

Section 2 Utilization of excellent overseas human resources – international movements in the labor force

<Key Points>

1. International movements in the labor force

Economic development through the stimulation of innovation will be essential in sustaining economic growth in Japan in the future. To this end it is important to utilize not only domestic resources in Japan, but also outstanding human resources from all over the world in the areas of management, research and technology. In addition, given the situation that with the advancing globalization of the economy, the scope of corporate activities is further expanding internationally, it is expected that foreign workers will play an active role in Japan to facilitate international business.

2. Current status of foreign workers in Japan and other countries

The countries of Europe and the US basically adopt a work permit system in the acceptance of foreigners in order to secure employment for domestic laborers. However, certain exceptions are stipulated to this system for some workers with special and/or technical skills, including corporate managers. In addition, in recent years the need for capable human resources has been increasing and Europe and the US have been actively developing measures designed to welcome such human resources, resulting in increased competitiveness in the procurement of capable human resources such as IT technicians.

There are large differences by country concerning the influx of foreign workers, and although the proportion of foreign workers in Japan has shown an upward tendency in recent years, the proportion is still low in comparison to Europe and the US.

As the income disparity between Japan and other Asian countries is very large, there is therefore a very great potential for labor movements to occur. Of the Asian countries, the Philippine government in particular is actively developing policies to realize the movement of labor forces out of the country, centered on the Philippine Overseas Employment Administration (POEA), and actual movements of labor forces are remarkably large in comparison to the situation in other Asian countries.

3. Impact of labor force movements

The acceptance of foreign workers, in particular those with specialist and/or technical skills, contributes to the sophistication of economic activity and plays, in principle, a part in activating the economy. However, there will be an impact on the domestic labor market, and as new social costs such as education, medical care and housing are also expected to emerge, it is necessary to consider such impacts and costs when accepting foreign workers.

4. Measures for foreign workers in Japan

In order to more actively acquire capable human resources, Japan will need to eliminate systemic factors hindering the movement of the labor force through such measures as mutual accreditation of qualifications and the conclusion of social security agreements, and to make the domestic labor market and living environment more amenable to foreign workers.

1. International movements in the labor force

As globalization advances and the movement of people becomes increasingly invigorated, countries are seeking to establish policies for accepting foreign workers in order to appropriately control the influx of workers. At present, Japan is working to strengthen economic cooperation centering on free trade agreements (FTAs) with the countries and regions of East Asia. Labor force movements within the region are expected to be vitalized as a result of further upgrading in regional economic integration.

Economic development through the stimulation of innovation will be essential in sustaining economic growth in Japan in the future. To this end, it is important to utilize not only domestic resources in Japan, but also outstanding human resources from all over the world in the areas of management, research and technology. In addition, given the situation that with the advancing globalization of the economy, the scope of corporate activities is further expanding internationally, it is expected that foreign workers will play an active role in Japan to facilitate international business.

2. Current status of foreign workers in Japan and other countries

(1) Status of systems for accepting foreign workers and their influx

(a) Overview of other countries

Policies for accepting foreign workers are affected by various influences, including the conditions of each country's domestic labor market, historical background, and geographical factors, and regulations are developed uniquely by each country. They can be divided into six representative types as shown below (Fig. 3.2.1). The countries of Europe and the US are combining multiple systems but basically adopt a work permit system in order to secure employment for domestic workers. However, certain exceptions are stipulated to this system for some workers with special and/or technical skills, including

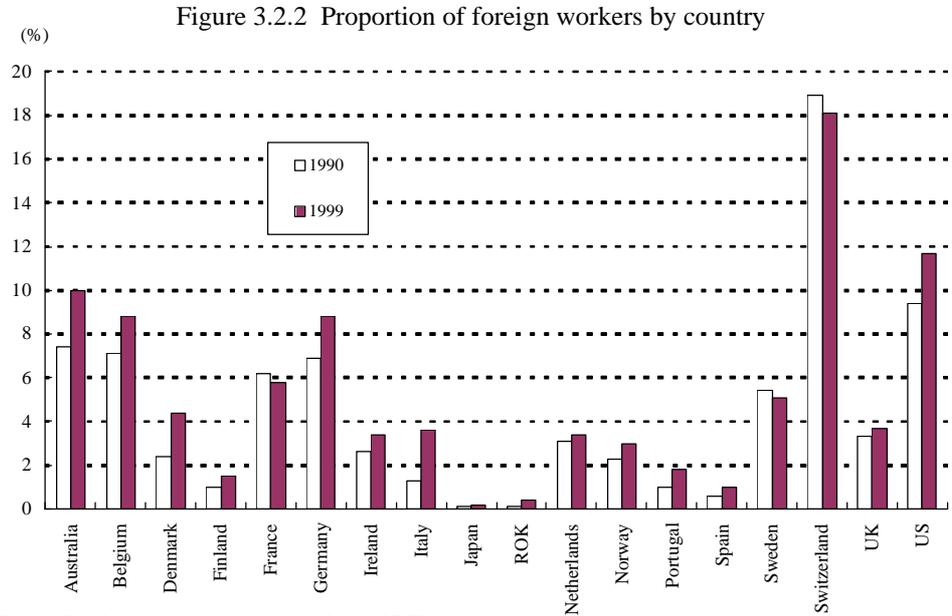
Figure 3.2.1 Classifications of restriction of access to domestic labor markets

Method of permission	Implementing country	Overview
Conformance to qualification requirements (positive list)	Japan, US, UK, Germany, France (company directors, etc.)	Method of accepting workers if certain qualification requirements are satisfied.
Labor market test (labor test)	US, UK, Germany, Italy, France (excluding company directors)	System of accepting workers only in the case where impossibility of procurement of workers in the domestic market is examined and verified.
Numerical method (Quarter system)	US, Switzerland, Italy (total figures), Germany (individual country figures)	System whereby the number of workers to be accepted is decided in advance and once this number is reached no more are accepted.
Prohibition of employment by job area (negative list)	Thailand, Indonesia, etc.	System of prohibiting the acceptance of foreigners in certain designated job areas.
Employment tax and rate	Singapore (non-skilled workers)	System which collects fixed taxes and commissions from employers who employ foreign workers, and system that establishes a maximum proportion of foreign workers to the entire employment ratio.
Point system	UK (workers with advanced skills), Canada (skilled workers)	System that sets points in advance for factors in accepting workers and accepts them when the scores reach the fixed level.

Source: Iguchi, Yasushi, *International Migration and Labor Market, Report on the Issue of Foreign Workers* (Ministry of Health, Labour and Welfare).

corporate managers. In addition, in recent years as the need for capable human resources has been increasing, centered on IT technicians, Europe and the United States (US) have relaxed immigration examinations for them and have been actively developing measures designed to welcome them, resulting in increased competition in the procurement of capable human resources such as IT technicians.

There are large differences by country concerning the actual influx of foreign workers. As of 1999, foreign workers accounted for over 10 percent of the total number of workers in Switzerland and the US, revealing situations where foreign workers have an extremely significant presence (Fig. 3.2.2). In Germany it was over 8 percent, in France just under 6 percent and in the United Kingdom (UK) just under 4 percent. In contrast, the same figure in Japan did not even reach 1 percent, and it can be clearly seen how extremely low this is compared to the countries of Europe and the US¹. Moreover, in nearly all countries, the proportion of foreign workers in 1999 was larger than that of 1990.



The following represents an overview of the systems and actual conditions of the influx of foreign workers in the US, Germany, the UK, France and Japan.

(b) US

Figure 3.2.3 gives an outline of US visa types. Immigrant visas include the family sponsored visa and the employment based visa, while there are non-immigrant visas from A to V². The H visa is a wide-ranging work visa that breaks down into four types (Fig. 3.2.4).

¹ The number of foreign workers in Japan calculated in OECD statistics does not include illegal workers and foreigners of Japanese descent. Therefore, this figure is low compared to actual conditions.

² There are three types of foreign workers in the US: permanent resident aliens, who have been admitted to the US as a lawful permanent resident; non immigrants, who are granted temporary residence for a specific purpose; and illegal aliens, who have either entered the country without undergoing inspection or have

Figure 3.2.3 Overview of categories of US visas

Immigrant visa	
Family Sponsored	Employment Based
Non immigrant visas	
A Foreign government officials	L Intracompany transferees
B Business or pleasure visitors	M Vocational and language students
C Aliens in transit	N North Atlantic Treaty Organization employees
D Crewmen	O Workers with extraordinary abilities (in arts, science or business)
E Treaty investors or treaty traders	P Athletes and entertainers
F Academic students	Q International cultural exchange visitors
G Foreign government officials to international organizations	R Religious workers
H Temporary workers	S Witness or informant of terrorism information
I Foreign media representatives	T Victims of a severe form of trafficking in persons
J Exchange visitors	U Victims of certain crimes
K Fiancé(e) of US citizens	V Spouses and minor children of legal permanent residents

Source: US Immigration and Naturalization Service.

Figure 3.2.4 Categories of H visa

H1 Visa	H1A: Nurses H1B: Specialty occupations
H2 Visa	H2A: Temporary agricultural worker H2B: Temporary worker other than above
H3 Visa	Trainee or participant in a special education exchange visitor program
H4 Visa	Spouse or child (under age 21) of H-1, H-2, H-3 (They may not accept employment.)

Source: US Immigration and Naturalization Service.

Of these, the most common is the H-1B visa. It is valid for three years, extendable to a maximum of six years, and having it makes one eligible to work for a US employer. Obtaining this visa requires advanced expertise, such as the attainment of an academic degree in one's country of origin. To obtain this visa, one must also obtain a work permit from the Department of Labor. The number of H-1B visas issued is also restricted based on US Immigration Law.

In addition, from the standpoint of strengthening international competitiveness, the US has aimed to actively accept highly skilled human resources. Through the 2000 "American Competitiveness in the 21st Century Act," the number of H-1B visas issued was raised (from 115,000 to 195,000) and the period of stay was prolonged.

Foreigners who enter the US to work as non-immigrants usually enter after obtaining the H-1B visa. According to Immigration and Naturalization Service (INS) data, the number of foreigners in the country with the H-1B visa (including both new issue and extensions) increased from 100,000 in 1990 to 356,000 in 2000. While influx is marked mainly from Asia in this field, the influx from Canada and Mexico has also been increasing since the establishment of the North American Free Trade Agreement (NAFTA) in 1994.

A little less than 140,000 foreigners entered the US in 2000 with the H-1B visa in 2000. Of these, about three-quarters (or just fewer than 100,000) entered from Asia. This figure illustrates that Asia has become an important supplier of workers with special and/or technical skills to the US (Fig. 3.2.5). A

overstayed the temporary period of stay granted.

look at the “computer-related” sub-group within the H-1B visa type reveals that out of 75,000 workers received in that field in 2000, over 60,000 (over 85 percent) were Asian. Indians accounted for the most of these at roughly 50,000, followed by Chinese and Filipinos.

Figure 3.2.5 Breakdown of entries with H-1B visa by region and by sector

	Total	Europe	Asia							Africa	Oceania	North and Central America	South America
			India	China	Philippines	ROK	Taiwan	Japan					
Total	136,787	19,454	98,575	60,757	12,333	4,002	3,160	2,864	2,806	3,350	1,429	8,125	5,472
Computer-related	74,551	5,932	63,837	50,827	5,275	1,217	600	890	337	1,068	437	2,145	968
Architecture, engineering and surveying	17,086	2,867	11,259	4,444	2,069	705	712	621	284	481	172	1,302	955
Administrative specialization	11,468	2,046	6,721	1,592	1,012	780	428	480	635	441	169	1,081	968
Education	7,210	1,964	3,494	603	1,258	182	348	180	328	311	141	865	414
Medical care and health	4,734	600	3,058	852	371	687	125	80	94	317	37	501	211
Managers and officials	4,366	1,359	1,652	536	162	105	114	72	166	173	105	602	454
Social science	3,103	630	1,714	508	288	92	106	114	183	105	44	256	343
Life science	2,921	808	1,635	323	786	23	102	77	115	82	57	199	129
Professional, technical and managerial	2,734	748	1,137	314	211	57	64	50	145	104	52	338	340
Science	2,364	674	1,288	237	601	35	85	71	39	61	43	219	74
Others	6,250	1,826	2,780	521	300	119	476	229	480	207	172	617	616

Note: 1. Data are as of year 2000.

2. “Others” contains the total amount of the following occupations: fashion models, arts, entertainment and recreation, law and jurisprudence, museum, lib archival science, religion and theology, writing and unknown.

Source: US Immigration and Naturalization Service.

The “computer-related” sub-group accounted for 75,000 of the workers who received H-1B visas in 2000. Meanwhile, in Japan, the number of new entrants holding the major status of residence that includes IT technicians (engineer, specialist in humanities/international services, and intra-company transferee) was about 15,000³. While the two figures are classified differently, one can still realize that Japan accepts few foreign IT technicians by simple comparison of the numbers of people. As IT technicians from overseas have played a large role in the development of the IT industry in the US, they are expected to play a similarly active role in Japan as well.

(c) Germany

For those seeking employment in Germany, a labor market testing system has been adopted wherein a work permit is issued according to the status and dynamics of the labor market, based on the Employment Promotion Act and the Work Permit Ordinance. The employment office in the area of the company planning to hire workers recruits for four weeks. The work permit is granted if it is judged that there are not enough German or European Union (EU) workers to compensate for the lack of labor force, and there is no concern that employment conditions for Germans will be worsened. Teachers, including university teachers, researchers at research institutes and short-term (three months or shorter) workers are exempt from work permits⁴.

Germany is also accepting foreign workers while restricting their numbers through bilateral agreements from the standpoint of assisting Eastern Europe and in order to fulfill demand in specific

³ Data is from *Statistics on Immigration Control No. 40, 2000* (Ministry of Justice). In addition to the number of foreign IT technicians, the number of workers in other fields is also significant in this total.

industries that have insufficient domestic labor forces (Fig. 3.2.6).

Figure 3.2.6 Current status of foreign workers received through bilateral agreement in Germany

Type of workers received (explanation in parentheses indicate legal basis)	Countries	Preference to German and EU citizens	Conditions regarding wage, social security etc.	Limitation on number of workers	Maximum length of employment	Types of industry
Contracted workers (Contractual agreement)	14 countries including Bulgaria, Czech Republic, Slovak Republic and Yugoslavia	No	· Wage level equivalent to German workers · No obligation to participate in the social security program in Germany.	Yes	Maximum of three years, including one-year extension	Specified construction projects, etc.
Invited workers (Guest worker agreement)	14 countries including Albania, Bulgaria, Czech Republic, Slovak Republic and Croatia	No	· Wage level equivalent to German workers and social insurance system. · Provision of housing.	Yes	Possible extension up to 18 months	Construction and metal industries
Seasonal workers (Agreement for receiving of seasonal workers)	14 countries including Bulgaria, Czech Republic, Slovak Republic and Croatia.	Yes	· Standardized wage level by labor agreement or by region. · Obligation to participate in the social security program in Germany. · Provision of housing.	No	Extension up to three months each year	Agriculture, construction, hotel and catering industries
Cross-border workers (Special law for termination of recruitment)	Poland and Czech Republic	Yes	· Within 50 km from the German border · Wage level equivalent to German workers and social insurance system.	No	None	Manufacturing, metal, hotel and catering industries, etc.
Nursing staff (Special law for termination of recruitment)	Croatia and Slovenia	Yes	· Standardized wage level by labor agreement or by region and provision of housing.	No	None	Nursing care for sick and elderly

Source: *Nihon ni okeru tabunka shugi no jitugen ni mukete*

(Fujita Institute of Future Management Research. FIF Monograph No.4-1 FIF 2001).

In one trend of recent years, Chancellor Gerhard Schröder made a statement at the computer fair in Hanover in February 2000 regarding the simplification of temporary work permit (green card) acquisition procedures in order to solve the shortage of labor in the information and communications sector. In response, an ordinance stipulating the issue of green cards came into force in August 2000 (Fig. 3.2.7).

Figure 3.2.7 Overview of the green card ordinance for IT technicians

Qualifications	· Graduate from university or technical university with a degree in the area of IT. · Should demonstrate outstanding specialist knowledge in information and communication technology as a contract with an employer will guarantee an annual salary of at least DM 100,000.
Occupations	· System, Internet and network specialist. · Software and multimedia developer and programmer. · Developers of computer circuits and IT system. · Specialist for IT consultancy.
Graduates from German universities	· Foreign students in Germany who studied in university or technical university in courses specializing in the area of information and communications technology and who intend to work after graduation in the fields listed above.
Upper limit on the number of work permits	· Set the initial number of permits to 10,000. If there is higher demand for the IT technicians, the number of permits may increase up to 20,000.
Applying for work permit and term of validity	· The initial deadline for applications is July 31, 2003. · Permits may be issued for maximum of five years according to the duration of employment.
Procedures	· Public employment office should decide on issuance of a work permit for each case within a week after receiving an application.

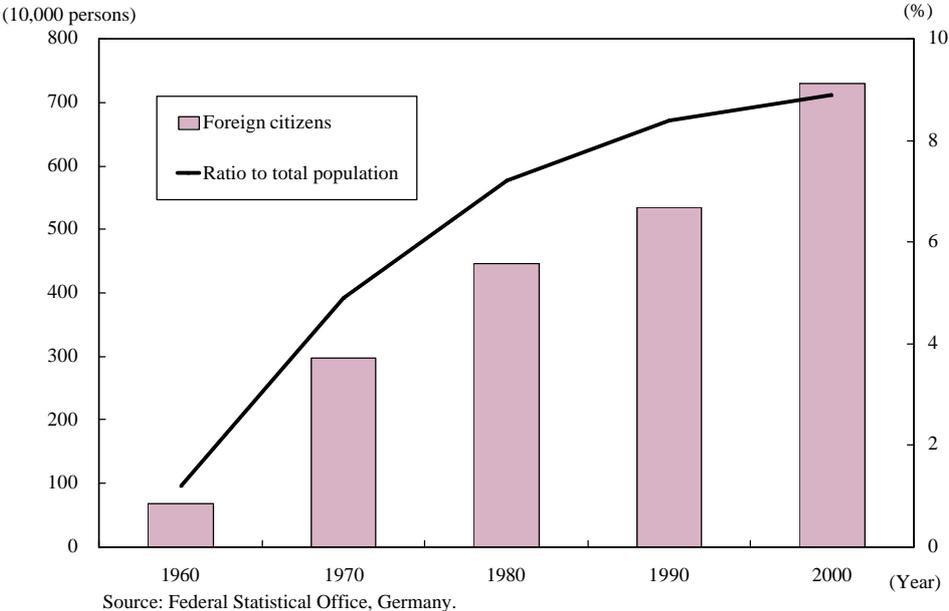
Source: *International Labor Information: Germany October 2000* (Japan Institute of Labour).

⁴ Ministry of Health, Labour and Welfare (2002).

Moreover, in response to the rapid changes in the state of affairs surrounding foreign workers, the Bundestag and the Bundesrat, which had been considering modalities of German immigration policy, passed the new Immigration Law in March 2002 upon receiving the report of the Experts Committee on Immigration Issues⁵ announced in July 2001⁶. Its contents include: (i) introduction of restrictions on welfare for political immigrants and measures encouraging repatriation; (ii) simplification of types of permission for residence; (iii) elimination of tolerance (temporary suspension of forced repatriation for de facto refugees), one of the traditional forms of permission for residence; and (iv) unification of work permit and permission for residence⁷. However, the law is not yet in force because the German Constitutional Court ruled that the adoption method used by the Bundesrat was unconstitutional.

Next, looking at the actual conditions of foreign worker influx in Germany shows that Germany has an overwhelmingly large number of foreign residents among EU countries. By 2000, the number had increased to 7.2 million, or 8.9 percent of the entire population (Fig. 3.2.8).

Figure 3.2.8 Trends in foreign workers in Germany



As for the breakdown of foreign workers in Germany, most are of German descent. In recent years, the influx from Yugoslavia, other East European countries and the former Soviet Union has been increasing, but partly due to historic background, the highest number of foreign workers has come from Turkey (Fig. 3.2.9).

⁵ This report cites that, a comprehensive strategic policy combining immigration policy and social harmonization is needed in order to cope with future labor shortages accompanying population decrease. Specific proposals include: (i) accepting immigrants on a scale that does not interfere with unemployment reduction; (ii) harmonizing immigration with German society; (iii) simplifying acceptance procedures and restructuring government organization; and (iv) developing immigration-related legislation.

⁶ Originally, the foremost objective was simplifying the immigration system to promote immigration by those with professional expertise. Later, business stagnation due to the IT slump and the impact from the terrorist attacks in the US greatly changed the purpose of the legislation, and the tightening of conditions for economic immigration came to be the primary aim of the law (Tanaka, 2002).

⁷ Tanaka (2002).

Figure 3.2.9 Breakdown of foreign workers in Germany

Number of incoming foreign workers (10,000 persons)	1996	1997	1998	1999
Total	70.8	61.5	60.6	67.4
Yugoslavia	4.3	3.1	6.0	8.8
Poland	7.7	7.1	6.6	7.2
Turkey	7.3	5.6	4.8	4.7
Italy	4.6	3.9	3.6	3.5
Russia	3.2	2.5	2.1	2.8
Number of incoming ethnic Germans (10,000 persons)				
Total	17.8	13.4	10.3	10.5
Former Soviet Union	17.2	13.2	10.2	10.4
Romania	0.4	0.2	0.1	0.1
Poland	0.1	0.1	0.1	0.0
Total number of foreign workers (10,000 persons)				
Total		357.5		354.5
Turkey		103.9		100.8
Italy		37.5		38.6
Greece		21.4		21.9
Croatia		21.5		18.9
Austria		12.3		11.8
Others		160.9		162.5

Source: *Trends in International Migration 2001* (OECD).

A look at employers by industry shows that in terms of number of people, the manufacturing and service industries have an overwhelmingly large number of workers. However, in terms of proportions of foreign workers in each industry, the agriculture, forestry and fishery industry, and the construction industry have large proportions of foreign workers with 13.2 percent and 11.0 percent shares, respectively.

The number of foreign IT technicians obtaining employment permission based on the Green Card Regulation was 8,500 in July 2000, one year after the regulation went into effect, and had increased to 13,600 as of January 2003⁸. A breakdown by country of origin reveals 22 percent from India, 14 percent from Russia, etc., 8 percent from Romania, 7 percent from the Czech Republic and Slovak Republic, and 3 percent from North Africa. As such, the number of IT visa holders can be said to be steadily increasing, but it still fell short of the maximum number of permits of 20,000.

(d) UK

At present, the foreigners accepted by the UK are in principle limited to (i) settled foreigners and their families, (ii) refugees, and (iii) workers with special and/or technical skills.

Foreigners who wish to work are required to possess skills related to the job. Specifically, this includes a university or higher level degree, or a Level 3 or higher National Vocational Qualification (NVQ) certification, in addition to more than three years of work experience. In addition, because the UK adopts a labor market testing system, it must be proved that there is insufficient employment domestically in the field, and a work permit must be obtained from the Department of Work and

⁸ Federal Government of Germany.

Pensions (DWP). Employers apply for this permission, recruitment of workers is carried out prior to application for four weeks through a job introduction agency in the area, and the DWP conducts an inspection. A work permit is granted in principle for one year (four years maximum, extendable), with limited employers and job types⁹. However, for intra-company transferees falling into certain job types, the labor market test is not required, and permission is granted according to job type and treatment.

From 2000, the UK relaxed regulations on the issuance of work permits in order to supplement shortage of skilled workers in IT-related industries and medical care sectors. The four main changes brought about by UK immigration deregulation are as follows:

- a. Non-EU foreigners who had previously needed two years of work experience can now obtain a work permit directly upon university graduation;
- b. The term of validity of the work permit has been raised from four years to a maximum of five years;
- c. Foreigners who completed a training program conducted in the UK and previously have had to temporarily leave the country can now immediately start working; and
- d. Foreigners who engaged in three years of high-level skilled work outside the UK can now apply for a work permit.

In addition, the Home Office’s Immigration and Nationality Directorate introduced the Highly Skilled Migrant Programme (HSMP) in January 2002 in order to increase acceptance of highly skilled technicians in science and finance, which are becoming important for competition in the global economy. Under the HSMP, one year of residence is allowed provided that the condition of a combined score of 75 points or more in five scoring areas (Fig. 3.2.10) is met, even if there is no job offer. This may be further extended a maximum of three years. Moreover, those who have worked a total of four years as a Highly Skilled Migrant may apply for permanent residence.

Figure 3.2.10 HSMP score calculation method

Educational attainment	PhD = 30 points, Master’s degree = 25 points, Bachelor’s degree = 15 points
Work experience	More than five years graduate level work experience (or three years with a PhD) = 15 points, more than two years of senior or specialist level work = additional 10 points
Past earnings (annual income)	Over 40,000 pounds = 25 points, over 100,000 pounds = 35 points, and over 250,000 pounds = 50 points
Achievement in the chosen field of employment	Those with exceptional achievement = 50 points, significant achievement = 25 points
HSMP Priority Applications for General Practitioners	A special program to invite foreign doctors who wish to work in UK as General Practitioners in the National Health Service.

Note: In evaluating past earnings, the countries are divided into 4 groups from A to D. The chart refers to group A (EU countries, US, Japan, etc.).
 Source: *International Labor Information: United Kingdom March 2002* (Japan Institute of Labour).

Figure 3.2.11 shows trends in the number of foreign workers entering the UK and the total number of foreign workers in the country. Both the number entering and the total number were larger in 1999 than in 1990. In 1999, the total number reached 1.005 million, accounting for 3.7 percent of the total number of workers in the UK.

⁹ Fujita Institute of Future Management Research (2001), p. 80.

Figure 3.2.11 Trends in foreign workers in the UK

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Number of incoming foreign workers (10,000 persons)	3.5	2.9	3.0	2.9	3.0	3.7	4.0	4.7	4.9	5.2
Long-term workers (10,000 persons)	1.6	1.3	1.3	12.5	1.3	1.7	1.9	2.2	2.5	3.1
Short-term workers (10,000 persons)	1.4	1.3	1.4	1.3	1.3	1.6	1.7	2.0	2.4	2.2
Trainees (10,000 persons)	0.5	0.4	0.3	0.4	0.4	0.4	0.4	0.5	-	-
Foreign workers (10,000 persons)	88.2	82.8	90.2	86.2	86.4	86.2	86.5	94.9	103.9	100.5
Ratio of foreign workers to total workers (%)	3.3	3.0	3.6	3.4	3.4	3.4	3.3	3.6	3.9	3.7

Note: Most of the short-term workers are either entertainers or athletes.

Source: *Trends in International Migration 2001* (OECD).

A look at the breakdown by region of foreign workers who entered the UK reveals that almost half of them came from the European region, including the EU. However, it is notable that there was an increase in influx from various other countries in 2000. Among these other countries, African countries accounted for the biggest, followed by India and the US (Fig. 3.2.12).

Figure 3.2.12 Foreign workers in the UK by place of origin (10,000 persons)

	1985	1990	1995	2000
Ireland	26.9	26.8	21.6	20.6
Africa	5.1	5.9	8.3	14.0
India	6.6	8.4	6.0	6.1
US	3.7	5.0	4.9	6.1
Italy	5.6	4.8	4.3	5.5
Australia	2.3	3.9	3.4	5.4
France	1.7	2.4	3.4	4.8
Central and Eastern Europe	2.5	2.0	2.3	4.5
Germany	1.8	2.2	2.7	3.3
Pakistan	2.7	2.7	2.0	3.1
Caribbean, Guiana	7.7	4.8	3.8	3.1
Spain	1.4	1.6	1.7	3.0
New Zealand	0	0	1.9	2.5
Portugal	0	1.1	1.8	1.5
Bangladesh	0	0	0	1.4
Others	12.8	16.6	18.1	25.8
Total of EU countries	38.2	41.9	44.1	45.2
Total of non-EU countries	42.6	46.3	42.1	65.5

Source: *Trends in International Migration 2001* (OECD).

A look at employers of foreign workers by industry shows that a large proportion of foreign workers are in the medical care, education and social services industry (24.1 percent), the wholesale, retail and hotel industries (19.8 percent), other service industries (21.6 percent), and the mining and manufacturing industry (19.3 percent). In addition, the construction industry and public service industry each account for 6 to 7 percent.

(e) France

In France, a provisional residence permit is required based on the Labor Code in order to stay in the country with the objective of working there. Issuance of the permit is determined by the Regional Labour, Employment and Training Directorate (DRTEFP) based on job type, the regional employment situation and the results of a 30-day recruitment period. However, decisions are made regardless of the employment situation for university teachers, researchers at public research institutes and other highly skilled workers.

In order to encourage acceptance of IT technicians, exchange students who majored in information processing, possess IT credentials equivalent to Master's level and can earn more than 180,000 francs annually, are allowed to avoid the regular requirement to return to their home country and to newly apply as an employed person, and instead change the status of their provisional residence permit from one as exchange student to one with work permit¹⁰.

Figure 3.2.13 shows trends in the number of foreign workers entering France and the total number of foreign workers in the country. The influx of permanently residing workers has been decreasing in recent years, dropping to about 11,000 in 1999, which was less than half of what it had been in 1990. However, the total number of foreign workers has been fluctuating between 1.5 and 1.6 million, accounting for 6 percent of the total number of workers in France.

Figure 3.2.13 Trends in foreign workers in France

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Number of incoming permanently residing workers (10,000 persons)	2.2	2.6	4.2	2.4	1.8	1.3	1.2	1.1	1.0	1.1
Number of incoming temporary workers (10,000 persons)	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.6
Total number of foreign workers (10,000 persons)	155.0	150.6	151.8	154.2	159.4	157.3	160.5	157.0	158.7	159.4
Ratio of foreign workers to total workers (%)	6.2	6.0	6.0	6.1	6.3	6.2	6.3	6.1	6.1	5.8

Source: *Trends in International Migration 2001* (OECD).

The breakdown by age of the foreign worker population reflects the history of the French economy. Foreign male workers between the ages of 50 and 60 who entered France during the period when demand for a production labor force was growing in the phase of industrialization are the largest group, accounting for 7.9 percent of foreign workers. A look by nationality reveals that as of 2000, the foreign labor force population in France was represented by workers from Portugal (22.4 percent), Algeria (13.6 percent), Morocco (13 percent) and black African countries (10 percent)¹¹.

Next, a breakdown of foreign workers by industry sector shows that high proportions of foreign workers are in the mining and manufacturing industry (20.5 percent), the construction industry (16.7 percent), the medical care, education and social services industry (12.3 percent), the wholesale, retail and hotel industries (18.3 percent), and other service industries (18.7 percent).

¹⁰ Ministry of Health, Labour and Welfare (2002), Iguchi (1997).

¹¹ *Statistical Data – 8. Labor Force* (French Embassy homepage).

(f) Japan

Japan has a positive list system (a method that permits employment in Japan when certain conditions are met) for accepting foreigners. Specifically, examination is conducted on whether the conditions for landing are met according to Article 7 of the Immigration Control and Refugee Recognition Act (hereafter called ‘Immigration Law’). If it is recognized that the conditions are met, then status of residence is determined according to Article 9 of that law, and landing is permitted.

As shown in Figure 3.2.14, Japan has 28 statuses of residence for foreigners, including 23 based on the activity in which one engages (from “diplomat” to “designated activities”) and five based on status or position (from “permanent resident” to “long term resident”). Among these are 16 types of status of residence that permit employment (from “professor” to “skilled labor”). Although in principle work is not permitted under the “college student” and “pre-college student” statuses, if one obtains Permission to Engage in an Activity Other Than That Permitted by the Status of Residence Previously Granted, then

Figure 3.2.14 List of status of residence in Japan

Status of residence	Major occupations etc.	Scale of work	Period of stay
Diplomat	Ambassador, minister or consul general of a foreign government, and his/her family	Limited	Assigned term
Official	Staff member of a foreign embassy or consulate general and his/her family	"	Assigned term
Professor	University professor, etc.	"	1 or 3 yrs
Artist	Composer, painter, writer, etc.	"	"
Religious	Missionary, etc. dispatched by foreign religious organizations	"	"
Journalist	Reporter, photographer, etc. of a foreign journalistic organizations	"	"
Investor/business manager	Manager or administrator of a foreign affiliate	"	"
Legal/accounting services	Lawyer, certified accountant, etc.	"	"
Medical services	Physician, dentist, etc.	"	"
Researcher	Researcher of a private or public organization	"	"
Instructor	Language instructor of a middle school, high school etc.	"	"
Engineer	Technician in mechanical engineering, information processing technology, etc.	"	"
Specialist in humanities/ international services	Interpreter, designer, language instructor of a private company, etc.	"	"
Intra-company transferee	Transferee from business offices in foreign countries (who work in occupations described in the “Engineer” or “Specialist in humanities/ international services” columns of this table)	"	"
Entertainer	Actor, singer, dancer, professional athlete, etc.	"	3 or 6 mths, 1 yr
Skilled labor	Chef who specializes in foreign dishes, sports instructor, specialist in processing of precious metals, etc.	"	1 or 3 yrs
Cultural activities	Researcher of Japanese culture, etc.	N/A	1 yr or 6 mths
Temporary visitor	Tourist, conference participant, etc.	"	90 or 15 days
College student	Student of a university, junior college, advanced vocational school (specialized training college), etc.	"	1 or 2 yrs
Pre-college student	Student of high school, vocational school (high school courses or general courses), etc.	"	1 yr or 6 mths
Trainee	Trainee	"	"
Dependent	Spouse or minor child of those who stay in Japan with the status of residence described above (from “professor” to “cultural activities” and “college student”).	"	3 or 6 mths, 1, 2 or 3 yrs
Designated activities	Servant of a diplomat, those on working holiday or in on-the-job training	Limited	6 mth, 1 or 6 yrs, or terms set case-by-case
Permanent resident	Individual who is approved to stay permanently by the Minister of Justice	No limits	No limits
Spouse or child of Japanese national	Spouse, child or special adopted child of Japanese national	"	1 or 3 yrs
Spouse or child of permanent resident	Spouse or child (who is continuing to stay in Japan) of permanent resident or special permanent resident.	"	"
Long term resident	Indochinese refugee, third-generation foreigner of Japanese descent	"	1 or 3 yrs, or terms set case-by-case
Special permanent resident	Individual with permission based on Special Law on Immigration Control	"	No limits

Note: Special permanent residency is provided in the Special Law on the Immigration Control of inter alia Those Who Have Lost Japanese Nationality on the Basis of the Treaty of Peace with Japan (Special Law on Immigration Control), and has been given to Korean Peninsulans, Taiwanese, etc. living in Japan, prior to the effectuation of the San Francisco Peace Treaty.

Source: *Immigration Control and Refugee Recognition Act* (Ministry of Justice).

one can work within the scope of the permit. The statuses “permanent resident,” “spouse of child of Japanese national,” “spouse or child of permanent resident,” and “long term resident” are based on status or position, and therefore have no restrictions on activities, and the holder may engage in any type of employment activity as long as it is legal. In addition, although the criteria for landing permission provided in Article 7 do not include provisions for numerical restrictions or clauses on adjustment of supply and demand, conditions are stipulated on nearly all statuses of residence, such as “The bearer shall be compensated by an amount equivalent to or greater than that paid to a Japanese national” and “The bearer must have a certain amount of work experience.”

Furthermore, there are additional requirements for certain items in the positive list. For example, foreigners who seek to obtain the status of residence for “medical services” in Japan and practice medicine or dentistry are required to graduate from the medical or dental faculty of a Japanese university, and either undergo training up to six years, or practice medicine at a dispensary in a region where it is difficult to secure doctors. Those who wish to work as nurses under the same status must undergo training up to four years after graduating from a school of nursing in Japan¹².

In addition, the requirements for obtaining the “engineer” status of residence have been relaxed along with Japan’s carrying out mutual accreditation of IT technicians qualifications with several countries in recent years. This will be discussed later.

The number of registered foreigners¹³ in Japan, which was about 740,000 in 1972, has steadily risen, reaching 1.78 million in 2001 (Fig. 3.2.15). This number is equivalent to 1.4 percent of Japan’s overall population. Until the mid 1980s, the year-on-year growth rate was several percentage points, which ballooned during the bubble years. This was largely influenced by the rapid increase in influx of foreigners of Japanese descent into Japan, taking advantage of the revised Immigration Law¹⁴ that was enacted in 1989 and went into effect in June 1990, when the labor force had been somewhat diminishing in Japan. The rate of growth later decreased, but in recent years has been on the rise again.

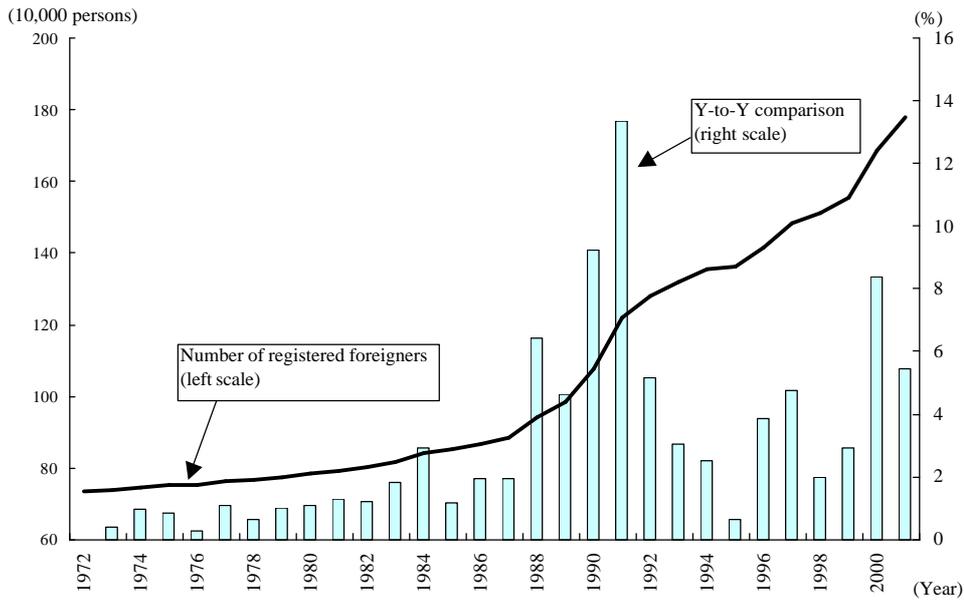
The highest number of registered foreigners in Japan are from the Korean Peninsula, followed by China, Brazil and the Philippines. Among these countries, China has shown the greatest rate of growth (Fig. 3.2.16).

¹² Those seeking to engage in medical services as pharmacists, dental hygienists, medical radiological technologists, physical therapists, occupational therapists, orthopedists, clinical engineers, or prosthetists and orthotists must be invited by a Japanese medical institution or pharmacy.

¹³ This is the number of alien registrations kept by the Ministry of Justice. Aliens (foreigners) are registered within 90 days of entering Japan or within 60 days of birth, and that registration is canceled upon departure from Japan, naturalization or death. There is often no registration when foreigners leave Japan within 90 days of entry. Also, those entering with special permission for landing, diplomats, and military or civilian personnel and their families under the Japan-US Status of Forces Agreement, etc. are not subject to registration.

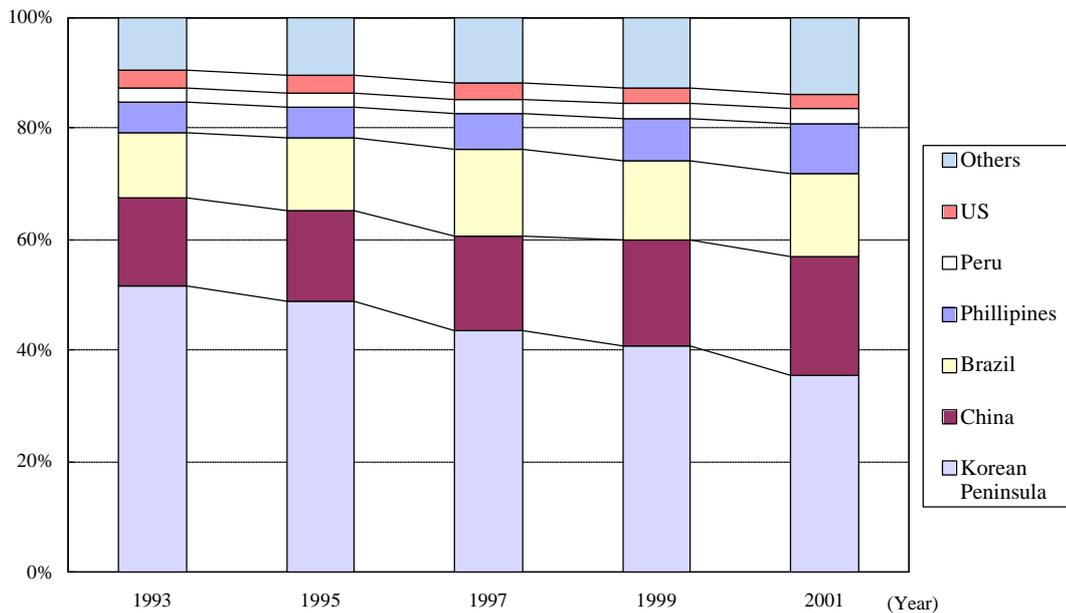
¹⁴ After revision of the law, the status that previously had been granted only to first and second generation foreigners of Japanese descent was extended to the third generation as “long term resident” status, and restrictions on employment were eliminated.

Figure 3.2.15 Trends in number of registered foreigners in Japan



Source: *Statistics on Foreign Residents in Japan* (Ministry of Justice).

Figure 3.2.16 Trends in registered foreign residents by country of origin



Source: *Statistics on Foreign Residents in Japan* (Ministry of Justice).

As of 2001, the number of registered foreigners by status of residence in Japan for the purpose of employment was about 170,000 (Fig. 3.2.17)¹⁵. The following takes a look at the representative statuses of residence for workers with special and/or technical skills by country and region, namely, the

¹⁵ Those with “permanent resident” and other statuses that are not expressly for the purpose of work also may work in Japan, and therefore this figure cannot be said to represent the total number of foreigners working in

“specialist in humanities/international services,” “engineer” and “intra-company transferee” statuses (Figs. 3.2.18, 3.2.19, 3.2.20). The most “specialists in humanities/international services” come from China, followed by North America and Europe, and the number of workers with this status is increasing year by year for nationalities from all regions and countries. China has an overwhelming lead in the “engineer” status (59 percent of the total in 2001), and its rate of growth is also extremely high. In addition to China, growth in this status of persons from the Korean Peninsula, and other Asian countries and regions, is also conspicuous. In contrast, as of 2001, the most foreign workers with the “intra-company transferee” status come from Europe. The number of workers with this status has been increasing, with high growth rates in Asia (excluding China and the Korean Peninsula).

Figure 3.2.17 Foreign workers by status of residence for the purpose of employment

Status of residence	1992	1994	1996	1998	1999	2000	2001	Rate of increase/decrease (2001/1992)
Total	85,517	105,616	98,301	118,996	125,726	154,748	168,783	2.0
Entertainer	22,750	34,819	20,103	28,871	32,297	53,847	55,461	2.4
Specialist in humanities/international services	21,863	24,774	27,377	31,285	31,766	34,739	40,861	1.9
Engineer	9,195	10,119	11,052	15,242	15,668	16,531	19,439	2.1
Skilled labor	5,352	6,790	8,767	10,048	10,459	11,349	11,927	2.2
Intra-company transferee*	5,135	5,841	5,941	6,599	7,377	8,657	9,913	1.9
Instructor*	5,841	6,752	7,514	7,941	8,079	8,375	9,068	1.6
Professor	2,575	3,757	4,573	5,374	5,879	6,744	7,196	2.8
Investor/business manager	5,057	4,548	5,014	5,112	5,440	5,694	5,906	1.2
Religious	5,599	5,631	5,010	4,910	4,962	4,976	4,948	0.9
Researcher*	1,328	1,697	2,019	2,762	2,896	2,934	3,141	2.4
Artist	166	220	272	309	351	363	381	2.3
Journalist	392	419	454	373	361	349	348	0.9
Legal/accounting services*	66	72	65	59	77	95	99	1.5
Medical services*	198	177	140	111	114	95	95	0.5

Note: * indicates that the status was newly established as a special and technical qualification.
Source: Ministry of Justice and Ministry of Health, Labour and Welfare.

Figure 3.2.18 Number of individuals who possess status of residence as Specialist in Humanities/International Services

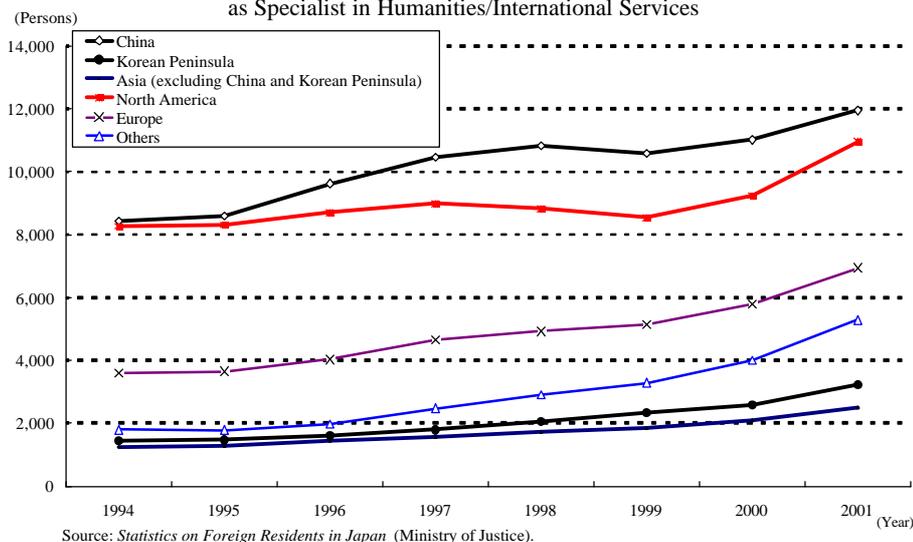
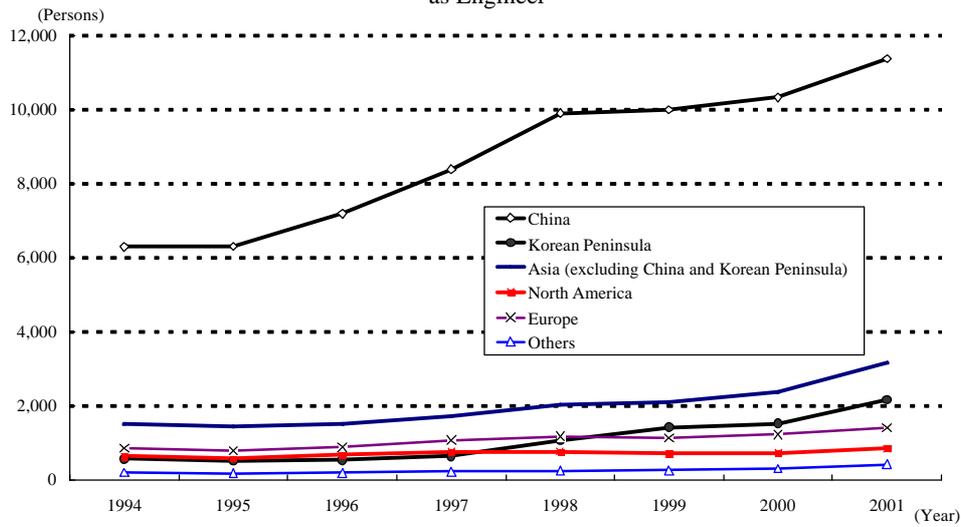
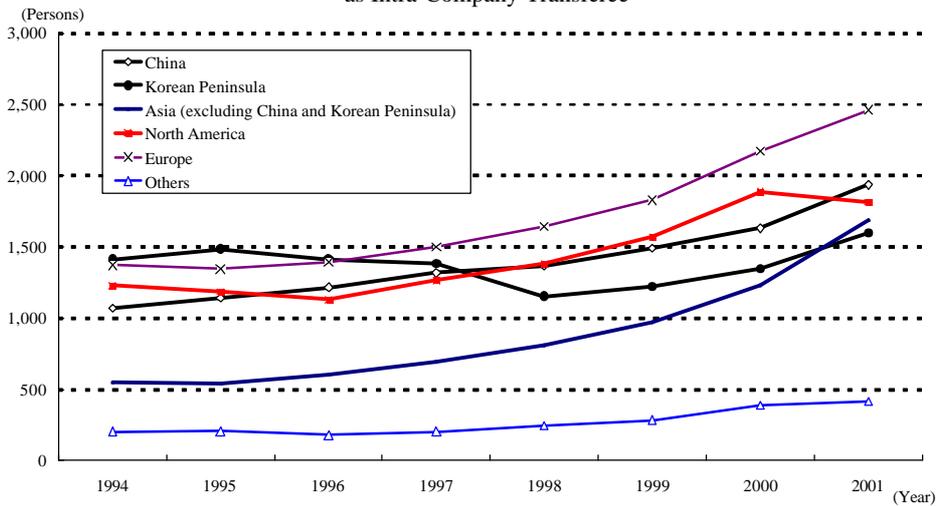


Figure 3.2.19 Number of individuals who possess status of residence as Engineer



Source: *Statistics on Foreign Residents in Japan* (Ministry of Justice).

Figure 3.2.20 Number of individuals who possess status of residence as Intra-Company Transferee



Source: *Statistics on Foreign Residents in Japan* (Ministry of Justice).

(2) Actual conditions of supply of labor force in the countries and regions surrounding Japan

(a) The potential for supply of labor force from Asian countries and regions

This section discusses the current conditions in Asian countries and regions of supply of labor force to Japan. First, there are various types of international movement of people. This movement can be divided into four types¹⁶.

- International movement for economic reason...migrant workers, economic immigration, etc.
- International movement based on blood ties...union of dispersed family, return of immigrants and descendants to mother country
- International movement for technology transfer...study, training, intra-company transfer
- Forced international movement...refugees and displaced persons, forced labor in wartime

¹⁶ Iguchi (2000).

Of these, the greatest factor encouraging a. is economic disparity between the country of origin and the receiving country. The gap in income levels between Japan, and Asian countries and regions, is greater even than that between the US or Europe and their surrounding countries. Moreover, countries such as China have greater populations than Japan, and it can be said that the latent potential generated by movement in labor force is extremely high (Fig. 3.2.21).

Figure 3.2.21 International comparison of population and income

	Population		GDP		Per capita GDP	
	(millions)	Japan=100	(billion US\$)	Japan=100	(US\$)	Japan=100
Japan	127	100	4,176	100.0	32,851	100.0
China	1,285	1,009	1080*	25.9	847*	2.6
India	1,018	799	465*	11.1	464*	1.4
Indonesia	215	169	153*	3.7	728*	2.2
Philippines	77	61	71	1.7	926	2.8
Thailand	63	49	115	2.7	1,825	5.6
US	285	224	10,082	241.4	35,401	107.8
Mexico	102	80	618	14.8	6,072	18.5
Germany	82	65	1,846	44.2	22,415	68.2
Turkey	69	54	200*	4.8	2967*	9.0

Note: Data are as of 2001. However those marked with an asterisk are as of 2000.

Source: *World Statistics 2003* (Ministry of Public Management, Home Affairs, Posts and Telecommunications).

(b) Actual conditions of movement in labor force in East Asian countries and regions

On the other hand, a look at actual conditions in the Asian countries and regions that supply the labor force reveals that the ratio of workers working outside their country of origin to the domestic labor force population is only around 2 percent in Thailand, Indonesia and Malaysia, while it is high in the Philippines, at 16.0 percent (Fig. 3.2.22). The number of foreign workers from the Philippines is conspicuously high because the official language in the Philippines is English, which is advantageous for movement in labor force to Europe and the United States, and because the government is actively developing policies encouraging the movement of labor force outside the country.

Figure 3.2.22 Number of workers working outside their country of origin in countries and regions of Asia

	Labor force population (10,000 persons)	Workers working outside their country of origin (10,000 persons)	Ratio of workers working outside their country of origin to total labor force (%)
Japan	6,766	6.1	0.1%
ROK	2,195	5.6**	0.3%
China	73,992	-	-
Hong Kong	337	5.0**	1.5%
Taiwan	978	12.0**	1.2%
Singapore	219	1.5**	0.7%
Malaysia	962	20.0*	2.1%
Thailand	3,397	55.0**	1.6%
Indonesia	9,565	160**	1.7%
Philippines	3,091	494	16.0%

Note: * indicates that the data are as of 1999, ** indicates that the data are prior to 1998.

Source: *Databook on International Comparison of Labor, 2003* (Japan Institute of Labour).

<Actual conditions of movement in labor force in the Philippines>

In order to relieve surpluses in labor force, the government of the Philippines considers overseas employment of domestic workers an important national strategy, and is developing policies encouraging the movement of workers outside the country, centered on the Philippine Overseas Employment Administration (POEA). Its duties are (i) to draft systematic project plans to promote and coordinate the overseas employment of Filipino workers while taking domestic labor force conditions into consideration, and (ii) to protect rights regarding fair and impartial employment.

The POEA’s specific functions are: (i) introducing workers and providing regulations on private enterprise recruitment activities; (ii) organization and implementation of promotion and monitoring of overseas employment; (iii) fair and impartial recruitment and employment practices, securing welfare of overseas workers and protecting their rights; (iv) developing necessary skills for introduction and registering and advising workers; (v) recruiting and introducing workers with specific skills requested in bilateral agreements, etc.; and (vi) encouraging retraining and reemployment of returned workers.

Since 2001, the Philippines has been actively concluding bilateral agreements for the purpose of movement in labor force out of the country, in order to address the increasing complexity of the state of employment affairs (Fig. 3.2.23).

Figure 3.2.23 Philippines’ bilateral agreements regarding overseas employment

Countries	Contents
General agreement on movements in labor force	
Taiwan	Taiwan government directly provides information on its labor market situation to Filipinos in order to reduce the trading in workers by brokers.
Saudi Arabia	Established minimum wage level for Filipinos.
Health care-related agreements	
England	Agreement on the employment conditions and the arrangements of pre-departure training for Filipino nurses who would work for national hospitals in London.
Norway	Agreement on the employment conditions and the arrangements of pre-departure training for Filipino nurses who would work for national hospitals in Norway.
Agreements concerning seafarers	
Netherlands	Recognition of the Filipino seafarer’s certificate.
Denmark	"
Norway	"
Agreement concerning workers at army bases	
US	Promote employment of Filipino workers at US army bases in Guam, Okinawa, Taiwan, etc. Promotion of measures to prevent discrimination and exploitation.

Source: Philippine Department of Labor and Employment.

The following presents an overview of the current state of movement in labor force from the Philippines. Figure 3.2.24 shows the number of migrant contracted workers between 1984 and 2001. Although there were fluctuations depending on the year, the number of contracted workers has tended to increase through the years. The number of contracts doubled in the 15 years from 1986 to 2001.

Figure 3.2.25 shows trends in contracted landing workers in the top seven contracting countries. In 2001, Saudi Arabia accounted for one-third of the total. Hong Kong is also becoming a major destination for movement in Filipino labor force in recent years. Taiwan as a destination showed

significant growth until 1998, after which movement of labor force to that country declined.

Figure 3.2.24 Trends in number of Filipinos working overseas

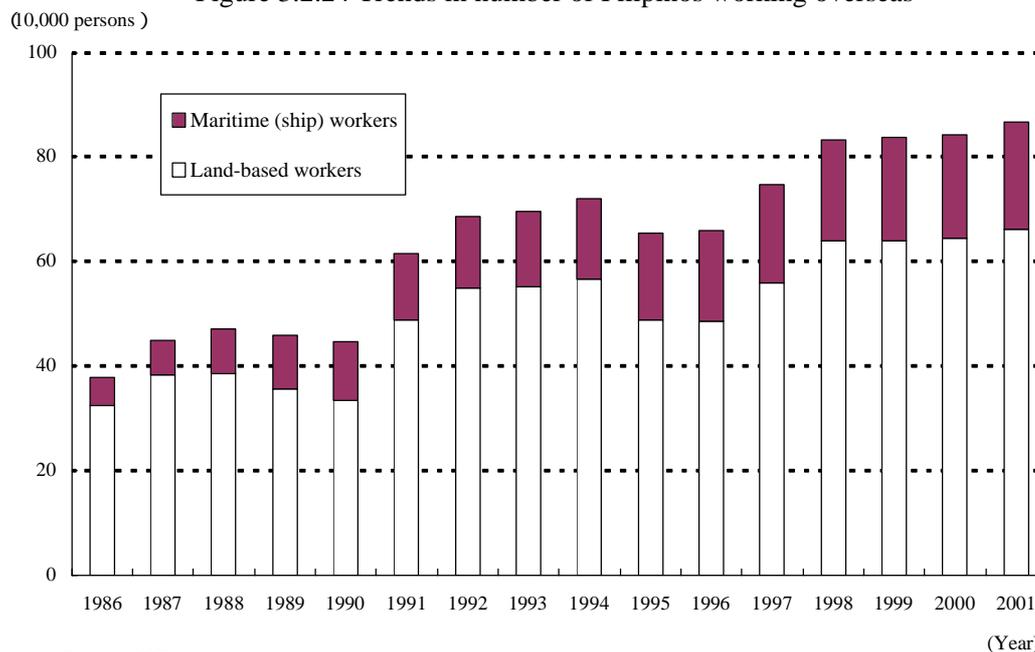
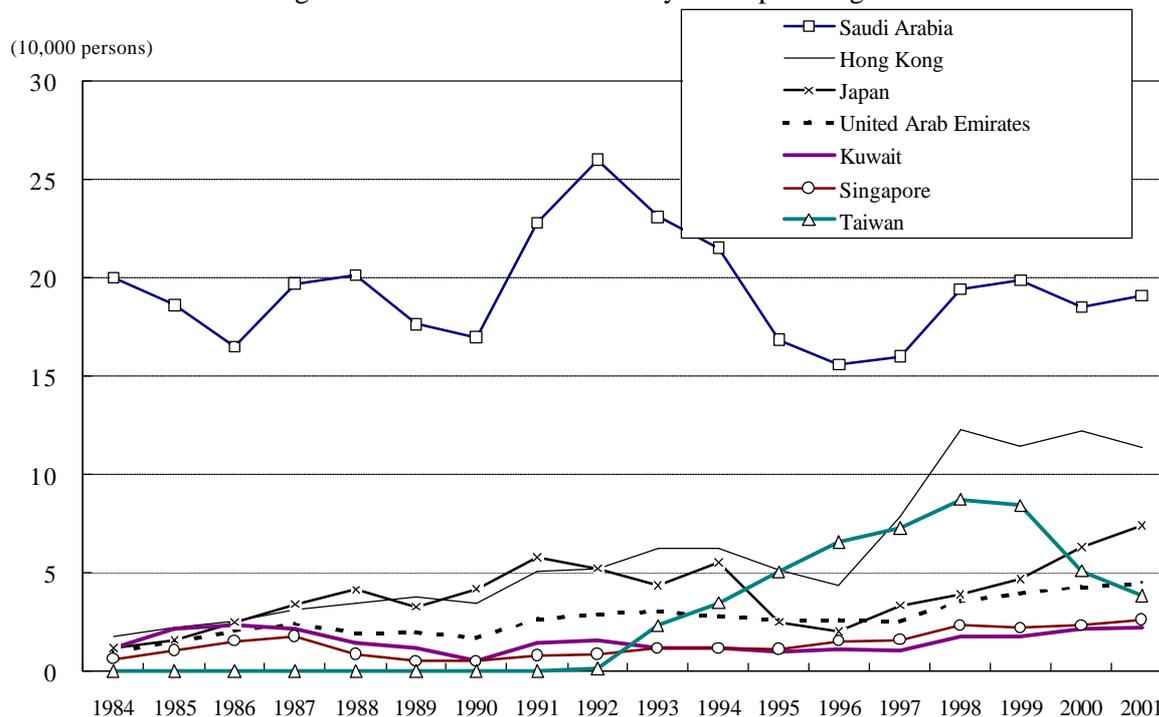


Figure 3.2.25 Destination country of Filipino migrant workers

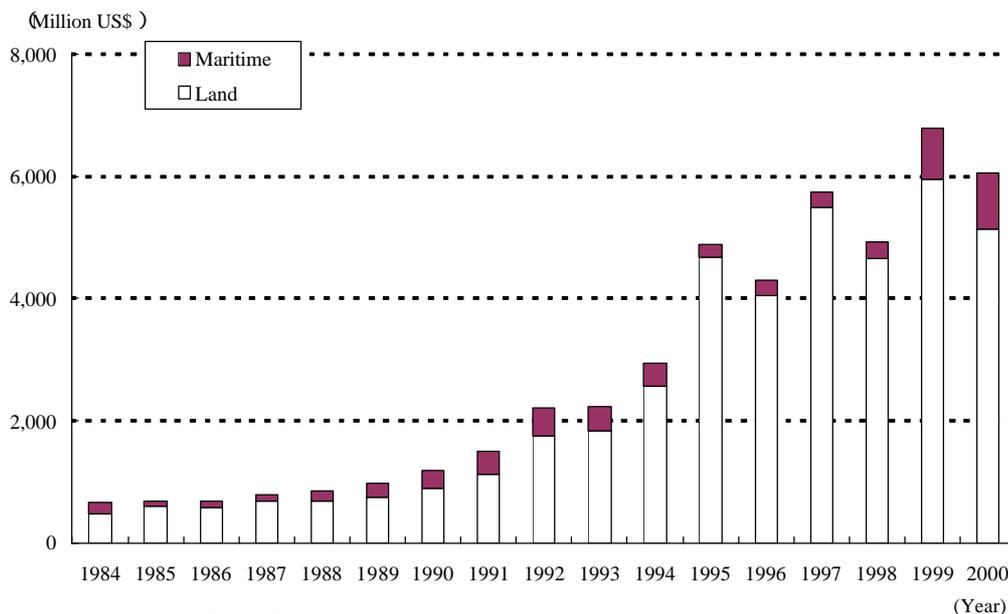


A country gains returns from sending workers overseas in the form of remittances. In 2000, the amount of remittances sent to the Philippines by its nationals working overseas reached US\$6 billion.¹⁷

¹⁷ It is also said that when figures that are not included in this statistic (e.g., amounts brought back in cash (foreign currency)) are added, the amount would be two to three times larger (Economic Planning Agency

This amount is equivalent to 16 percent of the country's export amount of US\$38.1 billion in the same year. Remittances from Japan totaled US\$370 million (Fig. 3.2.26).

Figure 3.2.26 Trends in amount of overseas remittances being made by Filipinos working overseas



The government of the Philippines is expected to continue to actively promote the sending of workers to overseas employment markets in the future. The Filipino side is also displaying strong interest in employment for Filipino nurses and care workers in Japan in its discussions with Japan regarding economic cooperation.

<Actual conditions of movement in labor force in China>

China has a population of about 1.3 billion people and farming village unemployment estimated at 200 to 300 million. While it is unclear what kind of domestic population movements will develop depending on future Chinese economic policies, in terms of workers with special and/or technical skills, China has the greatest potential for sending out labor force.

China's presence as a source for supplying skilled technicians is also growing. For example, 58 percent of all those entering Japan under the "engineer" status of residence are Chinese, an overwhelmingly large proportion. A look by nationality at H-1B visa holders in the US also shows that China is second overall after India.

<Actual conditions of movement in labor force in India>

In India, the next most populous country after China, the software industry has been gaining attention in recent years. According to India's National Association of Software and Service Companies (NASSCOM), an estimated 340,000 technicians were employed by domestic software and service

(2000), p. 238).

companies as of March 2000, the second most in the world after the US. In addition, because its official language is English, India has no difficulty in accessing the major markets of North America and Europe. Thanks to this situation, many IT technicians are playing an active role in the countries of Europe and the US. Japan is also developing an environment where Indian IT technicians to be able to play an active role through such measures as concluding with India the first mutual accreditation of IT technicians testing.

<Actual conditions of movement in labor force in other Asian countries>

Indonesia has a population of 215 million, and movement in labor force to outside countries has become more vigorous since the end of the 1970s. The greatest recipient of Indonesian workers is its fellow Muslim country in the Middle East, Saudi Arabia, followed by Malaysia and Singapore. They are employed mainly as unskilled workers, such as maids, drivers or in the farming sector.

Malaysia is both a sender and receiver of labor force. Skilled workers from urban areas work in such countries as Singapore and Taiwan as migrant workers. The resulting labor insufficiency is filled by farm workers in Malaysia, and the shortage of farm workers resulting from that is filled through the influx of foreign workers from Indonesia, Thailand and the Philippines, thereby forming a “cyclical labor market.”

Movement in labor force in Thailand has become more vigorous since the beginning of the 1980s. In 1998, 550,000 workers had moved overseas. The main recipients were the Middle East including Saudi Arabia, and Singapore and Brunei. In recent years, it is said that the proportion moving to work in Japan and Association of South-East Asian Nations (ASEAN) countries is increasing.

3. Impact of labor force movements¹⁸

An analysis was conducted on the economic impact of the acceptance of foreign workers in Japan or the countries that are sending them, using the Global Trade Analysis Project (GTAP) model, which is one of the applied general equilibrium models¹⁹. The results showed that the effect on economic welfare was positive in Japan where the influx of labor is progressing, and for the hypothetical case where the impact on economic welfare was greatest, it is estimated that Japan would mark a positive real GDP growth rate of 2.8 percent by 2020.

Aside from pure economic welfare, there is the impact on the domestic labor market. The acceptance of workers with special and/or technical skills leads to economic growth and industrial development, with insignificant impact on unemployment. On the other hand, acceptance of unskilled workers brings about a bilayer structure in the domestic labor market, and at the same time makes it easier for unemployment problems to arise in accordance with fluctuations in the business cycle. In Germany, the unemployment rate for foreign workers is actually about twice as high as that for its native citizens.

¹⁸ In this and other sections, unless otherwise noted, the dichotomy where foreign workers are split into the two groups (“unskilled workers” and “workers with special and/or technical skills”) is adopted. There are arguments that this dichotomy does not match the reality, and job types in between the two should be defined (Iguchi et al., 2001). However, for convenience in comparing impacts the conventional dichotomy is used here.

In addition, new social costs come about in education, medical care, housing and other areas. A comparison of workers with special and/or technical skills and unskilled workers reveals that workers with special and/or technical skills, who have high incomes, pay more taxes and are more economic in terms of social costs for human resources development. Therefore, taken in net terms, payments of their social costs are lower than for unskilled workers. In addition, the income from taxes and social insurance paid by foreign workers and the costs of administrative services enjoyed by them vary depending on the degree to which foreign workers are integrated into Japan²⁰. The further integration progresses, the higher the social costs become.

Finally, there is the impact on domestic industrial structure and labor productivity. While vitalization of the receiving country's economy can be expected through transfer of technology and expertise offered by workers with special and/or technical skills, the acceptance of unskilled workers hinders efforts to improve employment management and upgrade labor productivity. Thus, there is also concern that this may bring about a lag in transformation of industrial structure²¹.

4. Modalities for Japan's measures regarding foreign workers

(1) Measures to actively accept skilled human resources

The active utilization of human resources capable of generating high added value is essential to sustainable growth of the economy and enhancing the international competitiveness of industry. Furthermore, the need for workers with special and/or technical skills is growing along with the sophistication of industrial structure. As explained earlier, the countries of Europe and the US are actively developing policies to accept foreign workers in order to secure highly skilled human resources.

Specific policies carried out include the raising of the H-1B visa acceptance quota and extension of the period of stay in the US, the acceptance of immigrants possessing advanced skills through the HSMP in the UK, and permission for residence by IT technicians based on the Green Card Regulation in Germany.

As stated in the Ninth Basic Plan on Employment Measures, Japan is also actively promoting acceptance of foreign workers with special and/or technical skills. The maximum period of residence under many statuses of residence has been extended from one to three years. In addition, criteria for landing permits for IT technicians have been reviewed, and the scope of activity of foreign researchers receiving special treatment under the exception of the Law on Special Zones for Structural Reform has been expanded.

However, although acceptance of foreign workers with special and/or technical skills has been

¹⁹ See AN 3.2.1 for calculation method using GTAP.

²⁰ Integration can be divided into three general phases: "migrant worker phase," "long term resident phase" and "integration phase." In the migrant worker phase, the worker comes alone to Japan and sends most of his/her income to his/her home country. Next, in the "long term resident phase" the worker seeking long term residence calls his/her spouse, etc. to come to Japan. In the final "integration phase," the entire family is invited to Japan, where they live continually and no longer send remittances to the home country (Goto, 1993).

²¹ Ministry of Health, Labour and Welfare (2001), p. 9.

increasing in recent years, the number is clearly low, for example, in comparison to the number of H-1B visas issued by the US. In addition, looking at the current state where there are many H-1B visa holders from Asia, especially China, reveals that many highly skilled Chinese human resources are headed to the US instead of the geographically closer Japan.

In order to secure highly skilled human resources actively, it will be necessary to facilitate approval of status of residence for workers with special and/or technical skills, eliminate factors hindering international movement of labor, and transform the domestic labor market into one that is attractive to highly skilled human resources.

(a) Mutual accreditation of qualifications, etc.

Each country carries out in its own unique way the approval of qualifications of workers in various specialized areas, including technicians, doctors and accountants. Therefore, other countries do not recognize these qualifications. Since these workers cannot carry out their profession in another country, the international movement of labor is hindered. If mutual accreditation of qualifications with another country were realized, it could become an indicator for landing permit criteria. It could also become a clear marker for companies and other organizations when hiring foreign workers with special and/or technical skills.

The US is carrying out mutual accreditation of educational degrees and other qualifications with English-speaking countries that have comparatively high economic standards. In particular, the US is actively carrying out mutual accreditation for internationally competitive professions such as accountants, architects and engineers (Fig. 3.2.27).

Figure 3.2.27 Status of mutual accreditation of qualifications in the US

Sector	Partner countries	Content
Accountants	UK, Canada, South Africa, Australia	The American Institute of Certified Public Accountants (AICPA) does not impose a different process on evaluating accounting qualifications on member countries of the Institution of Chartered Accountants. It is possible for ICC members to receive similar treatment.
Accountants	Canada	Pursuant to the US-Canada Free Trade Agreement (current NAFTA), accounting qualifications are mutually accredited.
Accountants	Australia	19 US states mutually accredit accounting qualifications.
Engineering	UK, Australia	The Institute of Electrical and Electronics Engineers (IEEE) of the US treats members of partner countries industry groups equally.
Engineering	Australia	Pursuant to the Washington Accord, an education course for engineering qualifications is mutually accredited.
Architect	Canada	Pursuant to the to US-Canada Free Trade Agreement (current NAFTA), architect qualifications are mutually accredited.

Source: World Trade Organization (WTO) report.

Mutual accreditation of qualifications among EU member nations has been established individually through European Commission (EC) directives. In 2002, the EC proposed consolidation of these individually stipulated directives and the enactment of a new directive aimed at a more automatic and

flexible mutual recognition system²². This proposed new directive is set to cover doctors, architects, nurses, engineers, accountants, tax accountants and other professionals that are currently being recognized for mutual accreditation through individual EC directives. Attorneys will be covered by a separate directive after the new proposed directive is put into effect.

Regarding evaluation and recognition of engineering education, mutual accreditation in other countries is relatively advanced. In 1988, the respective evaluation and accreditation organizations for engineering education from the UK, Australia, Ireland, Canada and the US signed the Washington Accord, an agreement mutually accrediting the virtual equivalence of each signatory's evaluation and recognition criteria and procedures. Through the Washington Accord, if the content of engineering education courses of four-year colleges are deemed equivalent, and approval is obtained from evaluation and recognition organizations of the other party, then graduates of engineering courses in a signatory country are entitled to the same benefits as graduates of accredited courses in the other. In 1996, evaluation organizations of Hong Kong and South Africa joined the Washington Accord, and in 2001, the Japan Accreditation Board for Engineering Education (JABEE) was accepted for provisional membership²³.

Japan also carries out mutual accreditation with IT technician testing. Since the Asia Common Skill Standard Initiative for IT technicians proposed by Mr. Takeo Hiranuma, Minister of Economy, Trade and Industry, was adopted at the October 2000 ASEAN Meeting of Economic Ministers and the Ministers of People's Republic of China, Japan and Republic of Korea, Japan has been practicing mutual accreditation with testing agencies in Asian countries based on standardization of skills tested (Fig. 3.2.28). Further expansion of member countries is expected in the future. Along with this mutual accreditation, the Immigration Control System has been relaxed.

In fact, acceptance of technicians from India, the first country with which Japan began to practice mutual accreditation of IT technician testing, is growing. In 2001, 1,286 Indians registered with the "engineer" status of residence (a 53 percent increase over the previous year).

Japan also participates in the Asia-Pacific Economic Cooperation (APEC) Engineer Framework, which was created as an engineer accreditation system that could be accepted throughout the entire APEC region. There are two structures for mutual accreditation projects: the Substantial Equivalence Framework²⁴ and the Mutual Exemption Framework.²⁵ There are currently 11 technical areas eligible for registration. At present, Japan has only registered in two areas, Civil and Structural. In the future, it will be necessary to consider expanding the registered areas.

²² European Commission, Proposal for a Directive of the European Parliament and of the Council on the Recognition of Professional Qualifications, COM (2002) 119 final (2002).

²³ Harada, K., *Kokusaiteki ni Tsuyo suru Senmon Gijutsusha to Kogaku Gijutsu Kyoiku no Hyoka Nintei Seido (Evaluation and Accreditation System for Internationally Acceptable Professional Technicians and Engineering Education)*, Japan Federation of Engineering Societies News, No. 424.

²⁴ A framework between two member economies that assesses the technical standards of technicians as similar within a certain scope.

²⁵ A framework where technical competence examination required for business certification is exempted bilaterally, after the Substantial Equivalence Framework. However, an APEC economy may add an examination to confirm specially required items employed in the APEC economies. This is to be negotiated between the governments in the future.

Figure 3.2.28 Countries that are implementing mutual accreditation of IT qualifications with Japan

Date of conclusion	Country	Examining body	Eligible qualifications	Relaxing of residence requirements
February 2001	India	DOEACC Society	Levels A, B and C of the IT technician examinations (DOEACC)	Yes
August 2001	Singapore	Singapore Computer Society (SCS)	Certified IT Project Manager (CITPM) * Project manager examination	Yes
December 2001	ROK	Human Resources Development Service of Korea (HRD Korea)	Engineer Information Processing * Examination for software development technicians	Yes
			Industrial Engineer Information Processing * Examination for basic IT technicians	Yes
			Information terminal operator * Beginner level system administrator	No
January 2001	China	Center for IT Education Ministry of Information Industry	System Analyst * System analyst examination	Yes
			Software Engineer * Examination for software development technicians	Yes
			Programmer * Examination for basic IT technicians	Yes
April 2002	Philippines	JITSE-Philis. Foundation	Basic IT technicians * Examination for basic IT technicians	Yes
June 2002	Thailand	National Electronics and Computer Technology Center (NECTEC)	Network System Professional * Technical engineer (network) examination	No
			Database System Professional * Technical engineer (network) examination	No
			Fundamental IT Professional * Beginner level system administrator	No
July 2002	Vietnam	Hoa Lac Hi-Tech Park Management Board, Vietnam Information Technology Examination and Training Support Center (HHTP/VITEC)	Basic IT technicians * Examination for basic IT technicians	Yes
November 2002	Myanmar	Myanmar Computer Federation (MCF)	Software design technicians * Examination for software design technicians	No

Note: * indicates a qualification that is recognized to be of an equivalent skill level.
Source: METI.

It is also conceivable to facilitate approval of status of residence through improvements in the system, such as expansion of mutual accreditation of qualifications of technicians and other professionals.

In principle, other countries also do not approve the practice of medicine by foreign doctors and nurses. However, in the US, foreign doctors who fulfill certain requirements may practice medicine under special measures. In France, doctors from the EU and from countries with which France has concluded bilateral agreements may practice medicine. In the UK, doctors from the European Economic Area (EEA) may practice, and foreign doctors may practice in Germany for a limited period. On the other hand, the practice of medicine by foreign doctors and nurses is not approved in principle from the standpoint of ensuring public health under the Medical Practitioners Law, etc. in Japan. However, it is approved for foreign doctors who have received clinical training and have taken special tests under agreements on the acceptance of doctors concluded with the UK and other countries.

The number of foreigners in Japan under the “medical services” status of residence was 95 as of 2001 (Fig. 3.2.17). Establishing an environment where foreigners can receive satisfactory medical services is important in promoting inward direct investment in Japan, accepting foreign workers in special and/or technical areas, and increasing the numbers of foreign tourists. As proposed by Minister Hiranuma at the Council on Economic and Fiscal Policy (CEFP) in April 2002, Japan is also considering further expansion of the practice of medicine by foreign doctors.

(b) Pension accumulation systems through social security agreements

Public pension systems in most countries cover “those working inside the country.” Therefore, foreigners sent to Japan are forced to shoulder a double burden: entering the Japanese public pension

system while continuing payments to pension funds in their home country in order to secure the right to receive a pension in their home country. Furthermore, because of the short period of time working in the country to which they have been sent, the right to receive is not generated and the money paid is lost. This is a burden on foreign workers and an impediment to smooth international movement in labor force.

In order to solve this problem, the major developed countries have concluded social security agreements, thereby making it possible to avoid doubled levying of insurance premiums and allowing the accumulation of pension funds along with overseas relocation by workers.

The oldest US social security agreement is the one concluded with Italy in 1973. Although its history is short compared to Europe²⁶, the US had concluded pension agreements with 19 countries as of 2002²⁷, and is currently in negotiations with other countries, including Japan and Australia. In the US, pension portability is substantially secured because defined-contribution pensions based on 401k plans are the norm.

As for social security within the EU, based on the Amsterdam Treaty, social security benefits are guaranteed for (i) workers who are nationals of EU member countries and their dependents for the total period for the calculation of the amount of benefits in each country, and (ii) those who reside in the country.

Aside from EU member countries, Germany has bilateral agreements on social security rights with 12 European countries²⁸ and seven non-European countries²⁹, including Japan (pensions only) and the US (pensions only). These agreements provide social security to foreign workers based in principle on two frameworks. First, all of the people covered by these agreements enjoy equal status concerning social security rights. Second, those residing in EU member countries or countries that have concluded such agreements are granted equal status to those who reside in other EU member countries or countries that have concluded such agreements.

In addition to EU member countries, the UK has concluded bilateral agreements on social security rights for workers with 23 countries³⁰, including Japan and the US. Social security is guaranteed for workers from countries that have concluded such agreements, based on each agreement.

Among, the UK, Germany and France, France has been the most active in concluding social security agreements. Centered on its former colonies, it has concluded 32 agreements (excluding those with EU countries) in the Middle East and Africa³¹. In recent years, France has actively been concluding

²⁶ *JETRO Sensor* (September 2001 issue).

²⁷ Italy, Germany, Belgium, Norway, Canada, UK, Sweden, Spain, France, Portugal, Netherlands, Austria, Finland, Ireland, Luxembourg, Greece, Switzerland, ROK and Chile.

²⁸ Norway, Iceland, Liechtenstein, Bosnia-Herzegovina, Croatia, Hungary, Macedonia, Poland, Slovenia, CIS, Turkey and Yugoslavia.

²⁹ The other five countries are Canada, Chile, Israel, Morocco, and Tunisia.

³⁰ The other 21 countries are ROK, Canada, Iceland, Israel, Jamaica, New Zealand, the Philippines, Turkey, Barbados, Bermuda, Cyprus, Gibraltar, Isle of Man, Island of Jersey, Guernsey Island, Malta, Mauritius, Norway, Switzerland, Liechtenstein, and the former Yugoslavia. (Source: *JETRO Sensor* (September 2001 issue) and UK Department for Work and Pensions homepage.)

³¹ Switzerland, San Marino, Monaco, Spain, Portugal, Poland, Czech Republic, Slovakia, Romania, Slovenia, Croatia, Macedonia, Turkey, Norway, US, Canada, Israel, the Philippines, Algeria, Morocco, Tunisia, Benin, Cameroon, Cape Verde, Congo, Côte d'Ivoire, Gabon, Madagascar, Mali, Mauritania, Nigeria, Senegal, Togo.

agreements with eastern European countries.

In contrast, Japan greatly lags behind in social security agreements. Its first one was in 2000 with Germany³², followed by an agreement with the UK in 2001³³, a total of merely two. In order to enable smooth movement in labor force, the early conclusion of negotiations currently being carried out with the US, France and other countries, and the prompt initiation of negotiations with other countries which Japan has yet to negotiate, are necessary.

(c) Assistance for foreign students

As discussed earlier, each country is actively accepting workers with the aim of securing foreign human resources in special and/or technical areas. The acceptance of foreign students is an effective way to make an international contribution to the cultivation of human resources in developing countries and elsewhere, and to secure outstanding foreign human resources who potentially possess special and/or technical skills. In particular, obtaining and training human resources through foreign students is a very desirable practice from the standpoint of obtaining human resources that have an affinity for Japanese social customs and language. However, particularly regarding obtaining outstanding students from developing countries, Japanese universities are engaged in intense competition with the universities of Europe and the US. Moreover, considering the handicap posed by the Japanese language, it is very important to lower systemic barriers as much as possible in job recruitment and internships, both during study and after graduation, in order to accept high-level foreign students.

In addition, there are cases where outstanding students from developing countries wishing to study in Japan have difficulty affording tuition and living expenses. Therefore, there is a need to assist foreign students in terms of living environment, for example, enhancing scholarships and securing low-priced student housing.

In the case of the US, working status is generally not approved for the F-1 visa, which is for students. However, if permission is given by the person responsible at the university, students are permitted to work a maximum of 20 hours per week on campus when school is in session and an unlimited number of hours during school vacation³⁴. It is also possible for foreign students to earn a fixed salary through working as a teaching assistant or an assistant for surveys conducted by the university. Moreover, there are many cases where disbursements of scholarship money and payments of student loans are linked to grades. In particular, the system allows outstanding students such as those in graduate school doctoral

Separate agreement with Quebec Province (Canada).

³² Official name: The Agreement Regarding Social Security between Japan and the Federal Republic of Germany.

³³ Official name: Agreement between Japan and the United Kingdom of Great Britain and Northern Ireland on Social Security.

³⁴ In addition, students who have completed one or more years of education and have excellent grades may work up to 20 hours a week when school is in session and up to 40 hours a week during school vacation at an off-campus part-time job, if they receive a permit from the person responsible at the university. Furthermore, students who have completed one or more year of education and have a special economic reason, even if they fail to find a job on campus, may work up to 20 hours a week when school is in session and up to 40 hours a week during school vacation at an off-campus part-time job by obtaining permission and an Employment Authorization Document (EAD) from the US Immigration and Naturalization Service (INS).

programs to conduct research without actually having to pay tuition. In addition, in the US it is possible after graduation to take a one-year Optional Practical Training period, with a status of residence that becomes a bridge from “student” to “worker.” In Japan as well, there is thought to be room for consideration of living and employment assistance for foreign students, from the standpoint of improving Japanese university and graduate school living environments and making post-graduation career paths more attractive for students.

In Japan, foreign students, who are engaged in job hunting after graduation in FY2003 and have been recommended by their universities, are permitted to change their status of residence to “temporary visitor.” Students can also extend their stay a maximum of 180 days by one-time approval of extension of period of stay, and Japan is now formulating measures that would grant a maximum of 28 hours per week of activity outside the scope permitted, based on individual application.

(d) Making the working environment more attractive

Even if systemic factors impeding the movement of labor are eliminated, influx of highly skilled human resources will not occur unless the labor market and the labor environment are attractive. Therefore, it is important to attract researchers from all countries by developing the research environments of universities and public research institutes, and create an environment where foreign workers can tap their abilities by developing fair and transparent personnel systems at workplaces and internationalizing workplace environments.

As for aspects of living, development of an educational environment for foreign children, such as through international schools, and of residential environments and medical facilities tailored to foreigners is desirable. The role that should be played not only by the national government but also local governments is significant. As seen already in Europe and the US, the activity by NGOs, NPOs and other non-public agencies is expected.

The movement of highly skilled human resources is closely related to trends in inward direct investment, as it is often driven by intra-company transfers at multinational corporations. The amount of inward direct investment is extremely low in Japan compared to that of the countries of Europe and the US. The tasks needed to raise this level have already been frequently pointed out. The resolution of this situation will also contribute to the influx of highly skilled human resources.

(2) Countermeasures for the domestic labor shortage

It has been estimated that aging of the population and declining birthrates will progress, and the population of Japan will peak in 2006³⁵. There are concerns that the accompanying decline of the labor force will invite labor shortages in specific industries. Some have pointed out that even at present, depending on the job type and region, there are already fields where the necessary human resources cannot be secured if existing remuneration levels were to be kept. For example, the number of nursing personnel, an area that has been cited for lack of labor supply, is projected to increase from about 1.151 million at the beginning of 2001, to about 1.301 million at the end of 2005 (an increase of 149,000

³⁵ Estimate by the National Institute of Population and Social Security Research.

million, or +13.0 percent). However, the demand for nursing personnel is projected to jump from about 1.217 million in 2001 to about 1.306 million in 2005. Thus, the existing shortage is expected to continue³⁶.

In order to combat this trend, it is important to eliminate mismatched labor force demand, improve employment environments so that elderly and female workers can play active roles, advance improvements in laborsaving, advance efficiency, and improve employment management. However, there are areas where the participation of the elderly and women in the workplace is not enough to resolve the issue of labor shortage.

Therefore, in the future, the new acceptance of foreign workers can be thought of as an alternative for areas where labor shortage cannot be eliminated. For example, Europe and the US are conducting labor market tests that are linked to the supply and demand situation of the domestic labor market, carrying out numerical apportionment systems, and accepting foreign workers under bilateral agreements with the countries supplying the labor. Considering Japan's future population makeup, it is necessary to consider the acceptance of labor force in similar forms over the long-term. However, it is essential to address the matter of accepting workers other than those with special and/or technical skills with sufficient care, based on a national consensus, because they are expected to exert a tremendous impact on Japan's economic society and its people's daily lives.

³⁶ Ministry of Health, Labour and Welfare, *Kango Shokuin no Jyukyu ni Kansuru Kentoukai Houkokusho (Report of the Panel on Supply and Demand of Nursing Personnel)*.