

The Graduate Employment in Asia and the Pacific Countries

—an overview of the current status—

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The emergence of a common ground

It was often said in the past that there is no “Asian Education” as such, in the sense that no common social background exists which enables sensible comparative analysis of the educational situation and social issues among the countries in the region of Asia and the Pacific. The recent trend of the globalization of economic activities in the region with widespread multinational enterprises and joint ventures, however, seems to have developed a common ground for comparative analysis of higher education systems and academic degrees. The presence of multinational and joint venture industries in many of the developing countries may even function as a driving force which demands institutions of higher education of the region to maintain a commonly acceptable level of professional training for equivalent qualifications. At the same time, the emergence of a globalized recruitment field will pressure the adoption of the standard practice of recruitment of university graduates in the business world. This article is an attempt to have a bird’s-eye perspective of the current graduate employment situations and its implication for the future orientation of higher education in selected countries of the region.

The availability of basic statistical information related to the employment of graduating university students was not even among the countries of the region. Accordingly, the issues of graduate employment and human resource development policies of each country have not been treated on a uniform perspective. The countries selected for review are Korea, Japan from East Asia, Thailand, Malaysia, Singapore, the Philippines, and Indonesia from ASEAN region, and Australia from the Pacific region. The reason is that the developing countries among them have experienced in recent years rather rapid economic growth, and came to have a similar pattern of occupational distribution as those of the developed countries. At the same time, through the network of APEC, an atmosphere of a regional community of partnership of the equal status is emerging, replacing the former north-south, or the assistance donor and the recipient relationships.

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Economic and Employment Situation

The graduate employment is naturally under strong influence of the general economic condition of the country concerned and of overall employment status of the entire working population. Accordingly, the general economic status and the recent employment prospect of each country are briefly reviewed. On the whole, economies of East Asia and Southeast Asia have experienced a very rapid expansion in recent years. In annual growth rate of per capita income, East Asia and Southeast Asia are markedly outdistancing other regions. During 1980-90, East Asia recorded an annual growth rate of real GDP of 7.2 percent, Southeast Asia 2.8 percent, OECD countries 2.0 percent; in 1990-93, East Asia 10.6 percent, Southeast Asia 4.1 percent, OECD countries 1.0 percent (UNDP Human Development report 1996) However, this rapid pace of development is showing a sign of slowing down in recent years.

European countries suffered a high rate of unemployment of over 10 percent during the period. Among the countries taken up in this article, Australia followed this pattern. In Asian NIEs and ASEAN countries, the unemployment rate remained low at 1-2 percent level and experienced a general shortage of trained human resources. The Philippines exceptionally had a higher rate of unemployment among ASEAN countries.

The rapid economic development brought about the structural changes of industries. During the past decade, most countries in the Pacific rim region have experienced the transition from an agriculture based economy to a labor intensive manufacturing economy and then partly to high tech industries. The restructuring of industries and economic services requires a considerable increase of supply of specialists and professionals in the new and emerging areas, and, at

Distribution of employment by occupation in selected countries of Asia and the Pacific, 1991

	Professional & technical	Admin. & Managerial	Clerical	Sales	Services	Agriculture	Production
Australia*	11.2%	19.6%	16.6%	14.9%	15.6%	15.0%	7.1%
Indonesia	3.0	1.2	2.0	4.0	8.0	33.8	48.0
Japan*	11.7	4.0	19.2	14.7	8.8	6.3	35.3
Korea*	8.3	1.7	14.4	14.9	11.5	15.8	33.4
Malaysia*	9.2	2.8	9.8	12.2	11.9	25.4	28.7
Philippines	6.2	1.1	4.4	13.6	9.4	44.3	21.0
Singapore*	19.5	10.0	14.3	13.6 ⁺		0.2	42.4
Thailand	3.5	1.9	3.2	10.0	3.9	60.5	17.0

* 1992 +Sales and Services

Source: Pacific Economic Cooperation Council, 1994, page 8

the same time, creates a need for traditional industries to transfer their excess employees to other jobs. The status of the distribution of employment by occupation in the selected countries of the region is given in the chart below.

The chart shows that most countries came to have a rather similar occupational distribution pattern, with exception of a few countries where agriculture still remains an important production sector. In the process of transformation from an economy based in agriculture to an economy based on manufacturing and service industries, human resources for the newly created works in industry and service sector were sought from the relocated work force of other sector and from the new graduates of higher educational institutions. The demand for qualified workers increased suddenly when a specific sector of the industry expanded rapidly. The increase in a certain occupational area was always filled by young workers who sought their first employment rather than by the transfer of personnel from other occupational fields.

Thus, the training capacities of educational institutions of higher education was rapidly expanded, especially in the field of Science and Technology. When the expansion of economy slowed down, it was the new graduates who faced the shrinking labor market. The graduates with a specialized professional training in the expanding areas of science and technology have less difficulty when compared to those with qualifications in the non-expanding sectors. Situation of graduate employment was in every country influenced by its economic conditions and the degree of structural changes of its economic activities.

Also the process of job hunting varies from country to country, and the information made available to the job seeking graduates on employment opportunities is not universal from country to country. In a country like Japan, the job hunting of the graduating students starts early in the final year of the undergraduate study, and by the day of graduation most of university leavers have their first jobs secured. Accordingly the employment statistics of the graduating students is dated on the end of March of the graduating year. Those who did not succeed in finding a good job at the time of graduation may wish to find a temporary place of refuge in the graduate course or by repeating the final year of the undergraduate course. Those who did not succeed in securing an employment by the day of graduation will risk to be regarded as being a drop-out at an early stage of professional career development.

This means that, in Japan, the recruitment of graduates has been treated separately from the recruitment of experienced mid-career specialists. This social practice necessitated and indeed produced the system of extensive OJT training of newly recruited staff at the cost of the company. The final touch of the professional training was thus undertaken by individual enterprises. The globalized economic activities is increasing applying pressure to major business concerns to abandon this country specific recruitment and OJT practice.

In other countries, the job search for the graduating students start later and many will accept

the offer only after the graduation. For example, the Graduate Careers Council of Australia does an annual survey of the employment of graduates who have just completed their course. The survey relates to their situation with respect to employment 4 months after they completed their courses. The Singapore survey was conducted 6 months after the final examination in May. The figures of graduate unemployment quoted in other reports contain often those who are continuing academic study and those who for various reasons do not enter the labor market. Thus, employment statistics of the graduates reflect different social patterns of job seeking. It has, therefore, not been possible to present the employment trends of the graduates in a unified format for comparison.

Country characteristics

Korea

The Korean economy expanded rapidly with an annual GNP growth rate of about 10 percent in the early 70's and of 12 percent in the late 70's. After experiencing a remarkable expansion from 1986 to 1988, the Government took measures to slow down the economic growth to avoid inflation of the currency and improve the balance of payment. As seen in the chart below, the growth rate dropped from 9.1 percent of the previous year to 5.1 percent in 1992, but bounced back to 5.8 percent in 1993, 8.4 percent in 1994, and around 9.9 percent in 1995. The rate of unemployment has been kept very low around 2 percent with 2.8 in 1993 as the highest as seen in the chart.

(in thousands, %)

		1990	1991	1992	1993	1994	1995
Korea	GDP growth rate	9.5	9.1	5.1	5.8	8.4	9.9
	No. of employed	18,085	18,612	18,961	19,253	19,837	20,722
	No. of unemployed	454	436	465	550	489	387
	Rate of unemployment	2.4	2.3	2.4	2.8	2.4	2.0

Note: The figures on 1995 are for the July-Sept. Period.

Source: Japan Labor Research Organization, KAIGAI ROUDOU HAKUSHO (Overseas Labor Situation) 1996

During 30 years from 1960 to 1990, the structure of the Korean economy experienced a profound change. The proportion of the labor force employed in agriculture dropped from 61 percent to 18 percent, that of manufacturing industry increased from 10 to 35 percent, and in

the service sector from 28 up to 47 percent. (UNDP, 1996)

With this expansion of the economy, jobs which were traditionally occupied by college and university graduates increased largely exceeding the number of graduates from universities and colleges. A report indicated that the jobs created were about 350,000 and the total of college and university graduates of the epoch was about 200,000 between 1970 and 1975. During 1975 and 1980, the number of jobs which required college and university graduates increased to 500,000 and the actual supply of the graduates was about 280,000.

From 1978 to 1981, universities increased the student intake to 3.8 times that of the previous years, thus creating an amount of graduates which then surpassed the increased employment opportunities created by the active economic development. It has 131 universities with a student population of 1,132 thousand. Colleges are principally established to meet the human resource needs of industries to supply middle level technicians, and in 1994 there exist 135 colleges with 506 thousand students. (Cho-sen, Ihm,1994) The detailed information on the status of the graduate employment must be available in this country, but at the time of preparation of this article, they were not accessible to the author. There appears to exist a mismatch between the types and the numbers of graduates needed by the industries and the graduating students from higher educational institutions, as witnessed in a statement as quoted below. "Since the 1980's, the number of college graduates has been on the rise at an average of 17.4 percent compared to the average employment increase rate of 7.8 percent per annum. The number of the employed among college graduate doubled from 60,000 (6.2 percent in 1980) to over 124,000 (6.9 percent) in 1986. In recent years, less than 50 percent of college graduates find employment and the figure is even worse for female graduates. These figures indicate the seriousness of educated unemployment in Korea. The common pace of expansion of college students has clearly affected the early employment opportunities of college graduates." (Cho-sen Ihm, 1994 page 109-110, footnotes)

Singapore

Singapore has followed a policy of industrialization since mid 1960 by facilitating foreign investment in the manufacturing sector. The economy expanded rapidly during 93 and 94 exceeding 10 percent of annual GDP growth, and remained at 7-9 percent in 1995. Reflecting this rapid pace of expansion, the unemployment rate dropped from 5-6 percent of mid-1980s to below one percent in the early 1990s. With the shift of industries from the manufacturing to the service sector, high level specialists, researchers and engineers were in short supply. To cope with the ageing population and a general short supply of work force, the Government is considering a measure to extend the retiring age from the current 60 years old to 67 years old. The employment market remained quite favorable for the qualified job seekers as seen below.

(in thousands, %)

		1990	1991	1992	1993	1994	1995
Singapore	GDP growth rate	9.1	6.7	6.0	10.1	7.2	-
	No. of employed	1,537	1,524	1,576	1,592	1,649	-
	No. of unemployed	25	30	43	44	44	-
	Rate of unemployment	1.7	1.9	2.7	2.7	2.6	-

Source: Japan Labor Research Organization, KAIGAI ROUDOU HAKUSHO (Overseas Labor Situation) 1996

The proportion of the labor force changed to reflect the restructuring of economic activities. The work force in agriculture was reduced from 7 percent in 1960 to a near zero level in 1990; that of industry increased from 23 to 36 percent in the thirty years, and in commerce and service activities declined from 70 to 64 percent. (UNDP, 1996) Toward the end of 1970's ASEAN countries followed the same path of industrialization, and Singapore as a front runner had to shift its industries to high-tech sectors and adjusted the system of higher education to produce the human resources required for this transformation. During these years Singapore experienced labor shortage at all levels.

As the professionally qualified human resources is the only resource available in this country, the government of Singapore has vigorously pursued the reform of institutions of higher education to produce human resources in science and technology to meet the changing needs of the industries. The Next Lap, which gave the outline of national development, prescribed that university graduates were to be increased from 25,000 in 1991 to 30,000 in 1995, and polytechnic students from 28,000 to 34,000. All of such increase of students were closely linked to the needs of industry through effective consultative mechanisms between university management and industries. Also in a national science and technology plan, the proportion of science majors among the university graduates was planned to reach 25 percent of the total by 1995.

According to a recent survey (1995 NUS and NTU Graduate Employment Survey, 1996), 77 percent of the graduates were economically active. The remaining graduates were either pursuing further studies at the postgraduate level or engaged in full time national service, or undergoing some form of training pertaining to their professions. Of the economically active graduates, about 92 percent found employment, and remaining 8 percent were either working on a casual or temporary job while looking for permanent jobs. Of the employed graduates, 99 percent secured their first job within 6 months after completing their final exam, and 46 percent among them found their first job within a month or less. 75 percent of the employed found their jobs in the private sector, 13 percent in Government, and the remaining 12 percent in statutory

boards. About 60 percent of the graduates received multiple job offers.

According to the report of the survey, nearly three-fifth of the employed degree holders (59.0 percent of the total) indicated that the salaries they received were equivalent to their expectations. 27 percent of the employed graduates were dissatisfied with their remuneration. 14 percent felt that their employers paid them higher than what they had expected. 13.4 percent of employed graduates indicated that they were looking for other jobs. Some of the reasons cited by the unemployed graduates for declining jobs offered to them were, "no genuine interest in the job"(69 persons or 37.3 percent) "lack of opportunities for personal development"(38 persons or 20.5 percent) and "poor working environment(19 or 10.3 percent).

Malaysia

Malaysia has also experienced a rapid economic growth during the past decade. GDP growth rate reached a peak in 1990 at 9.5 percent and slowed down a little in 1992 and 93 to 7.8 and 8.3 respectively. With the recovery of economic activities in advanced countries and direct investment from abroad, the GDP growth rate recovered to the level of 9.2 and 9.6 percent in 1994 and 95. The number of registered employment seekers decreased and the rate of the unemployed gradually decreased year by year from 5.1 percent of 1990 to 2.8 percent of 1995.

(in thousands, %)

		1990	1991	1992	1993	1994	1995
Malaysia	GDP growth rate	9.5	8.6	7.8	8.3	9.2	9.6
	No. of employed	6,686	6,891	7,096	7,396	7,618	7,832
	No. of unemployed	54	50	42	32	27	-
	Rate of unemployment	5.1	4.3	3.7	3.0	2.9	2.8

Source: Japan Labor Research Organization, KAIGAI ROUDOU HAKUSHO (Overseas Labor Situation) 1996

Malaysia was transformed during thirty years from the country based on the production of raw materials (natural rubber, palm oil and tin) to an industrial country. From 1960 to 1990, the labor force in agriculture dropped from 63 to 27 percent, in industry it increased from 12 to 23 percent, and in the service sector from 25 up to 50 percent. (UNDP, 1996) During the transitional period, Malaysia experienced labor shortages, but it also sent out sizable work forces to Singapore and Chinese Taipei.

During the late 80's, Malaysia has taken measures to shift from the labor intensive industry to the technology intensive industry, and encouraged further commercialization of agricultural

sector. In the sixth Five Year Plan (1991-1995), it was estimated that 3,800 engineers and 9,300 engineering assistants were required for mechanical and electric/electronic industries. Several new polytechnics were planned to introduce electronics, communication and computer sciences. The intake of students to the institutions of higher education was to increase from 28,000 in 1990 to 38,700 in 1995. The seventh Five Year Plan (1996-2000) underlined the promotion of science and technology and improvement of the quality of work force of the country. Faculties of science and engineering in universities are to be expanded to produce more scientists and engineers from 38 percent of the university graduates of 1995 to 43 percent in the year 2000. Several additional institutions of higher learning are being established.

As for the transition from university education to the working life, a study of 1987 (Ungku Aziz, pp.210-212) mentioned that 68.6% of undergraduates intended to work in the government and quasi government sectors; 19.2% were prepared to work in the private sector; and 4.7% were prepared to be self employed. A large proportion of graduates from the local universities found employment in the government and quasi-government sectors, while graduates from overseas universities tended to find positions in the private sector. Many graduates found their jobs through newspaper advertisement, and a sizable graduates in the public sector obtained their jobs because of scholarship bonding. 75.6% of the university graduates was confident of getting jobs within 3 months after the completing university education; 14.5% within 3 to 6 months; and about 6.2 % expected a waiting period of more than 6 months.

Thailand

The economy of Thailand developed very rapidly during 1988 to 1990 and slowed down a little during 1991-92. From 1993 it maintained a GDP growth rate of 8.4-8.6 percent supported by expanded export, expanded level of national consumption caused by increased income, and a large public investment to strengthen infrastructure. The rate of unemployment has decreased after 1993 and was kept at a low level. Qualified professionals, engineers and technicians are

(in thousands, %)

		1990	1991	1992	1993	1994	1995
Thailand	GDP growth rate	11.6	8.1	7.6	8.4	8.6	8.6
	No. of employed	30,844	28,859	29,204	31,642	32,788	32,422
	No. of unemployed	710	1,091	1,369	1,229	1,202	1,053
	Rate of unemployment	3.9	3.1	3.0	2.6	2.6	-

Source: Japan Labor Research Organization, KAIGAI ROUDOU HAKUSHO (Overseas Labor Situation) 1996

always in short supply, and industries experienced a persisting high level of turnover of experienced workers.

The structure of economy of Thailand changed during thirty years from 1960 to 1990 as follows: The proportion of agricultural work force was reduced from 84 to 64 percent, that of industry increased from 4 to 14 percent, and in the service sector from 12 to 22 percent. (UNDP, 1996) The change was on the whole gradual during early years and became rather sudden in 1980. Especially since the mid-1980's, the economy expanded rapidly through foreign investment in the manufacturing sector and the increased exports.

Due to the resource-rich economic background, the major emphasis of the past development plans (1960-1975) had been placed on the development of infrastructure, and the human resource development has not been among the priority development issues. Thus, the rapid industrialization created a short supply of middle-level managers, such as engineers, technicians, accountants and other specialists. The government proposed to generate qualified human resources through its educational system in their 6th social and economic development plan (1987-91). During the planning period, the economy developed as planned, but the supply of human resources failed and created a serious mismatch in the supply of required expertise to the growing industries. In the 7th plan (1991-96), the training of engineers, and professionals (such as chemists, etc) as well as qualified technicians was to be promoted. By 1996, engineers at the university graduate level were to increase from 2,774 to 7,390, at the college level from 23,487 to 33,939. Particular attention is drawn to the need to provide engineers in electronics, mechanical and petro-chemistry industries.

The universities of Thailand traditionally had the role of producing qualified civil service personnel as it was the only modern sector in the predominantly agricultural land until recent years. In 1981, 53% of all university graduates found employment in the government sector. The serious mismatch in the supply of science and technology graduates has increased the starting salary of engineering graduates 100 percent in five years against the equivalent of other fields, and thus created a wide gap between the salaries offered to the new science and engineering graduates and humanities and social science graduates. Most recently efforts are being made to expand the institutional capacity or create new institutions in science and technology.

As for the unemployment of university graduates, the Labor Force Survey (1987-1992) of the National Statistical Office provides data indicating that the graduate unemployment rate came down from 13.0 percent in 1987 to 8.2 percent in 1988, 5.9 percent in 1989, 3.8 percent in 1990, 3.1 percent in 1991, and 2.8 percent in 1992. The unemployment rate of the graduates of higher education remained a little lower than that of vocational school and upper secondary school leavers. As the need for the qualified engineers and scientists as well as managers in the

expanding industries emerged rather suddenly, the social mechanism of recruitment practice has not yet been well developed. Activities related to work hunting of graduating students and placement assistance in each university are yet to be developed.

Philippines

The economic development of the country has been affected by the lasting internal political instability and by the repeated natural disasters. The Philippines experienced a minus growth of its economy in 1991 and nearly zero growth in 1992. With the arrival of the Ramos government and the return of the political stability in 1992, the economy showed a recovery supported by the increased direct investment from abroad. The growth rate of GDP was 2.1 percent in 1993, 4.4 percent in 1994 and 4.8 percent in 1995. Despite the recovery of the economy, the employment market did not improve. The rate of unemployment remained at a high level of 9.5 percent in 1994 and 9.9 percent in 1995. Also a considerable portion of the employed work only for short hours. It is estimated that incompletely employed will reach 30 percent to 40 percent of the entire working population.

(in thousands, %)

		1990	1991	1992	1993	1994	1995
Philippines	GDP growth rate	3.0	-0.6	0.3	2.1	4.4	4.8
	No. of employed	22,212	22,914	23,696	24,382	25,032	25,699
	No. of unemployed	2,032	2,716	2,594	2,495	2,622	2,824
	Rate of unemployment	8.4	10.6	9.9	9.3	9.5	9.9

Source: Japan Labor Research Organization, KAIGAI ROUDOU HAKUSHO (Overseas Labor Situation) 1996

In the case of the Philippines, the development of manufacturing industries did not absorb much labor forces who left the farmland. The composition of labor force changed during the last 30 years from 1960 as follows: the agriculture sector was reduced from 64 percent to 46 percent, while the industry sector did not absorb the excess labor force from farming areas and remained at the same level from 14 to 15 percent; the service sector increased from 22 to 39 percent. (UNDP, 1996)

Of the 24.44 million persons employed in 1993, 53 percent finished primary and secondary education while 43 percent received higher education. The bulk of elementary graduates were agricultural, animal husbandry and forestry workers, fishermen and hunters (56 percent), followed by production and related workers, transport equipment operators and laborers (21.2

percent). Most high school graduates were production and related workers, transport equipment operators and laborers (33 percent), while among college and university graduates, professional and technical and related workers comprised 42 percent. (Philippines Statistical Yearbook, 1994)

The higher educational institutions of the Philippines can be divided into two categories; degree granting universities and non-degree granting institutions (polytechnics). There are 1,181 universities and 1,276 post-secondary institutions (as of 1994) in the country. The majority, 950 universities and 985 other post-secondary institutions, are privately funded. 27.8 percent of the age group are registered in higher educational institutions. This higher education system is a result of expanded provision of opportunities for higher education to secondary school leavers, and has not been directly connected with the human resource requirement of the national industries within the national boundary.

The Philippines is the country where the outflow of trained human resources has been prominent. There are two main streams of manpower flow. The first is permanent migration, where workers leave on a more or less permanent basis, and the second is the temporary migration, or a case of contractual employment for a definite period of time with the workers intending to return to their home after the termination of the contract. Traditionally professionals, mainly medical personnel sought permanent migration to the North American continent. Recent outflow of human resources are mainly of the second category. In the 1970's, the contractual migration to the Middle East started. In 1990, 65 percent of persons under contractual employment is with the countries in the Middle East (Saudi Arabia, Kuwait, United Arab Emirates). Asian countries came second with 27 percent of workers who sought employment opportunities there. (Philippines Statistical Yearbook, 1994)

Indonesia

The growth of the economy slowed down a little during 1992-93, but started to improve after 1993 due to active public investment, increased flow of investment from abroad, higher level of individual consumption, and the increased exports stimulated by the economic recovery of Europe and USA. The statistics of the unemployed remained low at 2.7 percent in 1993 and 2.8 percent in 1994, but part-time workers whose working hours do not exceed 35 hours a week are included in the national statistics for employed persons (especially in agro-forestry industries, commercial and service industries, and many female part-time workers). It is estimated that nearly 40 percent of the employed is made up of workers in this category.

Indonesia has also changed its economic structure rather rapidly. During the 30 years from 1960 to 1990, the proportion of agricultural labor decreased from 75 to 55 percent, in industry it increased from 8 percent to 14 percent, and in the service sector from 18 percent to 31 percent.

(in thousands, %)

		1990	1991	1992	1993	1994	1995
Indonesia	GDP growth rate	7.2	7.0	6.5	6.5	7.3	-
	No. of employed	75,851	76,423	78,519	78,322	79,200	-
	No. of unemployed	1,952	2,032	2,186	2,152	2,245	-
	Rate of unemployment	2.5	2.6	2.7	2.7	2.8	-

Source: Japan Labor Research Organization, KAIGAI ROUDOU HAKUSHO (Overseas Labor Situation) 1996.

(UNDP, 1996) The proportion of agricultural labor force is expected to further decrease.

Several ambitious human resource development projects were undertaken during the Fourth Five Year Plan (1983-1988) to strengthen technical quality of the work force by establishing technical high schools and technical colleges. During the last Five Year Plan (1989-94), students of higher education were planned to increase from 8.5 percent in 1989 to 11.0 percent in 1994. During the planning period, the polytechnics were to produce 100,000 graduates and agricultural polytechnics 15,000. The current Five Year Plan (1994-98) of Indonesia underlined the development of the economy and the improvement of the quality of human resources as two national priorities. In the field of the economy, improvement of technological capacity to support the upgrading of industries, effective application of science and technology, modernization of agriculture, and improvement of commerce and service industries are underlined. In the human resource development area, an improvement of the quality of national education, the provision of diverse specialized education and training, as well as human resource development to support economic development through science and technology are emphasized. These are the areas where the national higher education system is expected to contribute.

At present there are 48 national universities and 765 private institutions of higher education. Industries in Indonesia have a strong need of qualified human resources in science and technology, but at present not many institutions are providing qualified graduates in these field either in quality or quantity. The science and engineering students registered in the national universities are only 13 percent (1988) of the total. Short term colleges (polytechnics), currently there are 26 in Indonesia, are training engineers and technicians at advanced level in civil engineering, mechanical engineering, electronics. Many multinational and bilateral enterprises retain their non-Indonesian specialists in the face of the shortage of qualified Indonesian specialists.

Australia

Following a long period of slow growth in the 1980's, GDP has expanded since 1992 due to

improvement in the world commodity prices, increased consumption and investment in housing. The GDP expanded since 1992 and reached 5.1 percent in 1994 based on increased consumption and investment on housing. The decrease of investment is slowing down the expansion in 1995. Since 1992 the rate of unemployment gradually decreased. The government is taking several measures to improve the employment situation.

(in thousands, %)

		1992	1993	1994	1995
Australia	GDP growth	2.5	3.7	5.1	3.5
	No of employed	761	765	789	822
	No of unemployed	93	86	86	77
	Rate of unemployment	10.8	9.7	9.7	8.5

Source: Japan Labor Research Organization, KAIGAI ROUDOU HAKUSHO (Overseas Labor Situation) 1996

Australia expanded higher education facilities in recent years and strengthened the training facilities in science and technology. During 1980's, the annual number of engineering course completions rose by around 40 percent, and engineering graduates have performed better in labor market than graduates in many other disciplines. During the years of 1986 to 1991 the rate of graduate unemployment was between 3.6 percent to 4.8 percent, and the average duration of unemployment was from 17.9 weeks to 37 weeks. A report on recent trends indicates that doctoral and master degree graduates experienced strong level of demand before and during the recession, while graduates and postgraduate diploma holders experienced the sharp drop of demand during the recession.. (Department of Employment, Education and Training, 1996)

The 1995 Graduate Destination Survey indicates that 63.1 percent of new bachelor degree graduates are available for full-time employment. "Of this group, almost eight in every ten (78.9%) had found a position within four months of completing their qualifications." "A little more than one in three respondents (35.8%) had full-time employment in their final year of study and were still with that employer at the time of the survey..." "The continued improvement in the economy has seen a fall in the proportion of graduates going on to further full-time study. In 1995, 21.6% of new graduates elected to continue with further full-time study, a fall from 23.6% in 1994, 24.5% in 1993, 24.7% in 1992." "While a large proportion of new graduates have always chosen to strengthen their qualifications through further study, the increase during the years of the recession may have been a reaction to the difficult labor market." "Graduate

Employment status of graduates in selected field (1985-1989)

Field of study	Numbers working full-time as a percentage of those available for full-time work in Australia (%)		
	1985	1987	1989
Engineering	64.0	79.5	97.3
Aeronautical	79.1	90.4	94.7
Chemical	90.6	87.7	95.3
Civil/Structural	88.6	94.7	93.9
Electronic/computer	84.0	94.9	95.8
Industrial	95.2	96.6	92.6
Mechanical	88.2	91.5	91.7
Metallurgy/mining	86.2	92.1	94.1
Total Engineering	87.3	91.5	94.0
Arts/humanities	77.1	79.0	77.3
Science	83.5	87.7	86.4
All fields except engineering	86.4	87.9	88.8

Source: Higher Education Division, 1996, Report No.25

Employment status of Australian 1989 graduates as at 30 April 1990 (%)

Field of Study	As a proportion of graduates either in or available for full-time work						
	Employed full-time (by sector)				Employed Unemployed part-time or casually Total		
	Gov't	Private	Education	Total			
Arts/Humanities Social Sciences/Humanities							
-Humanities/Social Sciences	31.0	33.9	11.6	78.0	11.7	10.3	100
-Language Studies	17.1	41.1	15.7	75.7	11.1	13.2	100
-Visual & Performing Arts	9.4	40.7	10.2	62.1	21.9	16.0	100
-General	25.8	25.8	13.5	75.5	12.2	12.2	100
Total;	27.2	34.8	11.8	75.7	13.0	11.3	100
All other fields	28.0	37.2	23.5	90.4	5.3	4.3	100

Source: Higher Education Division, 1996, Report No.25

destination data from New Zealand show a similar profile of rising and falling percentages continuing in full-time study.(NZVCC95, p.9)" (GDS 1995 p.8 and p.9)

The report shows that the graduates of Arts, Humanities and Social Sciences are not favored in the labor market when compared to engineering, law and medical science graduates as given in the following chart.

The report also indicates that a sizable percentage of Arts and Humanities graduates found employment in the private sector contrary to the traditional perception.

Japan

After 1992, the annual growth rate of Japan came down to a very low level, and the economy experienced a prolonged recession. Pressed by global monetary policy to keep the Yen at a higher value, business concerns made a serious effort to restructure their activities for survival, and transferred a considerable portion of their manufacturing capacities to Southeast Asia and East Asian countries to in search of less expensive labor costs. This led to an increase of unemployment rate inside the country as seen in the chart.

	1990	1991	1992	1993	1994	1995
GDP growth	5.1	4.0	1.1	0.1	0.5	-
No of employed	62,490	63,690	64,360	64,450	64,530	64,570
No of unemployed	1,340	1,360	1,420	1,660	1,920	2,100
Rate of unemployment	2.1	2.1	2.2	2.5	2.9	3.2

Source: Ministry of Labor, Japan, Handbook of Labor Statistics 1996

The major emphasis of higher education policy of Japan during the last decade was to strengthen the science and technology components of higher education, particularly to strengthen the research capacities in these field. Several additional institutions of higher education (including postgraduate only universities) were established in recent years to increase research and training capacities in science and technology, especially in the areas of high technology. Among major national universities, the expansion of student intake of the past thirty years was mainly concentrated in the field of technology. As a result, there is no serious difference in the difficulty of the job search as well as in the starting salaries of humanities/social science graduates and science and technology graduates. The most recent demand of industries on university education are more on the capacity to work in an international environment and the high quality of research ability of the graduates.

Reflecting the slow growth of economy of the past four years, university graduates are

currently experiencing difficulty in finding suitable work to start their professional careers. Unlike the practices in other countries where the job hunting is conducted mainly toward the end of the period of education and after graduation, recruitment starts early in the last year of undergraduate and post-graduate education in Japan. By the end of the first semester, most of the reputed companies have nearly finished the major intake of their recruits for the coming year. At the end of March 1996, which is the end of the academic year 1995-96, 93.4 percent of university graduates (excluding those who advanced to the post graduate courses) found work, so did 90.9 percent of college graduates. This situation has lasted four years. Science and technology graduates are having an advantage in receiving work offers as shown below. At the same period, 96.4 percent of high school graduates who sought immediate employment found jobs.

Graduating students and employment at graduation (March 1996)

	graduates seeking employment	graduates who found work
Universities (total)	71.8%	93.4%
National and public univ.	55.1%	92.2%
Private universities	80.2%	93.8%
Women's universities	82.2%	93.7%
Colleges (2 years of study)	77.8%	90.9%
Higher Tech. Schools	67.5%	100.0%
Total	72.2%	93.3%

Percentage of graduating students who found the work at graduation (March 1996)

	Humanities, Social Sciences and Education	Science and Technology.
National/public univ. graduates	90.9%	94.7%
Private university graduates	93.8%	97.6%
Total	92.9%	96.6%

Source: Ministry of Education, DAIGAKU TO GAKUSEI No.372, 1996, page47

Issues which influence graduate employment

Higher education for the mass and the quality of training

As indicated in the preceding statements, many Asian countries came to have an extensive higher education system. This means that a considerable portion of the young age group who

seek employment have degrees and diplomas of some sort. In Japan, over 60 percent of the 18 years old are registered in institutions of higher education. One out of every three has a degree and a further one has a diploma of a higher educational institution mainly in some technical fields. A similar pattern is followed in Korea, Indonesia, Thailand, and in the Philippines. This poses a question about the social value of a university degree.

In a country where the elitist notion of university still persists, the university remains a key national institution to ensure the quality of research and quality of training to selected candidates. Since the university bears an important function of being a center of excellence in scientific research and training, the selection of the candidates is vigorous, and the level of research must be maintained at a high international level. Singapore and Malaysia place high priority on safeguarding the quality of education and research in their universities over the considerations of expanding the opportunities of higher education to the mass.

When the access to higher education and the chances of success in the professional career are limited inside the country, parents have now freedom to send their children abroad for higher education, and the graduates tend to find a professional career abroad. For Singapore, 25 percent of the age group received higher education abroad during the years 1985-92, for Malaysia 28.3 percent, for Hong Kong 50.2 percent. For countries where the capacity of higher education was expanded, the percentage of students registered in universities abroad remained very small. The figures for Korea remained 2.7 percent, Thailand 1.1 percent, Philippines 0.3 percent, for Indonesia 1.0 percent, and for China 5.7 percent.

The two universities in Singapore, NUS and NTU, however, are not the elitist universities of the past ivory tower type which remained aloof over the business and industry. The universities maintain close contacts and dialogue with business and industry at the university management level as well as at the laboratory and specialist levels, and are made to respond to the needs of the community very effectively. Students in the professional degree courses are required to have from 10 to 24 weeks of actual work experiences in industry as a graduate requirement. The graduates are thus tailor-made to fit the needs of the working world. The system almost gives an impression of being a production line of Toyota's "Just-in-time" system, which is a mechanism to deliver what is needed, when it is needed, and exactly in the amount needed.

Information and communication technologies and graduate employment

Development in labor saving technologies on the shop floor contributed to reduce the labor cost in many manufacturing industries. The service sector so far remained as the principal sector which absorbed a larger portion of graduates. Development of information and communication technologies and their increased application in office work and sales activities are

giving a general feeling of labor saturation in the service sector as well. Many enterprises are vigorously reducing excess personnel in traditional office work and simplifying hierarchical structures with the application of information technologies. As the majority of university graduates are usually employed for the works in the office, this aspect is clearly influencing the trend in graduate employment, and in the hardship of obtaining a good job for the graduates in Humanities and Social Sciences.

English as the common language of communication of the region

Recently enterprises in Japan are stressing specialized knowledge and capability to work in an international environment as a key element in recruiting graduates. In 1996 over 60 percent of the enterprises underlined the importance of this requirement in the Employment Management Survey of the Ministry of Labor. (Japan Labor Research Organization, Roudou Hakusho, 1996, page 149) The ability to communicate in English has become very important for the young managers and engineers who enter the job market in NIEs and ASEAN countries where English has not been the medium of instruction. In many of such countries, multinational and joint venture business constitute the mainstream of the job market for young managers and engineers. For countries like Japan, Korea, Chinese Taipei, Thailand and Indonesia, a good command of English is an asset for graduate job seekers as business activities have become increasingly internationalized by the transfer of manufacturing facilities to other countries in the region.

Other sought after qualifications were creativity and planning capacity as well as strong motivation for professional careers. This trend should be understood in the context of progress of the use of information technologies and reduction of simple managerial work. This pattern will be shared by many of the countries in the region.

Concluding remarks

The target of compulsory schooling for every child was basically attained in the countries of Asia and the Pacific by the early 80's. Then came an immediate pressure for expanded educational opportunities at the secondary level. Governmental inability to provide sufficient facilities of secondary education was corrected by the emerging private initiatives. A similar pattern was repeated in the expansion of higher education. So far the expanded product of the education system has found its way into the expanding modern sector of economy.

Originally many countries of Asia and the Pacific had established their higher education system to suit their traditional economic structure. The graduates were to become officials, medical doctors and agro-engineers. For expanding national civil service and for education

system, the liberal art graduates were in the main stream. The arrival of multinational and bilateral joint ventures to these countries in search of the inexpensive labor costs created a sudden need of a large number of middle level managers and engineers with a strong ability to communicate in English, as an international language of communication. For example, in Thailand, 15 percent of the total business activities are said to be undertaken by multinational corporations, 70 percent by bilateral joint ventures and only 15 percent are in the hand of national business organizations. So a few new universities of science and technology were established with a corporate type management system to ensure the internationally competitive quality in research and training. This new policy may be shared by other countries of the region, and must have set a strong international profile on the university graduates.

During the last decade, everything in the region has been in an expanding mode; national economic activities, national budgets, per capita income levels, school attendance rates, employment opportunities, children receiving better education than their parents, children earning better than their parents, etc. Educational system reform and restructuring of economic systems were also conducted in this expanding mode. Graduates with a degree were in great demand in the expanding industries. As a result, the quality of a degree and the validity of the training received at universities to the professional working life has not been paid sufficient attention in the recruitment process. Industry also was rather slow to develop a mechanism to rigorously screen the capacity of the new recruits. Only recently in some countries has the quality of university education, that is the quality of the degree, started to be examined in the light of increasing unemployment and the rising cost of higher education.

The traditional recruitment procedure for new graduates known in Japan has shown an indication of change in the recent years to accommodate graduates from foreign universities in the Autumn, and to an open recruitment for other mid-career specialists although the year. This change can be interpreted as an adjustment of the standard practice known outside the country. This is a shift to the recruitment on the proven professional ability of the candidates rather than on the potentiality or the trainability of the candidates of the past, and an adjustment to the expected mobility of personnel in the business world.

It is generally observed that studies in Art and Humanities are reducing its share in the job market. The gradual shift of employment of graduates in Art and Humanities from the public services, including education, to the private sector appears to hide an expanding need of the private sector for qualified professionals in the works related to the information technology. But it is difficult to identify the degree of this change.

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アジア太平洋諸国大学卒業者の就業について

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世界を各地域に区分したとき、西欧、アラブ諸国、ラテンアメリカ諸国、サハラ以南のアフリカ諸国等それぞれの地域が経済発展段階の類似性、歴史的背景の共通性、公用語の共有等により強い共通性を持っているために、その地域内の教育を論じる場合でも、西欧諸国の教育、アラブ諸国の教育、ラテンアメリカ諸国の教育というように類型化した概念を持つことが可能であった。唯一アジア太平洋地域と称される膨大な地域は、その社会的、文化的多様性のためにこのような類型化を拒絶してきた。この地域は東アジア地域、東南アジア地域、南アジア地域、太平洋地域、中央及び西アジア地域というそれぞれ独自性を持つ地域の複合体であるために、その地域の高等教育の共通問題を取り上げることが難しかったのである。ところが近年における経済活動の展開とグローバルイゼーションの結果として、職業人養成の教育と高等教育の水準の確保の動きが、太平洋沿岸地域の高等教育を論じる上での共通の基盤として表面化してきたといえる。この地域はマルチナショナルや合弁企業の活動が急速に進展した地域であり、その国際化した企業活動のニーズに対応するものとしての高等教育修了者の就業事情を把握することが、この地域の高等教育の国際化の流れを理解する手がかりになると考えられる。

限られた情報の制約で全体像が見えにくいだが、アジア太平洋地域の若干の国の高等教育修了者の就業状態や、産業界の人的需要への対応を通じて高等教育の全体の流れを見ようとした。全体としては、高等教育機関を専門職業や近代産業部門への準備段階とする認識が一般化し、拡大した高等教育への進学が、国家が従来提供してきた国立大学の枠をはみ出て私学の分野に拡大している。各国が類似した近代産業部門をもつにいたり、製造部門での理工系分野の人的需要が各国の高等教育政策を主導しているということがいえる。その意味で、この地域での大学間の学生交流、取得単位の互換性等の基盤が形成されてきている。

現今の各国の就業統計は、製造産業を中心とした従来の職業分類の統計であり、急速に変化しているサービス産業の内容に対応するものではない。特に人文・社会科学系統の実際の人的需要への対応を見ることが難しい。人文・社会科学系統の卒業生の就業については、従来の主要就職先であった公共部門から民間部門への流れが目立つものの、情報部門への人材の流れの実態は見えてこない。その背後に、訓練されるべき人材としてのnon-professional degreeを持つ人材から、独立した専門家としてのprofessional degreeを持つ卒業生へのシフトがおきていると思われるが、統計的には、現在この変化を把握するだけの情報がない。

この地域が相互により緊密に結びついた経済圏になったために、専門的職業活動に必要な共通語としての英語能力が重視され、大学における職業人の訓練の一環として習得科目に浮上し、これが

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非英語圏各国に共通した流れになっている。これはまたこの地域の大学相互間の国際交流を推し進める上で重要なファクターになっている。

大学の今後の形態を考える上で、この地域における大学と産業社会の需要の結びつき、情報・技術の進展による社会変化に対応することが今までより重要になると考えられる。