "Low" Skill



Although capitalism has entailed numerous changes in the institutional array, ironically, categorical inequalities have not changed much (Tilly 1999; Massey 2007). Gender and racial inequalities have persisted in the United States even after economic restructuring (Massey 2007). There had been a significant improvement in occupations and wage among female workers since the 1970s, but such "gender revolution" halted in

the mid-1990s (Cotter, Hermsen, and Vanneman 2011). Racial minorities experienced upward social mobility for a while during the post-WWII manufacturing era. However, African Americans became the largest victims from the economic restructuring because it entailed the outsourcing of manufacturing jobs that had served as a steppingstone (Wilson 1996). As we have seen, the beneficiary and victims of the processes of creative destruction are likely to be selected by the already constructed hierarchies (based on unequal resources) between groups categorically bounded through ascribed characteristics. As much as hierarchies between categories are durable, categorical inequality – that is, unequal distributions of rights to access to resources and opportunities according to categorical hierarchies – are "durable"(Tilly 1999), in spite of incessantly changing social systems.[6]

Unequal relations across categorical boundaries formed two systems of stratification that in turn reinforce the unequal relations. They are exploitation and opportunity hoarding.[7] Massey (2007:6) summarizes these two mechanisms in Tilly's (1999:86-95) work:

[6] The argument that categorical inequalities are durable does not mean that categorical hierarchies do not change at all. The transformation from feudal to capitalist systems did not benefit the old landed aristocracy (the existing power group). However, such fundamental and revolutionary changes have not been rare over the long history. Most of creative destruction incessantly occurs in capitalist systems because it is the capitalist mechanism. It would be interesting to see whether or how creative destruction would change the existing hierarchies among categorical groups in the long run.

[7] According to Tilly (1999:95-98), these two basic stratification mechanisms are reinforced by two other social processes: emulation and adaptation. These two mechanisms, by reproducing and keeping the existing systems of categorical inequality, contribute to institutionalize categorical distinctions and the existing unequal relations such as exploitation and opportunity hoarding.

> "*Exploitation* occurs when people in one social group expropriate a resource produced by members of another social group and prevent them from realizing the full value of their effort in producing it. *Opportunity hoarding* occurs when one social group restricts access to a scarce resource, either through outright denial or by exercising monopoly control that requires out-group members to pay rent in return for access. Either way, opportunity hoarding is enabled through *a socially defined process of exclusion*."

Exploitation and opportunity hoarding were originally key concepts of Karl Marx (exploitation) and Max Weber (opportunity hoarding). In addition to those more critical sociologists, Adam Smith also acknowledged, even earlier, these two mechanisms (although he did not use the terms, exploitation or opportunity hoarding) embedded in unequal *relations* between town and countryside (Smith 2000). Adam Smith illustrated that corporation systems and other related-systems were established, by the town residents, to provide more benefits to the town residents:

> "Corporations were established to keep up prices and consequently wages and profits; by means of which the towns gained *at the expense of the country*, in exchange for the produce of a smaller quantity of their own as the exports of a town are the real price of its imports. Combination is *easy* to the inhabitants of a town, and *difficult* to those of the country, who are

dispersed and not governed by the corporation spirit (Smith 2000:142-143, *Italics* added).

Town and countryside are (unequally) related to each other economically. Town or urban areas usually take a role in producing high value added goods, while rural areas produce low value added raw materials or crops. Such value added is in fact determined by an unequal relationship between two regions. Smith (2000:142) argued that "it is to prevent this reduction of price, and consequently of wages and profit, by *restraining that free competition* which would most certainly occasion it, that all corporations, and the greater part of corporation laws, have been established."(*Italics* added). Thus, trades between two regions are likely to favor town residents. And, the results of such trades, combined with town-favored institutional arrangements, reinforce the existing regional income gap.

The unequal benefit is not only found in trade, but also found in labor. The countryside not only serves as a provider of food or raw materials, but it also serves as a source of cheap labor. The substantial income gaps motivate rural people to move to urban sectors. Those internal migrants usually find their jobs on the bottom of the ladder. This is easily justified by urban residents who attribute this to rural people's lack of urban-relevant skills. If the migrant workers increase their skill level or more skillful workers come as a result of more frequent connections to the town, competition in the town would become severe. In this case, one of two strategies is usually adopted by urban residents to protect themselves from such increasing competition. First, they raise the minimum requirements, and, second, they make the skills of the migrant workers obsolete (destruction) by creating new industries and changing the institutional

arrangement (creation). This unequal relationship maintains (and justifies, in the name of comparative advantage) the unequal division of labor within a society.

Racial inequality also has some similar creative-destruction mechanisms. When rights to access to the formerly white-only public schools were granted to all African Americans after the end of the Jim Crow era, the public schools began to be devalued, because middle-class whites started sending their children to private schools (Collins 2010: 47-48). The consequence of this change (privatization) is that private schools became more valuable, while the existing system (public school) became obsolete simultaneously. We can infer that privatization was created – intended or not – to *restrain* African Americans who gained rights to access to public schools and other public services, from accessing to a good-quality of education and other services.

2.3. Global Stratification Perspective

This study places international migration at the center for understanding the mechanisms of global stratification and global social mobility. Neoclassical economic theory assumes that international migration is an individual-level rational choice on the basis of cost-benefit considerations. In this theory, it is international wage differentials that are most important in the considerations at a global level, given its assumption that "an individual moves when the reward paid to labor is higher in the destination country." (Yarbrough and Yarbrough 2003:9). A world-systems perspective also considers international wage gaps a key cause of international migration. However, the interests and approaches of world-systems analyses are very different from the conventional theory.

First, in the world-systems approaches, rational calculations are regarded as bounded to situations and systems.

> "In contrast to the neoclassical economics concept of the rational, utility-maximizing migrant, world-system approaches to international migration focus on the structures that condition and constrain individual action. Migration is part of a system: individuals may indeed migrate on the basis of cost-benefit considerations, but both the costs and benefits of movement are structured by an historical context of unequal exchange in a hierarchical international division of labor."(Sanderson 2012:463)

Second, the main focuses of world-systems approaches are different from those of neoclassical economics. While the conventional neoclassical approach considers international income gaps "exogenous," a world-systems approach perceives cross-country wage differentials themselves to be explained in a historical context. Therefore, while the neoclassical economic perspective regards wage gaps between countries as an explanatory variable of international migration, a world-systems perspective focuses more on the global structures and processes and their historical contexts that generate international wage differentials and their historical contexts (Sanderson 2012:463-464).

Having this in mind, I focus on structural factors or systems that make their migration rational, rather than individual-level motivations. When we try to understand global processes of social selection through social mobility of international migrants, it is

a necessary first step to understanding the systems that produce international migration and make it a rational or irrational strategy for social mobility. This work requires understandings on relations between sending and receiving countries. From the within-country perspective, sending countries are relatively poor and often described as with words like exclusion, ascription, and categorical inequality, while receiving countries are richer and characterized with words such as inclusive, universal opportunity, and the possibility of success through individual achievement. When we focus only on wealthy nations, their institutional arrangements may appear inclusive and achievement-based. In these countries, success is construed as the outcome of individual effort and achievement.

When shifting our focus from individual wealthy nations to relations between countries, however, we can find the very institutional arrangement (appearing to be inclusive) of wealthy nations is built on the institutional arrangement that excludes the population categorized outsides from access to resources and opportunities (Korzeniewicz and Moran 2009:81).

Global exploitation

We have discussed on how unequal relations between town and countryside benefit the town residents. Globally, we can see similar imbalances in economic and political power between countries. The town-country gap and their unequal relationship appear globally in the form of the First World (town) versus the Third World (country) or North (town) versus South (country). For a long time, going back to the seventeenth century according to Wallerstein (2004), the Third World or the South (or periphery) countries have taken the role of providing raw materials and agricultural products, while

the First World (core) countries have taken the role of producing highly valued commodities [8] (Again, the value or price of the commodities itself was constructed by capitals in the First World), on the basis of the "comparative advantage" principle. "Comparative advantage" is actually the concept that was asserted by the First World countries to maintain and justify the international division of labor, which confined developing Third World countries into providers of raw materials and cheap labor as well as buyers of expensive high-value-added goods (Chang 2002). In this situation, the education and skills of the elite class in developing countries are likely to be considered "high-educated" or "high-skilled" only *within* the developing societies; the same education and skills can be considered "less-educated" or "unskilled" when located in developed societies. Through this process, the labor of workers in the developing countries is "justifiably" devalued, while the labor of workers in the developed countries gets highly valued.

Since the WWII, however, there have been changes in this "division of labor" as some newly industrialized countries (NICs) like South Korea and Taiwan emerged. NICs came to have capacity to produce manufacturing goods. Besides, the labor was much cheaper (and skillful) in those areas compared to the already industrialized wealthy countries. The capitalist class in the wealthy nations faced increasing price competition from the capitalists in NICs. Keeping manufacturing plants in the country of expensive labor was not profitable any more. Capitals began to displace the plants to NICs of abundant cheap and skillful labor. As capitals moved to other less-developed and cheap-labor countries, the earlier industrialized countries like the United States have

[8] The international division of labor is well demonstrated with ample evidence by scholars who study global commodity/value chains (see Gereffi and Korzeniewicz 1993).

transformed their economic structure since the 1970s. This post-industrial economic restructuring was characterized by the so-called 'hour-glass economy' depicting the expansion of the high-tech, knowledge-based industries at the top and the expansion of low-skilled service sectors at the bottom but the decline in manufacturing jobs in the middle (Sassen 2001; Waldinger 1999). When understanding capitalism as a process of Schumpeterian creative destruction, we can infer that, as the First World capitals shift its main industries from manufacturing to high-tech/ knowledge/information-based industries, the former (manufacturing) is devalued as obsolete while the latter (high-tech/knowledge/information-based industries) is highly valued as a new source of profit.

Global opportunity hoarding

According to Korzeniewicz and Moran (2009:78), the wealthy nations' institutional arrangements entailing low income inequality (to protect their own citizen workers) [9] serves, simultaneously, to reproduce the high level of between-country income inequality.

> "Selective exclusion, in the case of within-country LIE [Low-inequality equilibria] , operates fundamentally through the very existence of national borders, reducing competitive pressures within those borders, while simultaneously enhancing competitive pressures among the excluded

[9] The United States, which is characterized by the high rate of racial inequalities, is an exception from this low-income inequality pattern of the wealthy nations (mostly Western European countries). Thus, Korzeniewicz and Moran characterize the United States as "hybridity": "the historical trajectory of the United States suggests a mix of some of the institutional arrangements characteristic of LIE with some HIE characteristics."(2009:37).

> population outside the very same borders (again, in the arenas or markets to which those populations are restricted). Hence, the establishment of within-country LIE and the persistence of between-country HIE [High-inequality equilibria] are not two separate processes: rather, they are the outcome of the fundamental institutional arrangements undergirding world inequality"([ ] added)

Between-country income inequality has been kept high by wealthy nations' institutional arrangement that protects their own population within categorical boundaries. But for any restriction, supposedly, free migration between poorer (labor-abundant) to richer (labor-short) countries would contribute to reduce income inequality between the countries as the supply of labor becomes close to the equilibrium of demand and supply. It was the case in the nineteenth century when the first great globalization boomed and no restriction in crossing national borders was implemented. According to O'Rourke and Williamson (1999), mass international migration between Europe and America drove falling income inequality between the two continents between 1850 and 1914.

The tendency of the convergence in income between countries, however, did not last long. In America, the influx of immigrant workers enhanced competition among the low-wage working class and contributed to restrain a rise in the wage of native-born working-class workers. The relative slowdown in the growth of the working-class wage, compared with the wage growth of the middle-class, resulted in a rising within-country inequality. This rising income gap in the United States led to the backlash of native (white) workers against immigrant workers. As a response to the backlash, the U.S.

government closed the door on immigration to protect the native workers. Restrictive immigration policies contributed to a declining inequality within the United States, but they slowed the convergence between America and Europe to a halt. According to O'Rourke and Williamson (1999:5), "convergence stopped between 1914 and 1950 because of de-globalization and the retreat to autarky."

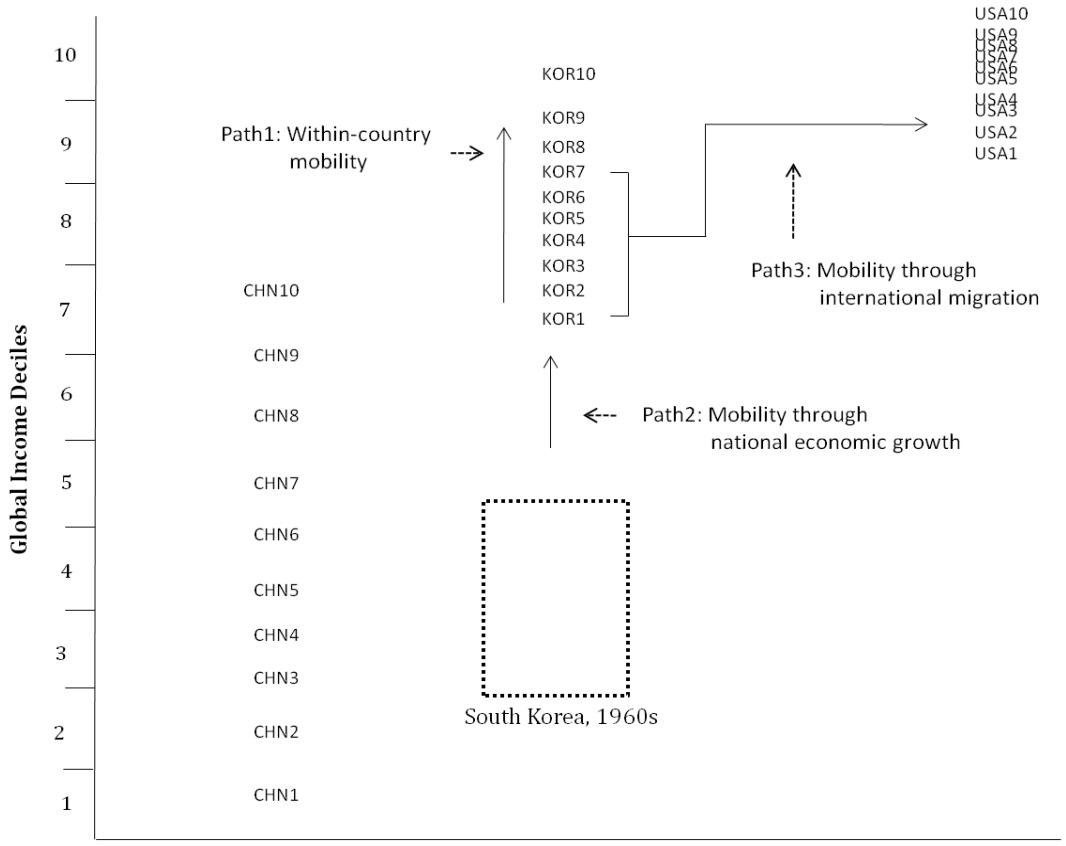
What we learn from this history is that the pattern of between-country inequality is contingent on the political economic situation of wealthy nations. When they restrict immigration to protect their own valuable people (i.e., native white workers) from competition, the fierce competition shifts to people *outside* the boundary of the own people (O'Rourke and Williamson 1999; Williamson 2005; Glenn 2002; Usdansky and Espenshade 2001). Put differently, while the wealthy nation's inclusive and protective institutional arrangements are applied to certain citizens only, the same institutional arrangements simultaneously serves as an exclusion of people *outside* countries and outsiders (categorical minorities) *within* countries.

2.4. Three Paths to Global Social Mobility

To understand such relations that make international migration as rational for social mobility, it is necessary to take the notion of global social mobility. Studying social mobility in a global perspective becomes more important as outside-country opportunities are increasingly considered among people as a realistic alternative. Korzeniewicz and Moran (2009) conceptualize three paths to global-level social mobility: within-country, between-country, and jumping categorical inequality (put differently,

global social mobility through international migration)[10]. Figure 2.2, stylizes three paths to social mobility drawn from a global perspective.

Figure 2.2. Stylized Representation of the Three Paths to Global Income Mobility



Path 1: Within-country mobility

The first path is within-country mobility. In this path, social mobility is measured by a shift of the position of individuals relative to those of others living in the same

[10] The global social mobility is conceptually different from the between-country mobility. While the between-country mobility refers to a country-level mobility, the global social mobility means an individual- (or household)-level mobility.

nation. The social status of outsiders is disregarded. Thus, in the framework of within-country mobility, people in the richest 10 percent within Haiti can be considered as the "rich", "elite", or upper class, no matter where they might be positioned when compared with the populations of other countries. Likewise, the poorest 10 percent of Americans would be considered "very poor", even if their income would place them in the top 10 percent in Haiti.

It is this perspective on social mobility that has dominated stratification research traditionally. When the modernization school or industrialists emphasize the importance of achievement in industrial societies or the importance of ascription in "traditional" societies, they are referencing an individual's or group's position *within* the country and ignoring global hierarchies. In this framework, they argue that industrialization provides more opportunities for upward mobility – especially in urban areas. This promotes social mobility through rural-to-urban migration for a while. After this transition period, once the society is industrialized and urbanized, the roles of human capitals become more important in accessing to resources and opportunities (Kuznets 1955).

Thus, in industrial societies, human capital – particularly education – has drawn the most attention and its role in social mobility has been recognized as an indicator of an open society. Human-capital theory emphasizes that the highly educated earn more because education increases productivity, which allows those individuals to demand higher wages (Becker 1964/1994). This argument is criticized by social scientists that focus on institutions. Collins (1979) argues that the highly educated get paid higher due not to their higher productivity but to social institutions that screen workers by educational credentials. Others focus on the labor market structure, such as the dual labor

market (Doeringer and Piore 1971) or labor market segmentation (Gordon, Edwards, and Reich 1982). This perspective does not deny the importance of education either, in the sense that the highly educated are likely to find jobs in the primary sector which gives higher rewards. Education is still important even for critical scholars who emphasize class background or socioeconomic status. Those scholars see education as an institution reproducing the existing class system: education plays the role of mediating and transferring the family's economic resources into human capital, which contributes to justify the higher income of the existing rich class (Bowles and Gintis 1976). As addressed above, not all within-country approaches advocate the human capital theory; many scholars emphasize the importance of structural and institutional contexts such as social systems or labor-market structure. However, they do not deny the role of education, because it is mostly the highly-educated who benefit from such structural/institutional configurations.

Path 2: Between-country mobility

The second path is between-country mobility. This path is concerned with the income standing of each country in the world hierarchy. Such studies rank each country using a measure of economic productivity or income, like GDP Per Capita. As everyone in a country is assigned the same income (i.e., the average national income of a country) in the analysis, differences among individuals are mostly ignored and the position of people refers only to the rank of the country.

In the between-country mobility perspective, national economic growth is the most important path to social mobility. There are debates among development scholars

on what are keys for national economic development. The modernization school emphasizes industrialization and modernization as a panacea of development. Thus, industrialization and modernization contribute the economic growth of developing countries, which would result in upward mobility of the developing countries (e.g., (Firebaugh 2003). By contrast, the dependent and world-system schools highlight persistent or rising income inequalities between rich/core and poor/(semi)periphery countries due to the unequal relationship between countries (e.g., Arrighi and Drangel 1986; Korzeniewicz and Moran 1997).

Because the focus is on national, not individual, incomes, mobility is a national outcome reflecting national actions. The performance of businesses in trade or the state's industrial policy to enhance competitive power in the world economy, for instance, are considered crucial (Amsden 1992; Chang 2004). Consistent with emphasizing national actions, this path is less associated with choices made by individuals. Yet, this does not mean that the between-country mobility is not a concern for individuals. As Korzeniewicz and Moran (2009:107) note, "when people in South Korea and China endorse policies designed to generate economic growth, rather than abandoning their concern for inequality, they are recognizing the potential significance of such a path for engaging in upward social mobility within a *global* system of stratification"(*Italics* in original). This reasoning has been empirically found when South Korean government policy appealed to nationalism for implementing its neoliberal policy. The South Korean government has often justified an increasing income gap across classes caused by its neoliberal policy as the cost of economic upward mobility of the country in the world, claiming that the ascent eventually would lift up all people in the country (Shin 2006).

The promising future of national economic development as seen in the case of South Korea is not universally applicable. Scholars adopting dependency and world-system approach agree that "such a road of national economic growth has not been easily accessible to vast parts of the world, and success stories have been the exception rather than the rule for most of the world's population"(Korzeniewicz and Moran 2009:107). Even for people in a country that is experiencing success like South Korea, the between-country income mobility seems less tangible because people may not be able to enjoy the benefit of national economic growth in their time as it takes several decades at least to see the effects.

Path 3: Global social mobility (through international migration)

The third path is mobility through international migration, which is called "jumping categorical inequality" by Korzeniewicz and Moran (2009). This path becomes visible when we have a global perspective that embraces the world community and understands social mobility as a shift among all people in the world. Unlike the between-country mobility focusing only on the positions of countries, the global perspective is concerned with every individual. In this perspective, it is no longer assumed that every Chinese individual receives the same income (represented by national accounts such as average GDP per capita). The global perspective ranks Chinese individuals based on their own income, not their national income. Thus, the rich Chinese can be found with other rich Americans in the same high position and the poor Chinese may appear with poor Haitians.

The global perspective allows us to find social mobility practices that do not make sense within the national framework. I focus on international migration, among others. According to Black, Natali, and Skinner (2006), international migration is indeed driven by the pursuit of *global* social mobility of people who are situated in *global* inequality:

> "International migration is a powerful symbol of global inequality, whether in terms of wages, labor market opportunities, or lifestyles. Millions of workers and their families move each year across borders and across continents, seeking to reduce what they see as the gap between their own position and that of people in other, wealthier, places. In turn, there is a growing consensus in the development field that migration represents an important livelihood diversification strategy for many in the world's poorest nations"(Black, Natali, and Skinner 2006: 1).

Studying international migrants is advantageous in that international migration uncovers the dynamic aspect of social mobility taking place across unequally related countries. Let's take an example of Filipino nurses' migrating to the United States (Choy 2003). Nursing is not such a high-paying occupation within the Philippines, while it is a very promising occupation for those who plan to migrate to the United States or other rich countries. For the Filipino nurses who migrated to the United States, their returns to education bear much higher than for most other occupations in the Philippines. In studying the nurses' returns to education among Filipinos, if we examine nurses working *within* the Philippines only, we would hardly understand why so many Filipino women

choose nursing. In many cases, nursing is chosen because it facilitates entry into and employment in the United States and other rich countries (Choy 2003).

Unfortunately, international migrants are often forced to change occupations when crossing borders. In fact, significant portions of immigrant workers experience a change in occupation after migration. International migration to wealthier countries usually involves occupational downgrades. A significant portion of Korean immigrants who had middle-class backgrounds with professional occupations in the country of origin, become working-class service workers or small shop owners in the United States. In these cases, international migration accompanies a tradeoff between income advantage and occupational disadvantage. Their occupational prestige is more likely to lower, but their absolute wage would be increased and possibly higher than the wage they were supposed to receive in the country of origin.

Bringing international migration to social mobility research, the role of human capital becomes more complicated. In the case of Filipino nurses, while nursing may not offer much to the college-educated in the Philippines, the reward is likely to be substantially higher in America. This implies some interaction between human capital and categorical status. That is, when their nursing education at a college (human capital) meets the American labor market (categorical location), their education possibly receives a higher return than they would have received in the Philippines. The role of human capital is more complex for migrants who experienced occupational downgrading.

Despite its growth, international migration has not been researched enough in terms of its effect on the social mobility of migrants. Even though there are some social mobility studies focusing on international migrants, these studies are limited to the

within-country perspective. The majority of the immigration literature examines the upward/downward mobility of immigrants *within* countries of destination, mainly comparing their standings when they first immigrated to a certain destination with their standings after then (e.g., Akresh 2008; Borjas 2006). There is rare a study comparing the income standings of migrants to people either of the world or the country of origin. Following chapters explore the effects of each of the three paths for South Koreans (chapter 3) and investigate what constitute the main determinants of the income positions of South Koreans and Korean Americans at a global/transnational level (chapter 4) and in a destination context (chapter 5).

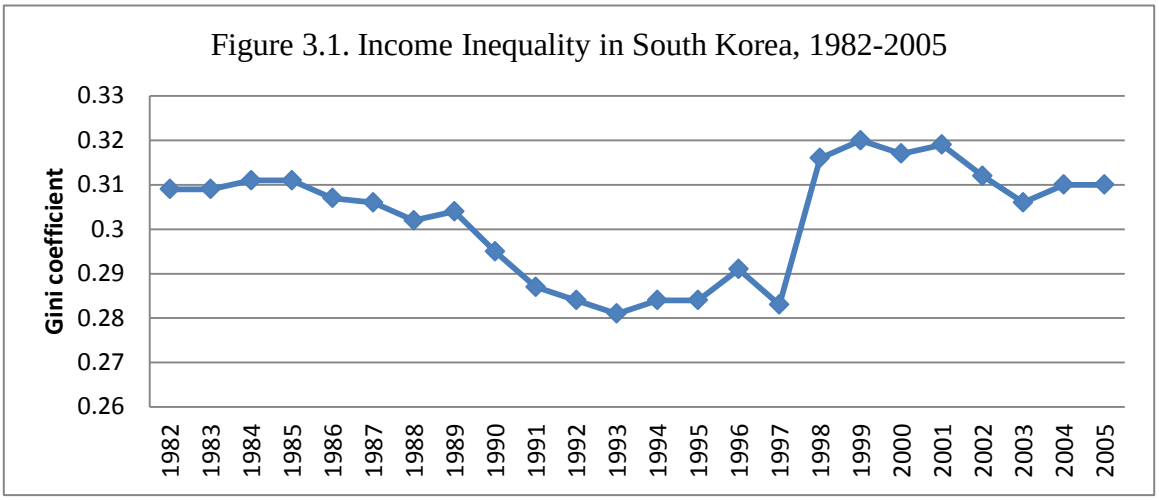
Chapter 3. Three Paths to Global Social Mobility: A Historical Assessment

3.1. A Within-country Mobility

3.1.1. Income Inequality in South Korea

During the industrialization period (the 1960s to the early 1990s), South Korea's income inequality trend followed Kuznets' inverted U-curve, except for a decline for a short period in the late 1960s: Income inequality increased from 1970 (.332) and reached to peak in 1976 (Ku 2006:12); then, it gradually declined until the occurrence of the 1997-98 South Korean economic crisis (Ku 2006:20). This declining trend stopped in 1998 when the South Korean government accepted the neo-liberal structural adjustment of the International Monetary Fund (IMF) to receive a relief loan. The structural adjustment dramatically transformed the society, particularly labor-market institutions to be more flexible. As a result, unemployment and under-employment rapidly increased. This change accounts of considerable part of the increased income inequality in South Korea after 1998.

Figure 3.1. Income Inequality in South Korea, 1982-2005



Source of data: (Ku 2006:20)

The Gini coefficient measure has a limitation that it does not show whose income has changed more. Percentile income distributions are more informative in this inquiry. Like the Gini coefficient trend, the P80/P20 percentile ratio of household income shows a declining pattern from 1982 to the mid-1990s and an increase thereafter (Ku 2006:24-25).

Data and Method

My calculations of income decile ratios using the Urban Household Income and Expenditure Survey (UHIES) (1983 - 2002) from the Korean National Statistical Office (KNSO) also display similar patterns. KNSO began this nationwide household survey in 1963 for households whose head is 15 years old or older. The surveys from 1983 to 2002 sampled urban households that have at least two household members only. The surveys excluded households in rural areas, single-person households, and foreign households from samples. Only the households of the working population were surveyed in this dataset and self-employed households were excluded.[11] Meanwhile, the data for the period 1983-1999 list office-worker households and non-office worker households separately, but they have been combined since 2000.

Although the surveys sampled for individual households, the dataset used in this study has grouped (income-decile level) information as the basic unit of data such as an average income and average household size of each income decile. For the analyses of

[11] Due to the narrowly-focused sampling, the target samples are only 37.4% of the total households. Therefore, there is an issue regarding representativeness. To improve the representativeness of the samples, the survey began to include the samples of non-urban households and households of the self-employed in 2003. The survey included single-person households from 2006 (Ku 2006:153).

the ratio of per-capita household income, I calculated per-capita household income of each decile, using its average total monthly household income (in Korean Won) and average household size: I divided each decile's average household income by the average number of household members of the corresponding decile; To make the monthly income to an annual income, I multiplied the per-capita income by 12; finally, I converted the income into U.S. dollar income by dividing it by the exchange rate of each corresponding year. [12] Table 3.1 reports the average of per-capita household income by income deciles.

Table 3.1. Average Per-capita Household Income by Income Decile in South Korea, 1983-2002 (Unit: US current dollars)

	Non-office worker's household				Office worker's household				Total
	1983	1988	1993	1998	1983	1988	1993	1998	2002
D1	804	1632	5007	4182	1103	3114	6688	5614	6116
D2	1022	2133	6872	5403	1503	3008	8998	7921	8255
D3	1212	2615	6073	6769	1784	3516	8326	9721	10611
D4	1413	2920	7153	6159	2077	4321	8741	8108	12019
D5	1595	3266	7855	6970	1886	4711	10403	8908	14283
D6	1825	3742	9052	7662	2730	5037	11377	10317	11868
D7	1675	4326	9936	9013	2316	5916	12501	11340	13726
D8	1973	4944	11175	10275	2665	6702	13947	12327	16296
D9	2411	6020	13352	12329	3416	6455	16609	14340	19171
D10	3850	7794	19921	19556	4640	9787	23652	22851	29143

Source of data: Urban Household Income and Expenditure survey, Korea National Statistics Office (KNSO), 1983-2002

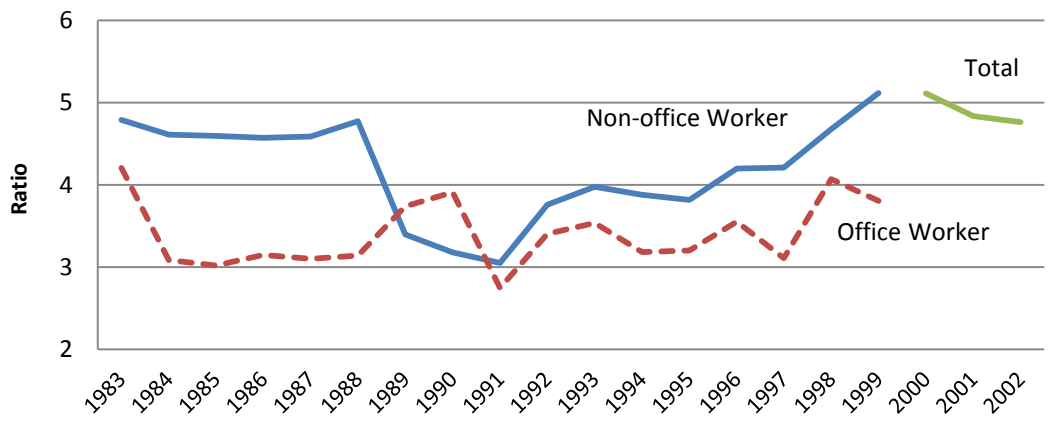
Results

D1 refers to the bottom ten percent in total per-capita household income, and D10 means the top ten percent. Figure 3.2 illustrates the D10/D1 per-capita household income

[12] For this conversion, I used World Bank data for the foreign exchange rates of each year (www.worldbank.org). This conversion into U.S. dollar may provide non-Korean readers a better sense of the income level of South Korean households so that the readers may easily compare it with the income of households in other countries.

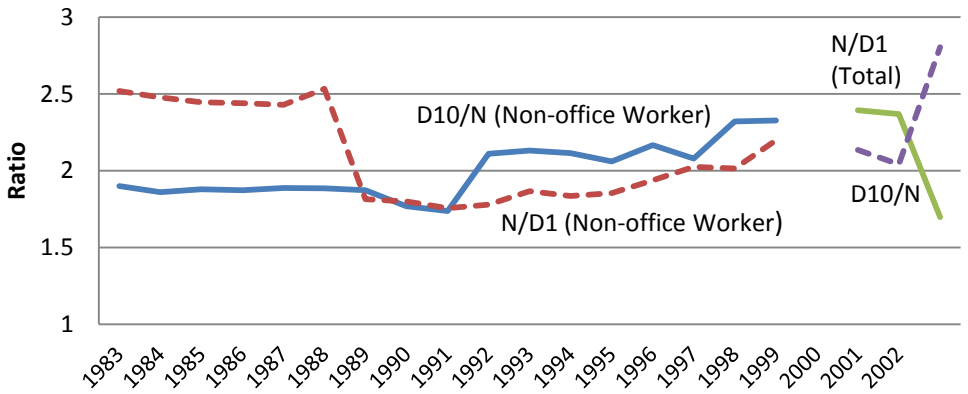
ratio, or the relative incomes of the two extreme income groups. It is interesting that income changes have occurred to a larger extent among non-office workers' households than among the households of office workers. This suggests that non-office workers' households have been more affected by the industrial changes. Total household income ratios (2000-2002) appear around 5. That is, during that period, the per-capita household income of the top ten percent is about 5 times higher than that of the bottom ten percent. This is similar to the ratios of non-office workers' households. Noteworthy is that the ratio began rising in 1998 for the office workers' households, while such rising already began in the early 1990s for the non-office workers' households. We may infer that non-office workers already began to be vulnerable to the neo-liberal transformation of the South Korean policies in 1993 while the office workers were not affected by that until the 1997-98 economic crisis.

Figure 3.2. D10/D1 Total Household Income Ratio, South Korea



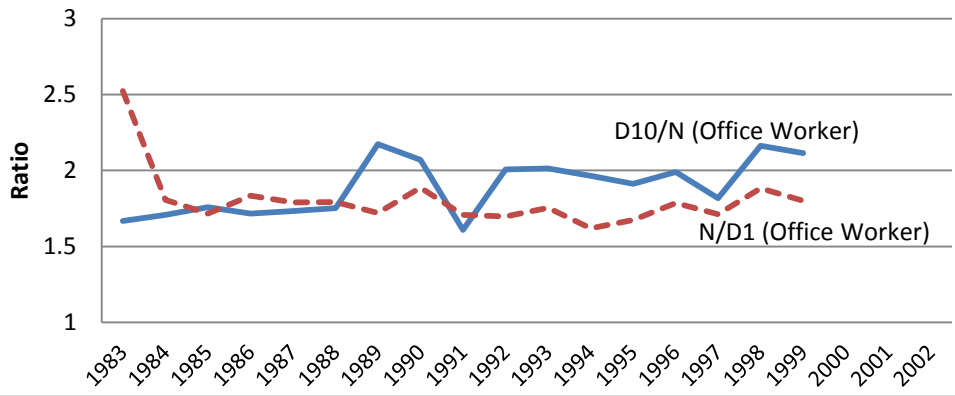
Source of data: Urban household income and expenditure survey, KNSO, 1983-2002

Figure 3.3. D10/N (National Average) and N/D1 Household Income Ratios among Non-office Workers and Total, South Korea



Source of data: Urban household income and expenditure survey, KNSO, 1983-2002

Figure 3.4. D10/N (National Average) and N/D1 Household Income Ratios among Office Workers, South Korea



Source of data: Urban household income and expenditure survey, KNSO, 1983-2002

D10/D1 ratios overall support the income inequality trend measured by Gini coefficient – that is, "great U-turn" of post 1998. This D10/D1 ratio analysis, however, does not provide a clear answer whether the ratio changes are due to the changes in the top ten percent (D10) or due more to the changes in the bottom ten percent (D1). To get a better

understanding of whose income changes are more responsible, I calculated the income ratio of the top ten to the national average per-capita income, and the ratio of the bottom ten to the national average.

Figure 3.3 displays the relative income change of D10 and D1 to the national average income (N) among households of non-office workers (1983-1999) and total workers (2000-2002). N/D1 ratio had been around 2.5 for the period from 1983 to 1988, but it dramatically fell to lower than 2. D10/N, by contrast, had remained around 1.8-1.9 until 1991. This means that the bottom ten percent made a significant achievement to catch up to the national average since 1988. Thus, we can infer that the low income inequality during the late 1980s and the early 1990s was driven by the upgrading of the bottom income groups. This coincides with the time of the massive strike of labor unions in 1988 that had noticeable success in increasing workers' wages. Another noticeable trend is that the income of the top decile grew faster than the national average after 1992. This may be attributable to the significantly transformed, more flexible labor-market policy that came as a condition of South Korea being a member of OECD. Among office workers' households, as figure 3.4 shows, the trend of income disparity during the 1990s was driven more by the income growth of the highest incomes, rather than by that of the lowest income group.

3.1.2. Social Mobility within South Korea

Internal migration

Internal migration, especially rural to urban migration, is a common strategy for social mobility among industrializing countries (Kuznets 1955). South Korea was not an

exception. During the industrialization period, internal migration from rural to urban areas in search of jobs occurred massively and rapidly (Lie 1998).The results of the internal migration vary by individual households: Some achieve rapid upward mobility, while others become part of a marginal class in urban areas. The individual-level analysis has been rarely available due to the absence of such longitudinal data tracing individual migrant households. Instead, we can estimate, through examining the rural-urban income gap, how effective the rural-to-urban migration could be in South Korea.

Table 3.2 shows the ratio of farm household income to urban worker's household income. In 1963, right before the start of industrialization, the income of farm households was higher than that of urban worker's households. After 1965, right after the state initiated its five-year economic development plan, the farm economy fell behind the development of the urban sector. The considerably large rural-urban income gap promoted a massive internal migration to urban areas. During the 1960s and 1970s, South Korea experienced one of the most rapid exoduses in world history (Koo 1990; Lie 1998).

The next two decades (1975 to 1995) is characterized by parity between rural and urban incomes. Two factors contributed to this parity. The first factor is the growth of the rural income. The state began its rural development project in the mid-1970s which included improving rural environments, distributing new agricultural technology, and industrializing rural areas. The second factor is the relatively slow growth in urban sector, which was partly caused by growing urban poverty (a consequence of the rapid and massive internal migration) and also the retarded growth of workers' wages (due to the state's repressive labor policy). After the peak of 1985, especially since the mid-1990s,

the relative income of farm households to urban ones has rapidly decreased. The ratio of farm to urban household incomes was 97 % in 1990, but drastically declined to 81% in 2000, and to 73% in 2002. This may be partly due to rapid aging of rural population as a consequence of the massive exodus of young working-age adults. With respect to the effectiveness of the internal migration strategy, the small rural-urban income gap (except for the 2000s) and completed urbanization imply that the effect of the internal migration would be limited in social mobility.

Table 3.2. Ratio of farm household income to urban worker's household income (Unit: Korean 1,000 won)

	1963	1970	1975	1980	1985	1990	1995	2000	2002
Urban	4,729	8,248	7,427	9,997	12,278	19,519	26,853	28,643	31,464
	(1.00)	(1.00)	(1.00)	(1.00)	(1.00)	(1.00)	(1.00)	(1.00)	(1.00)
Farm	6,130	6,239	8,243	9,584	13,849	19,013	25,530	23,072	22,981
	(1.30)	(0.76)	(1.11)	(0.96)	(1.13)	(0.97)	(0.95)	(0.81)	(0.73)

Source: Lee et al. (2004:71).

Educational attainment

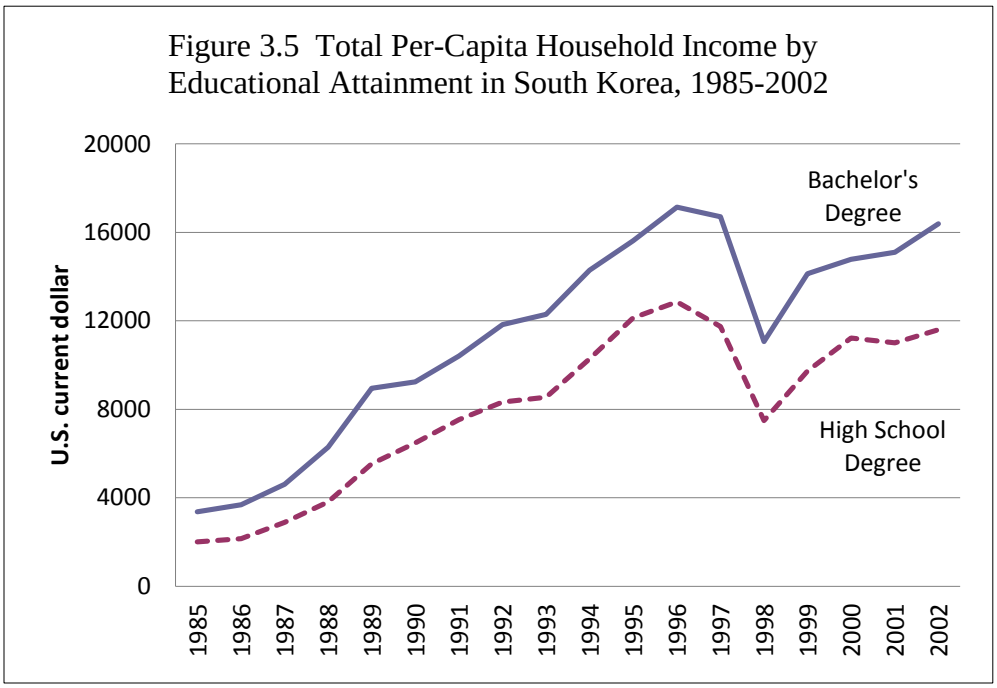
Scholarship on South Korean stratification paid particular attention to the role of education in social mobility (e.g., Chang 2009; Park 2003; Phang 2004). Especially during the 1980s, the late period of industrialization, education was one of the most important qualifications to upward social mobility in South Korean society (see Yeo 2008:59). This period seems to support the modernization perspective (e.g., Blau and Duncan 1967) that considers an achievement-based ‘open’ society as a fruit of industrialization. Recent studies, however, show different findings from those in 1980s. Focusing on the effect of family socioeconomic background on an individual’s economic

status, recent research claims that education is still important to an individual's status and social mobility, yet the level of education is itself increasingly dependent on a family's socioeconomic status (Chang 2000; Yeo 2008) or father's education (Cho 2004). According to these studies, since the 1990s, education has served as an institution to transfer class advantages intergenerationally, thereby reproducing rather than changing the existing class hierarchy (Yeo 2008; Cho 2004). Regardless of whether education is a result of individual effort or of family background, the determining role of education in social status in South Korea has been seldom disputed.

The trend of income growth is similar between households of college graduates and those of high school graduates from 1985 to 2002 (see figure 3.5). Both groups' incomes increased from 1985 to 1997; incomes sharply fell in 1998; and their incomes have been growing since.

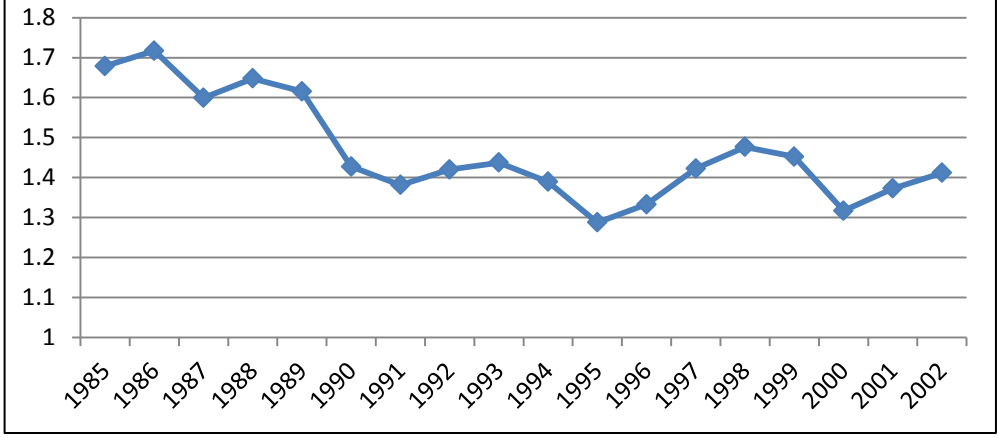
The BA/HS degree income ratio peaked in 1986, when incomes for college students were 1.7 times higher than for high school graduates on average. After the peak in 1986, it gradually declined until 1995 (when average incomes were 1.3 times higher for a bachelor's degree), with some fluctuation. Then it rose again and fluctuated until 2002. As of 2002, according to the ratio in figure 3.5, through earning a bachelor's degree, a household may increase its per-capita income by about 40 percent (or about $5,000) over those who have a high school degree only.

Figure 3.5 Total Per-Capita Household Income by Educational Attainment in South Korea, 1985-2002



Source of data: Urban household income and expenditure survey, KNSO, 1983-2002

Figure 3.6 Ratio of Per-capita Household Income of BA to HS degree in South Korea, 1985-2002



Source of data: Urban household income and expenditure survey, KNSO, 1983-2002

The role of educational attainment in social mobility is more clearly understood when we know its effect on wage. During industrialization in South Korea, it was certain that educational attainment contributed to social mobility. This mobility was generally associated with occupational mobility toward the industrial sector, rather than with income advantages in the same sector. At this time, according to Birdsall, Ross, and Sabot (1997:107), education brought a 'compression' effect. In other words, as the supply of the educated workers had increased to exceed the demand for them, the value of education decreased in South Korea. From 1976 to 1986, for example, the proportion of workers with a high school degree or higher increased rapidly so that in 1985 only 8 percent of Korean workers were minimally educated (with elementary school or less). Coincidental with this rise in the share of population that was highly-educated, the wage premium from education declined. In 1976, South Korean workers with a high school degree earned 47 percent more compared to those wth only a primary school education or less; but the wage premium for a high school degree fell to 30 percent in 1986. The wage premium for a tertiary education versus a primary education also declined from 97 percent to 66 percent for the same period (Birdsall et al. 1997: 107). The return to education, however, has increased since the mid 1990s (Kang and Yun 2008). The college premium started rising in the early 1990s (See figure 3.6). It is interesting because it increased while the percentage of college graduates in the labor force continued to increase from 6.7 percent in 1980 to 12.5 percent in 1988, 17.5 percent in 1993, and up to 23.4 percent in 1998 (You and Lee 2000:15).

Skill or occupational attainment

Occupational mobility, from the modernization perspective, is also a very important and effective path to social mobility. Industrialization provided many high-paying occupations that had not existed before. This increased the importance of the attainment of industrial skills. We can figure out the social mobility effect of these strategies through investigation of the wage returns to occupational and skill attainment.

Wage inequality of South Korea had persistently decreased during the 1980s and the first half of 1990s (Fields and Yoo 2000; Kim and Topel 1995; Kang and Yun 2008), but this trend was reversed after the mid-1990s. What caused the change in the trend? Kang and Yun (2008), using the data of the 26 waves of the Korean Occupational Wage Survey, 1985-2005 and a decomposition method, examined how much the wage inequality trend can be accounted for by the changes in the worker's characteristics (characteristics effect) and how much by the changes in the returns to worker's characteristics (coefficient effect). Their conclusion is that "changes in wage structure [i.e., changes in the returns to worker's characteristics] substantially explain both the decreasing and increasing of wage inequality… the substantial changes in the distribution of worker's characteristics and changes in occupational or industiral composition explain almost nothing" (Kang and Yun 2008:16). In other words, the change in the wage inequalty pattern in South Korea was not driven by an increase in the number of highly educated people or the number of female workers in the labor market; it was shaped by changes in returns to workers' education, gender, and so on. Changes in the returns to worker's characteristics are in a large part mediated by changes in returns to occupation. Changing returns to edcuation is an expression of changing industrial structure and institutional arrangements that constantly shape and reshape the meaning of "high-skill"

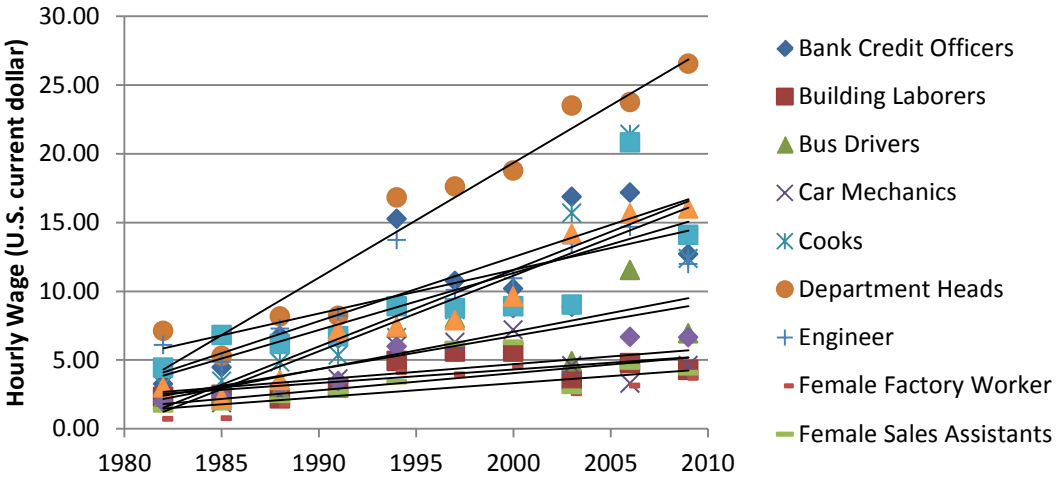
and “low-skill” (Korzeniewicz and Moran 2009) and, therefore, reconstruct a “high-paying” occupation and “low-paying” occupation. Thus, a historical investigation is required to better understanding on the dynamic processes of the changing value of a certain skill.

Given the close association between occupation, (the amount and the type of) education and skill, a historical comparison of each occupation’s hourly wage provides a part of the picture of how the South Korean labor-market reward systems have changed. For this analysis, I use world wage data from UBS (formely the Union Bank of Switzerland). In 1970, UBS began a survey of prices and salaries 31 cities across the world and has reported the results every three years since 1971. The number of cities included in this survey grew so that 73 cities are included as of 2009. The popultion of countries where the sampled cities are located account for roughly 70% of the world’s population (Korzeniewicz and Albrecht 2012). The UBS survey collected information on wage, payroll taxes and working hours for 14 separate occupations ranging from construction workers to department heads. “The survey was conducted with a representative sample of companies, and participants’profiles were defined with maximum specificity with respect to marital status, work experience and education.” It is not easy to collect and compare wage across the world because the way of sampling is not standardized globally and sampling in some countries are uncertain. In this circumstance, “the survey was conducted with a representative sample of companies, and participants’ profiles were defined with maximum specificity with respect to marital status, work experience and education”(UBS 2009:6). Therefore, there is a caveat that “figures do not represent statistical averages and its collection was limited to just a few

companies for each profession and city, data from different sources may differ"(UBS 2009:26). In this analysis, I use hourly wages estimated by Korzeniewicz and Albrecht (2012). Using the reported gross wage data, they created an estimate of hourly wages by "dividing the pay per week by the average number of working hours (also reported in the data)."[13]

The finding presents that that, in Seoul, South Korea, between-occupation hourly wage disparity has manifested a considerable rise from 1994 onward. These hourly wage trends in Seoul stand in sharp contrast to ones in Buenos Aires, Argentina (Figure 3.8). The overall trend of between-occupation hourly wage gaps in Buenos Aires can be described as a bell-shaped curve, rising from 1982 to the early 1990s and then falling, especially since 2000. It perhaps indicates that wage levels in Buenos Aires are less likely to be determined by the kind of occupation.

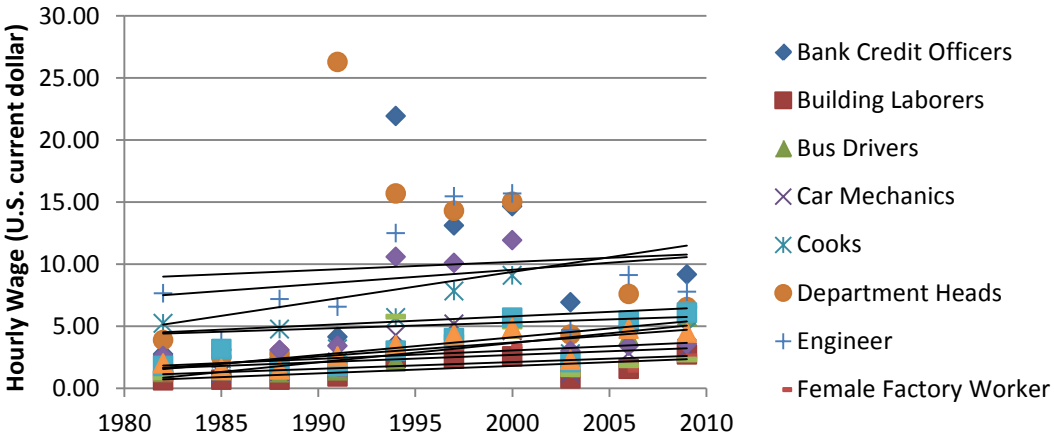
Figure 3.7. Trends of Hourly Wage by Occupation in Seoul, 1982-2009



Source: UBS, World Wage Data

[13] Korzeniewicz and Albrecht's estimation did not take into account the average vacation days reported by UBS because this information is less consistency (Korzeniewicz and Albrecht 2012).

Figure 3.8. Trend of Hourly Wage by Occupation in Buenos Aires, 1982-2009



Source: UBS, World Wage Data
Note: The lines show the average trends of wages of each occupation.

The different wage of each occupation (or different returns to skills) are largely determined by institutional arrangements that allocate rewards selectively and unevenly across groups, depending on the preferrence of the labor market. In turn, institutional arrangements, as shown in the history of the Korean development, has been shaped by the developmental goal and industrial policies. The targeted industries of the South Korean government have changed according to the developmental level from raw materials before its industrialization (before the 1960s) and light labor-intensive manufacturing industries (in the late 1960s and the early 1970s) to heavy-chemical industries (in the late 1970s) and to semiconductor industries since the 1990s (Lie 1998). When the state focused on the light labor-intensive manufacturing industries for export, women were massively recruited. This recruitment was mainly possible by the capitalists purpose to save labor costs. Therefore, although women were increasingly included in labor market opportunities, but at the same time they were selectively excluded from a rapid growth of

wages during that period (Kim 1997). After the 1990s, the similar mechanisms of inclusion/exclusion occurred to foreign workers. Foreign worekrs have been excluded from the benefits from South Korea's economic development. Currently, foreign workers are used and exploited for the survival of small companies or Korean self-employers where saving labor cost is an essential to compete with others.

3.2. Between-country Mobility

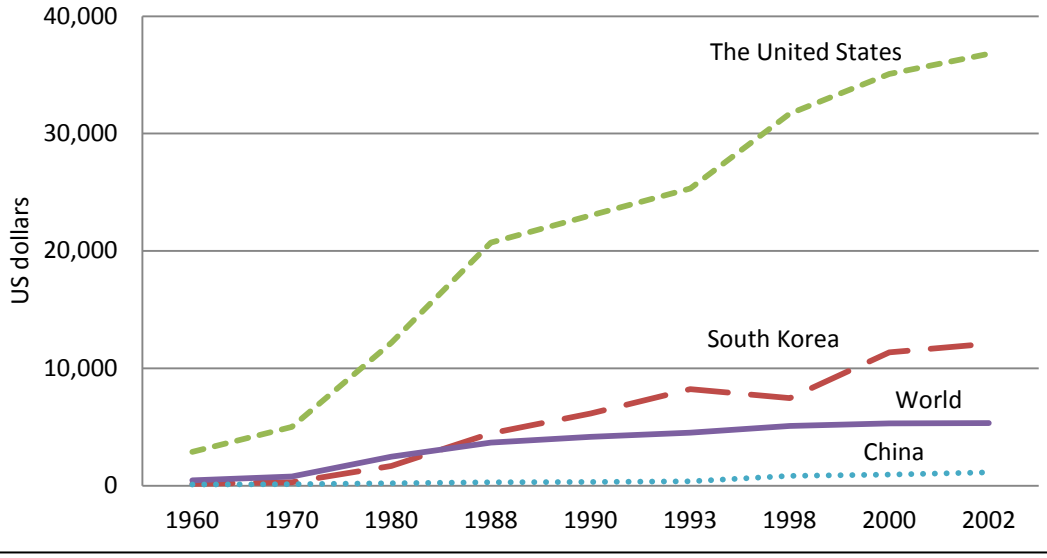
3.2.1 Economic Development and National Upward Mobility

There is a debate on whether the world is moving toward more equality. Some scholars (Firebaugh 2003) argue that between-country income inequality has declined due mainly to the upward mobility of newly industrialized countries such as South Korea and China. However, this seemingly convergence is largely due to the rapid growth of the Chinese economy with the world's largest population, rather than by the upgrading of many developing countries (Milanovic 2005). The gaps of national mean income (such as GDPPC) among nations have not been reduced. For the latter half of the twentieth century, there is a growing divergence in between-country income inequality (Korzeniewicz and Moran 1997; Milanovic 2005:39). As Milanovic (2005: 61) argued, "Western countries (that were already at the top) have pulled ahead of the rest of the world, and in only a few exceptional cases have non-Western countries been able to catch up." In other words, between-country mobility has not been common, it was rather exceptional.

South Korea is one of the exceptional cases. South Korea's rapid industrialization during the latter half of the twentieth century evidenced the effectiveness of between-

country mobility through national economic growth on the global income standing. Figure 3.9 displays the trajectories of the economic growth of the selected countries and the world as a whole (GLB) from 1960 to 2010.While the GDP per capita (GDPPC) of South Korea had been considerably lower than the world average from 1960 to 1980, it started to surpass the world GDPPC in the middle of 1980s. Since 2000, South Korea achieved GDPPC more than twice as high as the world average. The rapid industrialization of South Korea upgraded its standing from one of the poorest countries before 1960 to the 13th highest GDPPC country among 197 countries in the world as of 2010.[14]

Figure 3.9. GDP per capita of Selected Countries and the World, 1960-2002



Source: World Bank, Retrieved from http://data.worldbank.org/indicator/NY.GDP.PCAP.CD/countries.

Milanovic's (2005:61-62) mobility table of nations also illustrates the upgrading of South Korea in a position in the World. In the 1960s, South Korea was in the Third

[14]Source: The World Factbook, (CIA) (Retrieved from www.cia.gov/library/publications/the-workd-factbook/geos/ks.html)

World, defined as the countries with GDP per capita levels between one- and two-thirds of the poorest WENAO country (which was Portugal at that time). It's position has rapidly moved up and passed by the status of "contender"[15] country in 1978, and now (as of 2000) South Korea became one of rich countries defined (by Milanovic) as those whose GDP per capita is higher than the GDP per capita of the poorest WENAO country (which was Greece in 2000) (Milanovic 2005:61-62).

3.2.2. Industrial Changes and the Roles of Human Capital

The between-country upward mobility of South Korea is not just a matter of income mobility. Upgrading of the country's position accompanies the roles of the country in the world economy. That is, the economy is transformed industrially and institutionally: from labor-intensive to capital-intensive; from low value-added to high value-added industries; from using cheap labor to outsourcing.

In 1960, South Korea was an agricultural country. About one of five workers was a farmer or worker in forestry and fishery (Table 3.3). After four decades, however, the agriculture took less than 10 percent of workers. Manufacturing (including mining) steadily increased between 1960 and 1990, which reflects the country's rapid industrialization. The most rapid growth is found in social overhead capital (and others). Social overhead capital (SOC) means capitals that are not directly used for production, but used for social infrastructures, which covers everything from transportation and

[15] "Contender" refers, by Milanovic, to the countries where GDP per capita is immediately behind the GDP per capita of the poorest WENAO country. That is, they are the countries where are in good position to catch up rich countries (Milanovic 2005:61)

power to all kinds of public services (schools, universities, hospitals, libraries, etc.).The percentage of SOC increased from 15 percent in 1960 to 71 percent in 2000.

Table 3.3.Composition of Employed Persons by Industry: 1960-2000 (Unit:%)

Industry	1960	1970	1980	1990	2000
Agricultural, forestry & fishery	79.5	50.4	34.0	17.9	8.7
Mining & manufacturing	5.4	14.3	22.5	27.6	20.6
SOC* & others	15.1	35.3	43.5	54.5	70.7

Source: KNSO, *Social Indicators in Korea* (Hong 2003:41)
* SOC (social overhead capital)

The development goal and industrial policies are shaped by the position of a local country in the world economy. The targeted industries of South Korea have changed according to its developmental level from raw materials before its industrialization (before the 1960s) and light labor-intensive manufacturing industries in the late 1960s and the early 1970s, to heavy-chemical in the 1970s, to semiconductor industries in the 1990s (Lie 1998).

The late 1990s provided a different world-economy circumstance to South Korea than before. The rising global competition for exports led to a rapid decline in export earnings. China, India and some Southeast Asian countries emerged as competitor nations for exports. Their labor costs were lower than South Korea's, which provided them with advantages in price competition with South Korea. Increasing labor cost, combined with a serious trade balance deficit, threatened *chaebols* and other companies in South Korea. *Chaebols* moved production overseas.

After 1990, the weight of manufacturing has declined. This may be attributable to the outsourcing of large companies to countries whose labor is cheaper. The 1990s indeed experienced massive outsourcing of *cheabols*, or conglomerates, such as Samsung, Hyundai, LG, and Daewoo. By the mid-1990s, South Korea became one of the largest foreign investors in a number of developing and transition economies (Shin and Chang 2003: 77-78).

Many manufacturing industries have been going overseas for cheaper labor, while many finance-related industries have grown significantly due to financial liberalization in 1993. During the period from 1992 to 1996, the increase in employment in finance, insurance, real estate, and business services amounted to 30.2 percent of the total employment increase during the same period. This is a significant expansion from only 18.4 percent during the period from 1988 to 1992 (You and Lee 2000:15).

As South Korea upgraded, the state gave up the competitive advantage of cheap labor. This resulted in the abandonment of policy regulating wage increases. Therefore, the labor market system became more flexible. Facing the increasing cost of labor, companies became reluctant to hire full-time regular workers. Instead, they increased the hiring of part-time irregular workers. About 28 percent of workers were temporary workers (who were employed from one month to less than a year) in 1994, while the percent increased to about 35 percent in 2002. Day laborers were also increased from 14 percent to 17 percent during the same period (Kim 2004).

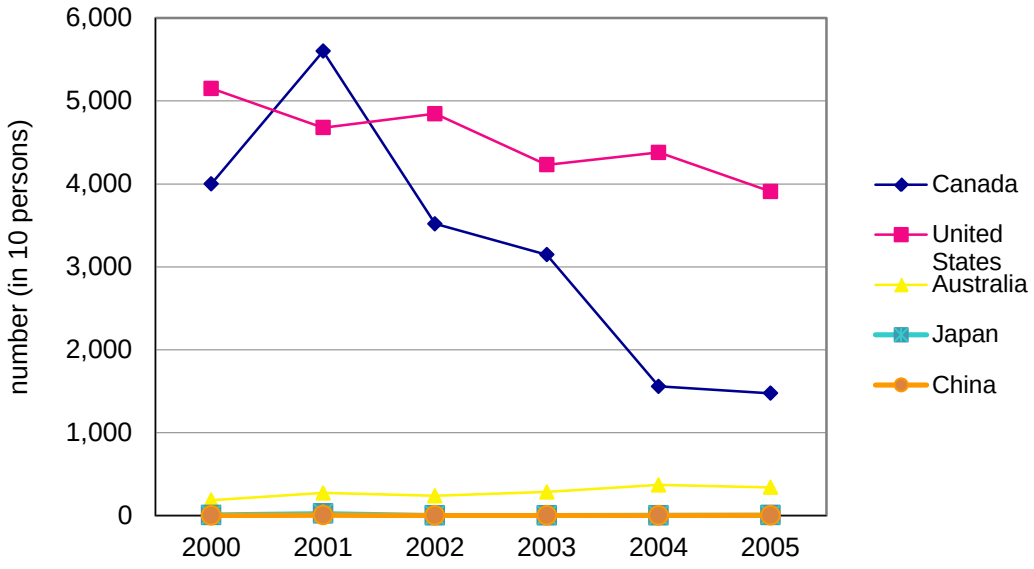
3.3. Global Social Mobility: Jumping Categorical Inequality

3.3.1. International Migration of South Koreans

At an individual level, there are broadly two ways for social mobility. The one is, as aforementioned in within-country mobility, investment in human capital (acquiring education and skill). The other one is changing their categorical group. This way is more attractive where categorical inequality is higher. It is, however, not easy because categorical characteristics such as race/ethnicity and gender are rarely changeable. Changing location is perhaps only an available strategy. In a within-country perspective, it appears as rural-to-urban migration. From a global perspective, we focus on international migration. The internal migration ceased to serve as an attractive social mobility strategy in South Korea as its population is mostly urban so that few working-aged people remain in rural areas.

International migration has also been extensively practiced since the 1970s and, unlike the internal migration, it continues. International migrants vary from students and guests workers to permanent emigrants. Thousands of South Korean workers migrated as construction workers to the Middle East in the mid-1970s and many mining and nursing workers moved to European countries, especially Germany (Lie 1998:88). The majority of Korean international migrants came to the United States (Yoon 1997; Light and Bonacich 1988). As figure 3.10 displays, in the recent period (2000-2005), the United States is the largest destination among emigrants whose purpose is to settle in a new country (i.e., among those whose purpose is not a temporal stay for work or study).

Figure 3.10. Korean Emigrants for Living by Major Destination



Source: Ministry of Justice, *Yearbook on Departure & Arrivals*, Each year (Notes: excludes crew), South Korea

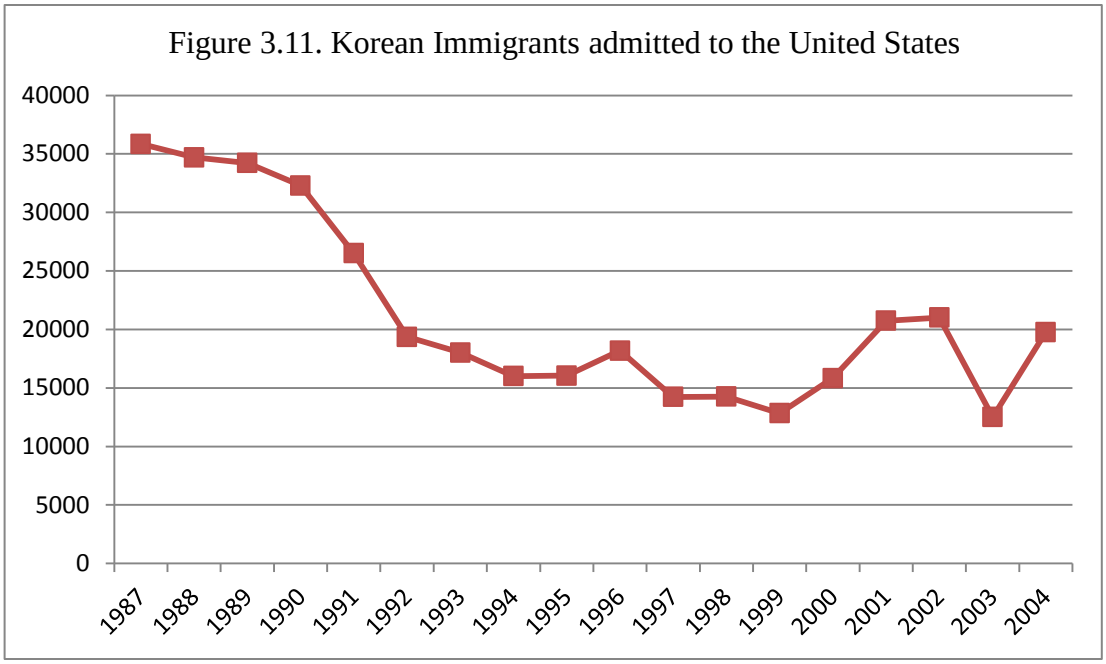
Figure 3.11 depicts the trend of annual immigrants from South Korea to the United States from the mid-1980s to the mid-2000s. This trend looks highly correlated with the income gap between the country of origin and destination. There had been a significant national income gap between two countries until the late 1980s. During this period, annually 30,000-35,000 Koreans moved the base of their lives to the United States. However, since 1990, the volume of the migrants rapidly decreased and stayed low from 1992 to 1999, reporting 13,000-18,000 Korean immigrants per year.

This trend reflects the changing economic position of South Korea in the world economy, and as a result the changing relations between South Korea and Korean immigrants in the United States. The 1990s of South Korea can be characterized as fully modernized in economics and politics. Particularly, the 1988 Seoul Olympics was considered from the views of South Koreans a symbolic event that the whole world

started recognizing the rapid development of their country. South Koreans came to have a positive image of their own country. Besides, watching the 1992 L.A. riots reported on TV, South Koreans began to realize what Korean immigrants were doing for living and how much they struggled in American society. These two events contributed to their changing view toward Korean immigrants from enviable to poor people (Abelmann and Lie 1995), which demotivated migration to the United States.

The number of Korean migrants to the United States began to rise again since 2000. This seems to be highly related to the economic crisis of South Korea in 1998. A significant number of workers have been forced to retire due to the crisis; regular job opportunities decreased and the rates of unemployment and under-employment increased. Such increasing risk perhaps propels the emigration of South Koreans. Their migration was also facilitated by rapidly increased cost for private education for their children (especially English education) (Yoon 1997).

Figure 3.11. Korean Immigrants admitted to the United States



Source: Statistical yearbook of the Immigration and Naturalization Service

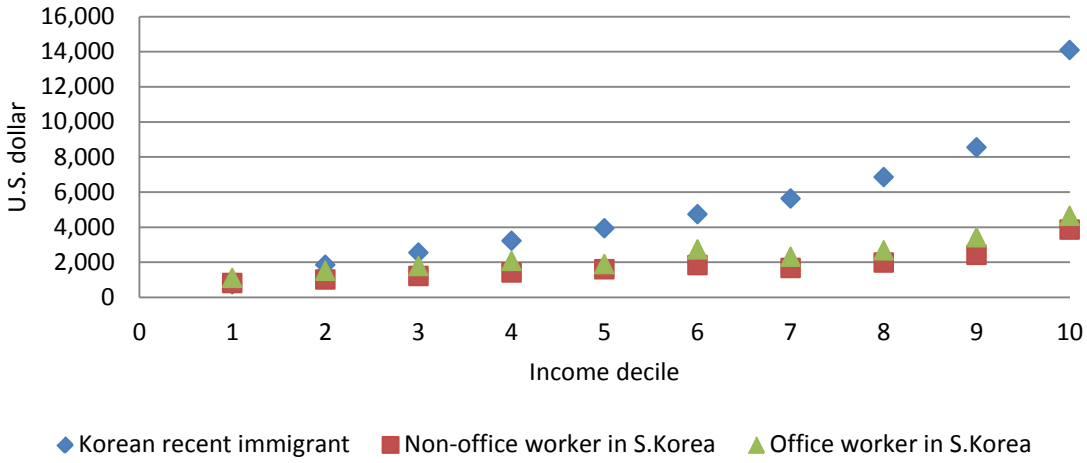
3.3.2. Positions of South Korean and Korean-American Income Deciles

How many Korean immigrants in the United States are better off or worse compared to South Koreans? I compared the per capita household income of South Korean households with that of *recent* immigrant households in the United States who are defined as Korean immigrant households and have been in the United States less than five years. The reason I compare with the recent immigrants is that the income of the newly arrived group is likely to be associated with more immediate or direct effect of the migration.

Figure 3.12 reports that, in 1980, the richest ten percent of the recent immigrant households earned per-capita incomes which were about 3.5 times higher than the richest ten percent of South Korean worker's households, while the poorest ten percent of the immigrants received income which was similar as that of the poorest ten percent of South Korean workers. In 1990, while the income gap was still largest for the tenth (the richest) decile, the gap became narrower compared to the gap in 1980 (see figure 3.13).The top ten percent of Korean immigrant households earned per-capita incomes which were about $6,000 higher than that of the top ten percent of South Korean office-worker's households and about $13,000 higher than that of the top ten percent of South Korean non-office workers households (interestingly, in South Korea, an income gap between office and non-office workers became wider considerably). The income gap at the highest decile increased again from 1990 to 2000. As seen in figure 3.14, in 2000, the per-capita income of the top ten percent of Korean immigrant households is almost twice as that of South Korean counterparts ($60,000 and $29,000, respectively).

The bottom decile, by contrast, shows the opposite. The poorest 10 percent among the Korean new arrivals to the United States receive per-capita household income which is less than that of South Korean households. In 1990, the income of the poorest group of the immigrants is about $3,000 lower than South Korean non-office worker's households and about $4,000 lower than the office worker's households. For this poorest group, the income level had not been improved from 1990 to 2000. The between-group income gap also had maintained the similar level as the one in 1990.

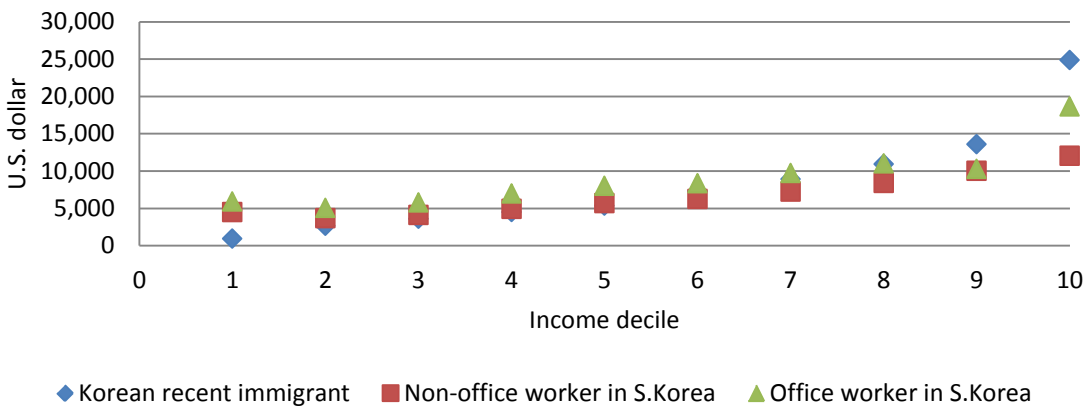
Figure 3.12. Per-capita Household Income of South Koreans (1983) and Korean Recent iImmigrants (1980)



Note: Korean recent immigrants refer to the samples that have been in the United States less than 5 years.
Source: PUMS [16] 5% 1980, 1990, 2000, for Korean immigrants; Household Income and Expenditure Survey, Korean National Statistical Office, for South Koreans.

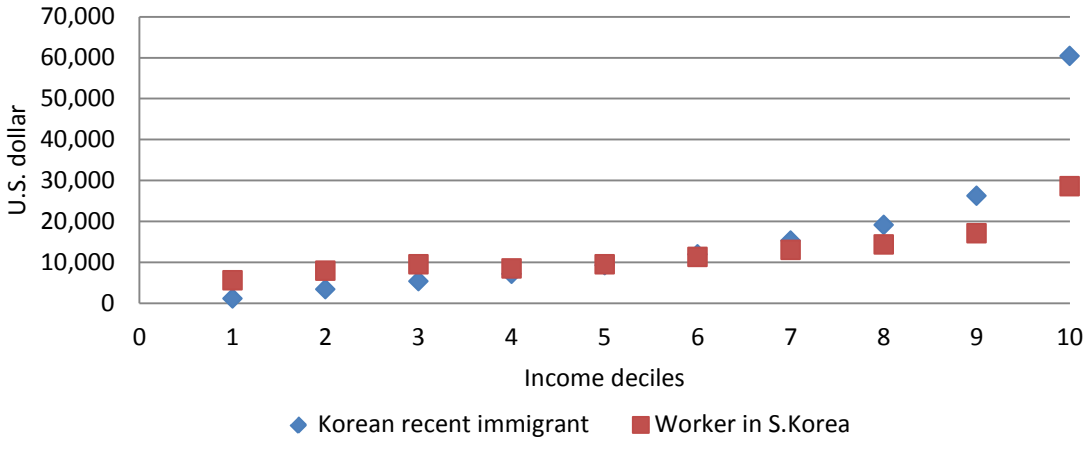
[16] The source of these data is http://usa.ipums.org/usa , managed by the Minnesota population center at the University of Minnesota. Ruggles, J. Trent Alexander, Katie Genadek, Ronald Goeken, Matthew B. Schroeder, and Matthew Sobek. *Integrated Public Use Microdata Series: Version 5.0* [Machine-readable database]. Minneapolis: University of Minnesota, 2010.

Figure 3.13. Per-capita Household Income of South Koreans and Korean Recent Immigrants, 1990



Note: Korean recent immigrants refer to the samples that have been in the United States less than 5 years.
Source: PUMS 5% 1980, 1990, 2000, for Korean immigrants; Household Income and Expenditure Survey, Korean National Statistical Office, for South Koreans.

Figure 3.14. Per-capita Household Income of South Koreans and Korean Recent Immigrants, 2000



Note: Korean recent immigrants refer to the samples that have been in the United States less than 5 years.
Source: PUMS 5% 1980, 1990, 2000, for Korean immigrants; Household Income and Expenditure Survey, Korean National Statistical Office, for South Koreans.

The income of the recent migrants may reflect the class background of the migrants; on the other hand, it could be a "pure" migration effect on income (rather than labor-market adjustment or acculturation effects). According to immigration literature, international migration from Asia is more the practice of the middle class than of the upper class or the working or poor classes (unlike Mexican migrants whose majority is working class). For elites, there is usually no motivation to leave their country because they are able to enjoy their high status in their own country. For the working class in Asia, as they have to cross the Pacific to come to the United States, international migration is not an easily available option for them given their lack of financial and informational resources necessary to make such an international migration.

The class background of Korean immigrants has varied by period (Yoon 1997). The immigrants of the 1970s-80s periods were likely to have a middle-class background (with high education and professional occupation). The 1990 cohort of immigrants is characterized by a combination of a significantly increasing number of individuals from working class who came to the United States as a way of family reunion and the declining middle-class' immigration (due partly to increasing opportunities according to the rapid growth of the South Korean economy). The 2000 cohort has been more diverse in terms of class. The 1997-98 economic crisis threatened the middle class so that they considered migration to reduce risk. The different class background of each period is reflected in figure 3.12-14.

As discussed above, although Korean immigrants have come from diverse classes, the upper class and very poor class are expected to be underrepresented among the migrants whose majority would be middle or working class. Therefore, if the income of

the Korean recent immigrants was just a reflection of their class background in the country of origin, the income inequality among the immigrants should have been lower than that among South Koreans. Unlike our expectation, however, as figures 3.12-14 demonstrate, income gaps between deciles are larger among recent Korean immigrants than among South Korean workers. It is inferred that their new country context plays some role in the widened income gap among the immigrants. The fact that the between-group income gap is larger in 1980 than in 1990 is associated with the larger gap between the South Korean and the U.S. economy in 1980 than in 1990. Although there was a selective migration, it solely was not enough to account for the migrants' much higher income at higher deciles than the income of South Koreans at the same deciles. It was the wealth of the United States and its high-paying labor market (between-country income inequality) that played a significant role in upgrading the income level of the migrants relative to non-immigrant South Koreans.

In 1990 and 2000, the gap between the Korean migrants and non-migrants in South Korea became smaller than in 1980. It seems to be due to the combination of the upgrading of the wealth level of the migrants and the rapid upgrading of the Korea's economy. Noticeable is that, through their international migration to the United States, some groups (mostly, already richer) may have experienced a dramatic increase in income within 5 years, while others (mostly, already poorer) have not. This is another role that the context of the receiving country played. The United States, since the new immigration act of 1965, has institutionalized its evident preference system to select workers with "qualified skills" who would meet the changing demand for labor according to the economic restructuring.

3.4. Evaluations of the Three Paths to Global Social Mobility

3.4.1. Global Income Decile Positions

Data and Method

Which path is more effective for South Koreans' social mobility from a global perspective? To evaluate the effectiveness, we should first know where each group (South Koreans and Korean immigrants) is positioned in global income deciles. For this analysis, first, the map of global income deciles distribution should be constructed. I used the World Income Distribution (WYD) data of the World Bank. WYD has mean per capita household incomes of income deciles or ventiles of each country.[17] The WYD database is composed of national household surveys from most of the world's countries from 1988 to 2002 in five-year interval (Milanovic 2005, 2009).

Table 3.4. Coverage of Population and Income of the surveys (%)

	Population				GDP (in US$)			
	1988	1993	1998	2002	1988	1993	1998	2002
Africa	48	76.1	67.1	77	48.7	85.2	71.2	71
Asia	92.5	94.9	94.4	96	94.4	93.2	95.6	95
E. Europe/FSU	99.3	95.2	100	97	99.4	96.3	100	99
LAC	87.4	91.8	93	96	90.2	92.8	95.2	95
WENAO	92.4	94.8	96.6	99	99.3	96.2	96.3	100
World	*87.3*	*92.4*	*91.6*	*94*	*96.5*	*95.4*	*96*	*98*

Source: Milanovic (2005:107) for 1988-98;(Milanovic 2009:6) for 2002
Notes: E.Eurpoe/FSU: Eastern Europe and former Soviet Union
LAC: Latin America and the Caribbean
WENAO: Western Europe, North America, and Oceania

[17]World Bank researchers collected household per capita income of every individual household from the household surveys. All individual household per capita incomes are ranked and grouped into deciles (10 income groups) of the country for 1988, 1993, and 1998,[17] and into ventiles (20 income groups) of the country for 2002. Every income group is assigned the group's mean value of the household per capita incomes.

The coverage of this database is impressively comprehensive. The data for the year 2002, for example, include 120 countries' household surveys representing 94 percent of the world population and 98 percent of total GDP of the world (Milanovic 2009:5). Table 3.4 presents the coverage of the WYD data.

For the mapping of the global income distribution, I first converted different local currencies of the mean incomes of each decile into comparable U.S. dollar incomes using the exchange rate (I will discuss issues about income converting below). The mean dollar incomes then were weighted by each decile's population size. Finally I ranked and grouped all the converted and weighted decile incomes (ventiles for 2002) into global income deciles.[18] Each of the global income deciles is presented with GLB, that is, GLB1~10, and income deciles or ventiles of each country are marked as, for example, USA1~10, KOR1~10, or CHN1~20.[19]

After constructing the tables of the global income deciles, I positioned the income deciles of Korean Americans on the global income deciles. Data for Korean American households has been obtained from Current Population Survey (CPS). Through this process, we can find to the locations of South Korean deciles and Korean American deciles from the view of global income standing.

For global comparisons of incomes, meanwhile, all local currencies should be converted into a common currency. Two convertors are most popular among global

[18] Therefore, there is an unavoidable assumption that everyone in the same income decile is supposed to have the same household per capita income.

[19] WYD data desegregated Chinese household per capita incomes into ventiles (20 income groups). This decision may be made due to the large size of population and the wide range of income within China that makes deciles not detail enough to present income distributions.

income inequality students: foreign exchange rate (FX) and purchasing power parity (PPP). FX, which converts the incomes of local currencies into dollars, gives us a comparison of people across the world in terms of their *cross-country* purchasing power. PPP, on the other hand, which converts the incomes of local currencies using PPP exchange rates that reflect the different domestic price level of each country, gives us a comparison of the level of domestic welfare (available consumption) (Milanovic 2005:12). Which conversion rate is better depends on the purpose of the research at hand (Korzeniewicz and Moran 2007:567). Because of their nation-bounded approach, the majority of studies of global income inequality use PPP (Milanovic 2005:13). I, however, used FX to convert incomes because FX-adjusted dollar income, as commonly used in a global market, is a better indicator of purchasing power than PPP-adjusted income in a global market. That is, FX-adjusted income is more fit to this study whose interest is income status at the global level.

Results

Within-country mobility

Figure 3.15indicates the locations of the selective country deciles in the map of global income deciles. The range of within-country mobility varies by country. The range of income distribution *within* China has enlarged from 1988 to 2002. During this period, the richest 15 percent of Chinese experienced significant upward global income mobility by jumping up by three deciles (from GLB5 to GLB8). However, the poorest 10 percent remained in the position of world's poorest 10 percent (GLB1) during the same period. A wide range of within-country income distribution of China is consistent with the literature reporting notable increases in income inequality within China for the last two decades

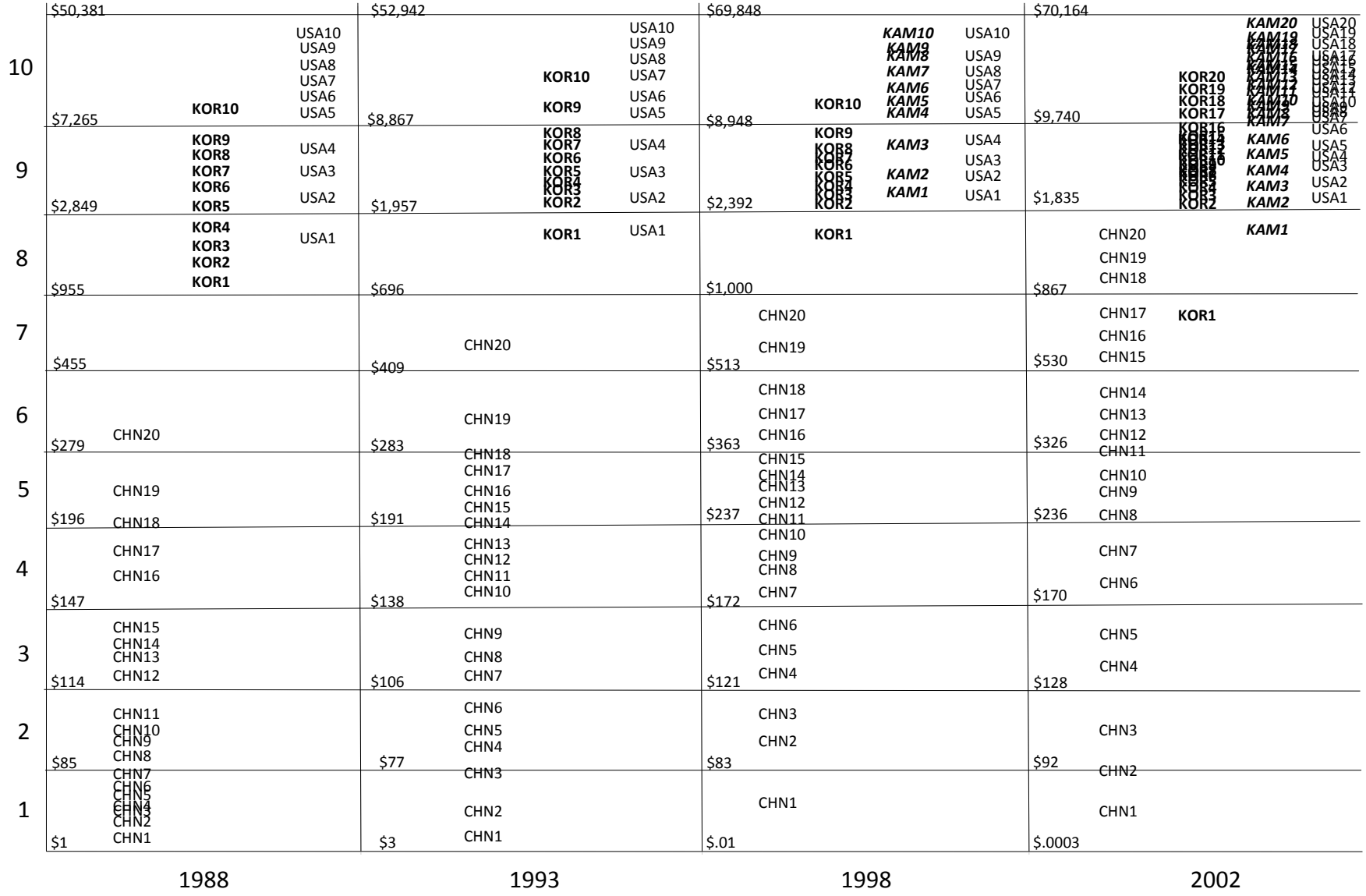
(Fan, Kanbur, and Zhang 2009). What we know from this is that China, through its rapid industrialization, produced a significant portion of the middle class of the world, yet not everyone has benefited from its economic growth. In the context of China characterized by a wide distribution of income, the within-country income mobility can lead to a significant change in one's global income position as well. Theoretically, the within-country income mobility strategies such as educational attainment or migration to urban areas in China make it possible for Chinese people to move up from GLB1 to GLB8.

The within-country mobility strategies appear not that effective among South Koreans from the global perspective. Between 1988 and 2002, most South Koreans were constantly found to be between GLB8-10, or within the richest 30 percent in the world. This implies that within-country mobility (e.g., through higher education, internal migration, etc.) allows South Koreans to cross two global income deciles at most. The effect of the within-country mobility on the global income mobility appears to be even smaller for Americans. All U.S. income groups find themselves in the world's richest 20 percent (GLB9-GLB10) between 1998 and 2002. Thus, it can be said that previous stratification researches focusing on wealthy countries account only for stratification of the richest quarter of the world population.

Between-country mobility

Unfortunately, it is not yet possible to see how the national economic growth of South Korea has affected global income mobility at a decile level due to the absence of data on world incomes prior to 1988. However, given the fact that 1988 already found all

Figure 3.15. Global Income Decile Positions of South Korea, the U.S., China, and Korean Americans, 1988-2002



the South Korean income deciles in the position of the upper-middle class (within the richest 30 percent) of the world, which is a remarkable shift from its globally lower income status until 1980, it is reasonable to believe that every South Korean income decile rose during the period of its industrialization.

The upgrading of South Korea continued but at a slower rate between the late 1980s and the early1990s. The period from 1988 to 1993 saw continuing economic growth, which raised the global standing of most of the South Korean income deciles. For example, in 1988, there was only one decile (KOR10) in the group of the richest 10 percent globally (GLB10), but two deciles in 1993. The poorer South Koreans also experienced upward mobility in global income standing. In 1988, 40 percent of South Koreans (KOR1-4) belonged to GLB8, while only 10 percent remained there in 1993 and the other 30 percent moved up to GLB9. The 1988-1993 period supports the "growth-with-equity" thesis of East Asian countries (World Bank 1993), exhibiting that the benefit of South Korean economic growth for global income mobility was widely distributed to all income groups.

The next period, 1993-98, gives us the opportunity to observe the impact of the economic crisis of 1997 on the global income standing of South Korean income deciles. During this period, there were no groups that experienced global upward/downward mobility except for KOR9 that fell down to GLB9. That is, even though South Korea experienced its economic crisis in 1997, that crisis did not affect substantially the global income status of South Koreans. The following period, 1998-2002, demonstrates that there was no significant change among South Koreans in their income position at the global level, suggesting that the South Korean economy did not experience significant

mobility in the country's income position of the world from 1998 to 2002. Given the stable patterns found between 1993 and 2002, one may argue that South Korea's era of industrialization has already passed, so mobility through national economic growth is hardly expected in the future for South Koreans.

Global social mobility (Jumping categorical inequality)

Unlike the between-country perspective that places countries on the world hierarchy, my global stratification perspective originally aimed to place individual households on the global income distribution. Ideal for the global perspective is to mark the locations of every household on the global income deciles. However, this study uses decile units, rather than individual household units because WYD data are composed of the decile units. To discern the effect of country on world income status, I locate Korean American (KAM) deciles in the map of the global income deciles. For data on Korean Americans, I used the Current Population Survey (CPS)[20] for 1998 and 2002 (the identification of Korean ethnicity is not available in 1988 and 1993 CPS). According to figure 2, in 1998, seven deciles (representing 70 percent) of Korean Americans (KAM4-10) belonged to the richest top ten percent of the world population, while only one decile of South Koreans did. The decile comparison for 1998 also exposes that KOR9 (i.e, the second highest income decile among South Koreans) is placed in a lower position than KAM4 (i.e., the fourth poorest income decile among Korean Americans) in the global income deciles. In 2002, 15 ventiles (75 percent) of Korean Americans appear in the global top ten percent (GLB10) whereas 4 ventiles (20 percent) of South Koreans were

[20]The 1998 and 2002 CPS data were retrieved from IPUMS-CPS (http://cps.ipums.org/cps/) (King et al. 2010).

found there. The percent in GLB10 is seven times higher for Korean Americans than for South Koreans in 1998, but only 3.75 times higher in 2002.

This result shows the significant effect of the country of residence on the global income standing. However, it is an over-simplification to attribute the higher income status of Korean Americans compared to South Koreans solely to the country effect. Some immigration scholars highlight the selective migration thesis: Immigrants, especially Asian immigrants, were not randomly selected from the population of their country of origin (Lobo and Salvo 1998). They are not only people who have frontier spirit with great enthusiasm for the American dream, but they can afford to bring with them human capital and enough resources to succeed in the country of destination. Therefore, in order to answer whether or to what extent the higher income status of Korean Americans can be attributed to something related to their migration to the U.S., incomes of the two groups should be adjusted for their demographic and socioeconomic status (This issue is discussed in chapter 4 in more detail)

3.4.2. Skill versus Location

Global comparisons of wages in each city in the world shed light on the relative effects of skill and location on global stratification. Using UBS's world wage data, I examine the wage effect of within-country occupational mobility (related to path 1 mobility), within-occupation country mobility (related to path 2 mobility), and international migration (related to path 3 mobility).

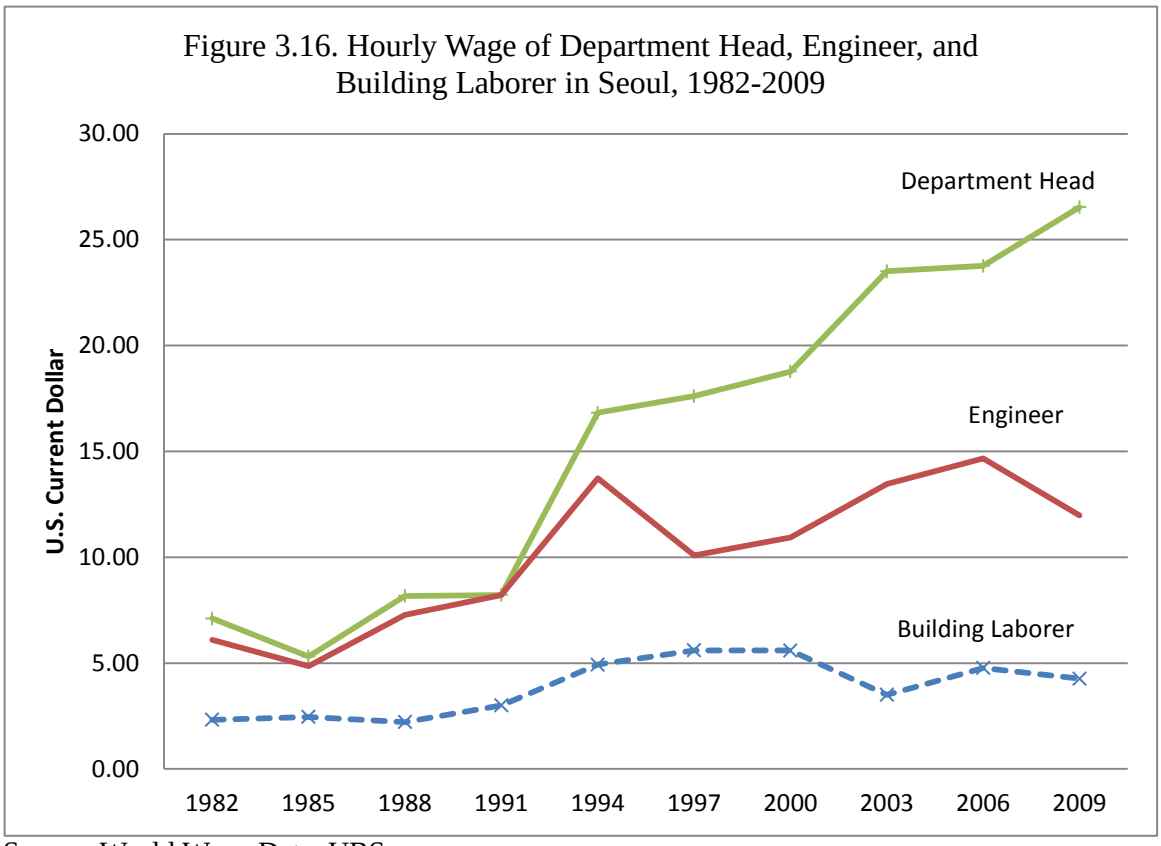
The wage effect available by a within-country occupational mobility is measured by the wage gap between occupations at the bottom and at the top. There are 14

occupations in UBS dataset. Among these 14 occupations, I take out female occupations (i.e., female factory workers and female sales assistants) to control gender disadvantages. (In fact, both female occupations are the lowest and second lowest-paying occupations among 14 occupations). After removing those female occupations, I rank each of the 12 occupations by its wage in 2009. The top occupation is "department head" and the bottom one is "building laborer." "Engineer" is in the middle, which is 7th (out of the total 14 occupations).[21]

A building laborer in Seoul, by upgrading his/her human capital, can be promoted ideally to a department head in the same city. This maximized occupational migration would increase his/her hourly wage by about 2-3 times (or $3-5) in the early 1980s. As the wage of department head has grown more rapidly, as of 2009, a building laborer is possible to raise his/her hourly wage by more than five times (or about $21). In the case of engineer who represents the middle in wage status as of 2009, the occupational mobility to department head provides an hourly wage increase of about $14 or twice of their engineer wage.

[21] In 2009, Department heads were defined as "Operational head of a production department with a staff of over 100 in a sizeable company in the metalworking industry; completed vocational training and many years' experience in the field; about 40 years old married, two children"; Building laborers were defined as "Unskilled or semi-skilled laborer; about 25 years old, single" ; Engineers were defined as "Employed by an industrial firm in the electrical engineering sector, university or technical college graduate with at least 5 years' work experience; about 35 years old, married, two children" (UBS 2009:26-38).

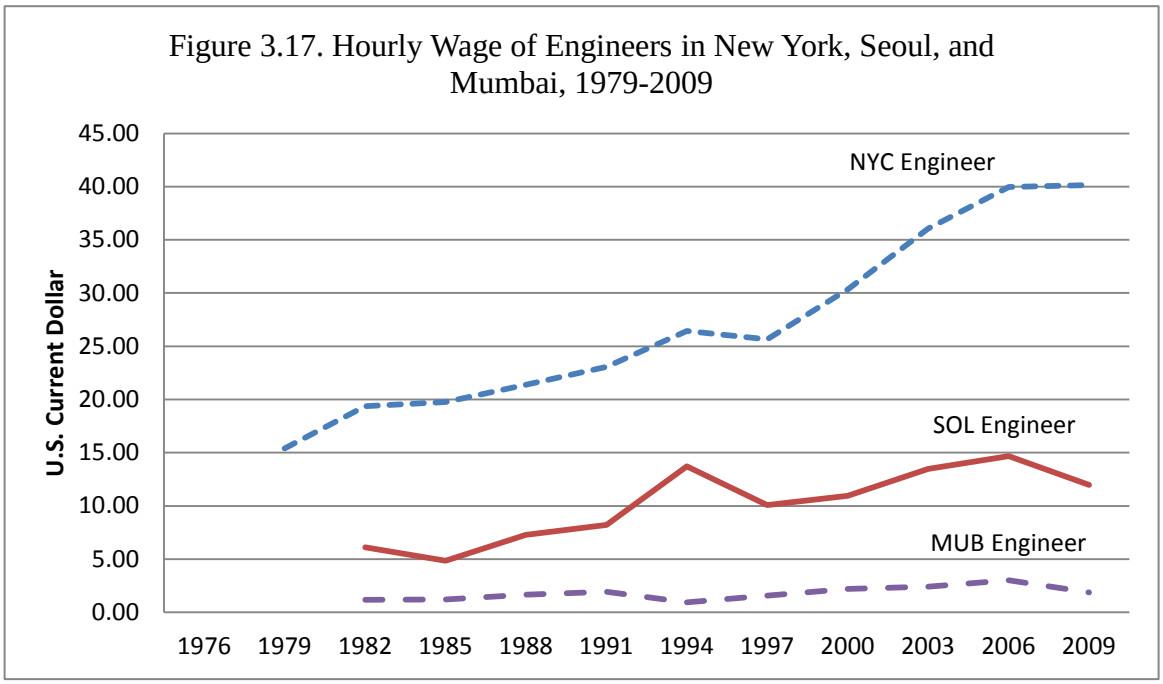
Figure 3.16. Hourly Wage of Department Head, Engineer, and Building Laborer in Seoul, 1982-2009



Source: World Wage Data, UBS

What if the Seoul engineer migrates to New York as an engineer? Figure 3.17 shows the wage mobility available from migration when migrant workers maintain their occupation. An engineer in Seoul can increase his/her hourly wage more than four times through migrating to New York City (from 11.98 to 40.16) in 2009. That is, for a Seoul engineer, migration to New York as the same engineer provides twice the wage benefit as upward occupational mobility to department head in Seoul. Such migration effects are much evident in the case of the migration from poorer countries such as India. An engineer in Mumbai raises an hourly wage by 21 times by moving to New York City (from 1.88 to 40.16). These cases demonstrate how effective and important the between-country mobility is in a global perspective.

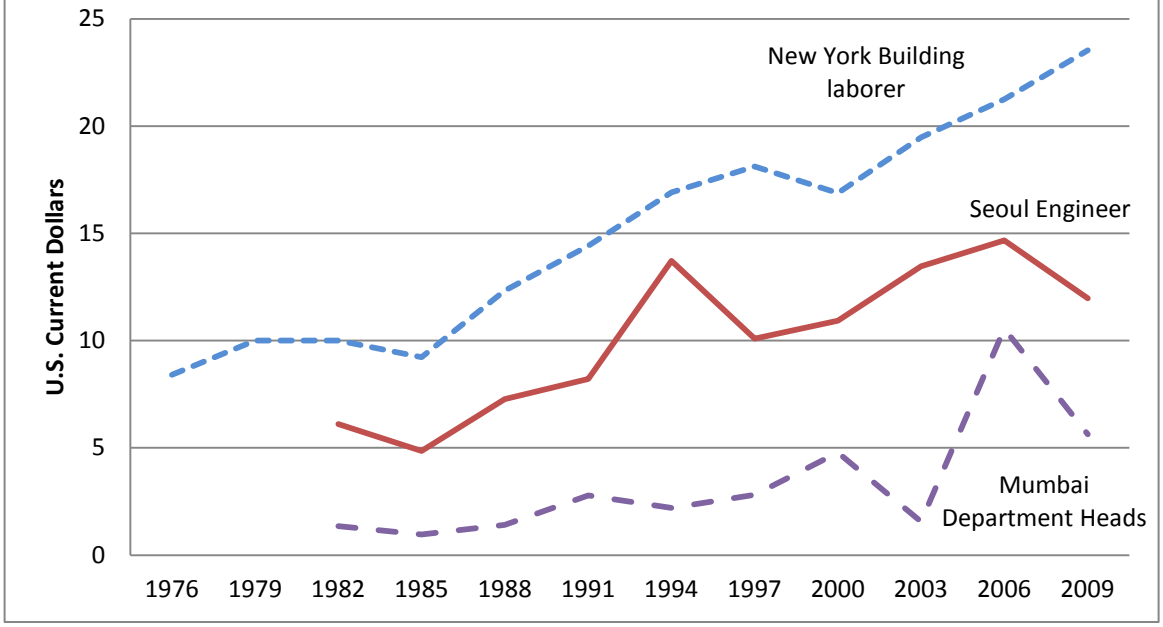
Figure 3.17. Hourly Wage of Engineers in New York, Seoul, and Mumbai, 1979-2009



Source: World Wage Data, UBS

In many cases, international migration accompanies occupationally downward mobility. It is common among Korean immigrants in the United States (Min 1996; Yoon 1997). Even if the Seoul engineer experienced occupational downward mobility, there is still a wage advantage from migration. As figure 3.18 displays, as of 2009, if a former engineer (an occupation in the middle) in Seoul find his/her job in construction as a building laborer (an occupation at the bottom) in New York, he/she would earn wage that is twice high as the wage of an engineer in Seoul. In the case of Mumbai, even a worker at the top occupation (department head) hardly earns half of the wage of a building laborer in New York. This comparison sheds light on why many highly educated Indian workers work in occupations of lower status in New York.

Figure 3.18. Hourly Wage of Selected Occupations in New York, Seoul, and Mumbai, 1976-2009



Source: World Wage Data, UBS

Chapter 4. Human Capital and Categorical Inequality: A Transnational level

Being interested in the changing roles of human capital and categorical characteristics in different contexts, this chapter investigates the relative importance of human capital to location (i.e., country of residence) in transnational and global dimensions. Although their achievements still play a significant role, the status of international migrants is also vulnerable to transnational context shaped by the interrelationship between countries of origin and of destination. The nation-bounded approach of the modernization school, however, leaves little room for critical assessments of the impacts of stratification operating at a transnational level that may rearrange the roles of human capital and ascribed attributes. Thus, through investigating the social mobility of international migrants, we can test the thesis of modernization school (i.e., the central importance of human capital) at a transnational level.

This chapter, with a transnational perspective,[22] situates the incomes of South Koreans and Korean Americans within a broader pattern of transnational social mobility. Although social mobility can be defined in various ways, my primary focus lies on income status as an indicator of their social status because income is an indicator that can be compared more objectively across nations.

In order to figure out the social mobility effect of Korean migration to the United States, firstly I examine the current social status of Korean Americans in the United

[22] Observing increasing transnational migrants and other transnational activities, some sociologists and anthropologists claim that we should shift away from the traditional approach that takes nation-states as the unit of analysis, which is called methodological nationalism, and should take transnational or global perspective. See Levitt and Jaworsky (2007), Martin and Beittel (1998), and Wimmer and Glick Schiller (2003) for theoretical discussion. There are also some empirical studies using a transnational perspective (e.g., Itzigsohn et al. 1999; Ong 1999).

States with a primary focus on whether Korean immigrants, compared to other racial groups, enjoy "just" returns to their human capital in the U.S. labor market. Secondly, I investigate their pre-migration social status. Although there is no nation-wide survey providing information on pre-migration income and occupations, there are some regional surveys that allow us to grasp their occupational status before migration. Unfortunately, pre-migration income information is not available even in these regional surveys. With this limitation, I measure income mobility effects indirectly by comparing the income status of South Koreans with that of Korean Americans. Thus, we should be aware that this analysis is not about the individual-level effects of international migration measured by differencing the individual's income before and after migration. The findings should be understood as displaying the structure that limits or expand possible levels of income mobility. By integrating and ranking the incomes of South Koreans and Korean Americans in a single space, we shall figure out how much higher or lower the social status of Korean Americans are compared to that of South Koreans.

One may criticize that a simple comparison can overestimate the income mobility effect of migration to the United States, as Korean Americans are more likely to have a middle-class background with higher educational attainment compared to the average of the population in South Korea. My last interrogation is, therefore, whether the effect of international migration remains significant after taking into consideration the differences in basic demographic and socioeconomic status between South Koreans and Korean Americans. This analysis may shed light on whether the income status of Korean Americans is associated with educational attainment or more with residing in the United States. In the conclusion, I discuss the implications of the income effect of U.S. residence

on our understanding of transnational stratification, paying particular attention to how a mechanism of stratification that operates on a transnational level can be different from the processes of social selection perceived by the modernization school.

4.1. Socio-economic Status of Korean Americans

There is an extensive volume of literature on social and economic status of Korean immigrants in the United States (e.g., Light and Bonacich 1988; Min 1994, 1996; Yoon 1997). These studies have focused on the status of Korean Americans relative to other racial and ethnic groups in the United States. Asian Americans, often being called "model minority," are portrayed as an economically successful immigrant community (Sakamoto, Goyette, and Kim 2009; Sakamoto and Xie 2006). The Korean American community is not an exception. The major indicators of socio-economic status (e.g., educational attainment, occupations, and income) seem to support this generally-held public perception of Korean immigrants.

First, a comparison of educational attainment reveals that Korean immigrants are highly educated: half (50.6%) of first-generation Korean immigrants hold a bachelor's degree or higher, which is a significantly higher percentage than the general U.S. population (29.3%) and even non-Hispanic Whites (33.5%).

Table 4.1. Social and Economic Status by Race (%), 2010

	Korean Immigrant*	White	Black	Hispanic	Asian	US General
Educational level						
Less than high school graduate	6.8	7.2	15.7	37.6	12.5	13.1
High school graduates	23.9	28.4	34.5	28.1	16.2	28.5
Some college/Associate degree	18.7	30.8	31.9	21.6	19.2	29.1
Four-year college graduates	34.2	21.4	11.9	8.9	30.9	18.8
Graduate school graduates	16.4	12.1	6.0	3.9	21.3	10.5
Employment status						
Labor force participants	69.3	79.1	72.9	77.4	80.2	78.0
Unemployed	7.1	7.7	14.5	10.6	7.3	9.0
Class of workers						
Employee of Private Company	57.7	64.3	65.8	75.4	70.3	66.4
Employee of Non-profit Organization	6.3	8.1	7.9	4.7	6.9	7.5
Employee of Government	6.5	15.8	20.6	10.4	11.4	15.4
Self-employed in unincorporated business	15.8	7.3	4.1	7.2	6.2	6.9
Self-employed in incorporated business	12.7	4.3	1.6	2.2	4.9	3.7
Unpaid family worker	0.9	0.2	0.1	0.1	0.3	0.2
Occupational distribution						
Management, Business, and Financial operators	14.7	15.7	8.8	11.9	11.8	14.7
Professional and related occupations	38.0	33.2	33.2	36.2	31.2	33.3
Service	19.2	19.8	19.5	21.1	16.9	19.7
Sales and office	4.8	5.6	6.9	6.3	4.5	5.7
Cons, Extract and Maintenance	6.4	10.5	14.1	10.7	11.3	10.9
Prod, Trans, Material moving, military	16.8	15.2	17.6	13.8	24.4	15.8
Occupational prestige scores+ (no.)	42.95	42.98	37.39	34.22	44.59	41.12
Economic well-being						
Mean Total personal income	44,301	49,584	32,512	30,593	54,102	44,908
Mean Total family income	81,225	86,139	55,743	57,105	99,937	78,775
Mean Household per-capita income	29,651	36,438	23,447	19,469	35,335	32,224
Percent below poverty level	11.4	8.7	21.4	20.1	8.5	11.9
Duncan Socioeconomic index (no.)	37.72	42.19	30.86	27.91	43.28	38.65
Total N (unweighted)	4,128	1,076,850	146,893	188,805	74,743	1,522,064

Source of data: American Community Survey 2010.

Note: All samples are aged 25-64 who do not attend school in 2010

* The samples are the first-generation Korean Americans who immigrated to the U.S. at 18 years or older

+ Occupational prestige scores indicates Siegel's scores

Even though Korean immigrants have considerably higher educational attainment than the general population, the gap between Koreans and the U.S. general is not so much as the gap in education. Among Korean immigrants, 51.7 percent hold managerial and professional occupations, while 48 percent of the general population do. The occupational prestige score is slightly higher for Korean immigrants (43.14) than for the general population (41.12), but again this gap is not as large as the gap seen in educational attainment between the two groups.

Korean immigrants are different from the general population in terms of employment status. Compared with the U.S. general population, first generation Korean Americans are less likely to be employed by either private companies or government sectors. Instead, they are more likely to be self-employed or unpaid family workers. The rate of self-employment among Korean immigrants is especially high. Nationally, 28.5 percent are self-employed, while the rate is 10.6 percent for the general population. Among self-employed Koreans, unincorporated business appears more popular than incorporated business. In other words, independent small store owners form a majority of the Korean self-employment. Other researches examining specific regions or different periods confirm the pattern of a higher rate of self-employment (Park 1997; Light and Bonacich 1988; Bates 1997; Kim 2006; Min 1995; Yoon 1997).

A comparison of income status, like the comparison of occupational status, illustrates that the educational attainment of Korean immigrants does not get rewarded at the same rate as white Americans. First-generation Korean immigrants earn on average

$44,301 for their personal income. This is very similar to the average personal income of the U.S. general population ($44,908). The average family income of the Korean immigrants is a little bit higher than that of the general population ($81,225 and $78,775 respectively). However, taking into account the difference in family size, we can find that the per capita household income of Korean immigrant households falls to a lower level than its U.S. average ($29,651 and $32,224, respectively). The Korean immigrants, despite their higher educational attainment, earn on average lower incomes (personal, family, and per-capita household income) compared to those incomes of non-Hispanic whites. Given the situation of limited returns to educational attainment in the U.S. labor market, Korean immigrants have found self-employment as an alternative route to increase their income. Some studies find a smaller disadvantage in earnings among the self-employed than among wageworkers. For example, Light and Bonacich (1988:174-175), using 1980 PUMS data, reported that the earnings gap between Koreans and non-Koreans in Los Angeles was 30 percent among wage workers, but only 24 percent among the self-employed after controlling for the level of education. Thus the case can be made that, if not for self-employment, the income of Korean immigrants would have been below reported levels. All indicators demonstrate that first generation Korean immigrants do not surpass the U.S. general population in regards to socioeconomic status. And, despite their higher educational attainment, their overall socioeconomic status is lower than that of non-Hispanic whites.

4.2. Occupations of Pre- and Post-immigration: Upward or Downward Mobility?

The higher educational attainment may lead us to conjecture that Korean immigrants come mainly from the middle class in South Korea. This was true until the mid1970s. The vast majority of immigrants between 1965 and 1975 were white-collar workers (Yoon 1997:91). From 1965 to 1974, occupational preferences were the most popular entry mechanism among Korean immigrants (Yoon 1997:86). Each year, about 30 percent came to the U.S. through U.S. occupational preferences. These people, several years after their arrival, obtained U.S. citizenship and became eligible to invite their siblings from South Korea (Yoon 1997:87). As a result, after 1976, family network-based immigration increased rapidly and it diversified the class background of immigrants. Consequently there was a diminishing selectivity in occupation: the relative number of professional workers has declined on one hand, while the representation of manual laborers, farmers, and service workers has increased (Yoon 1997:90). This history of immigration created a diverse Korean immigrant community regarding class background (Abelmann and Lie 1995:77).

Although there is no nation-wide survey on the pre-migration background of Korean Americans, there are two regional surveys that lead us to grasp a better picture of the individual-level occupational transition of Korean immigrants. The one is a DC-based survey, *A Survey of the Washington DC Korean Community*, which was conducted in 2003. According to the DC survey, among 183 Korean male immigrants whose pre-migration occupation was answered, the largest proportion (31.7%) had professional occupations before their immigration, followed by those who used to be self-employed (10.9%). Technical workers account for 9.3 percent of the pre-migration occupation, and

the same percent is also found for service workers. Students constitute the fifth popular pre-migration occupation, recording 8.7 percent. The other regional survey is a LA-based survey conducted in 2004, *Immigration and Intergenerational Mobility in Metropolitan Los Angeles (IIMMLA).* This survey sampled young adult (ages 20-39) children of immigrants in metropolitan Los Angeles (Rumbaut et al. 2004). There are 174 samples for second-generation Korean Americans whose father's pre-migration occupation is known. Although using a different classification of occupations, the LA survey displays a similar pattern of distribution of pre-migration occupation to that presented by DC survey. According to the LA survey, 39.8 percent of Korean fathers had worked as professional or technical workers before their migration, and 21.9 percent as managers, officers, or proprietors.

Table 4.2. Occupational transition of selective pre-migration occupations among Korean male immigrants in D.C. (%)

	Occupation before migration				
Current occupation in U.S.	Professional	Self-employed	Service	Technical	Student
Managerial	5.2	0.0	11.8	0.0	6.3
Professional	58.6	15.0	5.9	17.6	62.5
Sales & administrative	3.4	5.0	5.9	5.9	0.0
Service	6.9	20.0	29.4	5.9	0.0
Farming, forestry, & fishing	0.0	0.0	0.0	0.0	0.0
Precision, production, crafts, & repair	0.6	5.0	0.0	5.9	0.0
Fabricator & laborer	1.7	0.0	5.9	0.0	0.0
Self-employed	12.1	35.0	29.4	47.1	12.5
Technical	3.4	15.0	11.8	17.6	12.5
Unemployed	5.2	5.0	0.0	0.0	0.0
Other	3.4	0.0	0.0	0.0	6.3
Total (N)	100 (58)	100 (20)	100 (17)	100 (17)	100 (16)
% out of total pre-migration occupations	31.7	10.9	9.3	9.3	8.7

Source: A Survey of the Washington DC Korean Community in 2003

Now the question is what the occupational transition looks like. For instance, how many professional workers in South Korea keep their professional status; how many of them have changed to other occupations after immigration? Among Korean male respondents in D.C., about 40 percent failed to uphold their professional occupations after their arrival. A considerable proportion (12.1%) of the pre-migration professionals became self-employers after coming to the United States. Among the formerly self-employed, 35 percent are still self-employed, while 20 percent switched to service occupations. Most interesting is those who used to have technical occupations in South Korea. Only 17.6 percent hold the same kind of occupations, but almost a half (47.1%) chose self-employment for their livelihood in the new destination. For immigrants who came as students, the majority (62.5%), not surprisingly, took professional occupations in the United States. The LA survey (IIMMLA) illustrates a similar pattern. Among Korean immigrant fathers who had professional or technical occupation in South Korea, 59.7 percent uphold the same professional or technical occupations, 12.5 percent became craftsmen, and 9.7 percent are found among managers, officials, and proprietors. The rate of staying in a professional occupation is lower for Korean immigrant fathers than for Filipino (81.8%) and Vietnamese immigrants (75.0%), while similar to that for immigrant fathers from China (58.3%). Given the fact that Filipino and Vietnamese immigrants are more likely to retain professional jobs, language barriers (which are less significant among Filipinos) on one hand, and resources for self-employment (which are less prevalent among Vietnamese) on the other hand, may serve as driving Korean immigrants away from professional occupations. The existing literature and the results of

DC and LA surveys, all advocate the argument that Korean immigrants are likely to keep or fall down in regards to their occupational status, not move up.

Many of these Korean migrants who changed their occupation chose self-employment after arrival to the new country. In fact, self-employment was one of only a few options they can choose due to language barriers and non-transferrable human capital (Bates 1997; Min 1996; Waldinger 1996; Chiswick and Miller 2009). Self-employed Koreans are more likely to be found in the Korean ethnic enclave or other minority communities, not in mainstream society, while playing a role as a middleman minority (Bonacich 1973; Light and Bonacich 1988; Min 1996). The Korean ethnic enclave also finds many Korean employed workers who are not professionals.

Many non-professional Korean immigrant workers find themselves in a secondary labor market of the dual labor-market systems (Bonacich 1972; Gordon 1972; Gordon, Edwards, and Reich 1982). Secondary labor markets are characterized by lower returns to human capital due to a lower demand for skill, compared to primary labor markets. The returns to human capital are more complicated in ethnic enclaves or "middleman" businesses. Wilson and Portes (1980), distinguishing ethnic enclaves from the secondary labor markets, argued that enclave workers enjoyed significant returns to past human capital, but such returns were not found among immigrant workers in the secondary labor market. Regardless of whether they are working in the ethnic enclave or in the secondary labor market, given the characteristics of these labor markets, it seems unlikely that Korean immigrants receive as much of earnings returns to their human capital or occupational status as they received or enjoyed in the pre-migration labor market. Why, despite the high likelihood of occupational downward mobility and the loss of the values

of their achieved human capital in South Korea, does Korean immigration to the United States continue to occur? What are the structural contexts that make this migration rational?[23] This question is difficult to answer within a nation-state framework that focuses only on the U.S. context. Instead, we must take the transnational context of stratification into consideration.

4.3. Comparisons of Incomes of South Koreans and Korean Americans

The earlier discussion indicates that occupational opportunity is less attractive for Korean migrants to the United States. Then what is it that motivates their migration? Income, as a major indicator of social status, can be considered as one form of compensation for the downgrading of occupational status.[24] Income is a social status indicator that gains more importance in a transnational context. For instance, a significant number of Korean Americans have considered returning to South Korea with money they earned in the United States (World Korean, 9.15.2010). In many cases, this was motivated partly by the relatively higher value of the dollar and its purchasing power in South Korea. Transnational investment is also often practiced. Many Korean Americans

[23] Whether or how rational individual decision making is depends on a context as Portes noted, "global processes ultimately create the context for individual-level decision-making: "It is within the context of extensive social and economic penetration of peripheral societies by the institutions of advanced capitalism that individual cost-benefit calculations make sense."(Portes 2007:77, in Sanderson 2012:463)"

[24] Seeking better educational opportunity for their children is also one of main reasons for Korean immigrants in the United States. The cost for English education has rapidly grown so that it became a heavy burden for parents in South Korea. In this situation, many middle-class parents consider educational migration to the United States as a good way to provide better English education with less competitive cost (by letting their children attend a public school). That is, in further research, income benefits of the migration should include a benefit from saving the expense of English education.

visited South Korea in 2008 and 2009 to purchase real estate, when the value of Korean currency (won, or KRW) fell drastically relative to the U.S. dollar (Joongang.ca, 3.30.2009). Observing the purchasing power of Korean Americans in South Korea, South Koreans also experience the value of the U.S. dollar. The gap in purchasing power between Korean currency and the U.S. dollar is also found when Koreans consume in the United States. Today, many middle-class Korean parents have sent or came with their children to America for an English education, and find themselves in a struggle to pay for tuition and living costs when their money is devaluated by the exchange rate between KRW and US dollar. As people become more aware of the quality of life for people in other countries, the reference group for people's subjective identification of their social status becomes more transnational. This section investigates on the income standing of South Koreans and Korean Americans in a transnational perspective. Comparisons of income status of South Koreans and Korean Americans may improve our understanding of transnational stratification revolving on Korean international migration.

Data and methods

For transnational income comparisons, I merged two national surveys: the National Household Income and Expenditure Survey (NHIES) in 2007 (administered by the Korea National Statistical Office) for South Koreans, and the 2005-07 American Community Survey (ACS) 3-year dataset for Korean Americans (Ruggles et al. 2010). In this exercise, only householders are selected for samples.[25] I distinguished the entire

[25] While in ACS each individual household member in the same household has its own row , the arrangement of the data in NHIES is based on household units. That is, spouse's and children's information (such as education, income, occupation, etc) are arranged in

Korean samples into three subgroups: Koreans who remained in South Korea (hereafter, South Koreans, or KOR), Korean immigrants who came to the United States at 18 years old or older (hereafter, Korean immigrants, or KIM), and the children of Korean immigrants who came to the United States at 17 years old or younger or were born in the United States (hereafter, children of Korean immigrants, or KUS). The purpose of separating Korean Americans into KIM and KUS is that KIM is expected to present a more direct income effect of migration to the U.S., while KUS to suggest the migration's more indirect and potential effect for next generations as a proxy for intergenerational mobility. Each Korean group is again divided into ten income deciles from the richest 10 percent (marked as KOR10, KIM10, and KUS10) to the poorest 10 percent (as KOR1, KIM1, and KUS1) based on the ranked per-capita household income.[26] The income level of each decile is represented by the mean household per-capita income. There are total 30 income deciles (i.e., KOR1~10, KIM1~10, and KUS1~10). I used FX to convert South Korean's income in Korean won (KRW) to the U.S. dollars. The average rate of exchange in 2007 was 929.2 won to 1 dollar. [27]

Results

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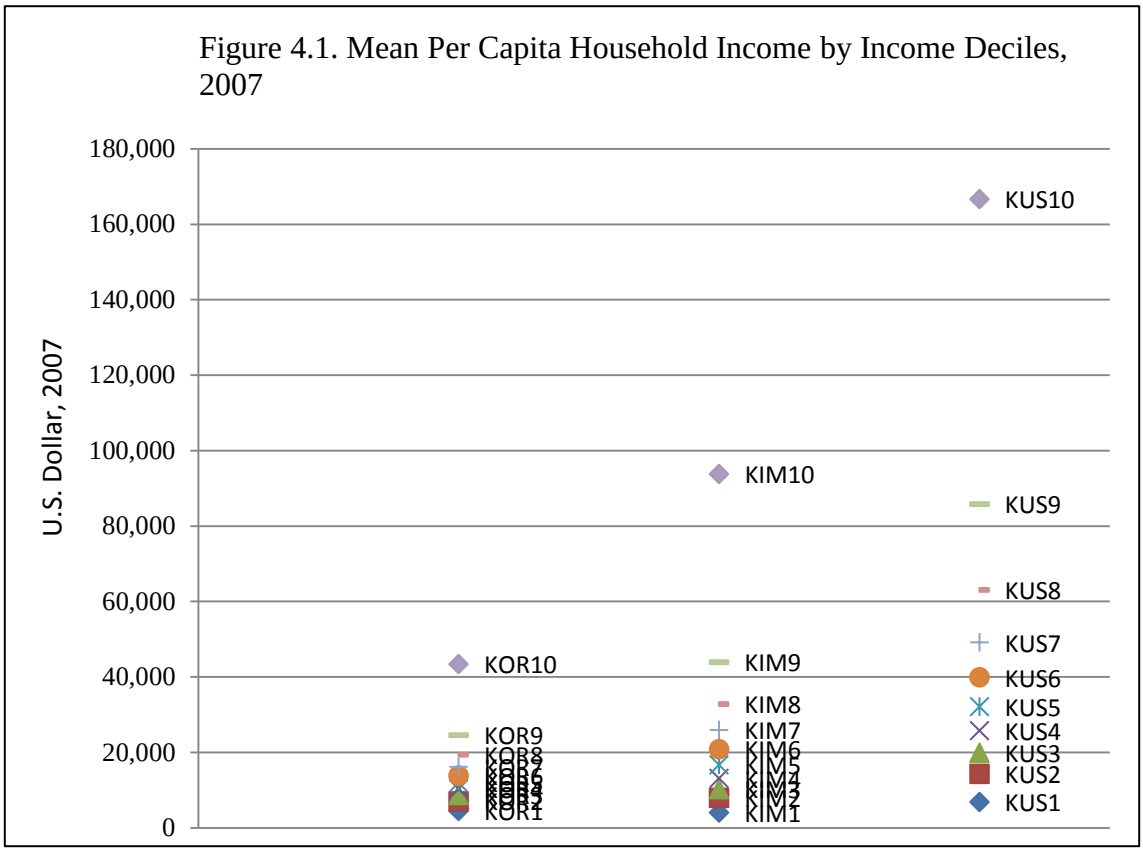
the same row with householder's income. This makes it difficult merging data for spouses and children in two datasets.

[26] To estimate per-capita household income, I divided total household income by the size of household. I did not use "equivalence" per-capita income (which divides by the square root of the family or household size). The equivalence income measure takes into account some economies of scale. Therefore, this is preferred in studying welfare or well-being of family. However, I did not use this equivalence measure because my interest was more in the economic position of households, rather than the welfare.

[27] For the average rates of exchange in each year, see Historical Exchange Rates (Chart and Table, 1971-present) (http://currate.com/historical-exchange-rates)

Figure 4.1 exhibits that KUS consistently earned the highest mean household incomes at each income level, followed by KIM. South Koreans (KOR) earned the lowest mean income at every decile (except for the lowest decile).



Note: Selected samples are householders only.
Source of data: The National Household Income and Expenditure Survey in 2007 for South Koreans (KOR); the 2005-07 American Community Survey 3-year dataset for Korean Americans (KIM and KUS)

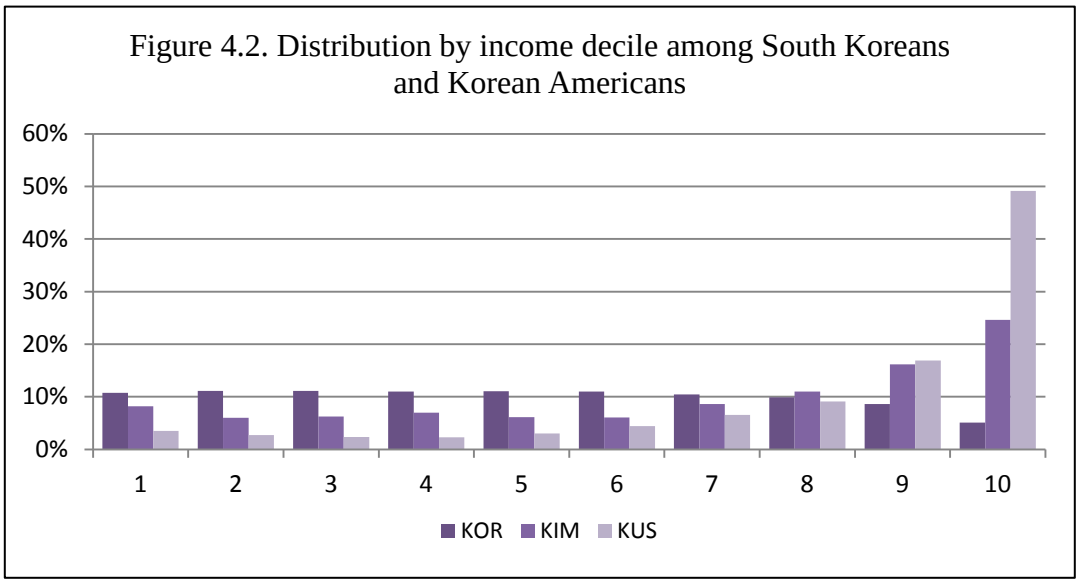
However, income gains from crossing the border are not equally distributed across income levels. Figure 4.1 reveals a trend that the richer the income group, the larger the gap between South Koreans and Korean Americans. The gap between the groups in decile's mean income is largest at the richest decile, and second largest at the second richest decile. By contrast, there is no noticeable gap found between South Koreans and

Korean Americans at the poorest decile. The income of KIM1 (the poorest decile of Korean immigrants) is even lower than that of KOR1. Similarly, the other income deciles in the lower half do not present substantial income gaps between Koreans and Korean immigrants. The results imply that Korean people who have middle- and upper-class background gain more income benefit from migration to the United States, while those in a lower class do not.

To estimate the income standings of KIM and KUS relative to KOR, I included those groups and constructed transnational income deciles for South Koreans and Korean Americans, by ranking all households in the three Korean groups from richest ten percent to poorest ten percent based on household per-capita income. Then I examined what proportion of each Korean group is found at each income decile. According to figure 4.2, about one fourth of KIM and a half of KUS are found in the richest 10 percent of all Koreans, comprising both South Koreans and Korean Americans, while only 5 percent of KOR are placed in the same group. Expanding our look to the second richest decile (i.e., KOR9, KIM9, and KUS9), we can find that 13.7 percent of KOR earned incomes belonging to the richest 20 percent, while 40.7 percent of KIM and 66 percent of KUS achieved the same level of income. In sum, the results of the transnational income comparisons illustrate that Korean's international migration to the United States is strongly and positively related to their achievement of richest 10- or 20-percent income position.[28]

[28] This result does not mean the causal relationship between international migration and achieving the income status of the richest 10- or 20 percent among all three Korean groups. There are many variables to be controlled to find the pure effect of international migration that is not affected by migration selectivity, such as the pre-migration socioeconomic status of the migrants.

Figure 4.2. Distribution by income decile among South Koreans and Korean Americans



Note: Selected samples are householders only.
Source of data: The National Household Income and Expenditure Survey in 2007 for South Koreans (KOR); the 2005-07 American Community Survey 3-year dataset for Korean Americans (KIM and KUS)

As we have seen, comparing the mean household per-capita incomes of each income decile reveals the relative standings of each group in the transnational income layers. However, it is still unclear which factors are main contributors to the level of income for each group. The following part examines which kind of factors between achieved and categorical attributes is more associated with income, focusing particularly on the effects of educational attainment (for the role of achievements) and country of residence (for the role of categorical attributes).

4.4. Comparisons of the Effects of Education and Location

This section examines how much of a role educational attainment as an achieved status plays compared to categorical status on the determination of income levels for

South Koreans (KOR) and how it differs for Korean immigrants (KIM) and that of the children of Korean immigrants (KUS). Given occupational downgrading among Korean immigrants and their higher presence in self-employment, especially in Korean ethnic enclaves, I hypothesize that the association of educational attainment with income for Korean immigrants is weaker than that for South Koreans. On the other hand, however, a blocked mobility thesis (referring to limited opportunity to upward mobility in South Korea) expects that, as there are more opportunities in industrial or post-industrial sectors in the United States than in South Korea, the role of their human capital becomes more important in the former than the latter. A second hypothesis is that, for Koreans, income is more associated with country of residence (i.e., whether residing in the U.S. or in South Korea) than with educational attainment. If this hypothesis appears to be true, the result challenges the modernization perspective on one hand, advocates the argument of some global inequality scholars (e.g., Korzeniewicz and Moran 2009; Milanovic 2010) who highlight a significant importance of nationality as a criterion for stratification at transnational and global levels on the other.

It is hardly expected that the role of human capital such as the returns to education is the same across all income levels (Budig and Hodges 2010; Hao and Naiman 2007).[29] Higher income earners are likely to be found in primary sectors characterized by the determining role of human capital such as educational attainment in income, while lower

[29] Given this different effect of education at different income levels, some scholars suggest quintile regression analysis as a proper way to examine income inequality (e.g., Budig and Hodges 2010; Hao and Naiman 2007). This study, instead of using quintile analysis, did separate investigations on the two extreme income groups: the top quarter (as a proxy of upper-middle class) and the bottom quarter (as a proxy of lower-working class), in addition to the analysis for the entire population as being more interested in the role of education by broader, categorically different, groups.

income earners are likely to be populated in secondary sectors where co-ethnic networks or other ascribed attributes, rather than educational attainment, are probably more important. Thus it is reasonable to expect that high income groups are more likely to experience a greater effect of achieved status on their income, while low income groups may experience a greater effect as a result of their ascribed status. For this reason, I selected the highest-quarter samples (the richest 25%) of income and the lowest-quarter samples (the poorest 25%) from each group (KOR, KIM, and KUS, respectively), in addition to using each total sample for analyses. Each sample was composed of householders at ages 30 to 54 years.[30] I used ordinary least square (OLS) multiple regression model. The dependent variable is the natural logarithm of individual householders' total annual income. For independent variables, I included education as human capital and gender as ascribed characteristics. The other controlling variables include gender, age,[31] the presence of a spouse and the urban-rural status of residence. In order to find the group in which the effect of the achieved factor (i.e., education) on income is larger and the group in which the effects of ascribed factors are more pronounced, I compared coefficients of each variable in each KOR, KIM and KUS. Then I merged the two datasets (NHIES and ACS) and created a country variable that refers to

[30] I selected this range of age (30-54) considering the context of the South Korean labor market where a significant portion of people before 30 years old do not find a job or not in the labor force (due to increasingly longer period of education) and people after 54 are less likely to remain in workforce because the retirement age is around this age in private companies.

[31] I put age as a control variable in the model because it is not clear whether age should be treated as achievement or ascribed characteristics. Some treat age as a proxy of achievement because they assume that age reflects work experience. Some others may treat age as a categorical characteristic because it does not depend on individual achievement and workers can be treated differently by their age itself in a labor market.

country of residence. With the merged dataset, I investigated how much of an effect the country variable had on their income at each income group (i.e., the general population, the richest income quarter, and the poorest income quarter) and compared the effect of the country variable with that of the education variable.

Socio-economic Profile of Samples

Table 4.3 presents characteristics of selected variables at each income group. The first row presents annual personal mean and median income of individual householders, which shows that South Koreans typically have lower annual incomes than Korean immigrants and children of Korean immigrants. This result is the same for the two extreme income groups. The highest-quarter groups (say, upper-middle class) of income display a higher gap in personal income than their lowest-quarter counterparts (say, low class) between South Koreans and Korean Americans (both KIM and KUS). In terms of gender, male householders are predominant, especially in the richest 25 percent. The male dominance in the richest 25 percent is most pronounced among South Koreans. The

Table 4.3. Descriptive Statistics for Urban Household Heads Aged 30-54, 2007

	General			Richest quarter			Poorest quarter		
	KOR	KIM*	KUS**	KOR	KIM*	KUS**	KOR	KIM*	KUS**
Annual personal income (dollars in 2007)									
Mean	34,863	57,967	84,597	64,718	131,587	191,335	12,925	13,853	20,504
Median	30,220	41,493	61,920	57,400	103,474	141,718	13,689	15,147	21,655
Men (%)	79.4	63.3	60.3	95.9	82.6	77.1	51.1	46.6	49.7
Median Age	43.0	45.0	36.0	43.0	45.0	38.0	44.0	46.0	36.0
Married, spouse present (%)	74.9	72.5	61.8	91.4	84.0	73.3	50.2	61.6	55.9
Level of Highest Education Completed (%)									
Less Than High School	15.0	4.1	1.5	2.2	0.8	0.0	31.7	8.9	4.8
High school	46.5	18.1	7.5	30.0	6.3	1.6	51.8	25.5	15.4
Some College	10.0	18.1	19.7	12.6	12.4	6.2	5.7	20.9	29.5
BA	24.8	34.0	39.6	44.0	40.4	31.6	9.2	26.9	36.4
Post-BA	3.7	25.7	31.6	11.2	40.2	60.7	1.5	17.8	13.9
Total Number of Sample	54,471	3,876	2,171	8,507	874	516	8,508	899	519

Source: For South Koreans (KOR), the 2007 National Household Income and Expenditure Survey (NHIES), Korea National Statistics Office

For Korean Americans, 2005-07 American Community Survey (ACS), 3-year dataset

Note: * Korean immigrants (KIM) refer to those who immigrated to the United States at 18 years old or older.

** Children of Korean immigrants (KUS) refers to those who were U.S.-born or came to the United States at 17 years old or younger

The samples are urban residents only

children of Korean immigrants, as expected, are younger than the other groups. South Koreans are more likely to be married and live with their spouse compared to Korean Americans.

Literature on immigrants, especially on Asian immigrants, shows that immigrants were not randomly selected. They were more likely to come from the highly-educated middle class and equipped with a higher aspiration for success. Such migration selectivity is found among Korean Americans as well. Looking at educational attainment, we find that KUS are most highly educated (e.g., 71.2 percent hold college degrees), while KOR exhibit the lowest educational output (e.g., 28.5 percent are college graduates). Given the selectivity, the simple cross-country analysis may overestimate the pure effect of country of residence. The overestimation of the effect of country can be reduced by taking into account the effect of the higher educational attainment on their income.

The Effects of Educational Attainment among South Koreans and Korean Americans

Table 4.4 reveals that KUS receive higher returns to their college education than KOR and KIM in general. KUS in general, especially, enjoy significant benefits from their bachelor's degrees and even greater benefits from post-bachelor's degrees. It is not surprising that KUS earn better returns given that the U.S. labor market gives more credit to KUS who presumably have attended U.S. educational institutes than it does to those who have received educations in foreign countries (Zeng and Xie 2004). Another reason of the significant gap between KUS and KIM is perhaps the different characteristics of labor markets in which they work. The mass media often reports stories depicting Korean immigrants with middle-class backgrounds having begun their careers at the bottom of

Table 4.4. Regressions of Log Personal Income on Demographic Characteristics and Educational Attainment by Immigrant Status and by Income, 2007

	General			Richest quarter			Poorest quarter		
Variables	KOR	KIM	KUS	KOR	KIM	KUS	KOR	KIM	KUS
(Constant)	8.334***	8.533***	5.745***	10.648***	11.039***	10.406***	10.504***	9.565***	8.828***
Level of Highest Education Completed									
(Ref=High School Graduate)									
Less Than High school	-.396***	-.182	-.407*	-.083***	-.229	n.a.	-.097***	.001	-.078
Some College	.249***	.210***	.202*	-.020	.027	.013	-.005	.026	-.032
BA	.352***	.382***	.558***	-.022**	.018	.002	-.046*	-.137	-.057
Post-BA	.473***	.464***	1.076***	0.010	.047	.158	-.237***	-.267*	.156*
Demographic Characteristics									
Men	.448***	.500***	.446***	.086***	.112*	.101	-.025	.266**	.364***
Age	.048***	.057	.215***	.005	.035	.078	-.050***	-.024	.055
Age Squared	-.000***	-.000	-.003***	.000	.000	.000	.001***	.000	.000
Married, Spouse Present	.239***	.006	-.024	.007	.045	.088	.096***	-.189*	-.222**
Urban Residence (Ref=Others)	.027***	.118	.038	.040***	.096	-.116	.053***	.123	-.089
Adjusted R Square	.295***	.096***	.203***	.032***	.005	.034***	.022***	.012*	.041***

Note: Estimates of effects of selected variables represent unstandardized coefficients (b)
* p≤..05; ** p≤..01; *** p≤..001 (two-tailed test).
All samples are aged 30 to 54 and householders in cities (for KOR) or in metropolitans (for KIM and KUS).
Source of data: The National Household Income and Expenditure Survey 2007 for South Koreans (KOR); America Community Survey 2005-07 3-year dataset for KIM and KUS

the ladder in the United States, for instance, as janitors, cleaning men, or workers in the poultry industry. It is also widely known that many Korean immigrants are self-employed as small business owners or work in ethnic enclaves (Min 1995, 1996; Yoon 1997), where college degrees are not so much needed.

However, it is surprising that returns to education for KIM are in fact not lower than those for KOR.[32] Put differently, even though the Korean society is famous for its fervor for college degrees, unlike my hypothesis, South Koreans do not receive as great a return from their college degrees as 1.5 or second generation Korean Americans do. One possible reason is the serious supply-demand imbalance – the excess of supply over demand – of college graduates in South Korea. This result requires further study on the causes of the lower returns to college education for South Koreans.

The standardized coefficients[33] of independent variables within each group, although not displayed in this paper, demonstrate that South Koreans and Korean immigrants in general experience the larger effects of ascribed characteristics (i.e., gender and age) over achieved ones (i.e., educational attainments). For the children of Korean immigrants in contrast, their college degrees and post-college degrees bring more returns than their ascribed gender status.

Among richest-quarter income levels, interestingly, South Koreans benefit a little less from bachelor's degrees than from only graduating from high school and show no

[32] Some of KIM may earn college degrees in the United States as they arrived in the United States at 18 years old or older. U.S. credential may play significantly different role in earnings (Zeng and Xie 2004). Thus, further research should take the place of credentials into account.

[33] The standardized coefficients help us to compare the effects of achieved factors to that of ascribed ones within the models of each group.

significant income premium of post-BA degrees. For Korean immigrants and their children, educational attainment has no significant effect on income. This result demonstrates that the status of upper-class income earners is little associated with their education for all the three groups.

Among poorest-quarter income earners, BA and post-BA degrees are significantly and negatively associated with income for KOR. For KIM, similarly, post-BA degrees are negatively associated with income, while BA degrees are not related to income. For KUS, education is not a significant factor to income. Gender status, instead, matters more for both Korean American groups at the poorest quarter: being a man is positively associated with income. These results imply that it is the middle-class income earners who receive the greatest benefits from attaining BA or post-BA degrees for all three Korean groups.

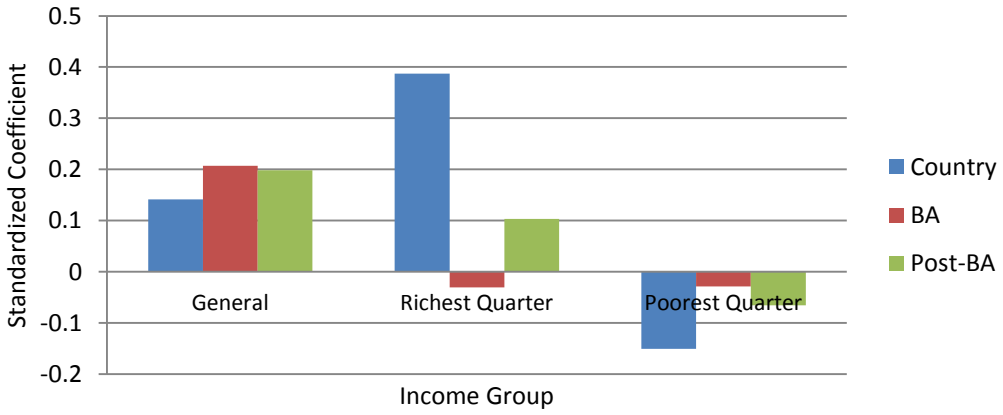
The Effects of US residence among South Koreans and Korean Americans

From a transnational perspective, we are interested in the effect of international migration on income mobility. As we are especially interested in the comparison of the relative effects of country of residence (as the indicator of the effect of international migration) to the effect of education (i.e., of attaining BA and post-BA degrees) within a group, we compare standardized coefficients (Beta) of each variable.

Figure 4.3 displays that, among all Koreans in general, returns to international migration (or the effect of country of residence) are lower than those related to BA and post-BA degrees (See also Table 4.5 for the results of the whole models). For Korean immigrants in general (figure 4.4), the effect of their migration to the United States is

about three times lower than the effect of completing a college or post-college education (compared to completing only secondary school). The children of Korean immigrants in general (as seen in figure 4.5) receive significant income benefits from their migration, but are still lower than the benefits of earning BA or post-BA degrees.

Figure 4.3. Effects of Country and Education in general and by income group among all Koreans (KOR, KIM, and KUS), 2007

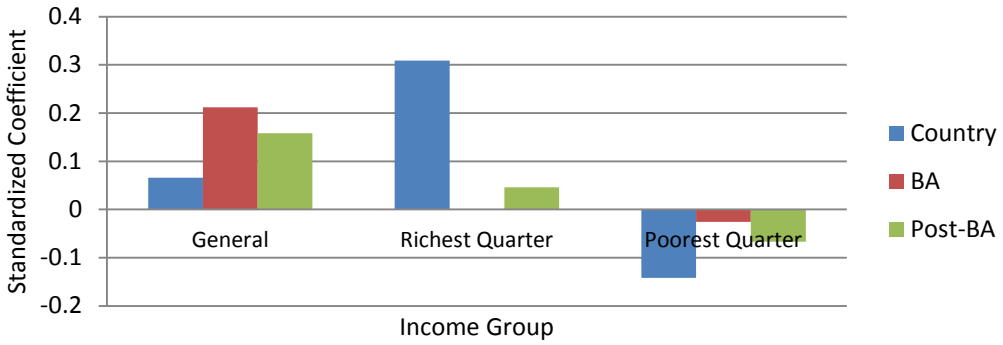


Notes: The samples include all three Korean groups (KOR, KIM, and KUS)
* p≤..05; ** p≤..01; *** p≤..001 (two-tailed test).
All samples are aged 30 to 54 and householders in cities (KOR) or metropolitans (KIM and KUS)
Source of data: The National Household Income and Expenditure Survey 2007 for South Koreans (KOR); America Community Survey 2005-07 3-year dataset for KIM and KUS

However, the effects of international migration to the United States (*i.e.*, the effect of USA as the country of residence) differ substantially between the richest quarter and the poorest quarter. For Korean immigrants in the richest 25 percent (see figure 4.4), the effect of residing in the United States on personal income is significant, being about six times as high as the effect of earning a post-BA degree. For children of Korean immigrants in the richest quarter (see figure 4.5), the premium of residing in the United States is even higher. That is, for those within the richest 25 percent, changing their

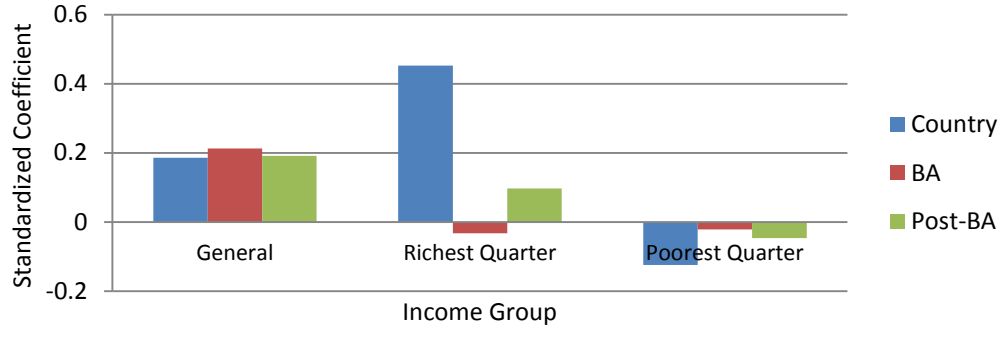
country of residence is the most effective way to increase income. By contrast, in the poorest 25 percent population, living in the United States is negatively associated with income. This is common for all three Korean populations.

Figure 4.4. Effects of Country and Education in general and by income group among Koreans (KOR and KIM), 2007



Notes: The samples include South Koreans (KOR) and Korean immigrants (KIM).
* p≤..05; ** p≤..01; *** p≤..001 (two-tailed test).
All samples are aged 30 to 54 and householders in cities (KOR) or metropolitans (KIM)
Source of data: The National Household Income and Expenditure Survey 2007 for South Koreans (KOR); America Community Survey 2005-07 3-year dataset for KIM

Figure 4.5. Effects of Country and Education in general and by income group among Koreans (KOR and KUS), 2007



Notes: The samples include South Koreans (KOR) and Korean immigrants (KUS).
* p≤..05; ** p≤..01; *** p≤..001 (two-tailed test).
All samples are aged 30 to 54 and householders in cities (KOR) or metropolitans (KUS)
Source of data: The National Household Income and Expenditure Survey 2007 for South Koreans (KOR); America Community Survey 2005-07 3-year dataset for KUS.

Table 4.5. Effect of Country of Residence and Educational Attainment on Log Annual Personal Income among South Koreans and Korean Americans, 2007

Variables	General			Richest Quarter			Poorest Quarter		
	KOR & KIM+	KOR & KUS++	ALL	KOR & KIM+	KOR & KUS++	ALL	KOR & KIM+	KOR & KUS++	ALL
Country of Residence									
USA (Ref=Korea)	.066***	.186***	.141***	.309***	.452***	.387***	-.142***	-.124***	-.151***
Level of Highest Education Completed (Ref=High School Graduate)									
Less Than High school	-.169***	-.175***	-.154***	-.042***	-.027**	-.035***	-.070***	-.074***	-.068***
Some College	.103***	.095***	.091***	-.014	-.038***	-.043***	-.008	.000	-.010
BA	.212***	.213***	.207***	-.009	-.033**	-.031**	-.026*	-.022*	-.029**
Post-BA	.158***	.191***	.198***	.046***	.097***	.103***	-.067***	-.047***	-.066***
Demographic Characteristics									
Men	.237***	.237***	.232***	.071***	.087***	.083***	.007	.008	.030**
Age	.445***	.456***	.395***	.236	.511***	.294*	-.537***	-.462***	-.449***
Age Squared	-.351***	-.358***	-.328***	-.114	-.387**	-.217	.482***	.390**	.395**
Married, Spouse Present	.119***	.124***	.103***	.026*	.040***	.028**	.046***	.054***	.030**
Urban Status	.015***	.015***	.015***	.038***	.033***	-.032***	.027**	.026*	.022*
Adjusted R Square	.263***	.310***	.268***	.121***	.200***	.174***	.040***	.033***	.042***

Note: Estimates of effects of selected variables represent standardized coefficients.
+ The samples include South Koreans and Korean immigrants
++ The samples include South Koreans and the U.S.-born or raised Korean Americans.

All samples are aged 30 to 54
* p≤..05; ** p≤..01; *** p≤..001
Source: The National Household Income and Expenditure Survey 2007 for KOR; American Community Survey (2005-07) 3-year dataset (KIM and KUS).

4.5. Discussion and Conclusions

As we have seen, Korean immigrants did not experience upward mobility in occupation. About a half of Korean immigrants who had been professionals took an occupation with lower prestige (including self-employment) than that of their pre-migration occupation. In the U.S. labor market, Korean immigrants, despite their higher educational attainment than whites, do not earn higher income than that of whites. Nevertheless, the findings of this study reveal that the international migration to the United States is beneficial for both Korean immigrants and especially the children of Korean immigrants. Its benefits are especially high for richer groups (i.e., the richest 25 percent). By changing their country of residence, the middle and upper classes enjoy much higher incomes compared to their counterparts in the country of origin.

This project also examined the effects of education and international migration to the United States from a transnational perspective. The simple comparisons of the unstandardized coefficients of each of the three groups address that returns to college education are higher for the children of Korean immigrants than they are for South Koreans and Korean immigrants. For South Koreans and Korean immigrants, as the standardized coefficients indicate, ascribed characteristics such as gender and age have slightly larger effects on individuals' income than educational achievement. For the children of Korean immigrants, by contrast, the effect of earning college or post-college degrees is greater than that of ascribed gender status.

Integrating the two different sets of data and creating the new variable of USA as the "country of residence," we found that, among all Korean groups in the richest quarter, the effects of a US residence are substantially higher than those of attaining BA or post-

BA degrees, but this country effect does not appear significantly higher for all Koreans (including all income groups), and can even be associated negatively with income for those in the poorest quarter. Thus, from the transnational perspective, we can infer that moving to and settling down in the United States is an attractive income mobility strategy among middle- and upper-class Koreans. Working-class Koreans, by contrast, are less likely to experience such benefits from migration to the United States.

The findings of this project challenge the modernization perspective which states that, as a society becomes modernized and industrialized, achievements or human capital become more important than ascription to an individuals' status. Using the transnational perspective that takes outside-country opportunities into account, this project reveals that, despite its industrialization, one's investment in human capital (e.g., college and post-college education) in South Korea was not so much important as usually assumed.[34]

[34] The role of *U.S.* college degrees may be different, as noted Zeng and Xie (2004); it may give substantial benefits, provided the relatively strong association of education with the income of the children of Korean immigrants. This also suggests that the effects of human capitals are shaped by categorical boundary (e.g., the *U.S.* colleges vs. the *South Korean* colleges).

Chapter 5. Human Capital and Categorical Inequality: A Destination

The global income inequality and the growing importance of international migration for social mobility continue to produce immigrant minority groups in destinations. The United States, inherently an immigrant country, was acclaimed as a land of opportunity for immigrants. The country of the "American Dream" opened its door to foreign people and proudly purported that anyone can be a hero of Horatio Alger's rags-to-riches' story if he or she has the characteristics of "modern" men (being educated, working hard, and having perseverance), no matter what his/her race is. People migrate to America with such an "American Dream." For people in this land of opportunity, individual efforts and achievements are thought to be the essential factor determining the success or failure of individuals.

However, some critical scholars argue that, even within the modernized society, a significant portion of people's social and economic status can be accounted by their categorical characteristics (Massey 2007; Tilly 1999). They demonstrate that the modern institutions of the wealthy nation (supposed to be universal and merit-based) entail an exclusion of categorical minorities (Bonilla-Silva 2006). If the American society seems to be an open society, it should be because the attention of the existing literature has disproportionately been on the majority whites (Brym and Lie 2006:234-235). In this case, its findings and conclusions, accordingly, reflect the stratification of the majority at best.

This chapter delves into the stratification (or social selection processes) of minorities by placing a racial/ethnic minority group at the center in stratification of a receiving society. For minorities, human capital may be not as important for minorities'

social mobility as it is for a majority; some other (categorical) characteristics may play more significant roles among minority workers. Before doing empirical analyses, I first discuss the nature of the U.S. society called a modern nation, paying particular attention to how (seemingly universally inclusive) modern institutions such as citizenship and labor market institutions have differently treated racial/ethnic minorities. Then, I examine racial differences in the extent of income inequality and income determinants, focusing on the case of Korean Americans.

5.1. U.S. Institutions as Selectively Exclusive

In this section, I explore citizenship and the labor-market institution as two central institutions of modern nations. Citizenship, referring to full membership in a community in which one lives, is construed as the core of modern institutional arrangement characterized by a shift from particularistic to universal-based and from restricted/exclusive to inclusive society. In the United States, citizenship has its philosophical grounding in the doctrine of natural rights and principles of equality. Thus, in principle, citizenship, as natural and universal rights for human being, should not exclude some groups of people based on their categories such as race, gender, or class.

U.S. citizenship as an institution, however, is far from this principle (Glenn 2002; Bloemraad 2006). For instance, the Chinese Exclusion Act of 1882 prohibited Chinese from naturalizing and suspended the immigration of Chinese laborers to the United States until 1943. About two decades after the Chinese Exclusion Act, in 1904, it was extended to Japanese laborers. During this period of time, not only Chinese and Japanese, but other East or South Asian immigrants also were affected by the exclusionary atmosphere that

barred them from being naturalized (Bloemraad 2006:21). A series of such exclusions of Asian immigrants from U.S. citizenship by the U.S. congress were made to protect mainly its first-class (i.e., white male) citizens. The serials of exclusion acts of that time were mostly responses to the backlash of the (white male) citizen workers who were seeing themselves in an increasing competition with immigrant workers. Particularly, the Chinese exclusion Act was implemented when Americans experienced the depression of the 1870s and an increasing number of Chinese workers searching jobs after the completion of the transcontinental railroad. Americans feared that these Chinese immigrants depressed wages and took jobs that rightly belonged to them (Usdansky and Espenshade 2001:27). Their fear resulted in massive backlashes of American workers against the immigrant workers. This was a decisive trigger for the establishment of the restrictive act (O'Rourke and Williamson 1999). The exclusionary acts were in nature an effort to protect U.S. workers, by keeping immigrants from participating in competition. Usdansky and Espenshade (2001:29) described the background of Chinese and Japanese exclusion Acts:

> During the first decade of the twentieth century, concern about competition from immigrant workers focused on a new group of Asians – Japanese laborers – who began coming to the United States in increasing numbers after Chinese laborers were excluded in 1882. Most Japanese immigrants settled in California and worked in agriculture, where they were widely seen as "too successful," a concern that gave way to the fear of a "yellow peril" … By 1904, the American Federation of Labor was

vigorously lobbying Congress to extend the Chinese Exclusion Act to Japanese laborers.

Exclusion by citizenship was not limited to political rights; it restrained economic rights of some Asian laborers who threatened white citizen workers. In the 1910s, by the Alien Land Acts, these "alien ineligible for citizenship" were prohibited from owning land. Asian male immigrants were (not legally but practically) excluded from marrying U.S. female citizen by their ineligibility to be citizens. The Cable Act of 1922 excluded any woman citizen who married an "alien ineligible for citizenship" from the category of the U.S. citizen (Glenn 2002:25–26). Thus, as Glenn argues, the construction of the U.S. citizenship went through a racialized and gendered process. She said that "race and gender have continuously been organizing principles of American citizenship; concomitantly, race and gender have been primarily axes for contesting boundaries and rights" (Glenn 2002:26). Roger Smith characterizes the American citizenship as selectively exclusionary on the basis of *ascribed* characteristics. He argued that "despite lofty ideals, citizenship in the United Sates had a strong tendency to "ascriptive Americanism": legal statues, judicial decisions, and legislative debates "manifested passionate beliefs that America was by rights a white nation, a Protestant nation, a nation in which true Americans were native-born men with Anglo-Saxon ancestors" (Bloemraad 2006:21). In short, this critical discussion reveals that the real nature of citizenship is inclusive only for native-born white men but exclusive for other categorical minorities.

Free labor (as opposed to servitude) and the "openness" of the labor market constitute another important distinctive institutional arrangement of modern nations. The

labor market is a space where one's effort and achievement are rewarded. Thus the way the U.S. labor market treats workers of color is informative to understanding the real nature of the "open" society. As the "formal" citizenship (as opposed to "practical" citizenship) was allowed to racial minorities starting from 1940s,[35] exclusionary institutions became subtle and "seemed" color-blind (Bonilla-Silva 2006; Collins 2010). However, the outcomes have been distinctive by color line. Ample evidence of racial inequality has been found in the labor market, such as differentials in earnings by race and labor-market segmentation (Glenn 2002).[36]

Exclusions of Asians are relatively less known when compared to blacks and Hispanics. Asians are often portrayed as a successful minority called a 'model minority'(Abelmann and Lie 1995; Chou and Feagin 2008; Wu 2003). It is often reported that Asian Americans have greater-than-average educational attainment, relatively higher rates of professional occupations, and higher mean and median incomes (Waters and Eschbach 1995; Sakamoto, Goyette, and Kim 2009). The seemingly successful labor-market outcomes of the 'model minority' or 'honorary white' is considered by advocates of 'declining significance of race' thesis to depict that Asian Americans do not suffer

[35] Chinese immigrants gained access to naturalization in 1943, Filipinos and Asian Indians in 1946. All restrictions to American citizenship based on race or national origin were abolished by the 1953 McCarran Walter Act (Bloemraad 2006:21).

[36] Glenn explains mechanism differentiating wages on the basis of ascription with notions of a "men's wage" and a "women's wage." According to Glenn (2002:82), "a "men's age" was sufficient to support a worker and family at a decent standard and was a badge of honor. A "women's wage," in contrast, was calculated even by reformers at a very low level and was a mark of dishonor. Women were simply paid less for doing the same kind of work or for a given level of productivity than men were." This conceptual distinction has not only gender meaning but race meaning. It may be reasonable to think that a men's wage is more likely to be assigned to white men, and a women's wage is given to others those are a racial or gender minority.

racial/ethnic disadvantages in the labor market (Sakamoto, Wu, and Tzeng 2000; Massey 2007:113).[37] Moreover, their success is suggested as rosy evidence of an eventual assimilation of non-whites and whites (Alba and Nee 2003), the condition as inclusive and universal in that achievement is universally a determining factor while ascription such as race and ethnicity has no significant effect (or declining effect) in one's labor-market position. However, the other group of scholars disagrees with the 'declining significance of race,' pointing lower returns to educational attainment for Asian Americans compared to that of whites (Hirschman and Wong 1984; Min 1995). For them, the racial disadvantages facing Asian Americans are not declining, rather veiled by Asians' over-education.

Relatively higher rates of professional occupations among Asian Americans are also considered as a sign of successful labor-market assimilation dismantling race effects, by the advocates of 'declining significance of race' (Alba and Nee 2003). For others, however, the simply aggregated information of higher percent of professionals is not enough to claim the disappearance of race effects for Asian Americans. They point out that some fields are favorable for Asian Americans but not all. This, in turn, is largely shaped by the demand for Asian labor with relevant skills in the U.S. labor market.

According to Ong, Bonacich, and Cheng (1994), Asians' labor-market segregation has been driven by the economic restructuring of the U.S. economy that was initiated in the mid-1960s. The economic restructuring needed a larger, highly-trained

[37] Massey also demonstrates that the U.S. stratification system is category-based. However, he does not think that every racial minority faces the same degree of racial disadvantages. The racial disadvantages are more the case of Latinos and blacks while it has mattered less for Asian Americans, as he says, "the future of America would seem to be one in which various European and Asian ancestries are increasingly jumbled together in a way that makes categorical distinctions between them fade."(Massey 2007:113)

labor force. However, domestic populations within the United States could not meet the emerging demands for high-skilled labor in areas such as healthcare, engineering, and science. The U.S. government attempted to remediate these labor shortages by importing Asian immigrants with the desired high-skills qualifications. Creating an official policy to support this goal, the U.S. immigration Act of 1965 gave preference to individuals with the desired training and to those with capital to invest. Given its preference, Asians in STEM (Science, Technology, Engineering, and Math) fields and healthcare were perhaps less likely to be considered as competitors for native white workers; thus they might likely be accepted as labor force that compensated for labor shortages in those fields.

Lee (2010)'s study found considerable segregation by subfields within professional occupations between Chinese/Japanese Americans and non-Hispanic whites. Asian's concentration into particular areas such as science, technology, engineering, and mathematics (STEM) is driven by different rewards given to Asian Americans by areas. That is, Asian Americans receive better returns to their education in STEM areas, but do not in others. Similarly, Barringer, Takeuchi, and Xenos (1990) found that when other factors were controlled, "whites earned more than Asian Americans in almost all occupational categories except in the professions, where Asian Americans had much higher incomes, but even there they bested whites only among the self-employed." In the discussion, we can find labor-market segmentation between Asians and whites and different reward system in each segment, which makes STEM fields and/or self-employment better choices for Asian American workers to minimize their racial disadvantages (or maximize racial advantages). Based on these findings, Lee (2010) argues that, for Asian Americans, race operates in choosing the type of occupations,

through different rewards by occupation given to Asians. Asian's greater-than-average income on the basis of aggregate information may be due to their disproportionate presence in professional occupations, rather than to declining racial/ethnic effects.

Why and how has the U.S. labor system maintained inequality in earnings and segmentation despite a theoretically free labor system? Glenn (2002:85) views this as "efforts to shore up the position of wage-earning (white) men" through "excluding (women and) men of color as competitors." According to her, the labor market segregation by race and gender was an outcome of such efforts to legitimate the protection of native white male workers from competition. As a result, white male workers are overrepresented "in capital intensive and more monopolistic sectors and industries where higher labor costs could be borne" (Glenn 2002:81). They also are disproportionately employed in leadership or supervisory positions (Woo 2000). In contrast, as Glenn (2002:81) points out, "minorities, immigrants, and women, lacking political or other means to advance their position, were more often relegated to sectors, industries, and jobs that were labor intensive, unstable, and highly competitive (where downward pressure on wage is greatest)."

This chapter aims to understand stratification of the racial/ethnic minority, especially focusing on different processes in determining earnings from the labor market. For doing this, first, I examine how income (wage and salary income, particularly) inequality trends are different by race and what criteria are more responsible in each race's income inequality. Second, I investigate what are more important criteria for social selection among racial minority population and how it is different from the stratification within the majority whites.

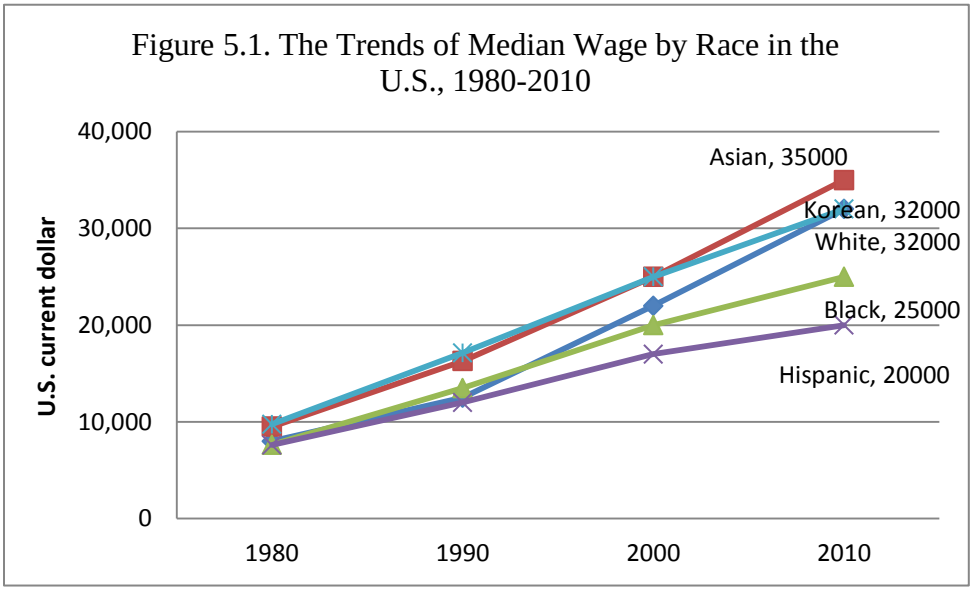
5.2. Between- and Within-race Wage Inequality

This section investigates income inequality among minorities to see whether there are unique patterns in the inequality of the U.S. racial/ethnic minorities that are different from the one of the white majority. I use the 1% Public Use Microdata Sample (PUMS) of years of 1980, 1990, and 2000, and the American Community Survey (ACS) of 2010 (Ruggles et al. 2010). For this analysis, I use the samples that have any positive wage in the survey year.

Racial gaps in wages have increased from 1980 to 2010. As figure 5.1 illustrates, the gap in annual wage and salary income started from about $3,000 in 1980 to $15,000 in 2010 between the highest (Asians) and the lowest groups (Hispanics). The wage growth was more rapid among Asians and Whites than blacks and Hispanics. The median wage of Korean Americans was higher than whites until 2000, but is the same as of 2010. The trend shows that the growth of Koreans' median wage has been slower than that of whites since 1990. The mean wage trend displays two clusters of mean wages, one is among whites and Asians including Koreans, the other is between blacks and Hispanics. That is, there is a growing convergence among the former groups, and a growing divergence between the former and the latter groups.

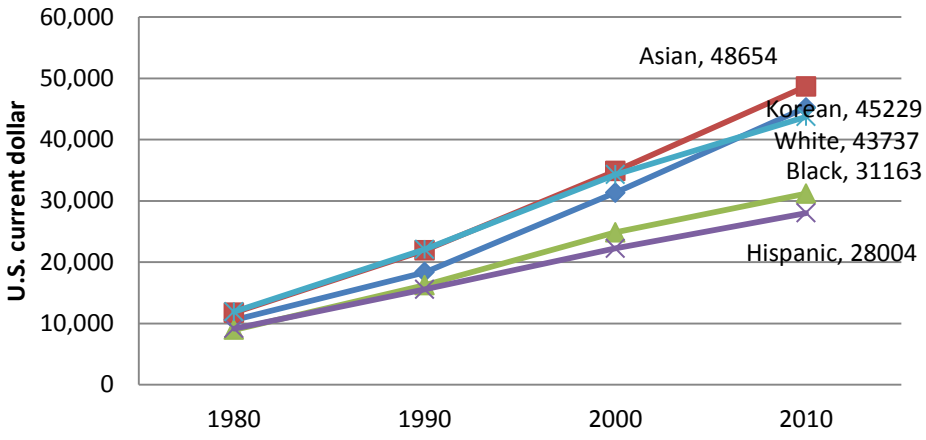
Does this mean that *all* Asians enjoy parity with whites in wages? Given the fact that the gap between two clusters is larger in the mean wages than in median wages, it is inferred that Asians' higher wages (compared to the wages of the other races) are more affected by the wages of the high-earning group of Asian populations. If it is true, then within-Asian (and within-Korean) wage inequality would be higher than that of the other racial groups.

Figure 5.1. The Trends of Median Wage by Race in the U.S., 1980-2010



Sources: 1% PUMS for 1980, 1990, 2000, and ACS for 2010
Notes: White, Black, and Asian samples are non-Hispanics only.
Asian samples include Korean samples.
All samples are those who have positive wages

Figure 5.2. The Trends of Mean Wage by Race in the U.S., 1980-2010



Sources: 1% PUMS for 1980, 1990, 2000, and ACS for 2010
Notes: White, Black, and Asian samples are non-Hispanics only.
Asian samples include Korean samples.
All samples are those who have positive wages

I examine *within*-race inequalities. I calculate and compare the Gini coefficient of wage and salary income of each race group. If the U.S. labor market lowers the wage of all minorities regardless of class background, their mean and median wage would be lower than that of the majority whites and their Gini coefficients would also be lower than that of whites. If the U.S. labor market practices *selective* exclusion to minorities, the Gini coefficient within each minority group would be higher than the Gini coefficient within-whites.

The results demonstrate that Korean Americans' wage inequality has been highest among racial groups included in comparisons. The Gini coefficients of Asians and whites, which are similar to that of the national Gini coefficient, take the second highest. Blacks and Hispanics are found in the layer of relatively lower inequality. The wage inequality pattern has constantly increased from 1980 to 2010 for the four major racial groups, and the increase was more rapid among whites and Asians than Blacks and Hispanics. The wage inequality among Korean Americans has always been higher than the other race groups. While the rising trend continued throughout the last four decades in the four major racial groups, within the Korean community the wage inequality pattern had increased between 1980 and 1990 and has remained almost the same from 1990 to 2010.

Table 5.1. Gini Index of Wage by Race in the U.S., 1980-2010

	White	Asian	Hispanic	Black	Korean
1980	0.458	0.453	0.435	0.437	0.480
1990	0.473	0.479	0.448	0.443	0.513
2000	0.484	0.491	0.450	0.450	0.510
2010	0.501	0.498	0.459	0.466	0.513

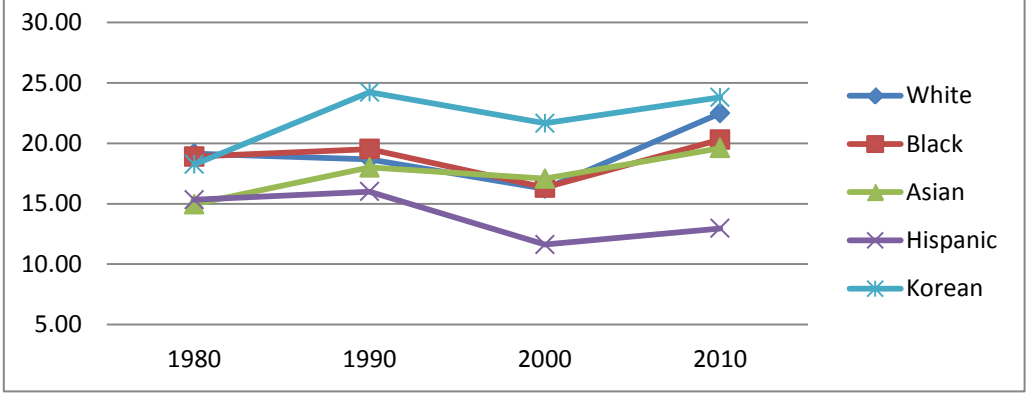
Note: samples are those who have positive wage. The numbers are weighted.
Source: 1% PUMS for 1980, 1990, 2000, and ACS for 2010

A Gini coefficient measure provides a picture of overall inequality of each group, but it does not tell us whose income has changed more. Was it the groups at the extreme (both at the highest and lowest) or the middle-income groups that experienced the upgrade/downgrade of their income level? This can be answered by wage ratio. The P90/P10 ratio indicates changes in the income share of two extreme groups. As of 2010, among major racial groups, whites are the highest in this ratio. White workers at the 90^{th} percentile of white-wage earn 22.5 times higher than the wage of those at the 10^{th} percentile. This ratio is slightly higher than the ratios of blacks and Asians and considerably higher than that of Hispanics. Interestingly, the P90/P10 ratio of Korean Americans is much higher than that of Asian Americans in general and even higher than that of whites. In other words, wage disparity has been enlarged between the richest and poorest deciles among Korean Americans.

Is this high ratio of Korean Americans due to the greater gain of the rich or due to the smaller gain of the poor? Comparing the P90/P50 ratios with P50/P10 ratios from 2000 to 2010, we find that the P90/P50 ratio has increased, while the P50/P10 has not. It suggests a greater change in wages among the rich half of the Korean workers, rather than to the underperformance of the bottom 10 percent (P10): It can be because of a greater gain of the top 10 percent (P90) or be a fall of the wage in the middle (P50) or the both.

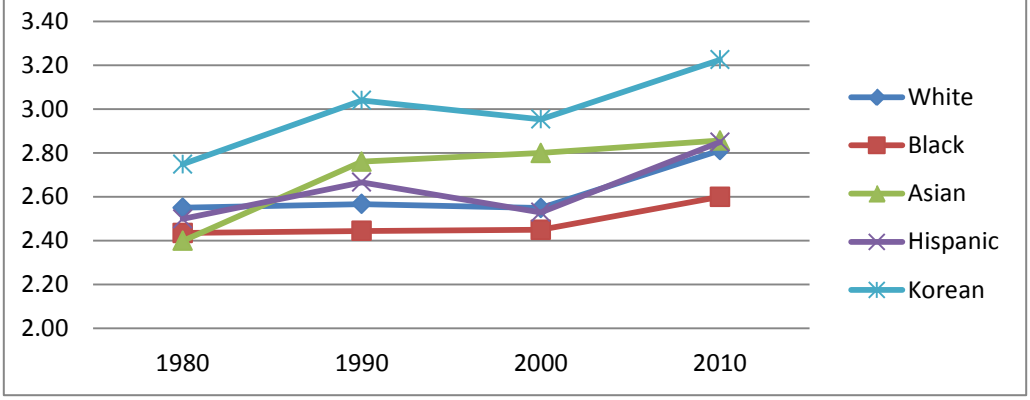
The other racial groups exhibit different patterns. All the groups except for Hispanics present a significant increase in wage inequality among the poor half for the last decade. It implies that there has been the relative underperformance of the bottom ten percent for whites, blacks, and Asians. The rich half of whites and Hispanics found a

Figure 5.3. The P90/P10 Wage Ratios, 1980-2010



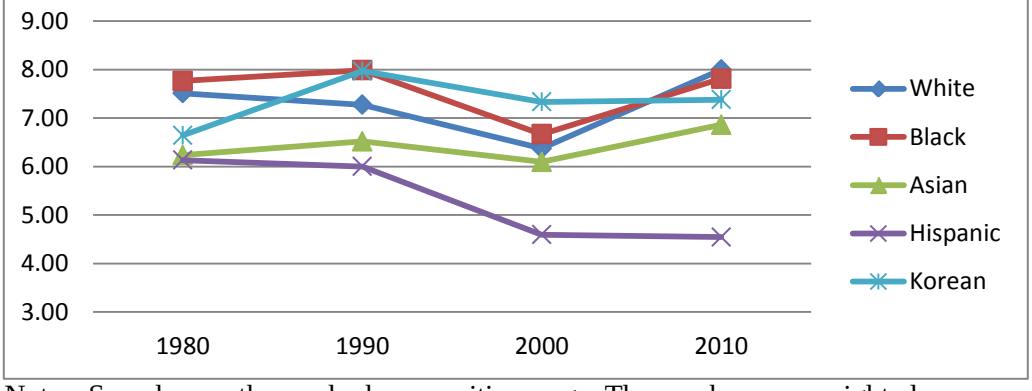
Note: samples are those who have positive wage. The numbers are weighted.
Source: 1% PUMS for 1980, 1990, 2000, and ACS for 2010

Figure 5.4. The P90/P50 Wage Ratios, 1980-2010



Notes: Samples are those who have positive wage. The numbers are weighted.
Source: 1% PUMS for 1980, 1990, 2000, and ACS for 2010

Figure 5.5. The P50/P10 Wage Ratios, 1980-2010



Notes: Samples are those who have positive wage. The numbers are weighted.
Source: 1% PUMS for 1980, 1990, 2000, and ACS for 2010

rising wage inequality since 2000, but this is not the case for black and Asian- rich populations. It suggests that blacks and Asians have experienced the relative upgrading of middle-wage groups, while whites and Hispanics have seen the better performance of top-wage groups compared to the middle-wage ones during the last decade.

The higher wage inequality and the more rapid growth of the high-wage groups of Koreans seem to support the selective inclusion/exclusion thesis. How do their human capital and categorical status (including the match between categorical status and the roles in the labor market) play in the inclusion or exclusion of Koreans in the U.S. labor market? The following section deals with this inquiry.

5.3. Earning Determinants by Category

Data and Methods

This section investigates the social mobility mechanisms facing the minority populations. I particularly examine the effects of categorical characteristics and human capital on earnings among Korean Americans on income,[38] and I compare with those of native-born white workers, using 2010 ACS data. The samples used are those who have positive earnings among metropolitan residents aged 25-64. For these analyses, I use ordinary least squares (OLS) multiple regression analysis. In this analysis, human capital consists of education and English proficiency.[39] Educational attainment is recoded into

[38] I use earning income instead of wage income to include the self-employed that predominate among Korean Americans.

[39] Work experience is often counted as human capital. PUMS and ACS have no information on work experience. Some scholars create this variable with years after completion of their education with the assumption that samples started work right after the graduation. The variable generated in this way is likely to correlate with the age

five levels (less than high school, high school graduate, some college, a bachelor's degree, and post-bachelor's degree). In the analyses, high school graduate is omitted as the reference group. English proficiency is measured in five levels ("Does not speak English," "Yes, but not well," "Yes, speaks well," "Yes, speaks very well," and "Yes, speaks only English"). I treat English proficiency as an ordinary variable from 1 (does not speak English) to 5 (Yes, speaks only English). For categorical characteristics, race, gender, age, nativity, citizenship, and class status [40] are included. Regarding the role of occupations in the earnings of Korean Americans (as an indicator of the existence of selective exclusion), the model also considers the earning effects of working in STEM fields (see Appendix A for detailed occupations included in STEM fields) and of self-employment. Finally, I include in the models some contextual factors (i.e., the median earnings of metropolitan areas and percent of co-ethnic population of county where they reside). I anticipate that the categorically minority status plays a more significant role in shaping the earnings of Korean Americans, while the role of human capital is less significant for them when compared with whites.

Results

Descriptive Statistics

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variable. Thus if we put years after graduation (for work experience) as an independent variable together with the age variable, it would violate the assumption of independence among independent variables. For this reason, I omit work experience from human capital. Instead, age would possibly provide some sense of the role of work experience, in such limitation.

[40] Class status is created as a dichotomous variable, whether in the middle class or not. I define the middle-class as those who are college graduates and have a managerial or professional occupation, following the suggestion of Dr. Zulema Valdez.

Table 5.2 presents descriptive statistics on earnings and the levels of education of the U.S. population in general, non-Hispanic whites, and Korean Americans. The mean value of total earned income is $52,174, which is significantly higher than that of the U.S. general population ($48,225) but lower than that of non-Hispanic whites ($54,438). Koreans have a higher level of educational attainment than that of the U.S. general population, and even higher than that of non-Hispanic whites. About 58 percent of Korean Americans have a bachelor's degree or higher, while about 32 percent of the general population and about 39 percent of whites have the same level of education. Korean Americans on average have a significantly lower level of English proficiency than the other two groups. This is mainly due to the Korean community's higher proportion of the first-generation immigrants. Among the samples (aged 25-64 who live in metropolitan areas), 62 percent are first generation (defined as those who were foreign-born and immigrated to the U.S. at 18 years old or older) in the Korean community. This is noticeably high given that the percent of the first is 16 percent among the U.S. general population and only 4 percent among whites. By contrast, in the Korean community, only 11 percent are second generation or older (i.e., the U.S.-born generation). Among Koreans, About 89 percent are foreign-born, and about 62 percent of them are naturalized citizens.

Koreans present two distinctive patterns in occupational distribution. First, Koreans are more likely to work in science, technology, engineering and mathematics (STEM) field. One in five workers work in STEM field that takes only 5 percent of the U.S. general workers. The second is that they are more likely to choose self-employment. About 21 percent of Koreans are self-employed, which is more than twice as high as the

self-employment rate (9.8%) of the U.S. in general. Koreans live more affluent metropolitan areas. The average of the median earned incomes of metropolitan areas where Koreans ($34,334) live is higher than that of metropolitan areas where the U.S. general population ($31,950) and non-Hispanic whites ($31,722) live.

Table 5.2. Descriptive Statistics for Sample by Race, 2010

	US general		White		Korean		T-test
	Mean	SD	Mean	SD	Mean	SD	(W/K)
Earning	48,255	549,328	54,438	587,923	52,174	620,697	**
Log earning	10.322	11.404	10.446	11.144	10.380	12.148	***
less than HS	0.123	3.410	0.058	2.346	0.043	2.159	***
High school	0.250	4.486	0.243	4.301	0.166	3.966	***
Some college	0.301	4.753	0.314	4.657	0.214	4.372	***
Bachelor's degree	0.208	4.209	0.245	4.313	0.377	5.166	***
Post Bachelor's degree	0.118	3.348	0.140	3.484	0.200	4.263	***
English proficiency	4.536	9.815	4.903	4.094	3.434	11.768	***
Sex (Male)	0.490	5.182	0.497	5.016	0.421	5.263	***
Age	43.8	116.4	45.1	113.1	42.3	116.3	***
Nativity (Foreign-born)	0.221	4.301	0.066	2.494	0.886	3.390	***
Citizen (US-citizen)	0.881	3.360	0.974	1.593	0.622	5.163	***
1st Generation	0.157	3.771	0.043	2.035	0.629	5.150	***
1.5 Generation	0.063	2.510	0.023	1.508	0.256	4.650	***
2nd Generation and beyond	0.772	4.348	0.933	2.502	0.114	3.388	***
Married	0.242	4.442	0.244	4.307	0.251	4.623	
Middle class+	0.035	1.907	0.044	2.066	0.050	2.325	*
STEM	0.050	2.269	0.056	2.309	0.062	2.571	*
Self-employment	0.098	3.081	0.109	3.121	0.206	4.279	***
Median earning of metro	31,950	55,794	31,722	51,480	34,334	61,457	***
Total N	1,179,399		767,221		7,163		

Notes: The samples are those aged 25-64 and metropolitan residents only
The values are weighted by person.
+Middle class refers to those who have managerial or professional occupations and have a bachelor's degree at least
Source: American Community Survey (ACS) 2010

Korean Americans and whites

Table 5.3 compares the effects of each variable on earnings between whites and Korean Americans. Model 1 that includes only human capital indicates that the role of education on earnings is higher among whites than among Korean Americans. The relative weight of a bachelor's degree to a high school degree is .567 for whites, while it is .346 for Korean Americans. English proficiency does not account much of earning differences for whites, but it plays a considerable role among Korean Americans. In Model 2 where categorical, occupational, and regional characteristics are taken into consideration, the positive effects of a bachelor's degree and a post-bachelor's degree is still significant and higher for the majority whites than those for Korean Americans. The middle-class effect is larger for whites than Korean Americans.

However, the earning benefit of working in STEM is a little larger for Korean Americans than for whites. Self-employment is associated negatively with earnings for both groups, but the degree is not similar. The earning disadvantage of self-employment is much larger for whites than for Korean Americans. These results are in harmony with the higher likelihood of working in STEM fields and self-employment among Korean Americans. [41]

Regional characteristics (characterized by two variables: the median income of the metropolitan area of residence and the percent of Korean population in the county of residence) do not explain much about the earning differences between whites and Korean Americans.

[41] It may be inferred that Korean Americans enter STEM fields and self-employment more than whites because the benefits of STEM are (slightly) greater and the disadvantages of self-employment somewhat less.

Table 5.3. OLS Regression Estimates of Log Earnings by Race

	White								Korean							
	Model1				Model2				Model1				Model2			
	b	SE	B		b	SE	B		b	SE	B		b	SE	B	
Intercept	9.772	0.017	0.000	***	6.126	0.033	0.000	***	9.632	0.056	0.000	***	5.805	0.276	0.000	***
less than HS	-0.349	0.007	-0.062	***	-0.340	0.007	-0.060	***	-0.310	0.093	-0.047	***	-0.295	0.090	-0.045	**
Some college	0.176	0.004	0.074	***	0.200	0.004	0.084	***	0.093	0.051	0.034		0.061	0.050	0.022	
Bachelor's degree	0.567	0.004	0.225	***	0.507	0.004	0.201	***	0.346	0.047	0.146	***	0.234	0.047	0.099	***
Post Bachelor's degree	0.902	0.004	0.295	***	0.809	0.004	0.265	***	0.705	0.052	0.255	***	0.544	0.052	0.197	***
English proficiency	0.070	0.004	0.024	***	0.090	0.004	0.031	***	0.128	0.015	0.122	***	0.136	0.018	0.130	***
Male					0.462	0.003	0.207	***					0.255	0.030	0.112	***
Age					0.112	0.001	1.108	***					0.135	0.012	1.257	***
Age-square					-0.001	0.000	-1.009	***					-0.001	0.000	-1.127	***
Citizen (US-citizen)					0.114	0.011	0.016	***					0.166	0.038	0.068	***
1st Generation					0.048	0.010	0.008	***					-0.147	0.059	-0.064	
1.5 Generation					0.114	0.011	0.012	***					0.013	0.049	0.005	
Married					-0.011	0.003	-0.004	***					-0.014	0.034	-0.005	
Middle class					0.450	0.006	0.090	***					0.394	0.062	0.084	***
STEM					0.320	0.005	0.071	***					0.409	0.056	0.097	***
Self-employment					-0.344	0.004	-0.097	***					-0.116	0.038	-0.041	**
Median earning of metro					0.000	0.000	0.093	***					0.000	0.000	0.083	***
Percent of Koreans in county					5.001	0.257	0.023	***					6.959	1.964	0.048	***
R-square	0.095				0.198				0.085				0.162			

Notes: Samples are metropolitan residents aged 25-64. The values are weighted by person.
*p < .05 **p < .01 ***p < .001
Source of data: ACS 2010

Meanwhile, there are some interesting differences between the two groups in the role of each variable relative to that of other variables. According to standardized coefficients (Beta) in Model 2, two higher educational degrees (post-bachelor and bachelor's degrees) and gender (being a male worker) play the largest role in their earnings among the majority whites.[42]

For Korean Americans, the relative weights of explanatory variables seem to be different. English proficiency is one of the most important determinants in their earnings. It is more important than a bachelor's degree and even than gender status. Some other interesting differences between the two groups are related to the roles of class and STEM. Class status matters more than STEM status for whites, while it is the reverse for Korean Americans.

Men and Women

Table 5.4 separates men and women and displays the effects of independent variables in each group. White male workers gain more earning returns to the higher education than the Korean male workers in both a bachelor's and post-bachelor's degree levels. The role of citizenship status is substantial for Korean men, while it is significant but not substantial for white men. First-generation Korean men are significantly disadvantaged in earnings, while the same generation of white men enjoys a slight earning advantage when compared with the U.S.-born generation counterparts. The both groups find earning advantages in STEM fields but the degree is much greater among Korean men. On the contrary, the disadvantage of self-employment is a very small for

[42] Age shows the highest and positive value of Beta, but the effect of age is almost offset by the negative beta value for age-square.

Korean men, but it is substantial for white men. The class effect (whether middle-class or not) appears to be very similar for both white men and Korean men. Regarding regional characteristics, the median income of each one's metropolitan area does not make differences in the earnings in both groups.[43] Korean concentration in the county, interestingly, is more highly associated with the earnings of white men than those of Korean men.

Comparisons of the male samples' Beta (B) values (indicating the relative importance of each variable compared with others) present the higher education is outstandingly important than the other variables among white men, but its role is not remarkably different from that of the other variables among Korean men. The most noticeable among Korean male workers is the considerable role of STEM in their earnings. For Korean men, the earning difference by STEM status is as large as the difference by whether having a bachelor's degree or a high school degree. The relative importance of STEM is, by contrast, far modest among white men. Another significant difference between white men and Korean men is found in the effect of the first generation relative to the second generation or beyond. The degree (b) and importance (Beta) of the first-generation status on earnings is not substantial for white men, while it is substantially and negatively associated with the earnings of Korean men. Citizenship status also more matters for Korean men, but it is associated positively. For white men, self-employment is more (negatively) important than the other categorical status such as

[43] This may be because only metropolitan samples are used for this analysis. It also implies that there is no significant impact of areas within metropolitan areas.

Table 5.4. OLS Regression Estimates of Log Earnings, By Sex

	White								Korean							
	Male				Female				Male				Female			
	b	SE	B		b	SE	B		b	SE	B		b	SE	B	
Intercept	5.800	0.043	0.000	***	7.008	0.050	0.000	***	5.243	0.374	0.000	***	6.504	0.402	0.000	***
less than HS	-0.310	0.008	-0.062	***	-0.393	0.012	-0.061	***	-0.549	0.147	-0.073	***	-0.163	0.116	-0.028	
Some college	0.202	0.005	0.086	***	0.197	0.005	0.084	***	0.070	0.071	0.027		0.033	0.070	0.011	
Bachelor's degree	0.549	0.005	0.224	***	0.461	0.006	0.184	***	0.282	0.066	0.127	***	0.151	0.066	0.062	*
Post Bachelor's degree	0.843	0.006	0.280	***	0.768	0.006	0.257	***	0.508	0.071	0.206	***	0.538	0.076	0.178	***
English proficiency	0.100	0.006	0.037	***	0.075	0.007	0.025	***	0.121	0.026	0.118	***	0.151	0.026	0.143	***
Age	0.145	0.001	1.481	***	0.075	0.001	0.756	***	0.187	0.016	1.830	***	0.092	0.017	0.832	***
Age-square	-0.002	0.000	-1.363	***	-0.001	0.000	-0.676	***	-0.002	0.000	-1.668	***	-0.001	0.000	-0.731	***
Citizen (US-citizen)	0.086	0.015	0.013	***	0.146	0.018	0.019	***	0.159	0.051	0.071	**	0.181	0.057	0.070	**
1st Generation	0.075	0.013	0.014	***	0.009	0.015	0.001		-0.206	0.082	-0.095	*	-0.085	0.085	-0.036	
1.5 Generation	0.098	0.015	0.011	***	0.131	0.017	0.014	***	-0.064	0.067	-0.027		0.087	0.072	0.033	
Married	-0.011	0.004	-0.004	**	-0.012	0.004	-0.005	**	-0.018	0.047	-0.007		-0.012	0.048	-0.004	
Middle class	0.393	0.007	0.088	***	0.516	0.010	0.093	***	0.316	0.074	0.082	***	0.536	0.106	0.093	***
STEM	0.271	0.006	0.075	***	0.470	0.011	0.075	***	0.411	0.064	0.123	***	0.423	0.106	0.073	***
Self-employment	-0.242	0.005	-0.077	***	-0.529	0.007	-0.131	***	-0.054	0.050	-0.021		-0.188	0.058	-0.061	**
Median earning of metro	0.000	0.000	0.099	***	0.000	0.000	0.090	***	0.000	0.000	0.064	***	0.000	0.000	0.097	***
Percent of Koreans in county	4.152	0.342	0.020	***	5.951	0.386	0.027	***	0.902	2.623	0.007		12.768	2.915	0.083	***
Total N	317,969				292,515				2,460				2,716			
R-square	0.199				0.138				0.184				0.129			

Notes: Samples are metropolitan residents aged 25-64. The values are weighted by person.

*p < .05 **p < .01 ***p < .001

Source of data: ACS 2010

citizenship and generation status, while it is less important than such categorical status for Korean men.

For female workers, the role of the higher education is also significant, but its degree is generally smaller than that of male workers. Interestingly, however, Korean women who have a post-bachelor's degree receive higher earnings compared with the Korean men. By contrast, the role of a bachelor's degree (as the highest degree) is considerably smaller for Korean women than that of Korean men. It is also much smaller when compared with that of white women. English proficiency plays a greater role among Korean women than among white women.

First-generation Korean women face earning disadvantages from the generation status, but the disadvantage is minimal when compared with that facing the male counterparts. Class effect (managerial and professional occupations of the college-educated female workers) is greater for women than for men in both whites and Korean Americans.

The STEM effect for Korean women is very similar to that for Korean men. Interestingly, white women, compared to white men, find a higher earning advantage in STEM fields, which appears to be a very similar to the effect of STEM among Koreans both men and women. The disadvantage of self-employment is significant and greater for women than for men in both whites and Korean Americans. Regarding regional characteristics, Korean women's earning is highly positively associated with the rate of the co-ethnic presence in their county.

Table 5.4 shows that Korean women do not gain the similar level of the earning returns to their bachelor's degree, and its significance (indicated by Beta) is small

compared to the roles of the other main variables such as English proficiency, citizen status, class, STEM, and the percent of the co-ethnic population. Another noticeable difference is that the earning advantage of managerial and professional occupations is greater than the advantage of STEM fields for Korean women, which was the reverse for Korean men.

STEM versus Non-STEM

In the U.S. labor market, STEM fields are disproportionately overrepresented by Asian Americans. Table 5.5 shows how the factors determining earnings in STEM fields are different from those in non-STEM fields for both whites and Korean Americans. It also presents the results for Asian Americans to see whether Korean Americans represent Asian Americans in general or more unique (due in part to the higher rate of self-employment).

STEM fields do not provide a higher earning return to the higher education for the majority whites. In fact, the earning contribution of a bachelor's degree and a post-bachelor's degree appear lower in STEM than in non-STEM fields. For Korean Americans, the coefficients of both degrees are higher in STEM than in non-STEM fields, but they are not statistically significant. In non-STEM fields, the roles of college and post-college educational degrees are significant. However, the contribution of the education to earnings is considerably lower among non-STEM Korean workers when compared with that among whites in both STEM and non-STEM fields.

As the coefficients of many variables are not significant for Koreans in STEM fields, I present some results from the samples of Asian Americans in general, to grasp a

Table 5.6. OLS Regression Estimates of Log Earnings, By STEM

	White						Korean						Asian					
	STEM			Non-STEM			STEM			Non-STEM			STEM			Non-STEM		
	b	SE		b	SE		b	SE		b	SE		b	SE		b	SE	
Intercept	6.729	0.093	***	6.031	0.035	***	6.889	0.791	***	5.739	0.296	***	6.487	0.152	***	6.056	0.083	***
Less than high school	-0.253	0.056	***	-0.339	0.007	***	-0.184	0.941		-0.292	0.093	**	-0.004	0.117		-0.128	0.017	***
Some college	0.114	0.016	***	0.200	0.004	***	0.132	0.265		0.054	0.052		0.201	0.069	**	0.125	0.015	***
Bachelor's degree	0.400	0.015	***	0.567	0.004	***	0.360	0.240		0.268	0.048	***	0.530	0.065	***	0.458	0.014	***
Post-bachelor's degree	0.509	0.016	***	0.889	0.004	***	0.438	0.242		0.583	0.055	***	0.624	0.065	***	0.890	0.015	***
English proficiency	0.099	0.012	***	0.092	0.005	***	0.043	0.053		0.144	0.019	***	0.111	0.011	***	0.134	0.006	***
Male	0.271	0.008	***	0.483	0.003	***	0.247	0.084	**	0.272	0.032	***	0.199	0.015	***	0.283	0.009	***
Age	0.113	0.003	***	0.114	0.001	***	0.113	0.034	**	0.137	0.013	***	0.121	0.006	***	0.120	0.004	***
Age-square	-0.001	0.000	***	-0.001	0.000	***	-0.001	0.000	*	-0.001	0.000	***	-0.001	0.000	***	-0.001	0.000	***
Citizen (US-citizen)	0.071	0.026	**	0.114	0.012	***	0.162	0.109		0.159	0.041	***	0.133	0.018	***	0.250	0.011	***
1st Generation	0.078	0.023	***	0.052	0.011	***	-0.286	0.148		-0.146	0.064	*	0.152	0.027	***	-0.006	0.015	
1.5 Generation	0.096	0.029	***	0.121	0.012	***	-0.163	0.110	*	0.018	0.053		0.091	0.027	***	0.108	0.015	***
Married	0.013	0.008		-0.013	0.003	***	-0.177	0.087		-0.007	0.036		0.007	0.016		-0.009	0.010	
Self-employment	-0.599	0.017	***	-0.347	0.004	***	-0.366	0.210		-0.101	0.040	**	-0.384	0.047	***	-0.238	0.014	***
Median earning of metro	0.000	0.000	***	0.000	0.000	***	0.000	0.000		0.000	0.000	***	0.000	0.000	***	0.000	0.000	***
Percent of Koreans in county	4.297	0.717	***	5.120	0.272	***	8.834	5.164		7.242	2.098	***	4.533	1.072	***	3.832	0.615	***
N	44,469			722,752			431			4,745			9,546			49,770		
R-square	0.174			0.173			0.225			0.134			0.162			0.200		

Notes: Samples are metropolitan residents aged 25-64. The values are weighted by person.

*p < .05 **p < .01 ***p < .001

Source of data: ACS 2010

better understanding on how the roles of STEM fields might be different between whites and Asian Americans. Unlike whites, Asian Americans in general do a better job in STEM than in non-STEM fields in actualization of their bachelor's degrees into earning return. In STEM fields, Asian's earning returns to the college education are even higher than those of whites. This result is inferred that STEM fields are better for Asian Americans in maximizing the earning effect of their bachelor's degree. However, STEM fields turn out not advantageous for Asian Americans who have a post-bachelor's degree.[44]

The role of gender is interesting. For whites, STEM fields are relatively gender-neutral (albeit male workers are still significantly advantaged than their female counterparts even in this area) when compared with non-STEM fields. That is, white women would be less disadvantaged if they work in STEM fields. The similar pattern is found among Asian workers as well (but the gap in the gender effect between STEM and non-STEM fields is smaller than that for whites). For Korean workers, gender is not as much important as is among the whites and among Asians in both STEM and non-STEM fields.

5.4. Conclusions

Within Korean Americans, the human capitals (college and post-college educations and English proficiency) play a significant role in the level of earnings. However, the importance of these human capitals is not as large as that among whites. Their categorical status, such as first-generation immigrant or non-citizen status, appears

[44] This may be attributed to a high rate of Asian Americans in high-paying professional schools such as law schools or medical schools that is not considered as a STEM field.

to be important and negatively associated with their earnings, while these categorical status are not so much important among whites. Among Korean Americans, the role of gender status is interesting. The wage returns to the bachelor's degree among Korean women is smaller than that among Korean men, but their post-bachelor's degree is better transferred to wage returns, compared to men's. Class status (whether or not having a college degree and managerial or professional occupations) affects both whites' earnings and Koreans' earnings, but the effect is larger among whites than among Koreans.

What matters more among Koreans in their earnings is the roles they take in the labor market. STEM fields are significantly and positively associated with their earnings, but among whites, in fact, STEM fields appear to be associated a little bit negatively with their earnings. Self-employment, which is relatively very popular among Koreans, is negatively associated with earnings for both whites and Koreans. However, the disadvantage is much smaller among Koreans compared to that among whites.

In the beginning of this chapter, I discussed the history of the U.S.'s exclusionary institutions against racial minorities. Since the post-war era, the exclusionary systems became transformed to be more selective in order to meet changing demand for labor in the context of the economic restructuring. The rapid growth of immigrants from Asia was a response to this changing demand for high-skilled labor, especially in STEM fields. The U.S. immigration policy manifested the selective inclusions/exclusions through explicit occupational-preference systems. The STEM preferences are still explicit in the current U.S. immigration policy. For example, it is granted to only STEM-majoring international students OPT (Optional Practical Training) extension for additional 17 months

(Department of Homeland Security 2008).[45] The STEM's wage advantages among Koreans and Asians can be understood in such U.S. institutions favored to STEM. This may result in the overrepresentation of Asians in STEM fields (Lee 2010). Thus, I argue that, for Koreans, their race category plays a role in career choices, and this a responsive strategy to the U.S. selective mechanisms.

[45] See "8 CFR Parts 214 and 274a [DHS No. ICEB-2008-0002; ICE No. 2124-08] RIN 1653-AA56" in the document of Federal Register 73(68). (http://www.gpo.gov/fdsys/pkg/FR-2008-04-08/html/E8-7427.htm)

Chapter 6. Conclusions and Discussion

Global movement of capital and people is not a new phenomenon and is expected to grow in the future. However, our analyses, with a few exceptions, are lagging behind the rapidly changing empirical world because of being limited by old-fashioned nation-bound perspectives. This study has presented an example of how we can understand stratification and social mobility in a global perspective. A global perspective perceives stratification as a global process. This global perspective pays attention to the position of people and their social mobility at a global level. In this global framework, three paths to social mobility become visible: within-country mobility, between-country mobility, and jumping categorical inequality (or global mobility through international migration).

How do stratification and social mobility look different from this global perspective (with the concept of the three paths to social mobility)? The nation-bound modernization perspective understands "the accumulation of human capital as the principal path to upward social mobility" and it believes "the relative access to this route is more or less shared equally, as ascribed inequality is weakened over time" (Moran 2012:278). This is a predominating path from a national perspective. At a global level, however, the effect of this path looks not so strong as usually assumed. What we can see from a global perspective is that the importance of the accumulation of human capital (claimed as universal by the modernization school) is more true for the global elite class (which is mostly constituted of the categorical majority groups of the rich First World countries), while it is less true for the other groups in the world (Korzeniewicz and Moran 2009).

In other countries, this first path (accumulation of human capital) is neither the most promising path to social mobility nor is its effect as large as it was usually assumed. The second path (between-country mobility) instead appears more important than the within-country mobility in global social mobility. As explored in chapter 3 (Figure 3.15), in South Korea, while earning a college or post-college degree or getting a high-paying occupation within the country, makes it possible to upgrade the global position by just two deciles (from 8th decile to 10th decile) at most during the 1988-2002 period, and the national economic growth moved the nation from one of the "third world" countries in 1960 to one of the "rich" countries in 2000 (Milanovic 2005:68-68 table 7.1). The mobility of the country through economic growth raised the majority of the population from globally lower positions (below the middle) to global upper or middle classes (9th or 10th deciles).

Between-country mobility can be quite effective for global social mobility, but it is in fact less attractive for individual households. National economic growth is mostly beyond the discretion of individual households. Besides, it is not easy to expect that a generation experiences such significant upgrading of the country within their time, because it may take a century or at least a few decades, even it may possibly never occur in many countries. Although South Koreans experienced global upward mobility through its rapid economic growth, this case is not a universally common trend among developing countries; rather, it is one of a few unique cases in the development literature. Thus, this path is neither tangible nor guaranteed for the vast majority of people in developing countries.

The third path to social mobility – jumping categorical inequality (mainly through international migration in this global mobility context) – is another route to global upward mobility. This study investigated the case of Korean immigration into the United States. Its effect was measured by comparisons of the global income position of Korean American income deciles to that of South Korean income deciles between 1998 and 2002.[46]. Each Korean American decile group presents its global income standing that is significantly higher than the global position of South Korean counterparts of each corresponding decile. In 1998, the seven deciles (4^{th}-10^{th} deciles) or about 70 percent of Korean Americans were positioned within the world's richest 10 percent, while only one decile (the 10^{th}) or about 10 percent of South Koreans was found in the global top decile. In 2002, about 75 percent (or 15 ventile groups) of Korean Americans found themselves in the global top decile, while about 20 percent of South Koreans made it. Put differently, for South Koreans, the international migration to the United States raises the likelihood of achieving the high status (the global richest 10 percent) by seven times in 1998 and by 3.75 times in 2002.

The crucial importance of location is also found in worldwide wage gaps. Comparisons of wage levels of the major cities of different countries revealed that changing location is more effective than upgrading occupation to upward income mobility on a global scale. Wage variance is accounted for more by the variance of location (across cities of different countries) than by the variance of occupation

[46] This comparison gives a more structural picture of the effect of international migration on global social mobility because my data is not a longitudinal data tracing pre- and post-migration income of individual households. It is possible that, at an individual level, there might exist many households that experienced downward mobility as opposed to the general trend of upward mobility.

(Korzeniewicz and Albrecht, unpublished manuscript). Overall, at a global level, the social mobility effect of the within-country mobility (through receiving higher education and getting a high-paying occupation) looks limited, compared to the effects of the other two paths.

Chapter 4 examined occupational mobility of Korean Americans before and after migration using two regional (Washington, D.C., and Los Angeles) surveys. Then, it, using merged individual-level census data of each of two countries, compared the roles of human capital of South Koreans and Korean Americans at a broader (global and transnational) context; and investigated the relative weight of country (whether living in South Korea or in the United States), compared to that of having a college or post-college degree.

For Korean immigrants, by occupation, downward, rather than upward, mobility is more common after migration to the United States. Many Korean immigrants took lower-prestige and less-skilled jobs compared to their jobs in the country of origin. However, their income is considerably higher than the income of South Koreans remaining in South Korea. Placing the incomes of South Koreans and Korean Americans together on the transnationally integrated income deciles, this study found that about one in four Korean immigrants (KIM) and about one in two children of Korean immigrants (KUS) are located in the richest 10 percent, while only one in twenty South Koreans are presented in the same decile.

A following question of the study was which one, either attaining a college or post-college degree or migrating to the United States, is more effective for South Koreans to upward income mobility. The study, thus, compared the income effect of the two

mobility practices. Considering the immigrants' skewed distribution in class background (i.e., selectivity), the study controlled for education and some other demographic and socioeconomic statuses. The study did additional analyses not only for South Koreans (including Korean Americans) in general, but for the higher (the richest quarter) income group and for the lower (the poorest quarter) income group separately, given that the effects of location and education may differ by income group. The results showed that among Koreans, in general, the effect of location is not significantly different from that of a college or post-college degree. However, this seems to be a result of the compensating effect of two opposing directions of the top quarter and the bottom quarter. In the top quarter, the new location is significantly and positively associated with income after controlling for education, and its effect is substantially higher than the effect of a college or post-college degree. In the bottom quarter, by contrast, the new destination is negatively associated with income, all other factors being equal. These results imply that, among South Koreans, middle- and upper-class workers are usually better at transferring their migration to income benefit than the working-class counterparts.

As soon as they arrive at a destination, international migrants become a minority in a destination and their social mobility processes are shaped by the stratification system of the destination. To grasp a more comprehensive understanding of global stratification, it is incorporated into analysis of how minorities are treated in a destination. The majority of international migrant workers move from a relatively poorer country to a wealthier country, and from a less modernized to more modernized (in the eye of Westerners) society. If admitting the modernization perspective, we should find that the migrant workers receive higher returns to human capital in a destination compared with the

returns in a country of origin because, in their more modern destination, human capital is supposed to play an essential role in determining rewards in a labor market.

Chapter 5 is about the U.S. stratification system for racial/ethnic minorities. The findings suggest that Korean Americans face different processes of being rewarded in the labor market, compared to the processes facing whites. For whites, higher education (bachelor's and post-bachelor's degrees) is a very important factor to upward mobility, as assumed by the modernization perspective. However, for Koreans in the United States, the role of a bachelor's degree is much smaller than that of whites. English proficiency has almost the same importance as a bachelor's degree. While first-generation status turns out a little positive for whites, but it appears negative among Koreans. STEM fields do provide higher earning returns to education for Koreans, but not to whites. White self-employers, other things being equal, make earnings significantly less than the earnings of wage-worker counterparts, while such earning disadvantage of self-employment is not considerable among Koreans. The earning disadvantage of the categorical status (being a Korean) is larger for men than for women. The earning effect of ethnic economy (measured by the percentage of Koreans in the same county) is positive, but not substantial among Koreans. Instead, whites receive relatively more earning advantage from the concentration of Korean population in a county.

What are theoretical implications we can draw from these results? The division of role (or labor) is assigned along with categorical boundary both at a global level and a within-nation level. Further, the roles of human capital such as education and skill vary depending on who (categorically defined) works for what (i.e., occupation). These processes challenge the traditional methodology employed by the modernization school

that treats human capital as an independent factor accounting for social mobility. The global stratification perspective, by contrast, views the role of human capital as an outcome of broader processes being operated on a global scale. Korzeniewicz and Moran (2009:103) underline that "the human capital criteria that underpin inequality are themselves an outcome of institutional arrangements linked to Schumpeterian processes of creative destruction." In this global perspective, thus, the definitions of "high" and "low" skill (which is viewed by the modernization school as a main *human capital* criterion used to "differentially distribute returns to various populations") are instead understood as a more *categorical* expression being constructed and kept changing over time by institutional arrangements leading the processes of creative destruction.

Despite the dynamic processes of creative destruction, however, categorical inequality in access to resources and opportunity has endured for a long time: the economic gap between Third World and First World has endured except for a few cases of Asian Tigers at a global level, and racial inequality has persisted for a long time in the United States. These "durable" categorical inequalities imply that the processes of creative destruction revolve on *categorical* distinctions, while destructing and creating institutional arrangements that shape the distribution of returns to human capital to different segments of population. For example, my Pakistani friend introduced in the chapter 1 has a master's degree and competent English skill, but his education and skill were not rewarded in the roles that were not tacitly allowed for his categorical characteristics in South Korea (e.g., teaching English as a non-white or non-American). That is, his categorical characteristics were not qualified for the roles that needed his education and skill. He was more wanted by low-skilled 3D (difficult, dangerous, and

dirty) industries that would not care what human capital he possessed, but only cared about how healthy and strong he was. In America, Asian Americans are stereotyped as being good at math and science, but not being good in managerial or leadership positions (Chou and Feagin 2008;Wu 2003). The impact of this stereotype is reflected in different earning benefits between STEM fields and non-STEM fields for Asian Americans. That is, Asian Americans are somewhat less disadvantaged in STEM than in non-STEM fields. As a result, Asian Americans are overrepresented in STEM fields, but underrepresented in higher-ranked managerial and leadership positions.

At a global level, there is international division of labor and this institutional arrangement accounts for different roles and different returns to skill by country. South Korea took a role in labor-intensive light industries in the beginning of its industrialization from the mid-1960s to the mid-1970s. At that time, this manufacturing seemed "lucrative" in South Korea, as the country had just been transformed from an agricultural to an industrial society and promoted a massive rural-to-urban migration. The very same (labor-intensive) manufacturing was simultaneously a declining industry in the United States. Facing increasing and expensive labor, the United States started restructuring its economy by upgrading its industrial structure and outsourcing manufacturing to countries of cheap labor. The U.S. restructuring processes made Fordism characterized by a mass production an obsolete system and created post-Fordism. Besides, the restructuring replaced the manufacturing industry with a financial one for a main source of profit. In these processes, Fordism-based manufacturing jobs were recognized as "unskilled" occupations in the U.S. economy. The growth of manufacturing in South Korea was closely related to this restructuring in the United

States. The U.S. capitals that had sought cheap labor found a cheap, but well-educated, labor force in South Korea. From the view of South Korean workers, at that period, the manufacturing, albeit it was labor-intensive and low-paid, looked like a *new* industry that resembled Western "modern" societies. As the "modern" manufacturing companies were increasingly established, the skills required to this industry were highly valued, while agriculture was viewed as a traditional sector where modern high skill was not required. Later, when the Korean state transformed its industrial structure to heavy-chemical centered from the mid-1970s, labor-intensive light manufacturing was devaluated as a less-skilled industry and was handed over to women to maintain and justify the cheap wage (Kim 1997), while operators of capital-intensive machines of heavy-chemical industry came to be labeled high-skill workers. A world-historical perspective, which pays attention to such creative destruction processes shaped by unequal relations between nations, as Korzeniewicz and Moran (2009:103) noted, "helps us understand, for example, why certain criteria (such as literacy, elementary education, secondary education, or computer skills) serve to claim (or justify) higher returns in one period but not later on in time; why some jobs are perceived as unskilled in some countries but skilled in others; or why new production processes might be read as deskilling in some countries but as upgrading in others."

It means that the developmental level of a country and its position in the world systems constitutes the "high" and "low" skill and shapes its economic return. Thus, for individual workers, nationality or where he/she lives is crucial for their earning and social mobility. It means that the role of individuals' achievement is not so a much determining factor as assumed in the modernization school. And categorical status is more important

than usually assumed. As where people were born is very important at a global level, people's position depends more on the position of their country. However, upgrading the global position of a country is hardly expected and beyond the discretion of individual households. In this circumstance, moving to a richer country becomes more attractive in achieving upward mobility.

This study, through the investigation of the case of South Korean social mobility at a global level and in a destination context, finds category-based *opportunity hoarding* is a main mechanism of stratification at both global and destination levels. At a global level, it is location or nationality that plays a central role in global stratification, and in the destination society, it is race/ethnicity that constitutes a main criterion of social selection among minorities. The returns to human capital are distributed unevenly according to the combination of occupations and categorical characteristics. The categorical outsiders can maximize their returns to education only when they do the roles that are assigned to their category. Asian Americans receive relatively higher returns to their education in STEM fields than when they work in non-STEM fields, unlike the majority whites among whom there is no such STEM earning advantages. In non-STEM fields, education does not play a role among Asian American workers as much as it does among white workers.

The findings of this study have theoretical and methodological implications: the role of human capital and the role of categorical status should be understood in *global* division of labor (or global labor supply system) and categorical characteristics usually play a central role in shaping. The roles of human capital are likely to be determined by the categorical status of those who possessed the human capital. Which skill is better to

maximize the returns to the investment in human capital also depends on the categorical characteristics such as STEM-related skills for Asian Americans.

Methodologically, this study challenges the traditional unit of analysis and its assumption. National stratification should not be assumed as single and independent; it should be understood in a broader context, global stratification. This shift of framework from national to global changes the traditional ways in which we model for stratification analysis. That is, this framework shift entails changes our analytic model regarding what should be an independent or explanatory variable and what should be a dependent variable to be explained. In this vein, Moran (2012:277) notes, "the social attitudes used in mainstream social science to "explain" inequality and individual attainment – such as education, skill, gender, race and ethnicity, and so forth – become instead the changing expression of processes of differentiation that entail both within- and between-country inequality"(Moran 2012: 277). This view leads us not to apply a same analytic model to every society, but to have more historical and relational perspective on stratification.

This project, especially chapter 4, is a trial of applying transnational and global stratification perspectives to the empirical study of stratification. There are many limitations due mainly to the underdevelopment of the transnational methodology, as well as lack of available data. First, the regression models are somewhat too simple in that it includes educational degrees only for human capital. As two nations' survey data were not standardized, a limited number of variables were successfully integrated. For a better understanding of the roles of achieved characteristics on income, work experiences, levels of skill, the field of education, and the quality of education should also be considered. Variables for ascribed or categorical variables are also very limited. Some

ascribed characteristics also should be included such as the socioeconomic status of parents if data provide such information. Besides, the models did not account for the role of social capital that is increasingly important in stratification research. Second, chapter 4 focuses solely on 2007 data. The effects of each income mobility practice can differ depending on the different contexts of each period of time. Thus, a historical study on changing context is necessary for an understanding of how global stratification works. Especially, a historical analysis of international migration policies will shed light on our understanding of why middle- and upper-class immigrants enjoy benefits from their migration while their working-class counterparts do not. Third, if we had microdata that contained information of both pre-migration and post-migration statuses for Koreans, we would have been able to more accurately estimate returns to international migration and the changing roles of each of the achieved factors and ascribed ones. I hope that such pre- and- post-migration microdata will soon be at our disposal in the near future. Last, but not least, this study used only income position as an objective indicator of social status and social mobility. This may be fine for the purpose of my study, but at the same time, I acknowledge that the meaning of social mobility varies for each culture and population. Occupational prestige, cultural/social capital, and furthermore symbolic capital, all are worthy to be measured as an indicator of social status. Future research should embrace social mobility in these dimensions.

Appendix A. Detailed STEM occupations

Computer and math Occupations

Computer scientists and systems analysts
(Computer and information research scientists)
(Information security analysts)
Computer programmers
Computer software engineers
Computer support specialists
Database administrators
Network and computer systems administrators
Network systems and data communications analysts
Mathematicians
Operations research analysts
(Web developers)
Statisticians
Miscellaneous mathematical science occupations (including mathematicians and statisticians)

Engineering and surveying occupations

Surveyors, cartographers, and photogrammetrists
Aerospace engineers
Agricultural engineers
Biomedical engineers
Chemical engineers
Civil engineers
Computer hardware engineers
Electrical and electronic engineers
Environmental engineers
Industrial engineers, including health and safety
Marine engineers and naval architects
Materials engineers
Mechanical engineers
Mining and geological engineers, including mining safety engineers
Nuclear engineers
Petroleum engineers
Engineers, all other
Drafters
Engineering technicians, except drafters
Surveying and mapping technicians
Sales engineers

Physical and life sciences occupations

Agricultural and food scientists
Biological scientists

Conservation scientists and foresters
Medical scientists
Astronomers and physicists
Atmospheric and space scientists
Chemists and materials scientists
Environmental scientists and geoscientists
Physical scientists, all other
Agricultural and food science technicians
Biological technicians
Chemical technicians
Geological and petroleum technicians
Nuclear technicians
Other life, physical and, social science technicians

STEM managerial occupations
Computer and information systems managers
Engineering managers
Natural sciences managers

Source: (Beede et al. 2011)
Note: Occupations in (parenthesis) are added by the author.

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Data

World Income or Wage Data

World Income Distribution (WYD), World Bank

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Data used for South Korea

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Data used for Korean Americans and the United states

Public Use Mircrodata Series (PUMS) 1% 1980, 1990, 2000

Public Use Microdata Series (PUMS) 5% 1980, 1990, 2000

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Notes: all the U.S. datasets are downloaded from www.ipums.org

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