

Cheap Labor and the Industrialization of Bangkok after 1945

Porphant Ouyyanont¹

School of Economics
Sukhothai Thammthirat Open University,
Nonthaburi, Thailand 11120
Email address: porphant@yahoo.com

Abstract

This paper deals with the remarkable industrialization of Bangkok and the growth of its population after 1945. Equally remarkable is the earlier long period when there was virtually no industrialization and much of the labor market for industries and services came from migrants from China. After 1945, the Bangkok labor force increasingly came from within the country. What caused these changes? The argument made in this paper is that a fundamental shift took place in the Thai labor market after 1945 as relative earnings in industry and agriculture shifted in favor of the former.

Introduction

In the 1980s, Thailand became one of the fast-growing Asian “tiger” economies, with high rates of industrial growth based on a rapid rise of industrial exports and a large inflow of foreign capital.

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Already before the 1980s, Thailand's industrial growth had been significant, and in the following sections we will examine aspects of this growth. As a background we may emphasize three points: (1) prior the Second World War Thailand's industrial sector was extremely limited; the country remained overwhelmingly rural, with foreign trade based on rice exports, as had been the case since the second half of the previous century. (2) Such industries as then existed were concentrated in and around Bangkok. This pattern continued for several decades after 1945, and is a principle theme of this paper. (3) Prior to the Second World War industrial labor in Bangkok (and elsewhere) was largely composed of Chinese immigrant labor. The movement of Thai rural labor to industrial occupations was limited. After the War, the situation changed. Bangkok's industries became increasingly dependent on Thai labor both from natural population growth and from an influx from rural areas.

The paper discusses the development of cheap labor industrialization in Bangkok after 1945. It looks at the changes which took place in the Thai rural labor market in the 20th century. The major point to emerge is the changing relativity between urban and rural wages. The argument rests mainly on demographic change, which transformed the economy from one where indigenous labor was relatively expensive to one where it was relatively cheap. After 1945, Thailand's continued fast population growth put pressure on rural incomes. Growing disparity between rural and urban incomes pushed people towards Bangkok. With the rapid overall population growth, a pool of "cheap" rural labor developed which could supply the industrial and service sectors in Bangkok, on which growth further depended. Wages in Bangkok grew relative to those in the provinces, and

it is a major finding of this article that the relations between rural and Bangkok unskilled earnings, favorable to the former in the pre-war period, became increasingly in Bangkok's favor after 1945.

The paper has three parts. Part I examines the pattern of industrialization in Bangkok after 1945; Part II discusses factors affecting the rapid growth of Bangkok's industrial sector; and Part III presents a brief summary and conclusion.

I

The war years, which saw Japanese occupation, forced supplies at low cost to the Japanese, the shutting of businesses previously owned and run by westerners, and the collapse of normal channels of marketing and distribution, were, of course, a time of hardship and dislocation for Thailand. But the physical damage of war was minimal, the organization of government remained intact, and the large subsistence rural sector (swelled by an exodus from Bangkok) helped Thailand emerge from the war years in relatively good shape.

Of necessity the Thai government had increased its control of various sectors of the economy, including banking and certain industrial activities. Following the war, state involvement continued. Striking was the growth of industries which

received support from the states or were state enterprises (such as sugar, cigarettes, paper, and tobacco)² (Table 1)

Table 1. Production of Thailand's major Industrial Products, 1946-48

	1946	1947	1948	Percent increase 1946-48
Beer (liters)	103,956	138,247	246,742	137.3
Cement & Products (tons)	16,141	60,053	84,251	422.0
Cigarettes ('000 packs)	73,625	204,359	314,214	326.8
Ice (tons)	69,100	125,000	113,400	64.1
Matches ('000 boxes)	154,080	250,704	400,320	159.8
Paper (tons)	489	915	1,131	131.3
Soap (tons)	n.a	3,536	5,790	63.7(a)
Sugar (tons)	2,645	3,581	10,789	307.9
Tanned Leather (tons)	476	540	865	81.7
Tobacco (tons)	n.a	2,7074	3,218	52.2(a)

Source: Hewison (1989: 73)

Note: (a) 1947 to 1948 only

After 1950, the industrial sector grew strongly. In the single decade of the 1950s, growth was recorded at 7-8 percent a year. Although industrial employment and output remained relatively low, significant changes took place, with more

² Hewison (1989: 73)

diversification compared to the pre 1950 period. The World Bank Mission estimated that private manufacturing capacity may have trebled or quadrupled in the 1950-1957 period.

Several of the largest employers in the city were found in the government sector. In 1950 the Port of Bangkok employed 2,200, including casual workers employed by the day. The Makasan workshops of the Thai State Railways employed 1,700 workers; the Government distillery at Ban Yee khan 1,300; Thai Tobacco Monopoly 7,000; and the liquor distilleries 2,500. In addition, an estimated 10,000 workers were employed in government owned and operated establishments such as power plants, water works, tanneries, the cargo transportation organization, a paper mill, and a textile mill. The total would be even larger if it included companies that were private in terms of commercial organization, but whose stock was largely held by the government, such as the Thai Rice Co, Ltd. ³

Although the industrial sector grew significantly in the 1950s, the industrial sector's share in GDP remained only 11.7 percent in 1960, and created a very small labor force employment. Industry in Thailand was mostly concentrated in Bangkok. A survey of establishments in Bangkok-Thonburi in 1960 by the Ministry of Industry shows that industries at that time, averaged only 8.5 employees per establishment. The largest group in terms of the average number per establishment was a cement plant (521 persons), followed by a match factory (321 employees),

³N.A. (3) Office of the Prime Minister 0201.75/1 (1951).

and a soap manufacturing plant (42 employees) (Table 2). Most of the industrial establishments were, characterized as the traditional sector such as hardware, printing, saw mills, rice mills, and weaving with handlooms, largely owned by foreigners, largely Chinese⁴.

Table 2: Establishments in the Bangkok Thonburi Area : 1960

Type of Business	No. of Establishments			No. of Employees	Employees per Establishment
	Total	Thai	Foreign ^a		
Hardware	1,024	285	739	5,926	5.8
Printing, book binding	530	290	240	5,014	9.5
Saw milling	317	89	228	4,771	15.1
Weaving with handlooms ^b	382	15	367	4,527	11.9
Rice milling	149	92	57	2,625	17.6
Candles, joss sticks	111	34	77	2,148	19.4
Machinery repairing	283	122	161	2,096	7.4
Weaving with machines	185	16	169	2,052	11.1
Spinning	62	9	53	1,586	25.6
Pharmaceuticals	228	85	143	1,562	6.9
Flour milling	196	32	164	1,448	7.4
Matches	4	1	3	1,283	320.8
Garments ^c	29	8	21	1,116	38.5
Aerated water	47	14	33	1,005	21.4
Tobacco	94	23	71	825	8.8
Shellac	24	7	17	558	23.3
Soap ^c	13	2	11	550	42.3
Cement	1	0	1	521	521.0
Ice	43	24	19	510	11.9

⁴ Suehiro (1989: 183)

Liquor	6	5	1	218	36.3
Total ^d	7,302	2,233	5,069	62,264	8.5

Source: Suehiro (1989 : 184)

- (a) Mostly the Chinese group
- (b) Establishments with five looms or more.
- (c) Establishments with five employees or more
- (d) Includes other business

A coup in 1957 brought Field Marshal Sarit to power. Sarit's economic policy was in line with the recommendations of the World Bank's 1959 Report which advocated reducing the direct role of the government and encouraging private domestic and foreign investment in the manufacturing sector. These recommendations reflected a trend which was then prevalent in the economic policies of many non-Communist developing countries: the importance of promoting industry to achieve growth, but the importance, too, of minimizing the direct role of the state. In Thailand, a number of state projects were dismantled and sold off to private enterprises. The government's role was reduced to the provision of economic infrastructure and to the establishment of a legal and political order favorable to the growth of private enterprise, which was now regarded as the engine of development. Since Thailand lacked technical know-how and capital, it was deemed imperative that foreign capital be attracted to invest in Thailand, and hence the Board of Investment was established in 1959. At the same time, Thailand's First National Development Plan (1961-6) was formulated, to facilitate state policies to support, and encourage private business giving priority to a number of infrastructure projects including highway construction. Sarit promised that all

private enterprises, whatever their nationality, would enjoy similar rights. Once an investment project had been approved, the government guaranteed that it would not set up any enterprise to compete with it. Nor would the government nationalize private industrial enterprises. The government offered to facilitate investment to the extent of waiving import duties on machinery, accessories and equipment, and offering exemption from income tax for a period of two to five years. The strategy of industrial development has been characterized as a phase of import-substitution prior to about 1972, followed by a period of encouragement for export led growth. Various economic policies were introduced to foster industrialization, such as low levels of taxation, tax exemptions for imported raw materials, and the maintenance of a strong currency, which all helped to promote both domestic savings and an inflow of foreign funds.

Among industries promoted between 1959 and June 1969, those producing consumer goods with a total value of investment of 4,526.3 million baht represented about half of the total (Table 3). Policies were successful in stimulating the growth of the import-substituting consumer goods industries such as food, beverages, tobacco, clothes, furniture, and printed products. Capital goods industries ranked second with investment of 1,454.6 million baht (Table 3).

Table 3 Number of Industries Established and the Amount of Investment under Industrial Promotion Legislation (1959-1969)

Type	Number of Industrial Establishments	Value of Investment (million baht)
Consumer Goods	129 (40.8%)	4,526.3 (50.7%)
Food	55	956.1
Beverages	5	29.0
Tobacco	-	-
Clothes products	68	3,537.7
Furniture	-	-
Printing product	1	3.4
Intermediate Goods	58 (16.3%)	2,091.8 (23.4%)
Timber	22	120.8
Paper products	2	43.2
Leather and Leather products	-	-
Rubber and rubber products	4	136.2
Chemical products	10	145.1
Non-metal mineral	15	876.5
Petroleum an oil products	1	770.0
Capital Goods	80 (25.3%)	1,454.6 (16.3%)
Metal and metal products	29	614.2
Machinery	9	170.9
Electrical equipment	16	156.8
Transport equipment	26	512.7
Miscellaneous	54 (17.1%)	857.4 (9.6%)
Total	316 (100%)	8,930.0 (100%)

Source : Pranee (1988: 178).

Industrial growth accelerated perceptibly after about 1957 (the Sarit era). Manufacturing contributed about 12 percent of GDP in 1960, compared to 10 percent in 1951⁵ and the major industries were cotton textiles, gunny bags, cement, sugar, paper and tobacco. During the period of 1960-1964, the output of the first three industries more than doubled, while that of paper and tobacco also increased although at a much lower rate.⁶ The high growth rate of the manufacturing sector was partly due to the revised Investment Promotions Act. Over 90 percent of promoted industrial plants were constructed in Bangkok and its adjacent districts of Nonthaburi and Samut Prakarn. An impressive growth rate also was recorded in the construction industry, in services and in wholesale and retail trade. The figures on the geographical distribution of industry, on gross regional product, on the number of factories, on the number of wholesale and retail businesses, and on the value added classified by various sectors of industrial origin all indicated a heavy concentration around the capital. Bangkok and the adjacent areas of Nonthaburi and Samut Prakarn accounted for over 70 percent of total value added in the manufacturing sector from the early 1960s to 1970.⁷ Employment in manufacturing in Bangkok increased from 145,553 in 1960 to 257,402 in 1970, or from 14.3 percent to 18.6 percent of the total labor force.

Foreign direct investment was a factor encouraging both rapid industrialization and concentration in Bangkok. Import-substitution industries

⁵Bank of Thailand (1964)

⁶Bank of Thailand (1964)

⁷TURA (1971:271).

which involved the assembly of components imported from Japan tended to locate close to Bangkok because of access to the port and to the large Bangkok market. Modernization theorists such as Hozelitz (1960) viewed urban growth as an inevitable result of development in which countries from the periphery adopted industrialization through diffusion from more advanced countries. Cities offer overwhelming advantages for profitable investment because of the infrastructure of transport, communications, public utilities, and so on which attract multinational corporations.⁸

In the 1960s Thailand was a relatively attractive site for foreign investment. The crucial factor for Japanese investors was stable political and military conditions. Thailand was spared from the turmoil and political conflict that occurred elsewhere. In the case of Indonesia, the government under Sukarno prior to 1967 nationalized all foreign property and generally made foreign investment unattractive. Between 1957 and 1965, a number of foreign enterprises were seized.⁹ Larger foreign investment in Thailand compared to other Southeast Asian countries also reflected that the Japanese took advantage of import substitution investment opportunities. Especially, the large textile investment in Thailand was due to the large size of Thailand's internal market. The inflow of foreign capital was in excess of the outflow by about 153.7 million baht in 1963. By 1969, the net inflow had grown to 669.7 million baht (Bank of Thailand, various years).

⁸ Sit Fung (1993 : 181).

⁹ Yoshihara (1978:54-57)

Industrial growth was increasingly export-led from the early 1970s, as we have noted. Thai exports grew from 14.3 billion baht in 1970, to 60.4 billion baht in 1976, and to 150 billion baht in 1981, and 616 billion baht in 1988. High growth of the manufacturing sector has been significant for GDP expansion. GDP grew substantially, averaging (in real terms) around 7 percent per annum in the period 1960-1979. Manufacturing grew at around 10.2 percent in 1961-66, 9.2 percent in 1967-71, 8.6 percent in 1972-76, and 8.4 percent in 1977-1981. While agricultural growth was much lower around 4 percent in 1960-1981, agriculture's share dropped from 40 percent in 1960 to only 25 percent in 1980, with an increasingly share of industry in GDP from 13 percent in 1960 to 21 percent in 1980.¹⁰ Industrial growth remained high throughout the 1980s, and the first half of the 1990s. GDP grew substantially around 6 -7 percent in the 1980s, and 1990-1996.

Rapid growth was accompanied by structural diversification. In 1986, for the first time, exports of manufactured goods exceeded those of agricultural goods. Rice, which had been 65 % of the value of total exports in 1953, was but 20 % in 1969, and 8 % in 1988. Manufactured goods, only 1.2 % of exports in 1960, were 28.3 % in 1980 and 40.2 % in 1988. Also, the jump in foreign investment was dramatic. In the years 1980-7 net foreign direct investment averaged 6 million baht with a low of 3.8 billion baht in 1980 and a high of 9.6 billion baht in 1984. In 1988, the figure was 27.6 million baht and in 1989, 39.4 billion baht, with over half going into industrial

¹⁰ NESDB, various years.

sector. Diversification by the late 1980s meant that the top ten export items constituted only 54.5 percent of total exports.¹¹

Industrialization has been, heavily concentrated in Bangkok. In 1985, Bangkok's share of industrial output reached 80 percent of total industrial output (Bangkok's share of industrial establishments (factories) was around nearly 50 percent of the total). Bangkok's population was about 800,000 in the late 1940s, reaching 3 million in 1970, and 5 million in 1980. As before most of Thailand's urban population was centered in Bangkok and Bangkok continued to account for a preponderant share of urban growth. Approximately two-thirds of growth of the urban population between 1947 and 1967 occurred in Bangkok, while other regions of the country had relatively low rates of urbanization. In 1980, Bangkok's population constituted 60 percent of Thailand's urban population. Bangkok has been referred to as "the world's leading primate city".¹²

With industrialization, regional disparities widened. Bangkok's gross per capita regional product was higher than those of other regions (Table 4). And as a center of industrialization, the demand for non agricultural labor in Bangkok and its vicinity resulted in manpower being drawn from the provincial areas. The growth in the urban population of greater Bangkok (about 3.4 percent from 1975-80) has been higher than its natural growth rates (about 2.4 percent over the same period),

¹¹ Falkus (1991: 59, and 1995 :24-59).

¹² Thomlinson (1971)

the difference obviously being net migration from the provincial areas, especially from rural agricultural areas.¹³ Migrants accounted for 30 percent of total population in the late 1980s and 50 percent growth between 1970 and 1989.¹⁴

Table 4: Regional differences in gross per capita regional product, 1960, 1970, and 1980 (in baht)

	1960	1970	1980
Bangkok	5,715	12,838	45,300
Central	2,537	5,005	20,647
North	1,454	2,739	10,511
Northeast	2,594	3,958	14,052
Whole Kingdom	2,056	3,956	15,280

Source: National Statistical Office, various years

The influx of rural migrants helped to keep down unskilled wage rates in Bangkok . The average unskilled wage rates across all industries increased only slightly between 1950 and 1969. The nominal wage rates for unskilled laborers in 1950 was 16.10 baht per day and this increased at only 2.5 per cent per annum to 23.88 baht per day in 1969. When adjusted by the wholesale price index to give real wage trends, these data show no upward movement between 1950 and 1980 (Table 5). Unskilled wages were not significantly upward trend until 1980. One study indicates that daily nominal wages in manufacturing sector in 1976 was at 30.29 baht , and increased to 50.39 baht in 1980, but in terms of real wages, daily

¹³ Medhi (1995: 44)

¹⁴ Medhi (1984: 12-13)

unskilled wages were 16.7 baht, and 17.7 baht¹⁵ After the mid 1980s, wage rates significantly increased. Low urban wages before the mid 1980s, raised business profit, and then attracted industrial expansion in Bangkok.

Table 5 Nominal and Real Wage Rates for Unskilled Labor in Bangkok (1950-1980)
(1948=100) (baht/day)

Year	Nominal Wage Rates	Wholesale Price Index	Real Wage Rates
1950	16.10	96	16.7
1951	18.60	104	17.8
1952	16.80	109	15.4
1953	19.80	102	19.5
1954	19.80	100	19.8
1955	19.80	117	18.0
1956	20.00	120	16.7
1957	21.10	126	16.7
1958	20.00	118	16.9
1959	20.15	116	17.3
1960	na	126	-
1961	17.62	134	13.1
1962	na	125	-
1963	na	117	-
1964	22.56	109	20.7
1965	21.50	117	18.4
1966	22.47	141	16.1
1967	22.60	143	15.8
1968	23.05	136	16.9
1969	23.88	140	17.1
1970	23.88	157	15.2
1971	n.a	160	n.a
1972	21.00	167	12.5
1973	24.11	186	12.9
1974	27.32	230	12.0
1975	33.90	240	13.4
1976	33.85	251	n.a
1977	n.a	272	12.2
1978	36.36	297	12.7
1979	41.69	326	12.8
1980	52.5	383	12.8

Sources: The Railway Authority of Thailand, Various Issues; Bureau of Labour Statistics, **U.S. Embassy Wage Survey of 12 Companies in Thailand** cited in United States Department of Labour, (1959, pp 13-14) ; and Department of Labour, Various Issues, Porphant (1996: 1996, 1998: 83)

Note: Real wages rates were adjusted by the wholesale price index because there were no a series of consumer price index available.

¹⁵ Nipon (1981: 75)

Data on differentials between skilled and unskilled wages are similarly hard to come by. One source is a survey of a wide range of occupations conducted by the American Embassy in the Bangkok area in March 1958 (Table 6).

Table 6: Wage Survey in Bangkok, March 1958

Occupation	Wage Period	Wage Rate (in baht)
Blacksmith	daily	46.25
Blast furnace worker (semiskilled)	daily	43.60
Boiler fireman	daily	24.00
Boiler operator	daily	46.25
Bricklayer	daily	55.00
Cabinet maker	daily	50.00
Carpenter (general)	daily	46.25
Carpenter (construction)	daily	60.00
Clerk (general)	monthly	1,800.00
Crane operator	daily	40.00
Draftsman	daily	100.00
Driver, truck	daily	31.34
Driver, truck (assistant)	daily	31.84
Electrician	daily	46.75
Electrician (helper)	daily	31.84
Enamelware factory skilled worker	daily	50.00
Fork lift operator	daily	34.25
Foundry worker (semiskilled)	daily	43.60
Lathe operator	daily	70.00
Machine operator (semiskilled)	daily	43.60
Machinist	daily	54.24
Match factory unskilled labourers	daily	15.00
Mechanic (general)	daily	32.00
Mechanic, motor	daily	54.24
Painter (semiskilled)	daily	34.24
Painter, skilled	daily	35.00
Pile driver	daily	35.00
Pipe fitter	daily	46.24
Plumber	daily	40.00
Rubber factory unskilled worker	daily	12.00
Stamping press operator	daily	60.00
Stenographer	monthly	2,500.00
Stone polisher	daily	50.00
Textile factor skilled worker	daily	18.00
Tile layer	daily	35.00

Timekeeper	daily	24.00
Tin cutter	daily	55.00
Unskilled labourers:		
Cement worker	daily	20.00
Construction	daily	20.00
Enamelware factory	daily	15.00
Match factory	daily	10.00
Railway	daily	14.00
Rubber company	daily	10.00
Textile factory	daily	12.00
Upholsterer, skilled	daily	125.00
Watchman	monthly	550.00
Welder	daily	29.00

Source: Computed from United States Embassy (1959 :13-14)

This survey showed that unskilled labor in cement company construction, enamelware factory, match factories, railway, rubber companies and textile factories earned 10-20 baht per day. Skilled laborers earned significantly higher rates. For example, construction carpenters earned 60 baht per day (Table 6).

Because of a lack of wages data, we cannot reach any firm conclusion on the magnitude of wage differentials between unskilled and skilled workers in Bangkok between 1950 and 1970, but the overall impression is that the small group of skilled workers earned double or more than the large mass of unskilled workers, largely because of the shortage of skills. In 1954, the ILO commented:

The shortage of skilled labour was a major problem in all sections of the country at all times. Employers are practically unanimous in stating that they have difficulty in finding trained and experienced personnel for jobs requiring skills. For example, in January 1953, the manager of an oil company stated that he could not find fitters for positions for as much as 50 baht per day. At Phuket, employers have had to make arrangements to share available skilled labour, and members of the Thai Mining Association customarily borrow skilled workers from one another for limited periods of time.¹⁶

¹⁶ILO (1954:10).

The ILO noted in 1954 that the scarcity of skilled labor was due to inadequate vocational education, inadequate apprenticeship.¹⁷ We should add that the restriction of Chinese immigrant labor during the war and after 1949 was also a factor explaining the scarcity of labor.

The bias of the educational system was also of significance. Educational policy tended to subsidize tertiary education at the expense of primary and secondary, particularly in the rural areas. In addition, university enrollment was limited, as universities concentrated on attempt to raise standards.¹⁸

From the mid 1980s, especially the late 1980s, nominal and real wages show rising trend. Nominal wages in 1980 were at 52.5 baht per day, and significantly increased to 276.3 baht per day in 1994 (5.2 times increase), while real wages were recorded at 34.3 baht per day to 98.5 baht per day (3.34 times increase) in the same period. (Table 7). A rise of wages indicates that demand for labor increased considerably because of economic boom geared by the expansion of international tourism sector and the influx of foreign direct investment from the late 1980s.

¹⁷ILO (1954:11).

¹⁸Ammar (1975 :47).

Table 7: Nominal and real wages of unskilled laborers in industrial sector in Bangkok: 1980-1994 (baht per day, 1976=100)

Year	Nominal Wage Rates	Real Wage Rates
1980	52.5	34.3
1981	59.0	34.2
1982	61.5	33.9
1983	n.a	n.a
1984	n.a	n.a
1985	80.5	41.4
1986	84.0	42.4
1987	n.a	n.a
1988	n.a	n.a
1989	129.5	66.1
1990	155.3	73.9
1992	214.6	93.4
1993	219.3	82.1
1994	276.3	98.5
1995	289.2	114.9

Source: Labor Force Survey, Various Years.

Bangkok's industrialization was largely dependent on a cheap supply of labor. Given Thailand's abundant labor force has been an attraction to foreign investors, and has formed a the basis of export led growth industrialization, largely labor intensive industries which mainly concentrated in Bangkok. Data on wage differentials between skilled and unskilled labor indicate cheap labor industrialization. A wage survey in Bangkok in 1987, the beginning of boom period, (where wages were higher around 15-20 percent of other provinces) indicates that there were marked difference in wages between unskilled and skilled labor (especially management labor). However, data from Table 8 indicate that unskilled wages were kept low with no rising trend before 1987 (Table 8).

Table 8: Labor costs in Bangkok, 1987 (baht per month)

	Unskilled Workers	Semi-skilled workers	Management	Weighted Average
Manufacturing	2282	4834	13157	4261
Food and beverages	2467	4321	12280	4352
Textiles and garments	2045	4468	10614	2879
Furniture and wood products	1970	5577	10088	4298
Pulp, paper and printing	2621	4950	14708	6690
Chemicals, petroleum, rubber and plastic	2325	4128	10088	3711
Non-metallic products	2370	4594	13199	4724
Iron and basic metals	2337	4969	10399	4229
Machinery	2298	4566	18969	4959
Other manufacturing	2027	4251	9601	2764
Construction	2438	4961	10436	5065
Wholesale trade	2292	4490	15709	3654
Retail trade	2390	4850	16078	5562
Hotels and restaurants	2269	5126	9643	5137
Transportation, storage and communications	2426	4561	10478	5283
Utilities	2434	4347	15311	3500
Financial institutions	2281	4819	10162	2971
Other services	2286	4927	13331	4845
Average (weighted by number of employees)	2360	4867	11960	4564

Source: Department of Labor

II

Bangkok's industrialization has been the focus of several studies.¹⁹ Here, I will concentrate on the evolution of cheap labor, which fuelled the rapid industrialization from 1945.

The concept I have in mind here is that of "opportunity cost". In terms of a simple two-sector model, if the opportunity cost of a rural worker moving to an urban centre is high (because rural productivity is high, perhaps), the worker will not move. Labor is "expensive". If the opportunity cost is low (and the urban wage is above the opportunity

¹⁹ See for example, Attchana (1989:2(1)-2(87)), Narongchai (1975), Juanjai (1986), Suehiro (1989), Hewison (1989), Falkus (1995).

cost for the rural worker), labor is "cheap" and we should perceive a flow of rural labor. My paper will show that a move from expensive to cheap labor did occur in Thailand around the period of the mid 1940s.

While the Lewis-type model of economic growth might seem to be of rather obvious application to Thailand, the longer economic history of Thailand suggests that a more elaborate explanation is needed. Briefly, before the 1950s, industrialization was extremely limited, Bangkok grew only slowly, and there appears very little evidence of a sizeable "labor-pool", or "unlimited supplies of labor". In fact, the opposite seems rather the case. Thai rural labor was slow to move to job opportunities in Bangkok and many jobs that emerged, skilled and unskilled, as Thailand became integrated into the world economy, were taken by Chinese immigrants. If there were a large rural labor pool we would expect low rural wages in rural areas relative to real wages in the city.

However, prior to around 1950 rural wages were not significantly lower than those in Bangkok and the incentive for rural-urban migration was therefore limited. Only subsequently did the gap in real wages widen and only then did internal migration from countryside to city become considerable.

How can this pattern be explained? Partly, of course, greater numbers of jobs brought by industrialization and foreign investment resulted in increased wages and an inducement to migrate. But "cheap labor" requires a supply-side explanation, and the key change in the Thai economy was its change from being a sparsely populated country with relatively high rural wages to becoming that of an increasingly heavily populated country

with pressure on rural incomes. In some areas land fragmentation and increasing numbers of landless became evident. Thus, a “labor-pool” became a feature of the Thai economy in the post-war period, and an explanation of Thailand’s pattern of industrialization must include rapid population growth and those factors (such as low agricultural productivity and adverse rural terms of trade) that allowed a large and continuous flow of migrant labor to Bangkok, and, from the late 1980s, to other urban centers also.

As far as can be judged, from the beginning of the 20th century and to around the mid 1940s, then, money wages for unskilled workers in Bangkok seem to have been no higher, and generally were lower, than money wages earned by unskilled workers in the provinces. (Table Appendix).

Prior to the Second World War, average incomes per capita do not appear to have differed greatly between the provinces, (comparing with later development). The broadcast rice farmer, with 8 hectares of land, almost certainly had an annual income well in excess of that of the Bangkok coolie laborer between 1905 and 1929.²⁰ As far as income distribution is concerned, before 1940, at least 85 percent of Thailand’s population was engaged in agriculture mostly owner-cultivators producing rice in villages, and many farmers in some regions produced to satisfy mainly their own consumption. Little excess of rice production was for sale. Thus the main causes of income variations would come from harvest fluctuations.

²⁰ Sompop (1989: 168)

By the late 1940s circumstances had changed. As we have seen, rural wages now lagged behind Bangkok wages. In 1954, a survey undertaken by the Central Statistical Office indicated that nearly all classes of labor in Bangkok earned more than elsewhere (with a few exceptions in the south). The lowest pay was found in the agricultural sector (farming, fisheries, and forestry). The national average wage in agriculture was 89 baht per week, with large variations across different geographical areas. Rural workers in the south earned the highest with 94.23 baht per week; the central areas (excluding Bangkok) came second with 79.70 baht; and the north and the northeast regions earned 47.65 baht and 37.85 baht respectively. Workers in manufacturing or the service industry, earned 130.01 baht and 107.49 baht respectively.²¹ The northeast was the poorest region with the lowest average wage rates in several sectors (Table 9).

Table 9 Estimates of Weekly Wages Rates in the Bangkok Area and Outside Bangkok for Various Occupations (baht/Weekly)

Occupations	Whole Kingdom	Bangkok	North	Central	N.E.	South
Professional	189.24	258.42	134.87	216.24	139.54	142.78
Managers (proprietors and officials)	301.36	392.79	171.17	137.02	199.83	274.75
Clerical and Related Workers	167.81	184.60	119.05	170.46	123.15	140.64
Salesmen and Related Workers	131.16	140.49	74.07	133.74	93.72	143.63
Farmers, Fishermen	89.56	85.40	47.65	79.70	37.85	94.23
Transport Operators	101.11	-	70.38	145.38	127.69	104.49
Craftsmen	153.69	166.92	96.00	156.67	104.05	149.72
Production Process Worker	134.72	155.31	97.78	137.30	108.60	135.12
Manual Workers and Labourers	113.78	130.01	76.92	125.84	81.00	125.10
Service Workers	91.50	107.49	74.47	91.05	77.77	105.49
Unspecified	139.23	141.88	136.56	142.13	114.99	151.86

Source: Central Statistical Office, **First Report of the Demographic and Economic Survey**, Vol 1, 1954, Table 18.

²¹Central Statistical Office (1954: Table 18).

Back to Table Appendix, it is shown that from 1945 onwards, wages of unskilled laborers in Bangkok were significantly greater than those earned by rural hired farm laborers and employees engaged on private and government projects in the provinces. (Table Appendix). From 1980 though, nominal wage differentials between Bangkok and the provincial areas were not substantial, and lack of clear and significant wage differentials suggests that migration served to link the labor markets in Bangkok and the provincial areas quite efficiently²²

Why should rural unskilled wages have been above those of unskilled urban wages before 1945 ? The basic answer lies in the relatively high returns to rural labor in agriculture, and the undeveloped urban sector with few job opportunities.

High wages in the provincial areas were caused by the relatively high productivity of Thai agriculture in relation to labor input. According to Falkus,

The relatively favoured situation of the Thai peasant should be seen in international perspective. In 1883 wages in Thailand were apparently three times higher than wages in Japan. The underlying factor was the relatively high productivity of Thai agriculture in relation to labour input... Around 1900 a farmer in Japan had to work twice as long to gain a similar amount of rice as his counterpart in Central Thailand. Thai yields were also well ahead of those in Java before the Second World War²³

The high labor productivity in Thai agriculture was made possible through the abundance of land. Although rice yields per rai were low, output per worker per hour worked was high. Lower labor productivity in rice farming in Japan and Indonesia was

²² Bertrand (1980 :480-511)

²³ Falkus (1991:61)

attributed to the excessive supply of farm laborers in relation to land, which outweighed the effect of using more advanced biotechnology than Thailand²⁴.

The interplay of supply and demand factors resulted in the characteristic of the labor market discussed here: a limited flow of rural labor to Bangkok before the Second World War, but an enhanced flow thereafter. The Lewis-type model of economic growth seems inapplicable to Thailand before 1945. The longer economic history of Thailand suggests that a more elaborate explanation is needed. Briefly, prior to around the mid 1940s industrialization was extremely limited, Bangkok grew only slowly, and there appears very little evidence of a sizeable “labor- pool”, or “unlimited supplies of labor”. In fact, the opposite seems rather the case. Thai rural labor was slow to move to job opportunities in Bangkok and many jobs that emerged, skilled and unskilled, as Thailand became integrated into the world economy, were taken by Chinese immigrants. If there were a large rural labor pool we would expect low rural wages in rural areas relative to real wages in the city.

Following 1945 circumstances changed. The rate of growth of Thailand's population, which had averaged 1.9 percent per annum in 1937-47, accelerated to 3.2 percent in 1947-1960, then fell to 2.8 percent in 1960-70 and 2.7 percent in 1970-80, taking Thailand from a sparsely populated country with an extensive land frontier to a heavily settled country. In 1929 the Thai population was just 11 million in, 1947 it was around 18 million, in 1970, 34 million in 1980, 44 million, and today well over 60

²⁴ Sompop (1989: 170)

million. Thailand's population density was 34 persons per square kilometers in 1947 and 109 in 1990. These high growth rates put pressure on rural incomes and wage rates, and led to increases in poverty, tenancy, indebtedness,²⁵ and a decline in rice output per person in some regions. There was also a growing disparity in income levels between rural and industrial occupations, and especially between Bangkok and the provincial regions.²⁶ Such differentials must have been significant in encouraging migration from the provinces to the city, which in turn kept down urban wages. The gap, moreover, grew over time. In 1975 the average income in Bangkok was double that of the nation as a whole; in 1986 the figure had increased two-and-a-half-fold. In the former year average incomes in the northeast were 37 percent of those in Bangkok, in the latter year they were 23 percent.²⁷

Low productivity in rice production constrained rural wages and incomes. Between 1959 and 1966, the area under rice cultivation expanded. The north had the highest growth rate of 4.1 percent per annum, followed by 3.5 percent in the northeast as compared with less than 2 percent for the central region and 2.8 in the south²⁸. The high growth rate of rice land for cultivation in the north and northeast was caused by the increase of population and the expansion of national highways linking the countryside. In the central plain, the area under paddy increased partly because of an extension of irrigated land in the region. Rice yields (based on area planted) were among the lowest of

²⁵) For a fuller discussion see (Ammar 1979 ; Udis 1958).

²⁶) There are a number studies on income distribution in Thailand (see Oey :1979 ; World Bank 1980b Somchai 1987 ; Medhi 1988 :967 ; Ikemoto 1991).

²⁷ Falkus (1995: 30)

²⁸ Pasuk (1980:197)

the major rice-producing nations in the world. The average for the northeastern areas was just 140 kilograms per rai in both 1957/58 and 1958/59, while the average for the entire country was 175 and 198.²⁹ In 1958 one survey showed that in the populous northeastern provinces of Roi-et, Sisaket, and Nakhon Phanom, the average output of rice was well below that necessary to sustain an acceptable level of subsistence³⁰.

The rice premium or tax on rice exports imposed in 1955 (and which continued at significant level until the 1980s and not abolished until 1986), was also important factor to make urban rural gap wider. The effect of rice premium was transfer income from farmers to the urban consumers, and making indirectly, to industrialists who were able to keep wage low.³¹ The rice premium also obstructed the modernization of the agricultural rice sector since it distorted the rate of return on production of rice relative to land and/ or other agricultural products (and stimulated the diversification of crops), resulting in lower rice productivity, because the rice premium greatly reduced the attractiveness of the use of fertilizers, pesticides, chemical inputs, and various mechanized production factors.³²

²⁹ N.A.M. of Finance (1) 1.3.3.2/4 (1960)

³⁰ Falkus (1993: 161)

³¹) A comprehensive survey of the literature on aspects of the economic impacts of the rice premium on the Thai Economy is contained in Rungsan (Rungsan 1987).

³²) Per capita for fertiliser use in Thailand was very low for example in 1962-63 (1.8 lbs per capita) which was only 4.8, 5.8 and 6.9 percent of the comparable levels for Japan (37.4 lbs per capita), Taiwan (30.8 lbs per capita), and Korea (25.9 lbs per capita) respectively (Bertrand 1969: 181).

Again, the post Second World War years saw a growing demand for labor in Bangkok, associated with various factors such as government policy (as already discussed) and declining Chinese immigration.

Especially from around the 1960s there was a distinct urban bias in the nature of Thailand's development. Government policies enshrined in the development plan of 1961 supported import-led growth and laid emphasis on investment in manufacturing industry. These policies promoted Bangkok at the expense of the countryside, often drawing the best human resources away from the villages. Also in the 1960s, the expansion of tourism together with the presence of U.S. military personnel boosted the service sector of Bangkok. The Vietnam War had a major stimulating effect on the Thai economy through a growing inflow of foreign capital. The construction of American bases and related infrastructure such as highways and spending by American servicemen on leave reached a total equivalent to around 30-40 percent of total Thai exports in the late 1960s³³. Jobs were by no means solely or even mainly in the industrial sector, but were spread across a wide range especially in services. Demand for labor increased considerably. Manual jobs in the service sector constituted most of the non-professional urban jobs especially in the 1960s. The 1960s in particular was a time of immense physical change in Bangkok under the rebuilding enthusiasm of Field Marshal Sarit.

From the 1970s, much investment was directed to export-oriented manufacturing rather than import substitution, overwhelmingly in the Bangkok area, and new industries

³³ Boonkong (1974: 215)

continued to locate near fringe of the city to take advantage of low land prices and access to ports and trunk roads. Tourism added to the expansion of services and construction. Bangkok's service sector has been increasingly geared to the reception of overseas visitors, and tourism became the largest export earner from the 1980s until the present . Employment in Bangkok in the 1980s grew faster than in the rest of the country, with an annual growth rate of 6.5 % in the BMA and surrounding five provinces compared to 3.5 % for the Thai workforce³⁴

An additional factor encouraging labor mobility after 1945 must be emphasized: the expansion of the provincial road network and concomitant rise of truck and bus services. Even as late as 1940 there was not a single trunk road linking Bangkok to other provinces. The furthest distance a motor vehicle could travel comfortably from the centre of Bangkok was no more than 20 miles.³⁵ . In 1950, the total length of national highways was only 4,000 miles, of which a mere 500 miles, all within a 150 mile radius of Bangkok, were paved. Thereafter the pace quickened and in 1966 over half the state highway network of 7,000 miles was paved, and a substantial network of provincial "feeder" roads had come into existence³⁶ . Roads encouraged a stream of rural migrants to Bangkok, making the real cost of migration lower in terms of expenditure per trip, and also making it easier for migrants to enter Bangkok's labor market on a seasonal basis.

³⁴ Askew (1993:25)

³⁵ Anonymous (1977:320-324)

³⁶ Falkus (1991:66)

III

Summary and Conclusion

This paper has sought to provide empirical evidence of a notable change in Thai labor conditions: the change in relative rural-urban real wages. In the pre-war period real wages in rural areas were higher than in Bangkok. Following 1945 the position was reversed.

We have attempted to find explanations for the phenomena, and to draw some implications from the findings. Population growth and the changing patterns of Chinese immigration have been emphasized. At the same time, the growth of industries and services in Bangkok increased the demand for labor at a time when rural real incomes were stagnant or falling. These factors were fundamental in producing conditions which allowed the expanding labor force required for Thailand's remarkable export-led growth which has characterized the last three decades of the twentieth century.

Table Appendix : Wage Rates for Unskilled Laborers per Region, 1904-1995 (baht per day)

Years	Bangkok (1)	Bangkok (2)	Rural Areas (3)	Rural Areas (4)
1904	.50			.66
1905	.50-.75			.89
1906	.75			2-3
1907				1.10
1908				6
1909				.93
1910				.93
1911				.94-1.10
1912		.87		1.10
1913		.82		
1914		.75		
1915		.75		
1916		1.00		
1917		1.00		
1918		1.00		
1919		1.00		

1920		1.00		
1921		1.00		
1922		1.00		
1923		1.00		
1924		1.00		
1925		1.00		.80
1926		1.00		.76
1927		1.00		.80
1928	.75	1.00		.80
1929	1.0	1.00		1.10
1930	1.0	1.00		.94
1931		.80		.75-1.10
1932	.50	.80	1.8	
1933		.80	1.00-2.00	
1934		.80	1.20-1.70	
1935		.80	1.5	
1936		.80	1.5	
1937	.50-.60	.80	1.00-1.25	
1938	.80	.80		
1939	.64-1.00		1.20-2.00	
1940			2.00	
1941			2.00	
1942			1.50-2.00	
1943	1.00-1.50	1.27	1.50-2.00	1.50-2.00
1944		1.96		
1945	4.00	2.46	2.50	
1946	4.00	5.22		
1947		8.80		
1948	10.00-15.00			
1949	12.00	12.00-15.00		7.54
1950				7.90
1951	16.80		10.00	6.91
1952	16.80			7.92
1953	19.80			8.08
1954	19.80		10.00	
1955	25.00-30.00			8.00
1956	21.00		15.00	8.00
1957	21.00		11.00	
1958	20.00			
1964	22.00			10.00-12.00
1965	20.60			10.00
1965-67	21.00-22.10			8.00-10.00
1970	23.30			10.00
1971	23.30			9.00-12.60
1972	21.00			
1973	24.11			
1974	27.32			
1975	33.90			25.00
1976	33.85			14.00-30.00
1977	n.a			15.00-30.00
1978	36.36			15.00-35.00
1979	41.68			n.a
1980	49.20			36.30
1981	59.00		45.00-52.40	
1982	61.50		52.00-58.3	
1983	n.a		n.a	
1984	n.a		n.a	
1985	80.0		55.90-73.00	
1986	84.0		56.00-73.00	
1987		n.a		n.a
1988		n.a		n.a
1989		n.a		n.a

1990	155.3	64.5
1991	183.7	73.0
1992	214.6	81.7
1993	219.3	83.8
1994	276.3	106.8
1995	289.2	113.6

Sources: [N.A.R.5. M. of the Capital 23.5/1 (1906)]

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[N.A. R.5 M.of the Capital 5.8/25 (1910)]

[N.A. R.7 M. of Interior 26.5/79 (1928)]

[N.A. M. of Education 0701.7.1/13 (1929)]

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[N.A. Office of the Prime Minister 0201.75/11 (1933-36)]

[N.A. M of Education 0701.28.3/2 (1937-38)]

[N.A. (2) Office of the Prime Minister 0201.75/38 (1947-49)]

[N.A. M. of Education 0701.26.3/2 (1947)]

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Note: Bangkok (1), wages for construction workers in public projects in Bangkok

Bangkok (2),wages for unskilled laborers in Bangkok.

Rural Areas (3),wages for construction workers in public projects in the provincial areas.

Rural Areas (4), wages meant farm wages for hired farm laborers in the provincial Areas.

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