The Labor Markets: An Overview

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I. INTRODUCTION

1.1 Objectives and Scope

This article provides an overview of the aggregate labor market of Thailand, covering its structure or composition, dimension and trends during 1996-2000. The period extends from the last of the boom years of the Thai economy before its crash in 1997, the crisis years that followed, and up to what appears to be the beginning of a slow economic recovery.

The data on employment in Thailand is obtained basically from a series of sample surveys (labor force surveys—LFSs) of the economically active population. This is supplemented with other secondary socio-economic data from both official and unofficial sources. The LFSs are carried out by the National Statistical Office (NSO) on a quarterly basis. In addition to the LFS and socio-economic data, the present study also makes use of information gathered through informal discussions with key informants, in order to gain further insight into the dynamics of the labor market, particularly during the economic crisis.

1.2 Seasonality and Employment Data

It should be emphasized at the outset that employment in Thailand is highly seasonal. The size and pattern of employment and unemployment vary from season to season, and thus a single set of labor force data from one season would not necessarily represent the employment pattern in another season. This fact should be always borne in mind when using and interpreting Thai employment data. To capture the seasonal variations, LFSs in Thailand are conducted on a quarterly basis, viz., in February and May, which correspond to the dry or slack agricultural season, and in August and December, which are, respectively, the wet (planting) and harvesting months.[1]

For reasons of space and simplicity, this study uses data for two major seasons, the first round (February) to represent the dry or slack season and the third round (August) to represent the wet or peak agricultural season. In some cases, data for only the wet season (Round 3) — when the total employment is at its peak — is presented. Data from these two major survey rounds also help reveal several other aspects of seasonal employment in Thailand.

II. LABOR FORCE

2.1 Population, Labor Force and Employment

The population of Thailand was a little over 62 million in 2000. The labor force, estimated at approximately 34 million (54.4% of the population) in the same year, was growing at declining rates (an annual average of 3.0% during 1980-1985, 2.9% during 1986-1990 and 1.5% during 1991-1995) mainly because of declining birth rates. With the population growth rate at about 1 percent per annum during 1995-2000, the labor force grew slowly from 32.7 million in 1996 to 34 million in August 2000, with an annual growth rate of 0.99 percent (Table 1).[2]

The size of the labor force was the largest in August 2000 (33.97 million), back to the level in the peak season of 1997 when the economy started to collapse. The slack-season labor force, on the other hand, steadily increased from 31.9 million in 1996 to nearly 33 million in 2000.

Generally, employment in the peak agricultural season is about 2 million or around 10 percent more than that in the dry season. During 1993-1999, employment was the highest in 1997, in both seasons. The difference between the employment in the two seasons, however, seems to have been decreasing and was lowest in 1999, though it increased again in 2000.

In 2000, peak-season employment was 33 million, or about 2.6 million more than in the slack season. This was a large increase from the average peak-season level of the previous four years, and close to the level in 1997. Slack-season employment demonstrated a similar pattern and was the highest in 2000, back to the level in 1997.

The difference in the size of the labor force between the slack and the peak seasons was not as high as the difference between the employment levels for the two seasons. The main reason for this is the different size of the "seasonally inactive labor force" which stayed out of the labor force during the slack season.

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Table 1 Population by Work Status, 1996-2000

	1996		1997		1998		1999		2000	
	R1	R3	R1	R3	R1	R3	R1	R3	R1	R3
	'000s									
Total population	59,750.4	60,045.3	60,350.6	60,648.9	60,949.0	61,248.4	61,551.2	61,856.7	62,192.1	62,481.4
1. Total labor force	31,898.4	32,750.0	32,000.2	33,560.7	32,143.1	33,352.9	32,810.2	33,210.2	32,994.3	33,973.0
1.1 Current labor force	30,740.5	32,586.3	30,964.2	33,454.9	30,892.2	33,275.9	31,740.3	33,073.9	31,838.5	33,813.7
1.1.1 Employed	30,099.2	32,232.3	30,266.3	33,162.3	29,412.9	32,138.0	30,024.5	32,087.1	30,420.5	33,001.0
- At work	28,088.3	31,760.4	28,308.9	32,714.5	26,958.5	31,460.9	27,675.6	31,209.7	28,089.0	32,197.5
- With job but not at work	2,010.8	471.9	1,957.4	447.8	2,454.4	677.0	2,348.9	877.4	2,331.4	803.5
1.1.2 Unemployed	641.3	353.9	697.8	292.5	1,479.3	1,137.9	1,715.7	985.7	1,418.0	812.6
- Looking for work	119.6	110.1	179.5	96.4	402.8	476.2	475.8	326.0	355.3	283.7
- Not looking/available for work	521.6	243.7	518.3	196.1	1,076.5	661.6	1,239.8	659.7	1,062.7	528.8
1.2 Seasonally inactive labor force	1,157.8	163.7	1,035.9	105.7	1,250.8	76.9	1,069.8	137.2	1,155.8	159.3
2. Persons not in labor force	13,744.5	13,119.4	14,334.9	13,238.0	14,888.6	13,912.9	14,923.8	14,763.7	15,468.1	14,739.1
- Unpaid family workers	4,007.4	3,539.3	4,195.0	3,450.1	4,341.2	3,589.7	4,217.1	3,723.7	4,343.5	3,485.1
- Students	5,472.8	5,518.9	5,811.0	5,580.4	6,089.9	5,912.5	6,260.2	6,176.6	6,383.1	6,228.4
- Too young/old/incapable of work	3,379.0	3,377.4	3,463.0	3,517.1	3,660.6	3,623.7	3,694.0	3,799.0	3,820.2	3,854.0
- Other	885.2	683.8	865.7	690.3	796.7	786.8	752.3	1,064.2	921.1	1,171.4
3. Persons under 13 years of age	14,107.4	14,175.8	14,015.4	13,850.2	13,917.2	13,982.5	13,817.1	13,882.7	13,729.6	13,769.2
	Percentage									
Total population	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total labor force	53.4	54.5	53.0	55.3	52.7	54.5	53.3	53.7	53.1	54.4
Current labor force	51.4	54.3	51.3	55.2	50.7	54.3	51.6	53.5	51.2	54.1
Employed	50.4	53.7	50.2	54.7	48.3	52.5	48.8	51.9	48.9	52.8
- At work	47.0	52.9	46.9	53.9	44.2	51.4	45.0	50.5	45.2	51.5
- With job but not at work	3.4	0.8	3.2	0.7	4.0	1.1	3.8	1.4	3.7	1.3
Unemployed	1.1	0.6	1.2	0.5	2.4	1.9	2.8	1.6	2.3	1.3
- Looking for work	0.2	0.2	0.3	0.2	0.7	0.8	0.8	0.5	0.6	0.5
- Not looking/available for work	0.9	0.4	0.9	0.3	1.8	1.1	2.0	1.1	1.7	0.8
Seasonally inactive labor force	1.9	0.3	1.7	0.2	2.1	0.1	1.7	0.2	1.9	0.3
Persons not in labor force	23.0	21.8	23.8	21.8	24.4	22.7	24.2	23.9	24.9	23.6
- Unpaid family workers	6.7	5.9	7.0	5.7	7.1	5.9	6.9	6.0	7.0	5.6
- Students	9.2	9.2	9.6	9.2	10.0	9.7	10.2	10.0	10.3	10.0
- Too young/old/incapable of work	5.7	5.6	5.7	5.8	6.0	5.9	6.0	6.1	6.1	6.2
- Other	1.5	1.1	1.4	1.1	1.3	1.3	1.2	1.7	1.5	1.9
Persons under 13 years of age	23.6	23.6	23.2	22.8	22.8	22.8	22.4	22.4	22.1	22.0
Current unemployment (1.1.2/1.1)	2.1	1.1	2.3	0.9	4.8	3.4	5.4	3.0	4.5	2.4
Total unemployment ((1.1.2+1.2)/1)	5.6	1.6	5.4	1.2	8.5	3.6	8.5	3.4	7.8	2.9

Notes: (a) R1 = February; R3 = August; (b) Total labor force = Current labor force+Seasonally inactive labor force.
Source: Labor Force Survey Report, National Statistical Office, various years.

About 2.4 percent of the labor force was unemployed in the peak season and 4.5 percent in the slack season of 2000. If the seasonally inactive labor force was counted as being unemployed, the proportion of the unemployed would become 2.9 percent and 7.8 percent in the high and the slack seasons, respectively.

The remaining 28.5 million people (45.6% of the population) were not in the labor force. Of these, 13.8 million were less than 13 years of age and 14.7 million were 13 and over (working age).[3] The latter included 6.2 million students (41.9%), 3.5 million family (household) workers, and 3.8 million who were too old to work.

2.2 Labor Force Participation Rate

Because the patterns were similar for the data of Round 1 and Round 3 (with the rates for Round 3 generally a little higher) only the rates for Round 3 are presented. The male participation rate for the group aged 25 to 59 was relatively high (90% or more in most cases) and stable from 1989 to 1997. It then declined during 1997- 1999. The rates for males in the 15- 19 and 20-24 age groups had been decreasing slowly, mainly due to the expansion of the education system, while the rate for the 13-14 age group was decreasing and approaching zero (becoming less than 10%) in 1998 and 1999. This was likely to be due to the raising of the minimum working age to 15 years as stipulated by the 1998 Labor Protection Act, as well as increasing school enrolment.[4]

The participation rates of Thai women had been relatively high, especially for those in the 20-49 age group (more than 80% from 1989 to 1990). The rates for this age group declined very slowly to the level of 70-80 percent in 1996, and then declined further, especially for the 20-24 age-group, to 62.5 percent in 1999. The participation rate for the group aged 15-19 decreased

markedly from 72.2 percent in 1989 to 26.3 percent in 1999. Similar to the aforementioned decline in the male group aged 13-14, this decline too could be attributed to the expansion of educational opportunities.

In general, the labor force participation rates for all age groups and both sexes demonstrate a declining trend throughout the last five-year period. The economic crisis of 1997 did not seem to have a strong impact on participation rates, particularly during the high season, although there was some adjustment in the labor supply and employment in some economic sectors and along the urban-rural axis. For example, labor force in the construction sector decreased while there was an increase in other sectors during the period of crisis. The crisis contributed to the expansion of the male labor force in urban areas. The labor force in the Bangkok Metropolitan Area increased the most. Regionally, the North was the only region to register a decrease in the labor force during the crisis. The impacts of the crisis on the Thai labor force indicate that the lower the education level and the younger the workers, the larger the decline in employment (Srawooth et al. 2001, 166).

2.3 Education Levels of the Labor Force

In 2000, almost 70 percent of the labor force had only primary education, and about 10 percent had university education. This was, however, an improvement from 1996, for both levels (Table 2). During 1990-1998, the transition rate from the elementary to the lower-secondary level was about 80 percent, from lower-secondary to upper-secondary about 50 percent and from lower-secondary to vocational education 42.5 percent. In 1993, the labor force participation rate for the population not in school was the lowest (59.3%) for the population with vocational education and the highest (91.1%) for those with university education.

2.4 Unemployment and Underemployment

Unemployment

Unemployment measurement in Thailand is based on LFSs, partly because there are no unemployment insurance and unemployment registration schemes, which would normally give a fair estimate of unemployment in a country. The LFS defines the unemployed as "persons, 13 years of age and over who, during the survey week did not work even for one hour, had no jobs, business enterprises or farms of their own from which they were temporarily absent, but were available for work." The unemployed consist of those who had been looking for work and those who had not been looking for work due to illness or because they believed that no suitable work was available. This group also included those waiting either to take up a new job, or for the agricultural season to begin, or for some other reasons.

Unemployment in Thailand had been generally low, around 1 percent, particularly prior to the 1997 crisis. There are several reasons for the low open unemployment rate. First, a large proportion of the labor force comprises own-account workers (self-employed) and unpaid family workers, mainly in agriculture. According to the LFSs, self-employed and unpaid family workers accounted for 58.7 percent of the total employment in 1999. Second, as in many other developing economies, the informal sector plays an important role in providing employment opportunities for the labor force. Third, Thailand does not yet have unemployment insurance system, which would encourage workers to report their unemployment.

In 2000, unemployment was approximately 1.4 million (or 4.5% of the current labor force) and 0.81 million (2.4%) in the slack and peak seasons,

Table 2 Employment by Education, 1995-1999

Education Level	1995		1996		1997		1998		1999		2000	
	R1 (Feb)	R3 (Aug)	R1 (Feb)	R3 (Aug)	R1 (Feb)	R3 (Aug)	R1 (Feb)	R3 (Aug)	R1 (Feb)	R3 (Aug)	R1 (Feb)	R3 (Aug)
	(million people)											
Total Employment	29.06	32.58	30.10	32.23	30.27	33.16	29.41	32.14	30.02	32.09	30.42	33.00
Upper elemen. and Lower [a/]	22.27	25.40	23.04	24.77	22.61	24.94	20.95	22.95	21.01	22.39	20.80	22.58
Lower Secondary	2.65	2.90	2.90	3.23	3.02	3.37	3.38	3.86	3.61	3.84	3.76	4.18
Upper sec. & Vocational	1.85	1.98	1.84	1.88	2.07	2.17	2.23	2.36	2.35	2.55	2.62	2.83
University	2.25	2.29	2.29	2.34	2.54	2.68	2.85	2.96	3.02	3.29	3.22	3.39
Unknown	0.03	0.01	0.01	0.01	0.02	0.01	0.01	0.02	0.03	0.02	0.01	0.01
	(Percentage)											
Total Employment	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Upper elemen. and Lower	76.7	78.0	76.6	76.9	74.7	75.2	71.2	71.4	70.0	69.8	68.4	68.4
Lower Secondary	9.1	8.9	9.6	10.0	10.0	10.1	11.5	12.0	12.0	12.0	12.4	12.7
Upper sec. & Vocational	6.4	6.1	6.1	5.8	6.8	6.6	7.6	7.4	7.8	7.9	8.62	8.59
University	7.7	7.0	7.6	7.3	8.4	8.1	9.7	9.2	10.1	10.3	10.6	10.3
Unknown	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.05	0.02

Note: a/ Upper elementary = grade 5-6; lower elementary = grade 4 and below.

Source: Calculated from LFS data (NSO).

respectively (Table 1). The 1997 financial crisis caused unemployment to increase significantly. As can be seen from Table 1, the slack-season unemployment rate jumped from 2.1 percent of the current labor force in 1996 to 4.8 percent in 1998 and 5.4 percent in 1999. It should be noted that the number of unemployed persons is relatively higher in the slack season than in the peak agricultural season.

The age profile of the unemployed in 1999 indicates that during the slack season the largest proportion was in the 20-24 age group (26.5%), followed by the 25-29 (19.2%), and 15-19 (15.5%) age groups. During the wet season, the 20-24-year-olds still dominated the unemployed, but were followed by those in the younger age group (15-19) and then those aged 25-29. By sex, in 1999 the ratio of male unemployment was higher than that of female unemployment in both seasons. Before the crisis, however, the ratio of female unemployment was slightly higher than that of male unemployment in the slack season. In the peak season, the ratio of male unemployment was consistently higher than for females, both before and after the crisis.

When classified by education, 46.9 percent of the unemployed had elementary education or less in 2000, a considerable decrease from 62.1 percent in 1996. On the other hand, there was an increase in the proportion of the unemployed with lower secondary, upper secondary or vocational, and university education. During the slack season, the unemployment rate for those with only upper elementary education was relatively high, probably because they were largely from the agricultural sector and were waiting for the next farming season (Srawooth et al. 2001, 143). It was also noteworthy that the proportion of the university-educated unemployed peaked in Round 3 of 1997 (20.6%), declined to 12.9 percent in 1999, and increased again in 2000 to 19.2 percent.

Underemployment

As mentioned above, unemployment in Thailand has been generally low except since the 1997 crisis, and one of the major reasons is that a substantial number of those considered employed are underemployed, or work less than they could or wished. Officially, the underemployed are defined by NSO as those who work less than 35 hours per week during the week of survey. In this study, however, underemployment is arbitrarily defined to include those who work less than 20 hours per week, in order to include only those who were really in need of more work.[5] With this definition, the number of the underemployed dramatically increased from 580,700 in 1996 to 938,400 in 1998, 953,900 in 1999, and 982,700 in 2000. This increase could be attributed to the impact of the Asian financial crisis which caused wide-spread reduction of work hours (Table 3).

Generally, underemployment did not show seasonality. There was no trend or direction in the underemployment figures between 1995 and 1999. In 1995, 1997 and 1999, unemployment was greater in the slack season than in the peak season, while in 1996 and 1998 it was the other way around. In 1999, the number of the underemployed was approximately 862,700 and 953,900 in the slack and peak seasons, respectively. This level indicated a significant increase from the levels during 1995-1997. It was, however, less than the level in 1998 (Srawooth et al. 2001, 144). It was also observed that workers in the younger and older age-groups accounted for a considerable part of the underemployed. The underemployment rates were also larger for the female workforce, especially in the young age groups. Thus those aged 15- 19 accounted for 23.1 percent of the total underemployment in the slack season and 22.9 percent in the peak season. This young group was followed by the older age group of 40-49 (13.8% in the slack season and 12.3% in the peak season), and then the 50-59 age-group (11.8% in the slack season and 14.0% in the peak season).

When classified by education, the majority of the underemployed had completed only elementary grades or less, which was consistent with the fact that most of the underemployed were young. In 1999, during the slack season, the percentage of the underemployed with elementary education and lower was as high as 73.2 percent (697,800 individuals), and was followed by those with lower secondary education at 17.7 percent (469,300), and upper secondary and vocational education at 7.1 percent (68,200). It should be noted that there had been no significant change in the educational pattern of underemployment, except for the significant increase (as high as 200,000) from 1995 onward in the number of the

Table 3 Underemployment* by Age and Sex, 1996-2000 (Thousand people)

	1996			1997			1998			1999			2000		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
13-19	91.54	87.33	178.88	140.14	121.44	261.58	191.48	169.15	360.63	151.81	154.12	305.93	179.14	175.54	354.68
20-29	50.07	38.01	88.08	41.08	53.74	94.82	81.24	82.28	163.51	84.85	67.69	152.54	73.20	79.65	152.85
30-39	40.66	55.56	96.22	55.79	59.46	115.25	71.90	56.92	128.82	81.80	69.32	151.12	60.17	74.27	134.44
40-59	68.98	85.75	154.73	72.30	99.81	172.11	90.42	121.24	211.66	113.84	137.35	251.19	112.64	133.06	245.70
60 and up	40.24	22.54	62.78	37.69	39.91	77.60	38.51	35.28	73.79	59.39	33.70	93.09	57.67	37.36	95.03
Total	291.49	289.20	580.69	347.00	374.35	721.36	473.54	464.87	938.41	491.69	462.19	953.87	482.82	499.87	982.69

Note: *Working less than 20 hours per week.

Source: NSO, Labor Force Surveys, (Round 3) various years.

underemployed with elementary education, both in the slack and the peak seasons. In 2000, workers with elementary education or lower accounted for 70 percent of the peak-season underemployment.

Among the economic sectors, agriculture accounted for most of the underemployment — about 796,300 persons or 81.2 percent of the total peak-season underemployment in 2000. This was significantly high when compared to the levels in 1995 (277,100) or 1996 (435,800) for the same season. Of the other economic sectors, commerce and services, respectively, accounted for 84,600 and 52,800 underemployed.

During the crisis, underemployment increased in every sector except public utilities (electric, gas and water supply), in which it declined slightly (Srawooth et al. 2001, 166-167). A significant increase was evident in the mining and manufacturing sector, while the smallest growth was in the agricultural sector. Underemployment increased in every occupational group, though the increase varied widely, from the largest increment in the clerical (office workers) group to the smallest among farmers and fishermen.

The effect of the crisis in increasing under-employment was roughly equal in both the male and female workforce, but uneven between the rural and urban groups. While underemployment in rural areas rose by 55 to 70 percent, it increased much more sharply in urban areas — by a hefty 350 to 760 percent. The impact of the crisis on underemployment was also unevenly distributed across the regions. Bangkok had the largest increase in underemployment while the smallest increase was in the North. However, the crisis-induced underemployment in Bangkok was found to be of a shorter duration.

Unlike in the case of the other indicators, it was not the less educated or the young workers who suffered the worst impacts of the crisis-led underemployment. Instead, the largest expansion of underemployment occurred among the university-educated, and those in the 25-29 and 35-39 age groups.

III. EMPLOYMENT STRUCTURE AND TRENDS

3.1 Employment by Age, Sex, Work Status and Education

In 2000, the proportion of female workers to male workers was 45:55. The average Thai worker is middle aged. The majority of workers were in the 40-59 age group. They accounted for 34.8 percent of employment. The second largest group was in the 30-39 age bracket, accounting for 27.3 percent of the total employment.

In general, during 1996-2000, the majority of the workforce consisted of self-employed workers, unpaid family workers and private employees, accounting for 30.1 percent, 26.9 percent and 31.4 percent, respectively. The proportion of unpaid family workers has started to decline since the crisis, from 30.3 percent in 1997 to 26.9 percent in 2000. The number of private employees declined first from 30.3 percent in 1997 to 28.1 percent in 1998 but bounced back in 1999 and 2000.

The trend during 1995 to 2000 indicates an improvement in the educational levels of workers. The proportion of those with only elementary education or lower decreased from 78 percent in 1995 to 68.4 percent in 2000, while the proportion of those with university education increased from 7.0 percent in 1995 to 10.3 percent in 2000. Similarly, the proportion of workers with lower secondary education increased from 8.9 percent to 12.7 percent, and of those with upper secondary education increased from 6.1 percent to 8.6 percent, during the same period.

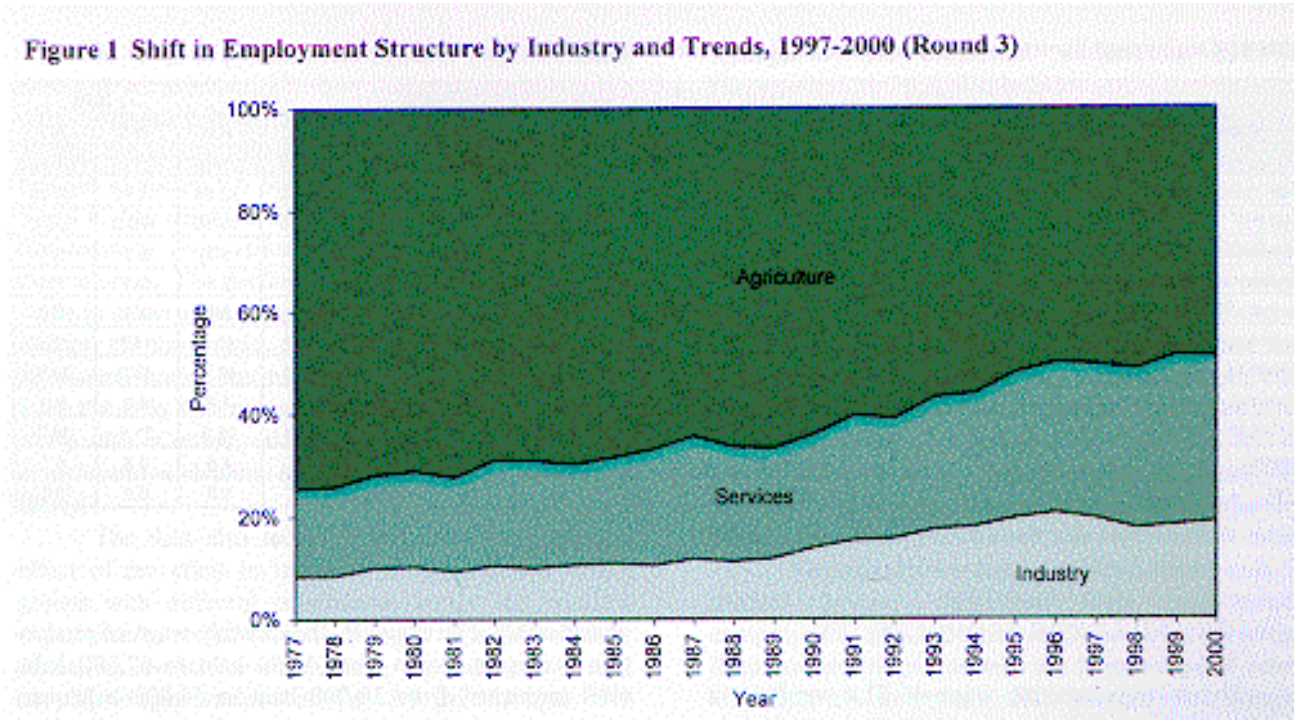
3.2 Employment Structure by Industry and Trends

In the peak season of 2000, almost half of total employment (48.5%) was in agriculture. Of the remaining, 15.2 percent were in services other than commerce, 14.8 percent in commerce, 13.7 percent in manufacturing, and 4 percent in construction. In the dry or slack season, the proportion of employment in agriculture decreased to 41.8 percent, while that in the non-agricultural sectors mostly increased, with the share of services reaching 16.3 percent, of commerce 16.1 percent, manufacturing 16.2 percent, and construction 5.2 percent.

In spite of the economic crisis, employment in manufacturing remained relatively stable during 1996-2000, accounting, on average, for about 16 to 17 percent of total employment in the first half of the year (slack season) and around 13 percent in the second half (high season). Employment in services and construction was less stable during this period. Employment in services increased from 14.3 percent in 1995 to 16.3 percent in 1999 in the first half of the year, and from 12.7 percent in 1995 to 15.2 percent in 1999 in the second half. This phenomenon reflects the capacity of the service sector to absorb excess labor during an economic downturn. The construction sector, on the other hand, saw a decline in employment during 1996-1999, from 10.4 percent to 5.2 percent in the slack season and from 6.7 percent to 4.0 percent during the peak season.

Long-term (1977-2000) employment trends for the three broad economic sectors[6] are illustrated in Figure 1. They reflect the nature of the changes in economic activity — a shift away from agricultural and toward industrial and service sector employment in Thailand during the past two decades. Thus, the share of agricultural employment significantly decreased from 74.4 percent to 48.5 percent, while industrial employment increased from 8.3 percent to 18.4 percent and service sector employment from 17.2 percent to 33.1 percent. The speed of change was relatively slow for employment in agriculture with a growth rate of approximately 0.7 percent *per annum* from 1981 to 1996 (Srawooth and Kulaya 1998, Table 9). During this period, before the crisis, employment in industry showed

Figure 1 Shift in Employment Structure by Industry and Trends, 1997-2000 (Round 3)



Source: National Statistical Office.

an increasing trend, with an annual growth rate of 6.2 percent and an annual growth rate of GDP per worker of 3.8 percent. During the economic crisis, growth in manufacturing employment showed a small decline. On the other hand, employment in services showed a consistently increasing trend with an average rate of 4.6 percent, but with a lower annual growth rate of GDP per worker of only 0.8 percent (Srawooth and Kulaya 1998).

3.3 Employment Structure by Occupation and Trends

The occupational composition of Thailand has been improving consistent with economic development. Data from censuses and LFSs indicated that the proportion of high-level manpower such as professionals, technical workers and administrative, executive and managerial workers increased over time: from 2.9 percent in 1980 to 4.4 percent during the 7th Plan (1992-1996), and 5.7 percent from 1997 to 1999 for the professional category. The proportion of administrative manpower increased from 1.9 percent in 1980 to 2.6 percent during the 1997-99 period. In 1999, professional and technical workers accounted for 6.8 percent and 6.3 percent of the total employment in February and August, respectively (Table 4).

With a declining trend of employment in the agricultural sector, the proportion of farmers and related workers decreased from 72.5 percent in 1980 to 50.2 percent during the 1997-99 period. In 1999, the proportions of employment in agriculture during the slack and peak seasons, respectively, were 41.9 percent and 48.7 percent in spite of the expectation that agriculture would absorb the large number of workers who became unemployed as a result of the 1997 economic crisis. During the same period (1980-1999), the proportion of clerical workers increased from 1.7 percent to 3.9 percent, craftsmen and laborers from 9.6 percent to 16.6 percent, and service workers from 2.8 percent to 4.7 percent.

In the short-run, the occupational composition may fluctuate and/or deviate from the long-term trends, due to factors such as economic fluctuation, weather and political problems. As Table 4 shows, in spite of economic recession, the number and proportion of professional and technical workers and those in the administrative and management category continued to increase, while the number and proportion of agricultural workers decreased. The number and proportion of craftsmen and laborers also decreased. While the decrease in the employment of craftsmen and laborers seems to be associated with the impact of the crisis on the construction sector, it is not immediately clear why the number of professional and administrative workers increased in spite of the economic crisis, which has otherwise caused widespread lay-offs and unprecedentedly high unemployment. Aside from labor mobility, an explanation for this could be found in the survey definitions and the classification of workers under the two categories. By definition, the professional and technical workers category also includes semi-professionals such as traditional masseurs and masseuses, midwives, draftsmen, teachers and tutors, monks or preachers, actors, dancers and musicians. Some of these professions which are relatively easy to enter became safety nets for workers who lost their jobs during the crisis. An examination of the subgroups of this category revealed that out of the net increase of 198,300 in this category between August 1998 and August 1999, 126,900 were classified under other professional sub-

Table 4 Employment Structure by Occupation, 1995-2000 (Percentage)

Occupational category	1995		1996		1997		1998		1999		2000	
	R 1 (Feb)	R 3 (Aug)	R 1 (Feb)	R 3 (Aug)	R 1 (Feb)	R 3 (Aug)	R 1 (Feb)	R 3 (Aug)	R 1 (Feb)	R 3 (Aug)	R 1 (Feb)	R 3 (Aug)
Total (million people)	29.06	32.58	30.10	32.23	30.27	33.16	29.41	32.14	30.02	32.09	30.42	33.00
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Professional	5.1	4.9	4.9	4.7	5.6	5.3	6.2	5.7	6.8	6.3	6.6	6.4
Administrative and management	2.9	2.2	2.7	2.4	2.8	2.4	3.0	2.5	3.3	2.8	3.1	2.8
Clerical	4.1	3.9	4.1	3.8	3.9	3.8	4.2	4.0	3.5	3.8	3.9	3.5
Commerce	13.2	11.2	13.0	11.7	13.6	11.8	14.8	12.5	14.7	13.4	14.9	13.0
Agriculture	40.9	52.3	40.4	50.2	39.5	50.6	39.6	51.3	41.9	48.7	40.0	49.0
Transport, communications	4.6	3.9	4.3	3.9	4.6	3.8	4.5	3.6	4.4	3.8	4.0	3.5
Craftsmen and Laborers	24.0	17.4	25.6	18.9	24.7	17.6	22.3	15.7	20.0	16.3	21.9	16.7
Services	5.2	4.2	4.8	4.4	5.1	4.6	5.3	4.7	5.4	4.9	5.5	5.1
Other	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: Report of the Labor Force Survey (various years), NSO.

groups. Only a little over 40,000 were physicians and medical technicians, and 33,300 were professors, teachers, and others in the field of education. Indeed, much more work needs to be done to understand the short-term fluctuations of the occupational structure.

IV. WAGE AND LABOR PRODUCTIVITY

The average monthly wage of Thai workers in 2000 ranged from 3,375 baht for workers aged 15-19 to 10,450 baht for those aged 50-59. Data from the LFSs indicate that wage increased with age, except for those aged 60 and over. Wage also positively correlated to the education level, starting from around 4,000 baht per month for workers having elementary education or lower, to about 12,780 baht per month for those with university education. On the average, wage did not increase significantly during the period from 1997 to 2000.

A survey in 1996 by the Wage Committee, Ministry of Labour and Social Welfare, provides data on wage by major occupation. The occupation with the highest average wage was production managers with an average monthly earning of about 30,000 baht, followed by other managers (29,300 baht) and civil engineers (27,195 baht). Construction workers seemed to have high wage with an average monthly earning of 12,840 baht. Within an occupation, however, the monthly wage varied considerably. For example, the monthly wage of production managers varied from 4,700 baht to 67,500 baht, civil engineers' from 10,000 baht to 60,000 baht, carpenters' from 2,500 baht to 16,000 baht (Table 5).

The impact of the crisis occurred less in terms of wage-price adjustment than in terms of quantity adjustment. The real monthly wages for all types of

Table 5 Average Wage by Major Occupation, 1996

(Baht)

Occupation	Total			Monthly employee			Daily employee		
	Average	Minimum	Maximum	Average	Minimum	Maximum	Average	Minimum	Maximum
Production Managers	29,975.40	4,710.00	67,500.00	29,975.00	4,710.00	67,500.00	.	.	.
Other Managers	29,299.52	5,000.00	85,000.00	29,299.52	5,000.00	85,000.00	.	.	.
Civil Engineers	27,195.13	10,000.00	60,000.00	27,195.13	10,000.00	60,000.00	.	.	.
Electrical Engineers	25,038.33	14,560.00	50,300.00	25,038.33	14,560.00	50,300.00	.	.	.
Mechanical Engineers	21,428.03	7,250.00	54,800.00	21,428.03	7,250.00	54,800.00	.	.	.
Computer Operator	9,431.13	3,500.00	35,000.00	9,431.13	3,500.00	35,000.00	.	.	.
Accountants	11,289.47	3,000.00	39,252.00	11,308.48	3,000.00	39,252.00	165.37	145.00	240.00
Secretaries	13,922.38	3,770.00	42,744.00	13,922.94	4,200.00	42,744.00	146.00	145.00	147.00
Clerical Workers	8,888.82	3,000.00	58,000.00	8,943.82	3,000.00	58,000.00	168.07	145.00	349.00
Electrical Workers	6,615.95	2,670.00	21,820.00	6,962.25	2,670.00	21,820.00	192.53	135.00	369.00
Welders	5,135.33	3,770.00	7,400.00	6,700.00	6,000.00	7,400.00	193.21	145.00	250.00
Steel Workers	6,989.10	4,030.00	13,515.00	8,274.89	4,500.00	13,515.00	190.41	155.00	400.00
Carpenters	5,143.07	2,500.00	16,000.00	7,710.87	2,500.00	16,000.00	171.55	145.00	400.00
Construction Workers	11,683.60	4,380.00	15,090.00	12,836.00	4,380.00	15,090.00	316.40	261.00	369.00

Source: Survey, Wage Committee, Ministry of Labour and Social Welfare, 1996.

workers declined only slightly during the crisis. Among all industries, transportation and public utilities were the only two sectors with increasing real monthly wages during the crisis. The largest reduction of real monthly wage occurred in the mining industry, where the real wages decreased more than 10 percent. The sector with the smallest reduction in real monthly wages was the construction industry, whose real wages declined by 2 percent during the crisis. The adverse effect of the crisis in terms of wage adjustment was moderately and evenly distributed across the occupation groups. The change of real monthly wage of all occupations varied between an increase of 0.25 percent and a decrease of 14.8 percent (Srawooth et al. 2001, 168).

In terms of genders, real monthly wages of males declined on average only less than 0.5 percent, while those of females decreased 0.9 percent in Round 2 (May) during the crisis. However, real monthly wages of females increased 0.6 percent and 0.5 percent in Rounds 3 and 4. The negative outcomes of the crisis in terms of real monthly wage reduction were larger in rural areas than in urban. The decline was 4.0 percent in rural areas, while in urban areas it was only 0.7 percent, at most. The impact of the crisis on real wages was unevenly distributed across the regions. Bangkok and the North were the only two regions where real wages increased, while the Central, the Northeast and the South experienced a decline in real wages (Srawooth et al. 2001).

The data also exhibit a moderate and impartial effect of the crisis in terms of wage reduction across groups with different educational levels. All workers experienced a reduction in real wages regardless of their education levels. For all workers, the reduction of real monthly wages varied between 5.7 percent and 13.9 percent. The crisis-induced real wage reduction affected workers aged 13-49, whereas older workers (50 and above) earned higher real wages during the crisis (Srawooth et al. 2001).

Labor productivity is roughly measured by the ratio of GDP per worker in each economic sector. The highest GDP per worker is found in the utilities sector while the lowest is in the agricultural sector. Labor productivity was affected by the crisis in every sector as shown by the declining trend of GDP per worker during the 1997-2000 period (Figure 2). Once the crisis is over, the utilities sector is predicted to recover most rapidly, while the construction sector and the agriculture sector are expected to stay at the low level of productivity throughout the projection period of 2001-2006 (Srawooth et al. 2001, Table 21).

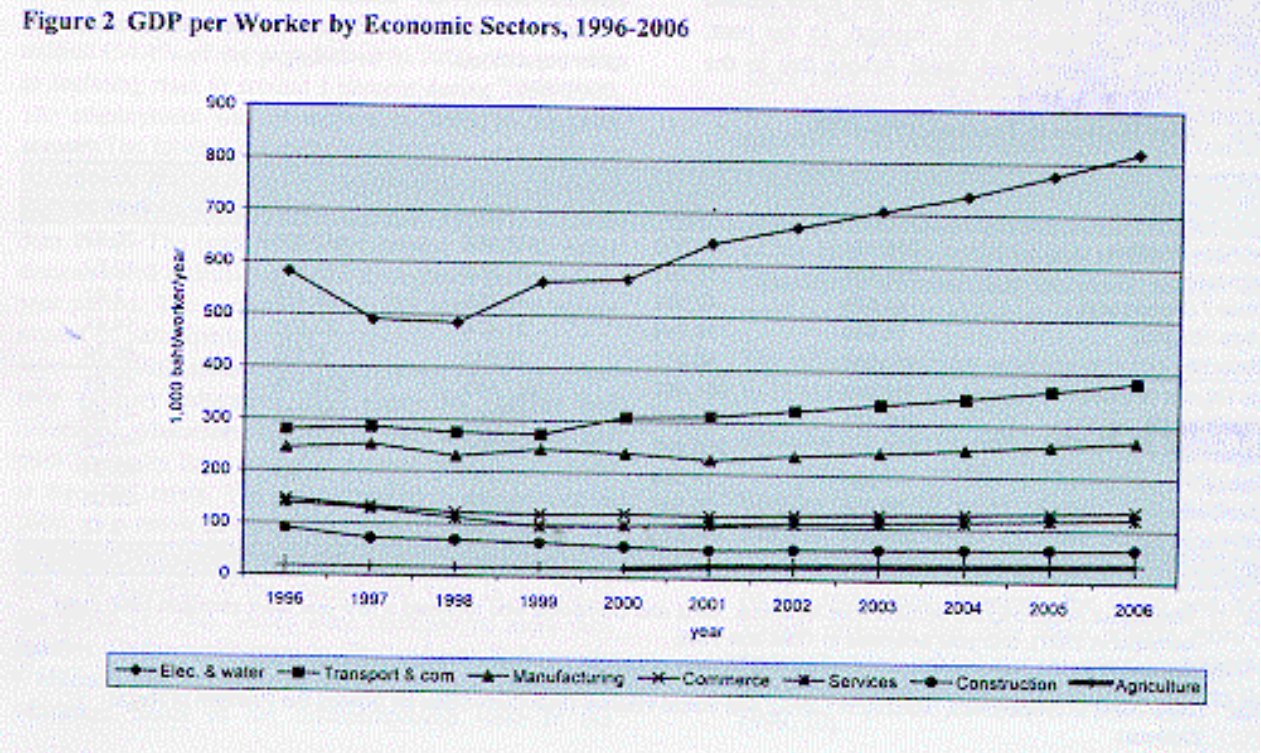
V. LABOR MIGRATION

5.1 Internal Migration

In 1995,[7] some seven million or about 15.6 percent of the working-age population (aged 13 and over) of 45.2 million were migrants.[8] Of these, 5.7 million or about 81.7 percent were in the labor force. The proportion of male-female migrants was 55.9:44.1. However, a larger proportion of female migrants were not in the labor force, and they accounted for 68.5 percent of all non-labor force migrants. Obviously, male labor-force migrants outnumbered female labor-force migrants.

Surprisingly, for the country as a whole, only 19.3 percent internal migrations were rural-to-urban, compared to urban-to-rural migration of 31.6 percent.

Figure 2 GDP per Worker by Economic Sectors, 1996-2006



Rural-to-rural migration was the largest type of internal migration accounting for 38.6 percent. For Bangkok, however, rural-to-urban migration comprised 75.1 percent of the total migration.

Regionally, the Northeast accounted for the largest number of migrations, a total of 2.5 million, or 35.9 percent. Bangkok had 1.1 million migrants, or about 16.2 percent. In the Northeast, male migrants outnumbered female migrants by 62.1 percent to 37.9 percent. In other regions, the ratio was close to 50:50.

By 2000, the number of working age migrants had increased to 11.9 million, an average increase of more than 10 percent annually. Of these, 9.2 million or 77.3 percent were in the labor force. Bangkok alone accepted 13.5 percent of migrants. This was, however, a decline from 16.2 percent in 1995.

5.2 International Migration

a. Thais working abroad

In the past decade, many Thai workers went to work abroad for better pay. Of the total 202,296 individuals migrating for work abroad in 1995, 134,524 workers or 66.5 percent went to East Asian countries, most of them to Taiwan. Of the rest, 46,257 (22.9%) worked in the ASEAN countries, 19,987 (9.9%) in the Middle East and 1,528 (1.3%) in Western countries. Brunei was the destination for the majority of Thai workers headed for ASEAN countries, while Israel and Taiwan were the most preferred in the Middle East-Africa region and East Asia, respectively (Srawooth et al. 2001, 147-149). The number of Thai workers migrating overseas declined to 183,671 in 1997 but rose again to 191,735 and 202,416 in 1998 and 1999, respectively.

From 1990 to 1995, the share of the Middle East and Africa as a region absorbing Thai labor decreased markedly from 43.5 percent to 9.9 percent, and that of the Western countries from 9.7 percent to 0.8 percent. On the other hand, the share of East Asia increased significantly from 19.4 percent to 66.5 percent, while that of the ASEAN fluctuated over the same period (Srawooth et al. 2001). In 1999, the proportion of Thai workers migrating to East Asian destinations increased to 88.5 percent. Taiwan again was the preferred destination, absorbing 115,096 or about 64 percent of Thai workers headed to East Asia.

The Thai government does not impose restrictions on the Thais working abroad. Thus, major factors determining the flow of Thai workers are, the economic and political situation in the host countries, their policies and relationships with Thailand. During the economic crisis, Thai workers found it harder to get a job abroad and some had to come back to Thailand. In the past, tension between Thailand and Saudi Arabia due to the unsolved murders of Saudi Diplomats in Thailand has resulted in the cessation of Thais migrating to that country.

b. Alien workers in Thailand

Legal immigrants

There were 102,767 legal alien workers in Thailand in 1999 (Table 6). These included skilled and semi-skilled foreign workers who were granted permanent residence under the Alien Act, and temporary workers under the Immigration Law, Article 12 or Article 7, and under the Investment Promotion Law. The majority of legal alien workers (49,976 persons or 48.6% of all legal alien workers) were temporary workers under Article 7 of the Immigration Law. The permanent alien workers totaled 19,361 or 18.8 percent. Since the economic crisis, the total number of legal workers has decreased from 164,313 in 1997 to 102,767 in 1999. The number of temporary workers permitted under Article 12 of Immigration Law decreased by 66.7 percent. However,

Table 6 Alien Workers in Thailand, 1996-1999

(Persons)

	1996	1997	1998	1999	% Growth 1997-99
Legal Alien Workers	316,174	164,313	116,657	102,767	-20.92
Permanent	121,521	15,291	21,853	19,361	12.52
Article 7 (Temporary)	44,998	42,162	48,288	49,976	8.87
Article 10 (BOI)	18,609	18,049	21,474	23,637	14.44
Article 12	131,046	88,811	25,042	9,793	-66.79
Illegal Migrant Workers	717,689	961,467	987,889	663,776	-16.91
Registered (1)	293,652	293,652	90,403	99,996	-41.65
- Myanmar	256,492	256,492	78,904	89,336	-40.98
-Laos	11,594	11,594	1,231	1,164	-68.31
- Cambodia	25,566	25,566	10,268	9,496	-39.05
Non-registered (2)	424,037	667,815	897,486	563,780	-8.12
Total	1,033,863	1,125,780	1,104,546	766,543	-17.48

Notes: 1) Registered illegal migrant workers from Myanmar, Laos and Cambodia who received a two-year work permit in 1996 (held constant in 1997), one year extended in 1998 and 1999.
2) Estimated by the National Security Council and Ministry of Labour and Social Welfare (various years).

Source: Department of Employment, Ministry of Labour and Social Welfare (Sub-Committee on Solving the Problem of Illegal Workers).

the number of permanent work permits, and temporary permits under Article 7 and under the Investment Promotion Act increased 12.5, 8.9 and 14.4 percent, respectively.

To encourage foreign investment, in June 1997, the Ministry of Interior, with the approval of the Cabinet, declared that the quota of general aliens who could be granted residency, should not exceed 100 people for each nationality. The scheme grants residence permits only to aliens who have invested in a business in the country and bring in at least 10 million baht. After three years, the total number of aliens to be granted residency is to be limited to 5,000 persons. Currently the Ministry of Interior allows all aliens who have over-stayed in Thailand to apply for such a residence permit under the same conditions.

Illegal Immigrants

Immigrants who had worked and stayed in Thailand before June 1995 were allowed to register for temporary permits under Article 17 of the Immigration Law. Nationals of only three countries, viz., Myanmar, Laos and Cambodia, were granted permits. The occupations or production activities in which these immigrants are allowed to engage were limited to manual or unskilled work. However, by 1999, of the estimated 663,776 illegal migrant workers, only 99,996 or 15 percent had registered. Most of the registered workers were migrants from Myanmar (amounting to 89,336 persons or 89% of the total). The remaining registered workers came from Cambodia and Laos.

The total (estimated) number of illegal migrant workers decreased from 961,467 persons in 1997 to 663,776 persons in 1999 (Table 6). In 1999, non-registered migrant workers were estimated at 563,780, compared with 99,996 registered workers. From 1997 to 1999 the number of illegal migrant workers dropped by 16.9 percent, while the number of non-registered migrant workers dropped by 8.1 percent. Illegal migrant workers from Laos decreased significantly (68%) followed by those from Myanmar (41%) and Cambodia (39%). The decrements were due to the repercussions of the economic crisis and the government policy to stop the flow and sent back illegal foreign workers.

VI. CONCLUSION

The Thai labor market is highly seasonal reflecting the dichomy and the flexibility of movement between the urban and rural sectors. During the financial crisis period of 1996-2000, the labor market had undergone some change. The labor force estimated at 34 million (54.4% of the population) in 2000, was growing at declining rates to around 1 percent during 1996-2000. The employment was 33 million in 2000, in the peak season. The labor force participation rates were high for both sexes. The rates of Thai women had been relatively high, especially for those in the 20-49 age group (more than 80%). The rates for all age groups and both sexes demonstrated a declining trend throughout the last five-year period. The economic crisis did not have a strong impact on participation rates.

In 2000, almost 70 percent of the labor force had only primary education, and about 10 percent had university education. Unemployment in Thailand had been generally low, around 1 percent, particularly prior to the 1997 crisis. The rate increased to 4.5 percent in 2000, as a result of the 1997 financial crisis. About 47 percent of the unemployed had elementary education or less. The majority of the unemployed were in the 20-29 age group (45.7%). Males were unemployed more than females. Underemployment in Thailand was high, nearly a million. The majority of them had only elementary education. Most of the underemployed were in the agricultural sector. During the crisis the under-employment increased in almost every sector except public utilities.

About 48.5 percent of employment was in agriculture. During the crisis, employment in manufacturing remained relatively stable, accounting for 13 percent in the wet season and 16-17 percent in the dry season. There might have been some movement within the sector. Employment in services increased during the crisis. Long-term employment trends indicated a shift away from agricultural toward industrial and service sectors. In terms of occupation, the proportion of high-level manpower (professional and managerial personnel) increased over time.

The average monthly wage of Thai workers ranged from 4,000 baht for those with elementary education to 12,780 baht for those with university degree. During 1997-2000, wage did not significantly increase. The impact of the crisis occurred less in terms of wage adjustment than in terms of quantity adjustment. Changes in real wages were uneven between genders, different time of the year, and across the regions.

The Thai labor is mobile. About 15.6 percent of the working-age population were internal migrants. The Northeast accounted for the largest number of internal migration. In case of international migration, there were about 202,416 Thai workers working abroad in 1999. The number of legal alien workers was 102,767 in 1999 while the number of illegal migrant workers was estimated at around a million in 1998 and declined to 663,776 in 1999.

ENDNOTES

[1] The NSO has been carrying out the LFSs since 1963. The survey was carried out in three rounds each year from 1984 to 1997, and in four rounds since 1998. In some years, one or more rounds were not conducted due to other survey commitments of the NSO. The August round is, however, conducted every year.

[2] Aside from slow population growth, the slow growth of the labor force could be due to the extension of educational services and increased school enrolment, as well as economic slowdown.

[3] The official minimum working age has been raised to 15 years since 19 August 1998.

[4] Effective 19 August 1998, Section 44 of the Labor Protection Act, prohibits employers from hiring workers under 15 years of age. Yet, there were 208,879 workers under 15 years of age in 1999, of whom 37,791 or 18.1 percent were wage employees. At the same time, however, the Child and Youth Survey revealed that over three million more students attended school in pre-primary through to secondary grades in 1997 than in 1992 (World Bank 1999, 10).

[5] Ammar and Orapin (1998), for example, used this definition and classified this group as being "severely under-employed" and persons who work less than 35 hours (but more than 20 hours) per week as being "moderately under-employed."

[6] The three-sector grouping is obtained by dividing the non-agricultural sector into the industrial sector, consisting of manufacturing, mining and construction, and the service sector, comprising public utilities, commerce, transport and communication, and services (United Nations 1968, 67).

[7] The year 1995 is arbitrarily chosen to represent a period before the crisis although it could not be ascertained if it was a normal year.

[8] Defined, according to the labor force survey, as those who changed their place of residence within the five years preceding the survey date.

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