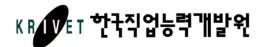
Expatriate Labor in the Korean Market 외국인 인적자원의 개발과 활용 방안

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Expatriate Labor in the Korean Market

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Preface

Korean policymakers and scholars have been searching for new engines of economic growth. Simultaneously, they are attempting to preserve Korea's historical prowess in engineering. Korean firms have been very successful at exporting manufactured goods because they could rely on a diligent, well-educated pool of local engineers. However, this pool of human capital has started to diminish. This report investigates one potential solution to this problem: expatriate labor. Expatriate labor, or "global talent" working in Korea, can not only provide skilled individuals for the emerging services sector, but also replenish a diminishing local pool of engineering talent.

This report suggests that the Korean economy would benefit by utilizing "global talent" in two distinct fields. Korea needs an enlarged talent pool within the service sector, especially in finance and general business management, for its ambitions of becoming a financial and business hub. Korea would also benefit from renewing its engineering talent, to maintain its traditional strengths in manufacturing and design.

Potential sources has also been uncovered for each type of labor. On one hand, global talent in business and finance could be recruited from the millions of second and thirdgeneration ethnic Koreans living primarily in the U.S. and Japan. Korea already has a substantial institutional infrastructure for such recruitment, and compares favorably to two roughlycomparable cases of Japan and Germany. On the other hand, global talent in engineering could be recruited from the foreign students who are studying at top universities in Korea.

Although Korea should institute something like the U.S. Optional Training Program, care should be taken to distinguish truly-qualified foreign students from those individuals that are not as qualified.

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We expect that this report suggest a new framework, theocratical and analytical, in discussing expatriate labor and migration policy and provide new grounds for formulating policy agenda. We declare that contents of this report only reflect ideas of participating investigators, not that of KRIVET.

November 2009,
Prof. Dr. Dae-Bong Kwon
President
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I. Introduction

1. Background

During the past ten years, the Republic of Korea (henceforth "Korea") has become an advanced industrialized society. Realizing this, Korean policymakers and scholars have been searching for new engines of economic growth. In particular, Koreans have been looking at the information economy, focusing on the services sector.

At the same time, the same policymakers and scholars are attempting to preserve Korea's historical prowess in engineering. Korean firms have been very successful at exporting manufactured goods because they could rely on a diligent, well-educated pool of local engineers. However, anecdotal evidence suggests that this pool of human capital has started to diminish.

This paper investigates one potential solution to these problems: expatriate labor. Expatriate labor, or "global talent" working in Korea, can not only provide skilled individuals for the emerging services sector, but also replenish a diminishing local pool of engineering talent. This solution is consistent with a large body of academic literature on economic growth, which has long considered expatriate labor as a key instrument for enhancing a country's economic competitiveness

The long-term economic growth of an advanced country…in the age of rapid globalization-- is certainty highly correlated with the skill level

of its residents...The skill level in turn depends heavily on both the education and immigration policies of the country. The combined outcome of these policies is a ready supply of high-skilled workers, which is critical for globally competing businesses (Kirkegaard 2007).

With increased economic globalization, competition has intensified for top service and technical professionals and Korea must compete with other advanced countries already lobbying for talented individuals (Kirkegaard 2007; McHale 2003). The United States, Great Britain and Germany have all initiated programs to recruit highly skilled laborers like medical professionals (see OECD 2008) and technical specialists (see Kirkegaard 2007).

Despite the international competition for "global talent", there are two compelling reasons why Korea should attempt to recruit these professionals: (1) global talent has become necessary in an increasingly globalized world economy; and (2) global talent is necessary to replenish Korea's pool of top-notch engineers.

2. Expatriate Labor and Korea as a Global/Regional Hub

First, economic globalization has made expatriate labor more critical. World city research (e.g. Friedmann 1984; Sassen 2001) finds that a few individuals in a few geographic locations exercise disproportionate influence over the world economy. Economic globalization involves the flow of goods, services, and capital across national boundaries. Because someone must decide which goods, services and capital are to be sent from one place to another, globalization has increased the need for information gathering and

analysis. These decisions are made by educated, skilled and experienced professionals, including executives leading multinational corporations, financiers who control capital flows--and producer service professionals like accountants, consultants, and lawyers. Working in concert, these professionals play a "command and control" role, making decisions that greatly affect distant parts of the world (Sassen 2001). Global talent also encompasses the top technical professionals. The new international division of labor (see Gereffi and Korzeniewicz 1994) has geographically-separated industrial production from research and design activities. While corporations seek low-cost locations for industrial production, they locate the much higher value-added research and design activities in research hubs--industrial clusters specializing in technical research and design (see Porter 1990).

In recent years, Korea has increased its "command and control" and "research hub" roles in the world economy. Under the Roh Moo-hyun administration, the Korean government declared that it will establish a "business hub" or "financial hub" for Northeast Asia (see Lee 2004). The intent was to strengthen Korea's command-and-control role, and capture the high-value economic activity associated with such activities.²⁾ Although these policy initiatives have largely failed to materialize, Seoul has nevertheless developed as a "global city" on its

¹⁾ This issue has attracted attention of the so-called developmental state theories of the East Asian economy. See Amsden (1989), Evans (1995), Johnson (1982), Wade (1990)

²⁾ Shin (2006) describes the Roh Moo Hyun Administration seeking for alternative hegemonic strategy in East Asia rather than through the unilateral relations with the United States. He argues that the Roh government made effort to establish "regionalism as a key agenda" (p.218).

own merits. Recent studies (Foreign Policy 2008; MasterCard Worldwide 2008) rank Seoul as the ninth-most important city in the world. The Foreign Policy study, conducted by consultancy A. T. Kearney and the Chicago Council on Global Affairs, rated Seoul immediately below Singapore and Chicago but immediately above Toronto and the District of Columbia. Seoul was said to be a national center, like Tokyo and Beijing, that "do [sic] well in international business, but not because they're necessarily globally connected; in these places, foreign firms can find something no other city offers."

Yet, Korea's potential as a "Northeast Asian hub" or "research hub" appears to be limited by a shortage of local "global talent". The Foreign Policy (2008) study ranked Seoul highly in terms of business activity (#7) and as a research and development center (#5), on the strength of its homegrown chaebol. However, Seoul was ranked low (#35) regarding the quality and quantity of its human capital. This shortage of "global talent" would hinder recent policy initiatives to make Korea a "hub" of Northeast Asia. Without addressing Seoul's limited supply of human capital, "hub" projects may not be realistic. Consequently, Korea needs to procure global talent in the service sector, especially in finance and general business management.

3. Expatriate Labor and Engineering Human Capital

Just as important, Korea may need to replenish its pool of engineering talent. Korea's economic development has been fueled largely by its engineers. Korean exports, like Samsung phones and Hyundai automobiles, are competitive on the world market primarily

because of their engineering and design. However, as Korea has become a wealthy, advanced economy, engineering has lost its appeal. Anecdotal evidence suggests that engineering was considered the most attractive field for college graduates in the 1960s and 1970s. For instance, electrical engineering was considered the most difficult department to enter at Seoul National University, as measured by entrance examination scores. However, young Koreans have become increasingly unwilling to enter engineering, which has traditionally been characterized by long hours and limited upwards mobility. Table 1 shows this trend. From 2001 through 2006, the number of students majoring in engineering and the sciences declined to approximately 900,000, after peaking at 936,000. As measured by a proportion of total university students, the engineering and sciences declined from 40.7% in 2001 to 37.9% in 2007.

<Table 1> Size of Entering College Cohorts by Field of Study, 2001-2006

	2001	2002	2003	2004	2005	2006
Total	2,303,996	2,351,071	2,333,251	2,341,007	2,356,839	2,369,391
Subtotal: Science and Engineering	936,464	946,733	936,767	924,023	911,502	899,006
- Science	299,688	295,589	286,607	282,919	282,489	281,440
- Engineering	636,776	651,144	650,160	641,104	629,013	617,566
Medicine and Pharmacy	83,319	84,268	81,772	80,307	79,995	80,906
Humanities and Social Sciences	978,620	998,860	983,323	991,056	995,298	1,009,102
Others	305,593	321,210	331,389	345,621	370,044	380,377
Percentage of Science Engineering	40.65%	40.27%	40.15%	39.47%	38.67%	37.94%

Source: Ministry of Education, Science, and Technology, Annual Statistics of Education

These observations, however, are partially contradicted by a report published by the Ministry of Science and Technology (2005), predicting shortfalls and surpluses in Korea's labor market for engineers and scientists. Table 2 presents these predictions. In this table, *supply* indicates the number of individuals having the appropriate skills, as produced via formal education and job training; *demand* indicates the number of such individuals needed by the Korean economy. The supply of individuals with science and engineering BA or MA degrees was predicted to be larger than needed.

However, this data unambiguously predicts a shortage of engineers with PhDs (i.e. global talent). Even as of 2005, there was a labor

shortage for PhDs, the need for Ph.D holders remained at approximately 44,000, when the supply only reached 34,700. Consequently, Korea will need to procure global talent in the engineering sector, particularly those with PhDs.

<Table 2> SUPPLY AND DEMAND OF HIGHLY EDUCATED LABOR BY FIELDS OF STUDY AND LEVEL OF DEGREES COMPLETED (THOUSANDS OF PERSONS)

Fields	Ph.D Supply	Ph.D Demand	MA. Supply	MA Demand	Associate Degree Supply	Associate Degree Demand	BA Supply	BA Demand
Total	50.9	55.4	173.7	149.8	358.9	194	658.9	556.6
Science	12.7	13	26.7	25.4	32.7	24.8	115.9	75.9
Engineeri ng	22	31	116.3	109.4	217.5	112.6	425.6	352.4
Agricultu								
re, Forestry, and Fishery	1.8	2.8	2.6	2.1	0.9	1.6	7.3	13.7
Medicine and Pharmacy	14.5	8.7	28.1	13	107.8	55	110.1	114.6

Source, Ministry of Science and Technology, Long-term Forecast of Supply and Demand of Human Resources in S&T (2005-2014) and Preliminary Survey on the Status of Graduates in Science and Engineering. Lee, Ki Jong, 2005.

4. Paper Objectives and Methods

This paper investigates two potential sources of skilled expatriate labor for the Korean domestic market: (1) second- and third-generation ethnic Koreans living overseas as a source of global talent in finance and general business and (2) foreigners studying at Korean universities for PhD degrees, as a source of global talent in engineering. With regard to research methods, this study combines an in-depth analysis of cases that can work as a benchmark for Korea and a statistical examination of existing databases on expatriate labor in the Korean market. Our analysis takes a three-step approach. First, we present the status quo in Korea, in terms of the underlying situation and extant policies. Next, we compare and contrast the Korean case to four other countries. Finally, we synthesize both streams of research into policy recommendations.

The case study approach compares and contrasts expatriate labor policies in other advanced countries, to see which approaches have been the most successful. Advanced countries differ from each other in crucial ways, thereby affecting the applicability of their experiences to the Korean case. We propose that the most important variations occur along two dimensions: (1) how intensively countries have recruited expatriate labor; and (2) their emphasis on a single national culture (monocultural) versus a "melting pot" of diverse cultures (multicultural). To capture the entire range of cross-national variation, we examine four cases: Canada (multicultural and aggressive); the

United States (multicultural but passive); Germany (monocultural but aggressive); and Japan (monocultural and passive).

Statistics on Korean expatriate labor are used to gauge where Korea stands in comparison to other advanced countries, and highlight opportunities for improvement. Given the aim of this study, we focus on foreign students studying in Korea and overseas ethnic Koreans.

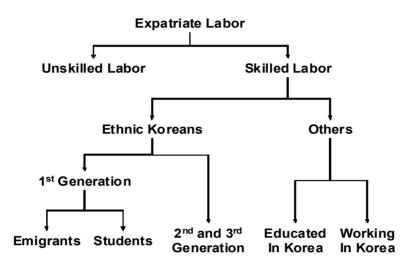
The paper will begin by examining different types of expatriate labor, and then explain why ethnic Koreans living overseas and foreign students at Korean universities are compelling research topics. The remainder of the paper compares and contrasts the Korean government's policies regarding these two market segments, versus those adopted by the four comparative

cases. This comparison highlights potential areas to improve Korean policies.

II. Market Segmentation

"Expatriate labor" includes a wide range of foreigners working in Korea, with very diverse skills and origins. Thus, "expatriate labor" cannot meaningfully be discussed without first subdividing or "segmenting" the larger group into more specific categories. Although outsiders have sometimes viewed Koreans as inhospitable and inward-looking, the Korean electorate is likely to support policies that recruit global talent *if these policies are properly presented*. Koreans have been viewing economic globalization as an instrument to be used to compete against other nation-states. Thus, Koreans have been surprisingly positive towards various globalization-driven policies, as long as they are seen as improving Korean competitiveness (Shin and Choi 2008). If expatriate labor is properly presented--as an instrument of Korean competitiveness--the electorates likely to embrace it, despite opposition from some social segments.

Figure 1 categorizes "expatriate labor" by individual skills and origins.



<Figure 1> TYPOLOGY OF EXPATRIATE LABOR

Skills, experience and/or education create distinction in this typology, between skilled labor. This includes service professionals and engineers, versus unskilled labor that lack education and training, who perform the 3D tasks: "Dirty, Dangerous and Difficult"

1. Unskilled Labor

Koreans are extremely-well educated; in 2005, over half of Koreans between 25 and 34 had some tertiary education (Kirkegaard 2007). Such individuals have been unwilling to seek employment in the 3D sectors. In recent years, the Korean government has recruited unskilled labor from countries like the Philippines and Bangladesh. Under the Industrial Technical Trainee Program visa program, 45,900 guest workers entered Korea in 2008.

The Korean economy saw labor shortages in 3D jobs beginning in the late 1980s, and medium- and small-sized enterprises urged the government to import a foreign labor force from less developed Asian countries. Park and Lee (2005: 147) suggest that the Korean government mimicked the Japanese model of importing an unskilled foreign labor force, stating that "the Korean government introduced the "Industrial Technical Trainee Program (ITTP) as a side door to bring in (unskilled) foreign workers." The program allows foreign workers to enter Korea as trainees, but not workers. Trainees entering Korea were entitled to a maximum of a six month stay with an additional six month extension pending explicit consent from the Ministry of Justice. A noteworthy feature of this program is that foreign labor is imported as trainees, rather than workers. Further, the Committee for Foreign Industrial Manpower Policy Appraisal determines which countries and subsequent quotas, while the actual import and management of a foreign labor force is delegated to the Federation of Small and Medium Businesses (FSMB)--an interest group representing enterprises in labor intensive manufacturing industries.

Although the influx of foreign labor under the program helped to solve labor shortages in 3D jobs, many scholars and civil society activists criticized it as trainees left their workplaces to become illegal residents. Trainees had an incentive to leave because they were denied the legal status of workers with appropriate rights. Since 1995, human rights activists and civic support groups for foreign workers have lobbied government agencies, especially the Ministry of Labor, to adopt a new foreign labor policy. After several attempts their efforts

resulted in a modified system of the Trainees Work system. In early 2000, the Kim Dae Jung Administration resumed policy discussions on the introduction of the "Work Permit Program (or Employment Permit Program: EPP)", which would have eased the hardship that foreign workers had faced during their time in Korea. The process did not proceed smoothly given tensions and conflicts among government agencies regarding the benefits or the costs that the "Work Permit" system would bring into Korean foreign labor policy. The Department of Labor supported the adoption of the system, while the Ministry of Industry and Energy and the Ministry of Justice argued against adopting the system, in coalition with the FSMB. After much debate, the act was passed in July 2003. For political and practical considerations, the earlier ITTP was to remain valid along with the introduction of the Work Permit system. However, the coexistence of the two policies revealed many problems, which led the government to combine the two foreign labor policies into the Work Permit system beginning January 2007.

Under the Work Permit system, foreign workers are entitled to protection under labor laws, including the Basic Standard of Labor Act. Also, the Employment Security Center of the Ministry of Labor, not private associations, would take charge of selection, import, and management of foreign labor force, and the influx of foreign labor was institutionalized to prevent illegal trafficking. In April 2005, the Presidential Committee on Social Inclusion proposed a policy framework through which poverty and discrimination of all sorts would be removed, including those against foreign workers. The Committee proposed many programs and legal adjustments to shift

government policy from the economically-oriented control of foreign labor force to inclusionary policies covering socio-cultural as well as economic aspects of foreign labor policy.

In addition to revising foreign labor policy, the Korean government opened the door for ethnic Koreans overseas through the Working Visit program, or the H-2 visa program. The plan allows many ethnic Koreans from China and former Soviet Union to visit their families and find jobs in nonprofessional sectors of the economy. The entrance of ethnic Koreans has skyrocketed since the adoption of H-2 visa programs. They usually find jobs in low-skilled positions in customer service sectors such as restaurants, as well as business support services like cleaning and maintenance, social services, personal care and housekeeping services.

2. Skilled Labor

Largely because the unskilled labor segment has already been well-researched, this paper focuses on the skilled labor category. This includes technical professionals (e.g. engineers and technicians), consumer service professionals (e.g. doctors) and producer service professionals (e.g. management consultants)--including global talent. The Permanent Delegation of the Republic of Korea to the OECD (2007) suggests that Korea shift the focus of foreign labor policy from simple technical labor to high-skilled professional labor. Most OECD members keep "the complementarity principle of foreign labor" for domestic labor markets, meaning the "recruitment of high skilled labor, while constraining the inflow of low skilled technical labor." In

accordance with this principle, OECD recommended the implementation of policies such as visa exemptions for recruiting highly-skilled professionals, abolishment of quota limits, income tax exemptions for foreign professionals, and permanent residency for foreign professionals.

Contrary to popular belief, the distinction between skilled and unskilled foreign labor is often blurred. Sociological research (see Portes 1998) suggests that immigrants are typically not a society's most destitute individuals, as they are unable to relocate elsewhere. Rather, immigrants possess substantial social, cultural and economic capital--including tertiary educations, or college-level instruction. This factor is a vital distinction between skilled and unskilled labor, because it teaches individuals "how to learn". It follows that: "Tertiary skills are the crucial stepping stones to a flexible, fluctuating, and increasingly service-oriented global economy" (Kirkegaard 2007: 2).

Many so-called unskilled laborers possess tertiary educations. Research by the OECD (2008)suggests immigrant over-qualification is universal. This study labeled individuals holding a job requiring lesser qualification than would theoretically be available at their education levels as overqualified. The study found that immigrants were more likely to be overqualified than native-born persons in all OECD countries except New Zealand and the Slovak Republic. This phenomenon is particularly pronounced in Southern Europe, where the percentage of overqualified foreign-born workers is at least twice that of native-born workers. Immigrant over-qualification occurs largely because immigrants are willing to take jobs they are overqualified for, lack locally-recognized professional credentials, and are restricted by work permits.³⁾

Immigrant over-qualification appears to dissipate over time, at least in "settler societies" like Australia, Canada and the United States. Immigrants to these countries appear to be under-represented initially in the professional or managerial occupations. However, these differences tend to diminish with the time immigrants have spent in their host nations. Frenette, Hildebrand, McDonald and Worswick (2003) suggest that skilled immigrants may spend a substantial amount of time not working, taking lower-skill jobs, or getting re-trained and/or re-certified before re-entering professional fields. Behavioral differences appear to dissipate after immigrants have spent 20 years in their new homes.

Looking only at explicitly-skilled labor, there are two potential sources of expatriates. Many ethnic Koreans live overseas; members of this diaspora may potentially be recruited back to Korea. Non-ethnic Koreans may also be recruited as well. Considering that Koreans view ethnic Koreans in fundamentally different ways than

³⁾ Migrants from the Philippines are an extreme case of this phenomenon. For instance, 48.6% of Filipino immigrants to the U.S. have some tertiary education. However, Filipinos are not over-represented in their trained tasks (OECD 2008); for instance, there are stories of Filipino doctors working as nurses. This phenomenon extends beyond the U.S. Filipinas in Vancouver, working predominantly as domestic workers or nurse's aides, who had previously worked in professional roles like secondary schoolteachers and accounting (Pratt 2002). Likewise, a survey of Filipina domestic workers in Hong Kong reveals that two-thirds had some tertiary education. Many previously were nurses or schoolteachers, or had university degrees in agriculture or business (Constable 2002). These migrants are usually severely underutilized in their host societies.

other groups (see Shin 2006), these categories must be investigated separately.

2-1. First-Generation Ethnic Koreans Living Overseas

As of 2007, 7.04 million ethnic Koreans live overseas. Specifically, China (2.76 million), the United States (2.02 million) and Japan (0.89 million) host the largest number (KOSIS, 2009).⁴⁾

Individuals have emigrated away from Korea for a wide variety of reasons. Before Korea's development into an advanced society, many Koreans left for wealthier countries like the United States. Other Koreans were stationed overseas by the chaebol and have chosen to remain there. Still others pursued educational opportunities--particularly graduate-level degrees--and stayed overseas after receiving their degrees. Recently, Koreans have begun sending their children overseas at a younger age, to avoid a secondary education system that is overly stressful for students and parents.

First-generation emigrants include skilled professionals who would be useful back in Korea. Former students and chaebol employees have particularly valuable skills: education and experience in professions like engineering, medicine and law. Their extended absence from Korea represents a "brain drain" (see Miyagiwa 1991) channeling skilled labor out of Korea into the most advanced economies, particularly the U.S.

^{4) &}quot;Korean Residents Abroad" (Ministry of Foreign Affairs, annual year) retrieved from the KOSIS (http://www.kosis.kr)

This paper, however, does not focus on first-generation emigrants for two reasons. The "brain drain" out of Korea has already been researched extensively (see KRIVET 2008). Also, first-generation emigrants have established themselves in their new homes, raising their families in their host societies. Thus, there are barriers that clearly need to be overcome to recruit first-generation emigrants back to Korea. Realizing this, the Korean government has implemented several policies intended to reverse the brain drain (Kwon et al., 2001; Moon, 2006; PCNC, 2008; Song et al., 2004).

Kwon et al. (2001) suggest policy concerns relating to the "brain drain" in the IT sector, and argue that there may not be easy solutions to reverse the mobility of IT professionals. Furthermore, the brain drain is said to generate positive as well as negative effects. Recent academic research (e.g. Saxenian 2006) asserts that the brain drain has morphed in a "brain circulation" that creates worldwide networks of entrepreneurship and innovation. Thus, Kwon et al suggest that government policy should maximize the former while reducing the effects of the latter. Several policies that reduce the negative effects of the outflow of domestic IT talent include: (1) increased investment in information technology education; (2) the adoption of new human resources management procedures to retain core IT professionals; and (3) policies to attract foreign IT talents and to build networks of Korean IT professionals and business personnel around the world. The so-called "scientific diaspora" and "business network" represent core remedies to address the brain drain. Although their suggestions lack specificity, they bring attention to the necessity of providing comprehensive plans covering university, labor markets, and immigration issues.

2-2. Second- and Third-Generation Ethnic Koreans Living Overseas

As the children and grandchildren of Korean emigrants, second- and third-generation ethnic Koreans have become integrated into their host societies. In the United States, for instance, Asian-Americans are disproportionately over-represented among the wealthiest quintile of U.S. households, even compared to native-born Caucasians (U.S. Census Bureau 2005). Beyond achieving economic success, Korean-Americans have also achieved high social integration, as evidenced by high inter-marriage rates between Korean-Americans and other ethnicities. Although ethnic Koreans in Japan (the zainichi) have faced legal and social barriers to full integration, they have also achieved substantial integration (Ryang 2000).

Despite their economic and social integration into host societies, many Korean-Americans, Korean-Japanese and ethnic Koreans in other advanced industrialized societies are attracted to their ancestral homeland. This attraction has been encouraged by government policies like the F-4 employment visa, a permanent residency visa giving former Korean citizens and their children unrestricted access to Korean jobs and services (Ministry of Justice, 2008). As of 2008, 37,740 overseas Koreans lived in Seoul under the F-4 visa program.

Many young Korean-Americans work in Korea for substantial periods of time. For instance, a large proportion of the Korean-American graduates of top educational institutions spend some

time working in Korea, especially in English language education and related activities. Anecdotal evidence suggests that these individuals go to Korea partly in search of their ethnic identities, and partly to enjoy the vibrant nightlife. After a few years in Korea, these individuals typically return to their adopted homelands to pursue professional careers, often in law and medicine.

Second- and third-generation ethnic Koreans, particularly from the United States and Japan, represent one of the two focal points of this paper. Current policies recognize that many young Korean-Americans and other ethnic Koreans return to Korea for short periods of time. Little research has been done to assess this group's potential as a source of skilled labor, however. Korean-Americans living in Korea have degrees from some of the best universities in the world, giving them the chance to become highly-skilled professionals. Indeed, many of these individuals return "home" to become doctors, lawyers, scientists, businessmen and financiers. Yet, few choose to stay permanently in Korea. The challenge is to create an environment that encourages second and third-generation ethnic Koreans to become professionals in Korea, instead of returning "home".

2-3. Foreign Students in Korea

Korean universities attract students from foreign countries. Although the best Korean universities rank below the most prestigious U.S. universities, they are competitive within Asia. 8 Korean universities are ranked in the top 100 in Asia, as ranked by the Academic World Ranking of World Universities (Shanghai Jiao Tong University 2008),

and 9 Korean universities are ranked in the top 100 in Asia, according to the Webometrics Ranking of World Universities (Consejo Superior de Investigaciones Científicas 2008). Considering that these top 100 lists are occupied nearly exclusively by universities located in developed Asia (Japan, Korea, Taiwan, Singapore) or China, students in other Asian countries have an incentive to study in Korea.

There are a total of 49,270 foreign students studying in Korea, as indicated by the number of student visas issued by the Korean government (KEDI, 2008).

<Table 3> NUMBER OF FOREIGN STUDENTS STUDYING IN KOREA BY REGIONAL ORIGIN OF STUDENTS

	т		Field of	f Study				
Region	Language Study	Humanities and Social Sciences			-	Subtotal	Others	Total
Asia	13,188		8,341	2,503	1,756	30,240	2,194	45,622
Africa	42	83	141	16	1	241	8	291
Oceania	26	29	36	7	10	82	34	142
N. America	472	291	383	78	66	818	402	1,692
S. America	56	87	70	8	7	172	12	240
Europe	400	192	254	30	27	503	380	1,283

Data Source: Korean Educational Development Institute (KEDI, 2008) "Foreign Students Statistics in 2007"

<Table 4> NUMBER OF FOREIGN STUDENTS STUDYING IN KOREA FOR MAJOR COUNTRIES

Nation	China	Japan	United States	Vietnam	Taiwan	Mongolia	Others	Total
Number of Students	33,650	3,854	1,388	2,242	1,047	1,309	5,780	49,270
Proportion of Total %	68.3	7.8	2.8	4.6	2.1	2.7	11.7	100

Data Source: Korean Educational Development Institute (KEDI, 2008) "Foreign Students Statistics in 2007"

As of 2007, the majority of foreign students (92.6%) have come from Asia. Chinese students are the largest group, amounting to about 68% of the Asian total. Although the humanities and social sciences disciplines attract the majority of Asian students, about 1 in 5 students seek degrees in science and engineering. The next largest group of students comes from North America, among which only 383 students sought degrees in engineering and science fields.

Table 4 shows the number of foreign students by level of education and by field of study. Among 49,270 foreign students, 18,831 were studying science and engineering. Most of these 86.5% were college students, while about 14% were pursuing graduate degrees. Those who majored in humanities and social sciences were about 9,216, amounting to 21.3% of total foreign students. Among these students, about half, 4,690 out of 9,216 were pursuing MA degrees and 822 PhDs, which is much higher than that of science and engineering fields. In sum, the portion of foreign students in science and engineering fields seems to be insufficient to fill the labor shortage --especially at the PhD level--in the short term, but there exist the potential for increasing the pool of foreign students with appropriate

policies. These results show that Asian students select Korea as their destination for tertiary education because of geographical closeness, cultural similarities, and relatively low costs of education and travel compared to other countries such as the United States and European states. Some research also show that they plan to seek jobs in Korean multinational corporations which has made direct investment in their homelands or remain in Korea seeking for jobs with decent pay and amenities (Kim Hye Jin, 2008).

<Table 5> NUMBER OF FOREIGN STUDENTS STUDYING IN KOREA BY EDUCATIONAL LEVEL

	Field of Study									
Level of Education	Humanities and Social Sciences	Science and Engineering	Natural Sciences	Arts and Physical Sciences	Subtotal					
Language Study	N.A.	N.A.	N.A.	N.A.	14,184					
Bachelor Degree*	3,704	15,865	1,221	1,381	22,171					
Masters Degree	4,690	1,471	646	440	7,247					
Ph.D.	822	995	775	46	2,638					
Other Training	N.A.	N.A.	N.A.	N.A.	3,030					
Total	9,216	18,331	2,642	1,867	49,270					

Note: Students studying in junior colleges were included.

Data Source: Korean Educational Development Institute (KEDI, 2008) "Foreign Students Statistics in 2007"

There is a lot we do not understand regarding foreign students in Korea. Data problems limit our understanding of the career trajectories of foreign students graduating from Korean tertiary institution and a comprehensive national-level survey has yet to be conducted. Therefore, we have little information as to what proportion of foreign students return home, and what proportion stay in Korea. Even more fundamentally, we do not understand the reasons why foreign students study in Korea. For instance, anecdotal evidence suggests that as much as 60% of foreign students at two-year institutions are in Korea

to work in 3D occupations rather than actual job training; the two-year degree simply provides a visa. Even among foreign students at four-year institutions, many students in the humanities and social sciences are not considered the best or brightest students (Seoul 2009). However, there has been little research to validate these observations. Considering that anecdotal perceptions are often misleading, further research is needed here.

Since 2001, the Ministry of Education, Science, and Technology has been implementing a program for attracting foreign students called the "Master Plan for Recruiting Foreign Students: Study Korea Project". This plan aims at several objectives: (1) fostering human resources that bridge developed and developing countries; (2) promoting domestic educational system's globalization to improve its competitiveness; and (3) improving the image of Korea as being friendly to foreign students. However this plan has caused an unexpected consequence in terms of quality of foreign students entering Korea. As the program only emphasized increasing the number of incoming foreign students, not all incoming students have been sufficiently qualified (Seol, 2009: 35).

This study focuses on foreign students in sciences and engineering, who are generally considered more capable than foreign students in the social sciences and the humanities. If these individuals can be kept in Korea, they would help alleviate the shortage of highly-educated engineers. Miyagiwa (1991) analyzes the issue of "brain drain" in net emigration countries. He argues that wage levels of highly educated personnel are determined by labor quality and the

overall level of productivity of the country's post-secondary education system. Therefore those who have been educated in less advanced countries are given strong incentives for migration into advanced countries, where they may recoup returns to their education owing to higher wages. Korea may very well be able to keep its science and engineering graduates like other countries historically have--particularly the U.S. and Canada. Researching this possibility, and recommending relevant policy prescriptions, is a second focal point of this project.

2-4. Skilled and Semi-Skilled Foreigners Working in Korea

Non-ethnic Koreans fill many different skilled-labor roles in Korea. An extraordinarily-large number, however, work as English teachers. Teaching English in Korea is a highly attractive proposition for college graduates in the United States and other English-speaking countries, who want to experience Asia while earning a salary. There are few skills requirements aside from speaking English fluently; the Korean government only requires that foreigner English teachers hold a Bachelor of Arts degree. Considering that on average, English teachers earn more income in Korea than any other Asian country except perhaps Japan, this market attracts many graduates who want to experience Asia. Although few concrete statistics are available, many English teachers have degrees from top academic institutions.

Although an academic investigation has not yet been conducted on English teachers' career trajectories, anecdotal evidence suggests two distinct career paths. On one hand, many English teachers stay in Korea long enough to experience an "exotic" location and its nightlife, before returning home to resume more typical career trajectories--often becoming professionals like doctors and lawyers. On the other hand, other teachers become so accustomed to living in Korea--and earning a good salary--that they end up staying in Korea for many years as an English teacher. Despite having prestigious undergraduate degrees, these individuals gain little work experience or training other than English language teaching. Thus, they have little career mobility potential, in both their home countries and Korea; many "professional English teachers" teach far longer than they want to.

With well-designed policies, the Korean government may be able to retrain English teachers into fully-skilled service professionals, to augment Korea's pool of skilled labor. The Korean market for English language education is somewhat unique, and no policies like this have ever been attempted. Thus, such initiatives will require a great deal of research and analysis, and is well-beyond the scope of the current paper.

3. Summary: Focal Points of this Research Project

The "expatriate labor" category covers "market segments" that have little in common with each other. Some of these segments (e.g. unskilled labor, the "brain drain") have already been extensively researched. Other segments (e.g. foreigner English teachers) are beyond the scope of this project, partly because they will require policy solutions requiring a great deal of research and analysis, and

partly because of a paucity of data.⁵⁾ The two segments selected for this study--ethnic Koreans, and foreign students studying in Korea--have not been widely researched but may potentially be tapped as sources of "global talent", using policies that have already been proven elsewhere.

We propose that the two segments covered in this study should provide different types of skilled labor. Second and third-generation Korean-Americans, as well as ethnic Koreans living in other advanced industrial societies, face strong pressures to become skilled professionals. Although Korean-American parents once pushed their children to become engineers, they have recently started pushing their children into professions of higher prestige: law, medicine and business. Policies consistent with this preference are most likely to be successful at recruiting overseas Koreans. In contrast, the best foreign students in Korea are studying to become engineers.

These segments, however, certainly merit an in-depth investigation in follow-up studies.

<Figure 2> FOCAL POINTS OF THIS STUDY

	Producer and Consumer Services	Engineering and Technical Labor	
Second/Third Generation Ethnic Koreans Overseas	Focus of Section III	Some Potential	
Foreign Students Studying in Korea	Some Potential	Focus of Section IV	

Each of these segments will be investigated through a three-step process. The status quo in Korea, in terms of the underlying situation and extant policies, will be presented first. Next, the Korean case will be compared and contrasted to four cases overseas. We conclude this research by making specific policy recommendations.

4. Case Selection

Korea is compared and contrasted to four countries. Some (e.g. Canada) embody "best practices" in recruiting and utilizing expatriate labor. However, such paradigmatic cases differ from Korea in two major dimensions: (1) they are multicultural "settler states" instead of monocultural nations having a *jus sanguinis* basis for citizenship; and (2) they have been more aggressive about overseas recruitment of

skilled labor than Korea. Canada, the United States, Germany and Japan are the comparison cases in this study. A 2x2 typology explains how these countries are similar to and/or different from Korea. While Japan is nearly identical to Korea on both dimensions, Canada is very different:

<Figure 3> COMPARABLE CASES

		Intensity of Overseas Labor Recruiting			
		Aggressive Less Aggress			
Social Foundation	Multicultural	Canada	United States		
	Monocultural	Germany	Japan Korea		

For the purposes of this report, one case is chosen from each cell in the typology. The following section presents brief overviews of immigration in each of these cases, before moving on to the specific focal points of this study.

4-1. Canada: Multicultural and Aggressive

Along with the United States, Canada is seen as the prototypical "settler society" that has populated itself through immigration. Canada has been far more aggressive than the U.S., however, in recruiting skilled immigrant labor. While U.S. policy has been motivated by family reunification, Canadian policy has followed demographic and economic needs, including: (1) easing the social costs of an aging population; (2) importing skill sets needed for the knowledge economy; and (3) promoting regional economic growth by dispersing immigrants to smaller cities across Canada (see Green 2003). All three points are relevant to Korea as well.

Key Statistics

Canada has a population of 29.6 million, 19.3% of which is foreign-born. Of this population, the vast majority (72.5%) have become naturalized citizens (OECD 2008).

The foreign-born population tends to be better-educated than native-borns. 38.0% of foreign-borns have had some tertiary education, compared with only 31.5% of natives. Both figures exceed OECD averages of 24.3% for foreign-borns and 19.9% for natives. Immigrants from the United Kingdom, China, India and the United States tend to be especially highly-educated; more than 40% of each of these groups have had tertiary educations. In contrast, immigrants from Italy have lower educational attainment, with only 11.8% having tertiary educations (OECD 2008).

Multicultural Basis

As a "settler society", Canada has populated itself by attracting new immigrants. Modern immigration into Canada begin in 1897. After three decades of economic stagnation and net emigration, Canada begin advertising its western frontier as a new land of opportunity to the British and Americans, and eventually attracted farmers from Eastern Europe, the Ukraine, Russia and Germany. Along with the expansion of rail lines, this influx created the rise of the "Wheat Boom" in Canada.

The Great Depression ended this era. When commodity prices collapsed, nominal income in the Canadian prairies fell by 70%. Immigration into Canada fell to a low of 11,000 in 1935; Canada even deported unemployed migrant workers back home.

After World War II, Canada began re-opening its doors to European refugees, and began admitting more immigrants for humanitarian reasons. Immigration soon increased, spurred by positive economic conditions much like the Wheat Boom years. In 1962, the government eliminated the existing system of racial preferences, in favor of universalized standards regardless of race or ethnic origins (Wilson 2003).

Overall, immigrants to Canada have been exceptionally successful at integrating into their host society. In 1980, a male immigrant who had arrived two to four years earlier earned \$25,000 on average. This impressive achievement has been slipping more recently; as of 1995,

the same figure had declined to \$13,000. A drop in the positive effects of foreign education and work experience on earnings explains part of the decline (Waslander 2003). Reitz (2003) finds that immigrant skills are frequently discounted in professional fields, especially in management and knowledge-based industries. The adverse economic conditions that Canada experienced during the 1990s is also a cause of the decline (Aydemir 2003).

• Aggressive Recruitment

Along with Australia, Canada pioneered the strategic recruitment of skilled labor. When its economy shifted from resource extraction and agriculture towards service and manufacturing in the 1950s, the government recognized that Canada lacked the skilled workers needed for this transition. Thus, it implemented a skills-based immigration policy in 1962 (Green 2003). This system awarded "points" for specific skills--education, training, a formal job offer--possessed by aspiring immigrants, and approved those who scored above a certain threshold (McHale 2003; Wilson 2003). As of 2000, this Independent Skilled Workers Program accounted for 118,000 immigrants--52% of the Canadian total (McHale 2003).

Canadian immigration policy became even more strategic in 1985, when the government began recruiting "business-class" migrants. This class consists of three categories: (1) the entrepreneur, who has business experience, a net worth of \$300,000 or more, and the stated intention of actively controlling a Canadian business; (2) the self-employed, who must start or buy a business that makes a

contribution to the Canadian economy; and (3) the investor, who must place at least \$400,000 of capital in trust with participating provinces, to be used to help create domestic jobs. Business-class immigrants are subject to a points system, but with a relatively low cut-off point; many have been admitted without either English or French language skills, and without post-secondary education. Although much capital was wasted on unproductive real estate investments, this policy has been largely successful in attracting immigrants and capital. From 1986 to 2000, 41,500 principal applicants arrived as entrepreneurs, 12,847 as self-employed, and 19,239 as investors. The investor program created an influx of \$5.76 billion invested in Canada, while the entrepreneur program (as of 2000) had 1,184 immigrants entrepreneurs contributing \$184 million in domestic investment, creating 1,832 full-time and 918 part-time jobs mainly in British Columbia and Ontario. When the political environment in Hong Kong improved after the smooth 1997 handover of Hong Kong to China, however, business immigration declined substantially (Wilson 2003).

• Current Policy Framework

The 2002 Immigration and Refugee Protection Act fundamentally changed Canada's points-based system. Previously, potential immigrants with experience in certain "shortage" occupations were awarded a bonus of 18 out of a total of 100 points, with individuals scoring over 75 points accepted for immigration. The new system eliminated this bonus, and re-allocated these points towards tertiary education and language. Table 6 shows this revised scoresheet

<Table 6> THE CANADIAN SKILLED-WORKER POINTS-BASED SELECTION GRID

Scoresheet Categories	Max Points
Education	25
Language (English or French)	
First	16
Second	8
Language Total	24
Experience	21
Age	10
Arranged Employment	10
Adaptability to Canadian Society	
Spouse's education	5
1-year authorized work in Canada	5
2-years postsecondary study in Canada	5
Pre-arranged employment	5
Family relationships in Canada	5
Adaptability Total1	10
Grand Total	100

Source: McHale 2003

The passing score on the scoresheet is 75 points.

McHale (2003: 239) considers parts of the scoresheet well-designed, especially the granting of points for a formal job offer, spousal education, tertiary education in Canada, and past work experience in Canada. However, McHale considers three parts to be badly designed. First, the awarding of a full 10 points for individuals aged 21-49,

¹ A maximum of 10 points are awarded for adaptability.

with two points lost for every year below 21 or over 49, seems to be "more blunt [of an] instrument than we would expect." Second, the credit for bilingualism has the "hallmark of politics" designed to placate French Canadians. Third, the greatest number of points for education is allotted to individuals with a PhD or a MA, followed by individuals with two or more BA degrees (22), and then two-year university degrees (20). Thus, someone with a single BA would receive the same number of points as another person with a two-year degree. Overall, McHale considers the 75-point cutoff to be overly difficult. For example, a 22-year applicant (10 points) with a computer science BA (20 points), one year's experience in Canada (15 points) and high proficiency in English but not French (16 points) would only score 61 points. Despite its shortcomings, the Canadian scoresheet has served as the model for several other countries, including Germany and the United Kingdom.

4-2. United States: Multicultural but Passive

The United States has long been hailed as the prototypical immigrant society--a "melting pot" drawing people from all over the world in search of the "American Dream". The U.S. certainly has had a magnetic attraction, given its wealth and its cultural hegemony. Yet, the U.S. has been passive about recruiting skilled labor, particularly compared to its northern neighbor. U.S. immigration policy has long focused on family reunification.

· Key Statistics

The United States has a population of 281.4 million, of which 12.3% is foreign-born. Of this population, 46.3% have become naturalized citizens (OECD 2008). Despite the myth of "American exceptionalism" when it comes to immigration, the proportion of foreign-born individuals in the United States is roughly consistent with other OECD countries like Sweden, Germany and Austria, substantially less than Canada or New Zealand, and little more than half of Switzerland and Australia (Kirkegaard 2007).

The foreign-born population has similar educational attainment as native-borns; 26.1% of foreign-borns, and 27.4% of natives, have had some tertiary education. Both figures exceed OECD averages (OECD 2008). Immigrants from the Philippines and China tend to be especially highly-educated, with more than 45% having tertiary educations. In contrast, only 5.4% of immigrants from Mexico have had some tertiary education (OECD 2008).

• Multicultural Basis

The U.S. has long been considered a haven for immigrants. From the founding of the U.S. through the 1880s, there were no major attempts to regulate or restrict immigration; from 1820-1900, nearly 20 million people moved to the U.S., partly to flee the famines and wars of the Old World, and partly in response to aggressive recruiting by U.S. employers. As cycles of economic depression occurred from 1873-1878, labor and nativist protests against immigration led to

major shifts in immigration-related political debates, leading to the Chinese Exclusion Act of 1882 and other restrictions. The 1900-1950 period was marked by even more extreme restrictions, particularly from Asia and Southern/Eastern Europe. For instance, the 1921 Quota Law set a numerical cap (357,000) on total immigration from the Eastern Hemisphere and limited the number of immigrants from any one country to 3% of the foreign-born population in the U.S., of that nationality, as of 1910. This quota law in effect favored Western and Northern Europe. After World War II, the exigencies of the Cold War, as well as economists' proclamations that the U.S. needed more labor and that immigration did not harm native workers, led the U.S. to institute a radically different framework. The foundation for this framework, the 1952 Immigration and Nationality Act, created a preference-based system privileging family-sponsored immigrants and skilled laborers. Most immigration reform since then has amended this basic foundation (Batalova 2006).

Despite being a multicultural "melting pot", the U.S. has an uneven history of multicultural acceptance. Immigration policy had three different strands in the years after 1875. Individual screening tested for health, character, destitution and other (un)desirable traits. This level did not discriminate against specific groups, at least theoretically. However, the U.S. excluded Asians, beginning with the Chinese Exclusion Act of 1882, largely in hostility to capitalist enterprises that first employed the Chinese. This exclusion later spread, however, to other Asians, given the charge that Asians could not--or would not--assimilate (Joppke 2005). However, exemptions were made for upper-class Chinese teachers and merchants who could

provide evidence of their skills or social position (Batalova 2006). A third policy was directed at European immigrants. Between 1882 and 1907, the main source of immigrants shifted from northwest Europe to southeast Europe. In a belief in the superiority of northern European "nordics", the elitist New England establishment supported the 1924 National Origin Quota Act. This system was ended after World War II was fought against explicitly racist regimes. The U.S. began by symbolically (but not practically) ending Chinese exclusion laws in 1943. Although the national origins quota system was not formally abolished until 1965, it was overcome by changing conditions; immigrations began entering quota-free as the beneficiaries of legislation for family immigrants and other groups (Joppke 2005).

Passive Recruitment

Although the U.S. has exerted a magnetic pull on immigrants, it has not aggressively recruited skilled labor in the past century. U.S. immigration policy is oriented towards family reunification. While 70% of U.S. immigrants arrived by being sponsored by family members, only 10% arrived for employment-related visas. This percentage is far below other OECD countries like the United Kingdom (45%), Switzerland (42%), Germany (33%) and Japan (25%). This is significant because a relatively low proportion of family-sponsored immigrants (27.5%) have had tertiary education in science or engineering (Kirkegaard 2007).

Current Policy Framework

The U.S. system differentiates between permanent and temporary

immigration. Legal permanent residency (LPR) is popularly known as the "green card". Every year in the past decade, the U.S. has granted LPR to approximately one million foreign nationals. The vast majority of these visas are awarded based on family ties, however. Employment-related immigration is restricted to a pool of 140,000 LPR visas, as defined by the Immigration and Nationality Act of 1990. These visas cover not only the expatriate worker, but also their family members.

This 140,000 pool encompasses five distinct categories. EB-1 visas cover "aliens of extraordinary ability" and "outstanding professors and researchers" whose achievements have resulted in sustained national or international acclaim in the field, and whose admission under LPR would substantially benefit the U.S. Similarly, EB-2 visas cover "professionals holding advanced degrees" or "persons of exceptional ability" with U.S.-based job offers. In contrast, EB-3 visas include not only skilled workers, but also unskilled workers as well. EB-4 visas cover special cases, like former employees of the U.S. government overseas. Finally, EB-5 visas are for investors with over \$1 million in total assets, who invest \$500,000 or more in the U.S. over a 5-year period. The EB-3 category is the largest by far, accounting for over half of all LPR visas awarded from 2000-2006 (see Kirkegaard 2007).

Nearly all LPR visas are awarded to foreign nationals already living in the U.S. on temporary visas. The U.S. system allows holders of temporary visas (see below) to apply for an "adjustment of status". Changes in U.S. immigration law, especially regarding "amnesty" for illegal immigrants, account for an extraordinary large number of

adjustments in recent years. Beyond these temporary policies, however, the adjustment of status channel has accounted for the vast majority of EB-1, EB-2 and EB-3 visas--over 90% in recent years (Kirkegaard 2007).

The U.S. offers two major temporary visas for employment. The L-1 visa serves the needs of multinational corporations, which transfer managerial and skilled technical employees between subsidiaries during routine operations. L-1 visas have increased from just over 30,000 in 1996 to approximately 70,000 in 2006. Although these visas are almost evenly split between Chinese and Indian nationals, the number of L-1s awarded to Chinese nationals have stayed nearly constant over the past decade, while the number awarded to Indian nationals have increased from negligible levels (Kirkegaard 2007).

The H-1B visa is an employer-sponsored visa for "specialty occupation" workers with skills not readily found among American workers. Congress caps the number of H-1B visas every year, which has decreased from 115,000 in 2000 to 85,000 in 2005. However, the total number of H-1B petitions granted by the U.S. is considerably higher than this cap, averaging over 260,000 per year since 2000. The discrepancy results from Congressionally-authorized exemptions to the cap, including employment in the educational, non-profit, research and medical sectors, as well as continuing employment. Kirkegaard (2007) suggests that most continuing employment applications for H-1B visas come from students who are transitioning from the F-1 student visa. All F-1 students graduating from U.S. universities have the option of taking a one-year "optional practical training" (OPT) period of legal

employment in the U.S. Considering that the OPT is available for a minimal fee, while the H-1B involves a potentially-complicated petition process, it is reasonable that most F-1 students remaining in the U.S. use the OPT for employment before transitioning to the H-1B.

Although the U.S. immigration system has long been considered a benchmark standard, it faces two challenges with regards to skilled immigration. First, the present LPR system limits the number of LPR visas available to any one country's immigrants. According to the Immigration and Nationality Act, no one country may have more than a specific percentage of the total number of visas available annually in each visa category. If limits are exceeded in a given category for a particular nationality, additional applicants are placed on a waiting list according to the date of their case filing. Thus, immigrants from countries like China, India and the Philippines may have to wait several years to acquire LPR status. Second, there is a cap of 20,000 H-1B visas awarded to foreign MA and PhD students. This is far below the demand for such visas. In 2007, for instance, the 20,000 cap was reached on May 7th--before the graduation date of most universities. While students who have not yet used OPT can more easily stay in the U.S., others who have used OPT have been forced to leave (see Kirkegaard 2007).

4-3. Germany: Monocultural but Aggressive

Having a *jus sanguinis* basis for citizenship and nationhood, Germany resembles Japan and Korea more than the settler societies. Despite this, however, Germany has been unusually active in recruiting immigrant labor throughout its modern history.

Key Statistics

Germany has a population of 82.2 million, of which 12.1% is foreign-born (OECD 2008).

Unlike the settler societies of Canada and the United States, the foreign-born population tends to be less-educated than native-borns; while 14.3% of foreign-borns have tertiary educations, 19.3% of natives do. While the figure for native-borns is close to the OECD average, the figure for foreign-borns is much lower than the OECD average. A substantial proportion of immigrants from the former USSR, Poland and Romania tend to have tertiary educations (ranging from 16.5% to 18.6%). In contrast, only 3.6% of immigrants from Turkey have had some tertiary education (OECD 2008).

• Monocultural Society, but Aggressive Recruitment

Despite its unicultural nature, Germany had a long history of using foreign labor. Prior to World War I, Germany employed workers from Russian-occupied Poland on a seasonal basis. These workers, however, were discouraged from permanently settling in Germany (Sassen 1999). Until the outbreak of World War I when they were prohibited from returning home, and converted into forced laborers. Later, they were joined by prisoners of war. Such policies foreshadowed Nazi Germany's policies during World War II, where labor was treated as

"spoils of war". Wartime mobilization created severe labor shortages. To fill these gaps, approximately three million prisoners of war, from Poland, France and other occupied countries, were put to use as forced labor before 1942. They were augmented by an additional 450,000 Soviet prisoners of war, and 1.3 million civilians forcibly recruited from the Soviet Union itself. By August 1944, 5.7 million civilian foreigners were registered in Germany. These foreigners were strictly controlled by the Nazi bureaucracy, and strictly segregated from German civilians (Herbert 1990).

After World War II, West Germany had a large pool of reserve labor, including demobilized soldiers, refugees from East Germany, and migrants from the countryside to the cities. By the end of the 1950s, however, most of this labor had been utilized; also, with the rise of the Berlin Wall in 1961, the flow of refugees from the East dissipated. At this point, industrial enterprises began calling for foreign laborers from Mediterranean countries like Greece and Turkey. Responding to these calls, the Federal government created a highly-organized system of labor recruitment. Thus, from 1961 to the 1990s, the foreign population in Germany grew from 686,000 to over 5 million. This demographic transformation included second and third-generation immigrants (Edye 1987; Chin 2007), who continued increasing even after Germany stopped recruiting foreign workers in 1973 (Herbert 1990).

Most of these workers had been recruited through a guest worker program, intended to rotate individuals back to their home countries within 3-5 years. However, a majority simply did not leave, even

under cash inducements; instead, they sent for their families. This created tensions in German society. Although foreign workers were welcomed as labor, they were not generally invited to settle in Germany, which has historically had a *jus sanguinis* view of citizenship and "German-ness".

Yet, many "temporary" workers have ended up settling in Germany. It would have been very difficult to deport such individuals, since three-quarters of them were protected under bilateral treaties given their long stay in Germany. In response to the growing number of foreign workers, the Federal government attempted to restrict immigration by raising the costs of work permits. However, this did not appear to have any real effect. In order to delineate a comprehensive approach that dealt with immigration, Federal and State authorities created a commission to research the problem. The Bund-Laender Commission published its proposals in February 1977, with the basic idea that Germany was not a "country of immigration", but that existing foreign workers should be integrated into the German population (Edye 1987; Chin 2007):

... for a socially responsible balance between the existential needs of the German population, especially those of the employees, and legitimate social and economic interests of the foreign employees and their families in the Federal Republic ... It was necessary to restrict the employment of foreigners and to maintain an awareness of the possibility of returning home. At the same time it was necessary to facilitate the temporary integration of foreign employes and their families already living in Germany (Bund-Laender Commission 1977, as cited in Edye 1987).

The report suggested that foreign laborers with long-term employment permits and children in school should be granted residence permits with unlimited duration, to facilitate integration to prevent social conflict and to address a future shortage of skilled workers given demographic trends. The Federal government incorporated some aspects of this report (Edye 1987).

In 1983, Federal Chancellor Kohl promised to restrict immigration and encourage repatriation. Through voluntary measures, and restrictions on family reunification, the aim was to reduce the number of foreigners by one million in a few years. (Edye 1987). Between 1983 and 1989, however, the ruling Christian Democratic Union rejected such policies, while still refusing to embrace a vision of Germany as a multicultural society. The reunification of East and West Germany, however, renewed pressures on immigrants, as the social and ideological work of re-integrating a collective German identity overrode the integrationist impulses of the 1970s (Chin 2007).

Between 1954 and 1997 about 24 million foreigners entered the country--and 17.4 million left. Today, foreigners represent 8.9% of the German population, or 7.3 million people, excluding foreign-born individuals (mainly ethnic Germans) who have gained citizenship. About 28% of this number is Turkish in origin, 10% are former Yugoslav and 8.4% Italian (Bommes 2006).

• Current Policy Framework

Germany implemented a new Immigration Act in 2005, and

amended it in 2007. The new system of residence permits grants access to the labor market, and replaces a previous system of separate residence and work permits. Foreigners now deal with a single issuing authority--overseas embassies and consulates.

As a member of the European Union, Germany awards all EU citizens the right to solicit and obtain work in Germany via the EC Long-term Residence Permit, which is similar to the Settlement Permit (see below). Citizens of new EU member states (Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, Slovenia, Bulgaria and Romania), however, have not yet been awarded this status, pending a transition period.

Germany restricts immigration for non-EU citizens to two categories: (1) skilled workers with a tertiary degree or at least 3 years of job training and experience; and (2) students and their immediate family members. Persons in these categories are granted three different types of residence permits: (1) a National Visa valid up to 90 days; (2) temporary Residence Permits; and (3) permanent Settlement Permits. Individuals arriving in Germany for the first time must come under the National Visa, to be converted into a Residence Permit once the individual has arrived in Germany. Temporary Residence Permits are issued for education, employment, humanitarian or family reunification reasons. Permanent Settlement Permits are issued for foreigners who have been living under a residence permit for five years, have a secure income, no criminal record, and an adequate command of the German language according to the A1 level examination.

Residence Permits are only awarded to individuals who are enrolled in an educational program, have a job offer in information technology, management or other specialist employment, or are scientists and other individuals with exceptional skills. Any older-style work permits (e.g. the IT-Greencard program) have been subsumed by these new residence permits. Residence Permits can be awarded for self-employment, but only with an investment of 250,000 Euros, the creation of five jobs, or the support of the local chamber of commerce. Foreign students are allowed to stay for one year after obtaining a university degree to find a job matching their qualifications. They are then given Residency Permits.

Like Canada and the U.S., Germany allows family reunifications. Foreigners with Residence or Settlement permits are allowed to bring their families. Spouses must have at least a basic working knowledge of German according to the A1 level examination. Children under age 16 are allowed to join their parents; persons between 16-18 can join under special circumstances (i.e. hardship, good prospects for integration (see German Federal Ministry of the Interior 2009 for details).

4-4. Japan: Monocultural and Passive

Of all comparison cases, Japan is the most similar to Korea. Japan has historically had a *jus sanguinis* basis for citizenship and nationhood. Japan has not been aggressive about recruiting foreigners, however, since its defeat in World War II. This reluctance to recruit foreigners has remained largely untouched through the present day.

· Key Statistics

Japan has a population of 126.9 million, of which only 1.2% is foreign-born. Only a negligible proportion of this population have become naturalized citizens (OECD 2008).

The foreign-born population tends to be slightly better-educated than natives; 30.0% of foreign-borns have tertiary educations, and 27.8% of natives do. Both figures exceed OECD averages (OECD 2008). Of the small number of American expatriates, most have university diplomas; 78.3% have had some tertiary education. Between 23.1% and 38.5% of individuals of Chinese, Filipino, and Korean ancestry have had some tertiary education. In contrast, only 17.8% of "Brazilians", predominantly of Japanese ancestry, have had some tertiary education.

Monocultural

Like Germany (and Korea), Japan has long had a well-defined ethnic identity. During the Meiji era and construction of the modern Japanese state, these sentiments led to the widespread adoption of ethnic nationalism, as well as complementary traditional concepts like the family registration system. Although ethnic nationalism had little direct impact on the legislative codification of a *jus sanguinis* basis for Japanese citizenship, the compatibility between *jus sanguinis* and the family registration system was enough to establish its dominance in modern Japanese immigration policy (see Kashiwazaki 1998). For instance, third and fourth-generation ethnic Koreans living in Japan, who had full fluency in the Japanese language and culture--and were

physically indistinguishable from many Japanese--were not automatically given Japanese citizenship. Out of the 901,284 ethnic Koreans living in Japan, only 284,840 (31%) had actually become naturalized citizens (Korea Overseas Information Service 2006).

Passive

With certain exceptions, the Japanese government has historically encouraged emigration. During the late nineteenth and early twentieth centuries, the Japanese government actively promoted emigration by creating a clear legal framework, and sponsoring private emigration agencies. The objective was to counter perceived overcrowding and a high birth rate (de Carvalho 2003).

There have been two major exceptions to this pattern. The first was the immigration of laborers from other parts of Japan's colonial empire, 1895-1945. Such flows were substantial, and grew dramatically as conscripted Korean laborers were forcibly imported during World War II. These flows, however, were counted as "internal" flows. The foreigner population in Japan today is predominantly the descendents of these migrants (Kashiwazaki 2006). The second exception has been the return migration of ethnic Japanese from other parts of the world, especially Brazil (see below).

Current Policy Framework

Compared to the other cases examined here, Japanese immigration policies: "···[have] always been a patchwork. We need to have proper

laws and regulations in place when accepting people from abroad…" according to Susumu Ishihara, President of the Japan Immigrant Information Agency (as quoted in Daimon 2009). The official regulations as posted by the Japanese government are difficult to follow, with many special exemptions:

<Table 7> TYPES OF JAPANESE VISAS AWARDED

VISA CATEGORY	Work Visa	Term of Residence	Authorized Activities	
DIPLOMATIC VISA	Yes	during mission	Diplomatic activities	
OFFICIAL VISA	Yes	during mission	Diplomatic activities and representation of international non-governmental organizations	
WORKING VISA	Yes	3 years or 1 year	Authorized activities include professorship, art, religious activities, journalism, investing, business management, legal/accounting, medicine, research, language instruction, engineering, humanities, international services, intra-company transfers and skilled labor	
		months	Entertainment, theater and television-related industries	
TEMPORARY VISITOR'S VISA	No	90 days or 15 days	Sightseeing and leisure	
TRANSIT VISA	No	15 days	Sightseeing and leisure	
GENERAL VISA	No	1 year or 6 months	Academic, artistic or cultural activities that receive no income	
		2 years or 1 year	College Student	
		1 year or 6 months	Pre-College Student	
		1 year or 6 months	Trainee: activities to learn and acquire technology, skills, or knowledge at public or private organizations	
		3 years, 2 years, 1 year, 6 months or 3 months	Dependent: daily living activities on the part of a spouse or unmarried minor child	

Source: Ministry of Foreign Affairs of Japan (2009a)

Nearly all working visas require a job offer in Japan. These visas are restricted to specific types of activities, delineated by profession. A university degree and/or work experience is generally needed for these visas, which can be extended. Individuals can also change their visa status within Japan.

Permanent residency can be granted to foreigners who have lived in Japan for ten or more consecutive years, and less than that for spouses of Japanese nationals and others who have made "significant contributions to Japanese society." Permanent residency is indefinite and allows any kind of employment.

III. Ethnic Koreans in the Services Sector

Sharing a Confucian respect for education like their Korean cousins, overseas ethnic Koreans are some of the best-educated people in the world. Given the increasingly important role that skilled professionals (e.g. financiers, businessmen) are playing in an increasingly global economy, these individuals represent a largely-untapped source of "global talent" for the Korean economy.

The return of ethnic Koreans is not a new phenomenon. In the aftermath of World War II, from 1945-1949, some 3.5 million people entered what is now the Republic of Korea. Besides the estimated 1.6 million people who moved from the North to the South, an additional 1.4 million Koreans were repatriated from Japan, and another 620,000 from Manchuria (Skeldon 1997). From the almost 2 million Koreans in Japan at the end of colonial rule, only approximately 233,000 remained there by spring 1946; the rest had returned home. Yet, returnees faced a difficult economic environment, where they had difficulty finding jobs. Disappointed, many returned to Japan; the number of Koreans in Japan rose to 509,000 as of October 1947 (Shin 1996).

Edye (1987) propose that migrant populations can be integrated into their host society in three different ways. Unilateral integration involves integration through the assimilation and subjugation of the minority into the majority, where the minority is forced to accept the majority's way of life. In contrast, pluralist integration involves group coexistence with minimum change, as epitomized by ghetto-ization.

Both groups remain fairly rigid within their own groups. The most stable form of integration, however, is said to be integration through interaction, occurring through mutual influence and exchange. This is a relatively stable form of integration, which is believed to have happened with Korean returnees after World War II.

Recruiting a new wave of ethnic Koreans back to their ancestral homeland is based on the concept of diasporic return. Although the definition of a "diaspora" greatly varies, nearly all diasporic communities acknowledge that the "old country" has some claim on their loyalty. This signifies an inescapable link with their past. Cohen (1997) suggests that members of a diaspora are drawn to their homelands, in search for social identity and belonging, despite the civic roots they have put down in their adoptive homelands. Such tendencies manifest themselves into "return migration". In a study of migration within Europe, Sassen (1999) finds that there is considerable return migration. For instance, about 60% of all Italians who left for the United States in the years around 1900 eventually returned to Italy. Sassen suggests that circular migration links the sending and receiving areas within a single economic system.

1. Current Situation in Korea

Table 8 shows that there are about 7.04 millions ethnic Koreans living around the globe as of 2007. Over half of them resided in Asia (2.76 million in China and 893 thousand in Japan). Besides Asia, North America hosts 2.34 million ethnic Koreans. Among those Koreans, most reside in the United States, 825 thousand having U.S.

citizenship, 732 thousand as permanent residents and 459 thousand using educational visas and other short-term visas. Following Asia and the Americas, Europe is the next largest region where ethnic Koreans reside, (645 thousand). Of this number, 89% live in the former Soviet Union, which created this diaspora through forced migration at the beginning of the last half of the 19th century. Although data on the level of education and income for these ethnic Koreans are not readily available, the largest pool of overseas Koreans would be drawn from Asia or North America.

<Table 8> OVERSEAS KOREANS BY STATUS OF SOJOURN (PERSONS, 2007)

	Country	Citizens	Residents	Sojourners		
Region				General	Students	Total
Total		4,047,934	1,451,346	1,211,148	334,288	7,044,716
	Total	2,577,953	546,919	751,288	164,216	4,040,376
Asia	Japan	*296,168	499,553	80,530	17,489	893,740
Asia	China	**2,244,398	3,112	438,238	76,412	2,762,160
	Others	37,387	44,254	232,520	70,315	384,476
The	Total	938,650	878,696	396,439	127,378	2,341,163
	United States	825,420	732,329	354,031	105,131	2,016,911
THE	Canada	95,062	78,497	21,536	21,533	216,628
Americas	Central and	18,168	67,870	20,872	714	107,624
-	South America					
	Total	531,062	24,456	47,981	41,753	645,252
Europe	Confederation of					
	Independent	518,437	3,342	9,052	3,145	553,976
	States (CIS)					
	Continental	12,625	21,114	38,929	38,608	111,276
	Europe	12,020	21,111	30,727	30,000	111,270
Mideast	Total	82	15	9,139	204	9,440
Africa	Total	187	1,260	6,301	737	8,485

Source: Ministry of Foreign Affairs and Trade "Overseas Koreans" available at Korean.net downloaded on August 5, 2009 from

 $(http://www.korean.net/morgue/status_2_2007.jsp?tCode=status\&dCode=0103)$

2. Current Policies in Korea

In light of economic globalization and transnational migration, the concept of citizenship or "nationality" has come under scrutiny in many countries, including Korea (Lee 2008; Sassen 1996). Nation-states confront human rights issues in dealing with migration

Note: * Figure represents total of Korean-Japanese who naturalized into Japan during 1952~2005 including those with North Korean nationality. Statistics are drawn from the Ministry of Justice.

^{**} A total of 1,923,800 Korean Chinese with Chinese nationality were reported to be live in China by Chinese Census 2000.

and see conflicts arising between "human rights" and nation-state "sovereignty." Specifically, the protection of migrant workers may conflict with national sovereignty and/or interst, during political decision-making and policy framing.

In the Korean context, Seol (2007) suggests that residency-based citizenship be revised, to eliminate the gap between nationality and residence. Specifically, Seol argues that the standards for acquiring Korean citizenship need to be changed, so that the "citizenship" paradigm could deal not only with the "import of labor" from outside the nation, but also distinct aspects of human lives. This is consistent with the approach that some other countries take, especially Canada, who emphasizes the human rights aspect of residency.

Korean policymakers have also been debating the merits of extending dual citizenship to overseas Koreans. Some experts, however, argue that the debate on dual citizenship is peripheral to expatriate labor policy. The debate has been spurred by Korean domestic politics than the needs of overseas Koreans beyond the first generation, whom the new policies are assumed to serve. The reason is that Korean immigration policy of is already hospitable to second and third-generation ethnic Koreans, so few care if they can actually obtain Korean citizenship. The existing F-4 "permanent resident" visa provides its holders nearly all the benefits of citizenship, without the need for military service. If any immigration policy refinements are needed, it might be to change the duration of the F-4 from the current two-year period to five- or ten-years, if the aim of the visa is to encourage more ethnic Koreans overseas to obtain and maintain their

F-4 status.

The debate took a dramatic turn since the Lee Myung-Bak administration proposed the new First Basic Plans for Foreign Workers, effective from 2008 to 2012. The plan calls for: (1) recruiting high-quality personnel to advance technological innovation and high value-added tasks; (2) giving permanent residence to skilled technicians with certain labor competencies to fill specific labor shortages; (3) the provision of consumer-centered support services (e.g. schools, local cultural center, social welfare facilities, and civic organizations) under the guidance of local governments; (4) allowing for dual citizenship for non-voluntary dual citizenship holders and global talent within limited areas; and (5) creating social integration programs for marriage migrant women (Kim E. M. 2009)

There is also a stream of the "global competitiveness" approaches to negotiating expatriate labor policy. Many Korean politicians and scholars emphasize the need to invest in a globally-competitive labor force for continuing Korea's economic growth (Kirkegarrd, 2007; Sassen, 2001; Bartlett and Ghoshal, 2002; Lee, 2004). This argument resonates with the need to import high-skilled expatriate labor from outside the nation. So far, there is a consensus that Korea should "follow up" on these ideas. In line with this argument, overseas ethnic Koreans can potentially serve as global talent in major segments of the economy mainly in the business and customer service sectors. For example, medicine, law, finance, business, and engineering appear to be good venues to bring in global talent.

3. Best Practices in Other Countries

Germany and Japan are the only relevant comparative cases here. Like Korea, both have utilized the *jus sanguinis* view on nationality. In contrast, Canada and the United States are both multi-ethnic settler societies, and cannot have "returnees" based on the *jus sanguinis* principle.

3-1. Germany

Germany has had two distinct waves of returnee migration. The first wave of returnees, directly following World War II, has been re-integrated into German society very successfully. However, a second wave of returnees, after the fall of the Berlin Wall, has not integrated as well.

The social integration of ethnic Germans into West Germany was initially extremely successful. West Germany's Basic Law, in Article 116(1), included refugees or "expellees" of German origin amongst the definition of a "German". This defined West Germany the state not only of its own citizens, but certain non-citizens as well. There was no need for "expellees" to have actually been expelled, but they only had to originate from a Communist country to be labeled a "resettler". Many of these individuals had ancestors who had left "Germany" as long as eight centuries ago (Joppke 2005). From 1945-1987, 1.6 million "ethnic Germans" entered West Germany. They quickly blended into the native population; ethnic German returnees from that era became socially invisible (Bommes 2006).

The story has been different for an additional 1.6 million who returned from 1988-1993, after the fall of the Berlin Wall allowed them to return from the former Soviet Bloc. Initially treated no differently from earlier returnees, the new wave was gradually stripped of their special status. Although the German government had originally allowed ethic Germans to enter without restrictions, it responded to the volume of immigration by restricting yearly inflows to 220,000 per year. Furthermore, it amended citizenship laws in 1990, 1993 and 1999 to allow non-German migrants and their children access to German citizenship, weakening the jus sanguinis basis for citizenship. In contrast to the situation of the earlier wave, the new wave of ethnic German returnees have a much higher unemployment rate than natives, even if it is lower than it is for most non-EU immigrant populations in Germany. Overall, ethnic Germans have been transformed into a "normal" type of immigrant (Bommes 2006).

Opposing "liberal" and "restrictive" forces have both contributed to this change. On one hand, liberal politicians decried Germany's hypocrisy, refusing to assimilate its Turkish population while providing special privileges to individuals of dubiously ethnic German background. On the other hand, conservative politicians took advantage of a worsening economy, with mass unemployment and slimming welfare benefits, to stir resentment against generous benefits bestowed on "resettlers". These contradictory forces generated a set of regulations that reduced ethnic German immigration (Joppke 2005). After the 2005 reforms, Germany provide no special provisions for individuals of ethnic German background.

3-2. Japan

Japan is perhaps the closest analogue to Korea, not only as an East Asian society that shares many cultural elements, but also as a monocultural society that has not typically recruited foreign labor, except during the World War II period. The recruitment of overseas ethnic Japanese, however, represents a key exception.

Much like Korea, Japan has a large diaspora created through outbound emigration. During the Meiji period, many Japanese sought to escape poverty through emigration. From 1885-1923, half a million Japanese left Japan for reasons including over-population and heavy taxes. Although emigration had been prohibited during the Tokugawa period, Japan was facing unemployment and overpopulation. Thus, emigration companies first received official sanctioning in 1890. Despite state encouragement, however, Japanese immigrants soon became unwelcome in most host countries. For instance, the United States restricted Japanese immigration through the "gentleman's agreement" of 1908. Brazil, however, had a shortage of labor after the curtailment of the Atlantic slave trade in 1850. In 1886, large coffee planters organized the Society for the Promotion of Immigration, to encourage European immigration; three years later, the Sao Paulo state government took over the organization, and instituted a contract labor system where it paid for partial passage to Brazil, transportation to Sao Paulo, lodging and food while a job was arranged, and transportation to the place of employment. These measures created intense immigration, where 1.6 million Europeans arrived in Brazil from 1880 through 1900, mainly from Italy. Brazilian employers, however, soon obtained a reputation for mistreating their workers, causing the Italian, French and Spanish governments to forbid emigration there. Because Chinese immigration was considered unacceptable on racist grounds, and because Japan had achieved a measure of prestige after its victory in the Russo-Japanese War, Brazil began importing Japanese. By 1940, there were 205,000 Japanese living in Brazil, constituting 0.5% of the Brazilian population (de Carvalho 2003). As of the mid-1990s, Brazil (620,370) and the United States (848,000) were the only countries that had more than 60,000 *nikkei-jin*, or overseas Japanese (Stanlaw 2004).

In the 1970s, Japan began recruiting Japanese-Brazilian labor in large numbers. The economic expansion of the era created labor shortages, particularly in the unskilled labor sector. Foreign workers, particularly from Asia, were used to alleviate labor shortages, despite being prohibited by law. In recognition of this situation, the Japanese government amended the Immigration Control and Refugee Recognition Law in 1989. These had four major provisions: (1) the number of foreign professionals and skilled workers allowed to work in Japan increased from 18 to 28 categories; (2) Japanese descendents up to the third generation, and their spouses, were permitted entry for an indefinite period; (3) sanctions on illegal workers were intensified; and (4) an on-the-job training program was recognized under certain conditions. Because these amendments favored returnees of Japanese descent (the dekasegi), the number of South Americans coming to Japan skyrocketed, from 88,201 in 1991 to 274,442 in 1998. 81% of these individuals were Brazilian. Dekasegi are recruited through several channels: Japanese and Brazilian job-brokering agencies (the

most popular option), directly by companies (about 35% of the whole), or by networks of friends and relatives working in Japan (de Carvalho 2003).

The *dekasegi* migrate to Japan primarily for economic reasons, but also for identity-related ones. The most common aspirations are to buy a house, a car and then start a business. However, other motivations include a desire to experience life in a developed country, acquaint themselves with the land of their ancestors, meet any relatives and learn about Japanese culture. The *dekasegi* tend to emphasize the positive aspects of their experience, encouraging others to follow in their footsteps. Most intend to return to Brazil after a few years. However, some experts believe that it is inevitable that many *dekasegi* will bring their families to join them in Japan, and settle there (see de Carvalho 2003).

The overwhelming majority of *dekasegi* are in their twenties and thirties, and are second or third generations; half have attended secondary school, and 25% have university degrees. Many of their previous occupations were in white-collar and professional roles. Yet, the majority in 1993 (51%) worked in manufacturing assembly lines; 25% in construction and 13% in service industries. Available data indicates that *dekasegi* income and working conditions are roughly identical to their Japanese peers (de Carvalho 2003).

Available evidence suggests that the *dekasegi* experience little discrimination in Japan. Popular media often represent *dekasegi* as suffering from discrimination. However, this is not supported by

academic research. For instance, very few *dekasegi* that de Carvalho (2003) interviewed actually experienced any discrimination in Japan; on the contrary, they tended to think that the Japanese had a good opinion of them. de Carvalho suggests that the fact that the *dekasegi* tend to perform low-prestige jobs may account for more of the discrimination than their national origin. The Japanese concept of national identity is perceived as being tied to Japanese "blood." Yet, research suggests that mutual contact between the Japanese and the *dekasegi* has led to an assertion of mutual differences (de Carvalho 2003). The *nikkei-jin* in Japan, including the *dekasegi*, are also becoming dissatisfied about being called "Japanese" in Brazil and "Brazilian" in Japan. They have been organizing discussions to change this status, despite the Japanese government officially recognizing as "Japanese" only those people who emigrated out during the past three generations (Stanlaw 2004).

The *dekasegi* enter Japan through a variety of visas, including the working visa category. However, they have a special claim on two visa categories: the Long-Term Resident category within Specified Visas, and being the child of a Japanese citizen.

Table 9 shows current German and Japanese policies towards return migrants:

<Table 9> COMPARISON OF GERMAN AND JAPANESE JUS SANGUINIS VISAS

Country	Returnee Visa	Eligible Individuals
Germany	Eliminated in 2005	N/A
T	Specified Visas-Long Term	Second, third and fourth generation
Japan	Resident	Japanese settlers
	Specified Visas-Spouse or	Individuals born as the child of a
Child of Japanese National		Japanese citizen

4. Policy Recommendations

The current regulations governing the return of second and third-generation ethnic Koreans appear to be an excellent foundation for an integrated policy framework designed to recruit "global talent." These regulations are comparable to the Japanese treatment of *nikkei-jin*, and are superior to current German regulations regarding return migration. However, some issues remain unresolved: (1) the small proportion of eligible overseas Koreans who have obtained the F-4 visa; and (2) creating institutional mechanisms matching the needs of the Korean economy with the appropriate overseas Koreans.

• Increasing the Duration of the F-4 Visa

The current F-4 visa fits the needs of ethnic Koreans in the United States, Japan and other advanced countries. Allowing return migrants unfettered access to employment and residency, this visa serves as an excellent foundation for policies designed to recruit "global talent" amongst overseas ethnic Koreans.⁶)

Only a miniscule proportion of eligible overseas ethnic Koreans actually hold the F-4 visa; 45,384 among the nearly three million ethnic Koreans in Japan and the United States (Monthly Statistics for Korea Immigration Service June 2009, Korea Immigration Service). This is largely because the F-4 is designed to serve the needs of ethnic Koreans *actually residing in Korea*, instead of ethnic Koreans *potentially* entering the Korean economy. For the F-4 to be used as a true "recruitment" tool, instead of a "convenience" tool for individuals who would come to Korea anyway, we recommend that the F-4 be reconceptualized as a visa for any ethnic Korean residing overseas in an advanced country, who could *potentially* come to Korea.

Although this re-conceptualization would occur in several steps, a first step would be to increase the duration of the F-4 from the current two-year period, to five- or ten-years. Currently, ethnic Koreans who obtain the F-4 visa, but end up leaving the country, cannot renew the visa--even though it is very easily renewed in a domestic immigration office.⁷⁾ If the duration of the visa were increased, ethnic Koreans who end up leaving Korea can more easily return. Considering that individuals who have already spent time in Korea are most likely to return, this policy would have maximum

⁶⁾ Discussions of "dual citizenship" for overseas ethnic Koreans is peripheral to the needs of second- and third-generation emigrants. First-generation emigrants may be interested in dual citizenship to maintain property in Korea. However, few second and third-generation emigrants actually own Korean real estate. While dual citizenship may be supported by first-generation emigrants--and opposed by domestic constituencies--it has little to do with the need to recruit second and third-generation emigrants abroad.

⁷⁾ The renewal process has become increasingly streamlined. For instance, F-4 renewal required two separate trips to an immigration office, separated by a week's worth of processing time, as recently as two years ago. F-4 renewal now requires a single trip with only a 15 minute processing time.

impact without disrupting the current policy framework.

The extension of the F-4 is consistent with the recommendations of the Presidential Commission on Policy Planning (2006), which suggests that Korea simplify visa application and immigration policies for non-ethnic Korean global talent.⁸⁾ The Commission's recommendations focus on the permanent residency and Special Occupations (E-7) visas. For ethnic Koreans, however, the F-4 would be a more effective and efficient vehicle, given that applicants would simply need to provide their Korean ethnicity, rather than having to establish permanent residency via long-term sojourns, or provide evidence of their "special talents".

• Constructing a Systematic Recruiting Framework

We also recommend that the government partner with quasi-governmental organizations like KOTRA (Korea Trade-Investment Promotion Agency), as well as industry organizations like the Federation of Korean Industries, to construct a cohesive system designed to match overseas Koreans with specific needs.

The Korean government already runs "Contact Korea", a special-purpose agency under KOTRA. The purpose of Contact Korea is to provide job placement consulting for foreign workers, and assist

⁸⁾ Note that the PCNC confines the categories of "global talent" to those with visa status of E1(Professorship) ~ E7(Special Occupation) with the exception of E6 (Arts & Performance) and D8 (Corporate Investment) according to the Immigration Enforcement Ordinance. This contrasts with our categorization of global talent and skilled-labor, according to which the latter corresponds closely to the PCNC's global talent category.

immigration procedures for foreigners in collaboration with the Ministry of Justice and the Ministry of Labor. In addition, the Presidential Commission on Policy Planning (2006) proposesd a "visa nominator" system where the overseas offices of Korean public agencies, trade agencies, and large Korean corporations are allowed to nominate specific foreigners for visas into an online visa nomination and review system called HuNet Korea. We strongly support these policy propositions, not only for non-ethnic Koreans, but also for the purposes of return migration.

We note, however, that such policies are likely to be most effective in the financial services and general business fields. Overseas ethnic Koreans can potentially serve as global talent in five occupations: engineering, medicine, law, finance and general management/business. Of these professions, engineering, medicine and law do not represent promising opportunities for recruiting overseas Koreans. Increasingly few Korean-Americans and Korean-Japanese consider engineering a desirable occupation; thus, few individuals would consider an engineering career in Korea. In contrast, the same overseas Koreans have had a strong predilection towards the medical and legal professions. However, Korean professional associations in medicine and law have strongly opposed the domestic recognition of professional credentials awarded overseas during recent debates about the U.S. and E.U. free trade agreements. Thus, the recruitment of overseas Korean doctors and lawyers has its obstacles. No such barriers are present in financial services and general business fields--the very fields where Korea needs perhaps the greatest inflow of human capital.

• Data Collection

Our final policy recommendation is to create two national databases: (1) of overseas ethnic Koreans, or at least those with the F-4 visa; and (2) of "global talent" positions that need to be filled amongst Korean businesses. The task is not only to facilitate the matching of skilled ethnic Koreans with suitable, unfilled positions in Korea, but also to generate data that will suggest future policy improvements. Tables 10 and 11 list databases available for addressing current issues regarding the utilization of overseas Koreans.

<Table 10> LIST OF DATABASES AVAILABLE FOR EXPATRIATE LABOR POLICY

		Available Data and Government Agency
Korean Statistical Informatio n System	Collect nationally conducted surveys from various government agencies and provide detailed information statistics on population, immigration, labor, and education. Also available are size of foreigners staying in Korea with various visas	Ministry of Justice, Korean Immigration Service - Statistics on Foreigners by Status of Sojourn (1992-2008) Ministry of Public Administration and Security - Foreign Residents by Provinces and Local Governments (2006-2008) - Basic Survey of Nationwide Foreign Residents (2006-2008)
National Science and Technologi cal Information System (NTIS)	Provide information on highly educated personnel who studied in Korean universities and those who are pursuing their academic or professional careers in research institute or educational institutions. Also available are the size of entering college cohorts by field of major, and forecast of labor demand and supply in engineering and science fields	Ministry of Education, Science, and Technology. 2008. "Survey of Current Situations of Science and Engineering Labor" Ministry of Education, Science, and Technology and Korean Institute of Science and Technology Evaluation "White Paper of Science and Technological Statistics". 2009

		Available Data and Government Agency
Employme nt Permit System	Provide general introduction of employment permit system and also statistical resources for policy and educational services. Number of foreign workers residing in Korea with various status are available However, no detailed information are suggested about foreign workers in terms of their job seeking behavior or job careers	
E-nara ndex	Provide current situations of South Koreain social, economic, political, and cultural aspects using high quality data collected by government agencies Provide not only government-acknowledged data but secondary data of administrative resources or predictions. Allow changes due to government policy using time-series data, and provide easy tools for graphically presenting outputs	Ministry of Labor. "Currents of Foreign Laborer Employment-General and Ethnic Koreans) Ministry of Justice. "Annual Statistics of Immigration Service" Ministry of Foreign Affairs and Trade. "Report of Foreign Residency "

<Table 11> STATISTICAL DATASETS ON OVERSEAS KOREANS

Datasets	Date of Survey	Date of Release	Data Collecting Agency	Publisher	Method of Data Collection	Contents
Foreign Students Statistics	March – August, 2008	November, 2008	Korea Educational Development Institute	Ministry of Education, Science, and Technology	Subject: Foreign Students Enrolled or Registered as of Survey Period	Number of Foreign Students Residing in Korea by Institutions by country of Origin by Type of Education by Year
Ministry of Foreign Affairs and Trade "Overseas Koreans"	July 2009	July 2009	Overseas Diplomatic Offices (Embassy, Consulate, and Branch Office)	Ministry of Foreign Affairs and Trade (2009)	Residency Report of Overseas Koreans, Issuance of Passport Collected by Local Korean Associations	Statistics of Overseas Ethnic Koreans (by Size by Purpose of Residence, Annual Change in Number)

Note that these datasets have some major gaps. There are few details on the reasons why ethnic Koreans return to Korea--beyond the general type of visa issued--and no data at all on the reasons why they leave. Furthermore, there are no data available on the jobs that would fit specific overseas Koreans.

Given the current state of databases available for expatriate labor policy, we recommend that efforts should be made to collect data. First, emphasis should be placed on predicting gaps in demand of and supply of professionals and skilled labor, by specific labor segment. Of special interest is size of producer and customer service sectors including finance, accounting, corporate law, consulting, and engineering and sciences. Second, there should be an effort to integrate this system with HuNet Korea, so that specific candidates can be matched with specific job needs.

Beyond these suggestions, which are valid for all expatriate labor, a more-specific database should focus on the needs of Koreans living abroad (e.g. why they would or would not return to Korea, what their skills are, and what their needs might be). Specifically, government agencies should collect data on the number of second and third-generation ethnic Koreans who reside overseas, and the skills they possess; they may be a useful labor pool for filling gaps in high-skilled professionals. There is also an urgent need for estimating the number of ethnic Koreans with highly valuable skills who already have jobs in domestic labor markets. To verify and further assist them in strengthening their careers, we should be aware of their career mobility and aspirations in Korea. A nation-wide survey may be conducted for this purpose.

Special research should be done on current F-4 holders, especially on the reasons why they would leave Korea.

IV. Foreign Science and Engineering Students in Korea

There is some evidence that manufacturing firms have difficulty recruiting engineers who can perform research and development work and technology-related tasks. Table 12 shows that the manufacturing sector suffers a shortage of 2,545 MA and PhD holders, and 23,653 junior-college or college graduates.

<Table 12> CURRENT SITUATIONS OF INDUSTRIAL TECHNICAL LABOR BY SECTOR (PERSONS)

	2004 Currently Labor		2005		2006	
			Currently	Labor	Currently	Labor
	employed	shortage	employed	shortage	employed	shortage
Manufacturing	246,365	15,642	370,499	24,144	377,602	14,885
Other Sectors	153,697	13,406	180,807	10,918	189,980	11,313

Source: Ministry of Knowledge Economy, 2008 "Report of Survey on the Demand and Supply of Industrial Technical Labor by Sector"

Note: survey was initially sanctioned as official statistics in 2004, and the survey for 2007 was administered between March, 2008 and June, 2008. Manufacturing denotes D-15 $^{\sim}$ D37 industries by Standard Industry Classification System, while other denotes machinery, consumption appliance lease, and business support industries.

<Table 13> CURRENT SITUATIONS OF INDUSTRIAL TECHNICAL LABOR BY EDUCATIONAL ATTAINMENT (PERSONS)

	2004		20	05	2006	
	Currently employed	Labor shortage	Currently employed	Labor shortage	Currently employed	Labor shortage
MA & PhD holders	62,094	2,772	82,905	4,294	89,127	2,545
Associates Degree & BA holders	337,968	26,276	468,401	30,767	478,454	23,653

Source: Ministry of Knowledge Economy, 2008 "Report of Survey on the Demand and Supply of Industrial Technical Labor by Sector"

Korean society may attract foreign students to fill this gap much like the United States, which has been fantastically successful in recruiting the most talented science and engineering students, and retaining them in its labor force.

1. Current Situation in Korea

As of 2007, 49,270 foreign students in Korea were either pursuing academic degrees or language study or other training. Of interest are 9,225 who major in science and engineering fields. About 90% of these students come from Asia, especially from China; less than 10% are from either North America or Europe. Some newspaper articles report that most Asian students studying for professional careers in the high tech industries such as information technology or bio-technology seem to be satisfied with studying in Korea, given that the research environments and support for education are much better than their home countries (Journal of Electronics, January 2, 2007, Prepare for handing over new momentum for economic growth in IT industry; Daily Donga May 29, 2007, Survey of R & D center of foreign enterprises in Korea; Hankyung Business Vol. 557 August 2006. No engineering! Strong preference for medical sciences) However, many of them return to their home countries, to work for Korean multinational corporations that offer better pay and fringe benefits that the same corporations provide their Korea-based employees.

For students pursuing post-graduate education coming from Asian countries, the research environment of top engineering universities in

Korea are said to be highly amenable compared to those of their homelands. Korea has a highly organized system of scientific research, experiment-based training, and an established research network. Asian graduate students and researchers are now bringing their families with them to enjoy better opportunities in Korea (Newstation Pursuing Degree in Korea? Foreign Scientists Attracted Attention by Their Performance. July 7, 2009).

• Improving the Quality of the Study Abroad Experience in Korea

Some institutions and government agencies have designed specific arrangements for attracting foreign students into Korea. For example, the Korean Institute of Science and Technology (KIST) established the International Research and Development Academy, which recruits highly qualified foreign students and helps them pursue academic degrees while doing field-based research. The Academy also provides students tuition and fee waivers along with living expenses. As of July, 2009, 98 students have joined the Academy. This will train foreign scientists and engineers and promote collaboration for international scientific technology transfer.

The Ministry of Education, Science, and Technology has made arrangements for supporting foreign students studying engineering in Korea. Of special interest is the issuance of a Science Card (a support system for foreign scientists). Once foreign scholars and students interested in doing research in Korea have this card, the immigration process into Korea is greatly shortened. As of April 2002, 1061 cards have been issued.

Although these measures help relieve foreign students of the material or psychological costs of studying abroad, there needs to be a more comprehensive support framework. Many are funded by their academic advisors or the managers of research projects they participate in. Administrative and legal procedures for sharing research outputs are not well established, causing conflicts among students and Korean researchers. In addition, qualified foreign researchers need to be given opportunities for obtaining large-scale research projects on their own.

• Attracting more foreign students

The Korean government has instituted the "Study in Korea Program", which is designed to attract foreign students to study engineering and the sciences in Korea. The program seems to have successfully increased the number of foreign students. However, as the focus is on maximizing the number of foreign students, the quality of these students has yet to be closely scrutinized (Seol 2009). For instance, interviews with local experts suggest that many "students" in 2-year programs (perhaps as high as 60%) are actually working in Korea in 3D-type jobs, using a student visa mainly for entry into Korea. Also, there appears to be a huge difference in the quality of humanities and social science foreign students in Korea (low) versus engineering and technical students (high). (Choi et al., 2008; Kim, Hye Jin 2008; Seol, 2009).

At the turn of this century, the Korean government has suggested plans to recruit foreign students into engineering majors in fear of Korean students' reluctance to enter into those fields. This resulting shortage would decrease Korea's competitive edge in high tech industries. According to the Ministry of Education and Human Resource Development, foreign graduates who have majored in engineering and sciences seek employment in related jobs without interruption of their visa status, and to pursue careers in the Korean labor market. Recently, the Korean Government proposed new plans for foreign students who achieved their degrees in humanities and social sciences, enabling them to extend their stay in Korea for an additional two years after graduation. The government expects that this policy will recruit the most talented foreign students into the business and producer services sector in which labor demand is expected to grow owing to the transition of Korean economy into service-based or knowledge-driven one (Korea's Delegate to OECD, 2007; Lee, 2009).

• Immigration policy

Immigration policies have been modified to ease the immigration process and help foreigners find better employment opportunities. For instance, the Ministry of Justice has started to issue Gold cards for technology professionals, IT cards for information technology professionals, and Science cards for scientists to recruit a highly skilled foreign workforce. Holders of these cards are guaranteed three years of unlimited entry and departure, as well as permission to hire household assistants. Foreign students in science majors have been added to this program. This prevents valuable human resources from going overseas, and ensures that there are enough specialized workers

in Korea. As of September 30th, 2006, there were 23,808 foreign specialized workforce and students, including professors (1,325), foreign language instructors (14,625), researchers (1,961), and foreign students (30,273).

Many researchers emphasize that foreign labor policies in Korea resemble core elements of those in Japan. The aim is to recruit a high quality workforce, while restricting the influx of low-skilled labor so that the latter would not interfere with employment of domestic workers (Seol, 2004; Lee and Park, 2005; Park, 2008). These policies, however, are sometimes considered discriminatory treatment against low-skilled foreign workers. This issue warrants further consideration and debate. Table 14 shows the progress of Korean policies regarding foreign labor.

<Table 14> ADOPTION OF FOREIGN LABOR AND RELATED INSTITUTIONAL CHANGES

Year	Institutions	Details
1991	Adoption of the "Industrial and Technical Training Program" (ITTP)	investment were allowed to bring
1994	Adoption of the association- recommended ITTP	their local trainees into Korea Small sized firms made no FDI were allowed to accept foreign trainees as well Trainees were covered under
1995	Regulation on the Protection and Management of Foreign Industrial and Technical Trainees	industrial accident remuneration insurance and health care insurance and protected partially by the Basic
2000	Adoption of the Industrial Training system	was modified into two-year training
2004	Adoption of the Work Permit system	and one-year employment The system adopted foreign labor force as workers, not trainees. Became effective with the ITTP remaining valid
2007	Abolition of the ITTP	Adoption of foreign labor made possible only through the Work Permit system

Source: Park (2008: 74)

2. Best Practices in Other Countries

In recent years, many countries have emulated the U.S. optional practical training (OPT) program, allowing foreign students a one-year

work permit after graduation. Australia has made it easier for foreigners with local degrees to obtain permanent residency. Canada made it easier for graduate students to work off-campus, and allowed them to stay after graduation. The United Kingdom expanded its one-year visa for graduates of science and engineering fields to cover all BA and MA recipients. France introduced a six-month renewable visa for current students, to search for employment there. Even the German government provided one-year work permits for foreign students who receive a job offer (Kirkegaard 2007).

2-1. The United States

The U.S. has historically maintained a very high retention rate amongst the highly-skilled science and engineering students it educated. Data from the National Science Foundation reveals that from 1988-1996, roughly two-thirds of foreign science and engineering PhD recipients planned to stay in the U.S. after graduation. Chinese (86%) and Indian (79%) students were especially likely to stay; Korean (36%) and Taiwanese (48%) students were much more likely to leave. Students from these four Asian countries accounted for nearly 80% of all foreign recipients of science and engineering PhDs awarded in the U.S. Kirkegaard (2007) expresses concern that as China and India increase their income levels, their students might increasingly resemble Korean and Taiwanese students, becoming much more likely to return home after education.

The OPT program is the primary vehicle for retaining foreign graduates of U.S. universities. As of Fiscal Year 2008, approximately 70,000 individuals were undergoing OPT. These individuals are split

between pre-completion OPT, which allows student employment in a field directly related to their program of study prior to graduation, and post-completion OPT (U.S. Citizenship and Immigration Services 2009). Historically, OPT duration has been limited to a total of 12 months, which could be split between pre and post-completion OPT. However, the U.S. Department of Homeland Security (2008) recently implemented two changes designed to make it easier for employers to hire F-1 students. First, it extended OPT from 12 to 29 months for F-1 students with a degree in science, technology, engineering, or mathematics. Second, it automatically extended OPT for all F-1 students with pending H-1B petitions, eliminating the possibility that an F-1 student would have to return home, despite an employer-sponsored H-1B application simultaneously being processed.

2-2. Canada

More than 130,000 foreign students study in Canada every year. Like the United States, Canada has instituted a program designed to retain these students after graduation. This program offers work permits for students at certified four-year institutions. For students who studied less than eight months in Canada, no permits are offered. Students who studied eight months to two years are offered a work permit for a period no longer than the length of time of study. Students who studied longer than two years are offered a three-year work permit (Citizenship and Immigration Canada 2009).

2-3. Germany

Following the success of the U.S. OPT program, Germany is now allowing foreign graduates of its universities a one-year period to look for jobs in Germany. Citizens of established EU states are automatically given a EC Long Term Residence Permit. Citizens of other EU states, as well as non-EU countries, are granted one year after obtaining a university degree, to find a job matching their qualifications. Students who obtain a job offer are then given Residency Permits (German Federal Ministry of Labour and Social Affairs 2009).

2-4. Japan

Unlike the other cases examined here, Japan does not appear to provide any special dispensation to foreign graduates of its universities. Students are simply urged to secure employment while still attending school, and file for a change-in-status from a student visa to a working visa before the expiration of the student visa (Japanese Ministry of Foreign Affairs 2009b).

2-5. Summary

Many advanced industrialized countries have recently entered an "arms race" to retain foreign graduates of their universities. Most of these programs have been modeled on the U.S. OPT program, allowing students a limited amount of time to secure employment. The one exception is Japan, which appears to provide no such

dispensation. Table 15 compares and contrasts these policies.

<Table 15> COMPARISON OF CANADIAN, U.S., GERMAN AND JAPANESE POST-GRADUATION POLICIES FOR FOREIGN STUDENTS

Country	Specifications
	Student employment is allowed for a total of twelve months of practical
	training. These 12 months can be split between pre and post-graduation.
TT '- 1	Recent amendments to the program have given students with a degree in
United	science, technology, engineering or mathematics a total of 29 months of
States	practical training, instead of the previous 12 months. Also, optional
	practical training is now automatically extended for students with pending
	H-1B work visa petitions
	Graduates of certified four-year institutions, including all public universities
	and most private universities, are provided work permits based on their
	time of study in Canada. Students studying less than eight months are not
Canada	given permits. Students studying between eight months and two years are
	offered a work permit for a period no longer than the length of study.
	Students who studying longer than two years are offered a three-year work
	permit.
	EU citizens are automatically given a EC Long Term Residence Permit.
Germany	Citizens of other countries are granted one year after obtaining a university
	degree to find employment and sponsorship for a Residency Permit.
Japan	No special dispensation is provided.

3. Policy Recommendations

Korea has followed the United States, Canada, Germany, the United Kingdom, and other advanced countries in streamlining the retention of foreign graduates of local universities, by implementing an OPT-like program. However, the large perceived gap in quality between foreign science/technology and social science/humanities

students may necessitate a re-evaluation of this policy.

• A Restricted OPT-Like Program

Korea is now attempting to extend an OPT-like program towards all graduates of its universities and colleges. Immigration policies (e.g. the IT and Gold cards) have been modified for the purpose of easing the immigration process and helping foreigners better seek employment opportunities. However, a universal OPT-like program may not be entirely applicable to Korea for two reasons.

First, there is a widespread perception that many foreign students at junior colleges are abusing their student visa status to work in 3D jobs. This perception cannot be checked against factual data, however, because this subject has not been researched in sufficient depth. If true, this phenomenon would necessitate a re-evaluation of the student visa program, let alone an extension of an OPT-like program to junior college graduates.

Second, there is a widespread perception that foreign students at four-year universities who are majoring in the humanities and social sciences are of inferior quality compared to those in engineering and the sciences. Again, this perception cannot be checked against factual evidence because of the lack of data. Even if these graduates were highly-skilled, the fact remains that Korea is facing no shortages in humanities and social science professions--and that foreign graduates would be competing with Korean university graduates.

Considering these two points, we recommend that an equivalent to

the U.S. OPT should be provided primarily for graduates of four-year educational institutions majoring in science and engineering-related fields. Although the allegations made against junior college and humanities/social science majors cannot be verified against actual data, extending an OPT-like program to these individuals would create competition for Korean college graduates regardless of the foreigners' actual merit. In contrast, the documented shortages in top science and engineering labor make the retention of locally-educated "global talent" a viable task. Furthermore, there is substantial precedent for the differential treatment of science and engineering graduates; for instance, the U.S. grants a much-longer OPT program only for technical graduates.

• An Expanded Science Card

We also recommend that policymakers keep a close eye on the success of the Science Card program. As of today, this program only has approximately 1000 enrolled persons, so it cannot be properly evaluated. However, if it proves successful, it may be expanded to all individuals who qualify for OPT-like programs.

• Expanded Support for Foreign Postdoctorates

We also recommend that the Ministry of Education collaborate with leading research universities, to design and implement a postdoctoral fellow program designed to retain top PhDs in Engineering and the Sciences. Our research shows that Korea has an unambiguous need for engineering PhDs. One of the best way to retain foreign students

with Korean PhDs would be to provide postdoctoral fellowships.

An ideal program would be funded and administered by the Ministry of Education, but awarded to top researchers at individual universities. Researchers who need research support would write competitive grants to the Ministry. Winning grants would receive the services of a qualified foreigner PhD with a degree from a Korean university.

A National Database on Foreign Students in Korea

Our most pressing policy recommendation is the creation of a comprehensive national database on foreign students in Korea. As we discuss above (in Section III), such a database is critical because we cannot investigate key questions with extant data.

More specifically, many experts on labor markets expect there to be an undersupply of highly educated students and researchers. Foreign students currently studying in Korea could be channeled into these fields. One needs to obtain detailed information as to how many of these students have currently worked in the Korean labor market, and what their career trajectories look like. As far as current data are concerned, Korean Education Development Institute and Ministry of Education, Science and Technology provide statistics on foreign students by three major fields of study: humanities and social sciences/science and engineering/arts and physical sciences (see Tables 10 and 11). However, we need very detailed statistics by specific fields of study, so that this information can be also used to predict labor market supply and demand. The government must collaborate with academic institutions to conduct such research.

V. Conclusion

Our investigation reveals that the Korean economy would benefit by utilizing "global talent" in two distinct fields. Korea needs an enlarged talent pool within the service sector, especially in finance and general business management, for its ambitions of becoming a financial and business hub. Korea would also benefit from renewing its engineering talent, to maintain its traditional strengths in manufacturing and design.

Our investigation has also uncovered potential sources for each type of labor. On one hand, global talent in business and finance could be recruited from the millions of second- and third-generation ethnic Koreans living primarily in the U.S. and Japan. Korea already has a substantial institutional infrastructure for such recruitment, and compares favorably to two roughly-comparable cases, Japan and Germany. On the other hand, global talent in engineering could be recruited from the foreign students who are studying at top universities in Korea. Although Korea should institute something like the U.S. Optional Training Program, care should be taken to distinguish truly-qualified foreign students from those individuals that are not as qualified.

Our most pressing recommendation is to collect data more systematically, especially regarding the life-courses of ethnic Koreans overseas as well as foreign students in Korea. Both groups have some attachment to Korea, and could potentially fit into Korean society. Yet, there is much we have to learn about these groups.

Summary

Expatriate Labor in the Korean Market

Shin, Gi-wook Kim, Ho-ki Ryu, Kirak Choi, Joon Nak

During the past ten years as Korea has become an advanced industrialized society; policymakers and scholars have been searching for new engines of economic growth. In particular, Koreans have been looking at the information economy, focusing on the services sector.

Simultaneously, the same policymakers and scholars are attempting to preserve Korea's historical prowess in engineering. Korean firms have been very successful in exporting manufactured goods because they could rely on the diligent, well-educated pool of local engineers. However, this pool of human capital has started to diminish.

This paper investigates one potential solution to these problems: expatriate labor. Expatriate labor, or "global talent" working in Korea, can not only provide skilled individuals for the emerging services sector, but also replenish a diminishing local pool of engineering talent.

Despite the international competition for "global talent", there are two compelling reasons why Korea should attempt to recruit these professionals: (1) global talent has become necessary in an increasingly globalized world economy and (2) global talent is necessary to replenish Korea's pool of top-notch engineers.

This paper investigates two potential sources of skilled expatriate labor for the Korean domestic market: (1) second and thirdgeneration ethnic Koreans living overseas as a source of global talent in finance and general business and (2) foreigners studying at Korean universities for PhD degrees, as a source of global talent in engineering. With regard to research methods, this study combines an in-depth analysis of cases that can work as a benchmark for Korea and a statistical examination of existing databases on expatriate labor in the Korean market. Our analysis takes a three-step approach. First, we present the status quo in Korea, in terms of the underlying situation and extant policies. Next, we compare and contrast the Korean case to four other countries. Finally, we synthesize both streams of research into policy recommendations.

The paper examines different types of expatriate labor, and then explains why ethnic Koreans living overseas and foreign students at Korean universities are compelling research topics. The remainder of the paper compares and contrasts the Korean government's policies regarding these two market segments, versus those adopted by the four comparative cases. This comparison highlights potential areas to improve Korean policies.

"Expatriate labor" includes a wide range of foreigners working in Korea, with very diverse skills and origins. Thus, "expatriate labor" cannot meaningfully be discussed without first subdividing or "segmenting" the larger group into more specific categories. Although outsiders have sometimes viewed Koreans as inhospitable and

inward-looking, the Korean electorate is likely to support policies that recruit global talent *if these policies are properly presented*. Koreans have been viewing economic globalization as an instrument to be used to compete against other nation-states.

The two segments covered in this study should provide different types of skilled labor. Second and thirdgeneration Korean-Americans, as well as ethnic Koreans living in other advanced industrial societies, face strong pressures to become skilled professionals. Although Korean-American parents once pushed their children to become engineers, they have recently started pushing their children into professions of higher prestige: law, medicine and business. Policies consistent with this preference are most likely to be successful at recruiting overseas Koreans. In contrast, the best foreign students in Korea are studying to become engineers.

The current regulations governing the return of second and thirdgeneration ethnic Koreans appear to be an excellent foundation for an integrated policy framework designed to recruit "global talent." However, some issues remain unresolved: (1) the small proportion of eligible overseas Koreans who have obtained the F-4 visa and (2) creating institutional mechanisms matching the needs of the Korean economy with the appropriate overseas Koreans.

Our final policy recommendation is to create two national databases: (1) of overseas ethnic Koreans, or at least those with the F-4 visa and (2) of "global talent" positions that need to be filled amongst Korean businesses. The task is not only to facilitate the matching of skilled ethnic Koreans with suitable, unfilled positions in Korea, but also to generate data that will suggest future policy improvements.

Given the current state of databases available for expatriate labor policy, we recommend that efforts should be made to collect data. First, emphasis should be placed on predicting gaps between supply and demand of professionals and skilled labor, by specific labor segment. Of special interest is size of producer and customer service sectors including finance, accounting, corporate law, consulting, and engineering and sciences. Second, there should be an effort to integrate this system with HuNet Korea, so that specific candidates can be matched with specific job needs.

Beyond these suggestions, which are valid for all expatriate labor, a more-specific database should focus on the needs of Koreans living abroad (e.g. why they would or would not return to Korea, what their skills are, and what their needs might be). Specifically, government agencies should collect data on the number of second and third generation ethnic Koreans who reside overseas, and the skills they possess; they may be a useful labor pool for filling gaps in high-skilled professions. There is also an urgent need for estimating the number of ethnic Koreans with highly valuable skills who already have jobs in domestic labor markets. To verify and further assist them in strengthening their careers, we should be aware of their career mobility and aspirations in Korea. A nation-wide survey may be conducted for this purpose.

Korea has followed the United States, Canada, Germany, the United Kingdom, and other advanced countries in streamlining the retention of foreign graduates of local universities, by implementing an OPT-like program. However, the large perceived gap in quality between foreign science/technology and social science/humanities students may necessitate a re-evaluation of this policy.

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Our most pressing recommendation is to collect data more systematically, especially regarding the life-courses of ethnic Koreans overseas as well as foreign students in Korea. Both groups have some attachment to Korea, and could potentially fit into Korean society. Yet, there is much we have to learn about these groups.

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Expatriate Labor in the Korean Market 외국인 인적자원의 개발과 활용 방안

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