

Migration and Gender-based Occupational Segregation in Bangkok

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Introduction

Bangkok is the largest city in Thailand, whether measured by the size of its population or by the proportion of urban population of the country's total urban population it constitutes. According to the most recent census, Bangkok's population exceeds 33.7 percent of the total urban population of Thailand (NSO, 2000).

There are several explanations for the growth of Bangkok population. Most studies indicate natural increase as the main component of population growth in the capital city in the previous decades (Goldstein, 1972; Sternstein, 1982; Pejaranonda, Santipaporn and Guest, 1995). However, the impact of in-migration from other regions is an increasingly important factor (Pejaranonda, Santipaporn and Guest, 1995).

National development plans have had tremendous influence on female migration to the urban sites particularly to the capital city (Clausen, 2002; Phongpaichit and Baker, 1995; Pejaranonda Santipaporn and Guest, 1995; Leenothai, 1991). The sex

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selectivity of migration to Bangkok, became more pronounced in the decade after the launching of a new economic development approach of export-oriented growth, and females have been predominant in migration flow to Bangkok for several decades (NSO, 1960, 1970, 1980, 1990, 2000). The export-oriented strategy has produced many new employment opportunities, especially in areas that are suited to those skill and characteristics traditionally ascribed to women (Phongpaichit and Baker, 1995). Consequently, the recruitment efforts tend to focus on females. Service sector work also reflects a similar demand for female labor. As a result, many rural women have decided to leave their rural homes in search of urban employment.

There appears to be a segmentation of the occupation structure in Bangkok that is gender-based. For example, males are often found in transportation and production occupations, while women dominate the service sector (NSO, 1970, 1980 and 1990). However, there are few studies focusing on gender differentials in migration and Bangkok's occupational structure.

The segregation of people into particular jobs may have a negative impact on those in such occupation. For example, women working in the manufacturing sector where the majority of employees are females, may encounter environmental hazards from the production process such as exposure to toxic chemicals and fumes, dust, excessive noise levels, etc. Mills (2003) notes in particular the stress incurred among manufacturing workers who worked overtime or night shifts. She comments that the demand to meet production quotas puts workers under daily stress. In addition, harsh supervisors and sexual harassment often add to this stress.

Preventive strategies to deal with the above problems will be effective only if they are designed according to concrete information on gender-based occupational segregation. Thus, this study aims to examine 1) how national development has influenced migration flow to Bangkok and 2) how the evolution of sex segregation in the labor force is related to the gender differentials in migration to Bangkok.

Data

The analysis is based on first, a macro analysis that provides trends and patterns of migration and its impact on Bangkok occupational structure. Second, the study focuses on migrants from Nang Rong district, Buriram province to Bangkok and its vicinity as a case study to examine the relationship between the macroeconomic situation and the occupations of Nang Rong migrants.

Censuses provide migration data that can be used to examine five-year migration rates. Census data are the appropriate source of data for national level estimates on the level, patterns and composition of migration stream (Goldstein and Goldstein, 1986). Most of the information necessary to do the analysis is available in the published form. When it is not, special tabulations can be carried out by using a 1-2 per cent sample of the raw data of the censuses.

Another source of data used for this paper is from a study entitled "Demographic Responses to a Changing Environment in Nang Rong, Thailand" which will be called the "Nang Rong Study" in this study. The project is a collaborative study between the Institute for Population and Social Research, Mahidol University and the Carolina Population Center, University of North Carolina at Chapel Hill. It is a longitudinal study for which data were collected in Nang Rong district, Buriram Province in 1984, 1994, and 2000. The survey included a household census of every household in 51 study villages. An additional migration study was carried out in two different periods of time, in 1994 and 2000. The study followed and interviewed the migrants from a sample of 22 of the original 51 villages. The household members who were reported to have stayed in the household for less than two months were defined as migrants in the study. The migration study followed only migrants who moved to one of four major destinations, Bangkok and the five peripheral provinces (BMR—Nonthaburi, Pathum Thani, Samut Prakarn, Samut Sakorn and Nakhon Pathom), the Eastern Seaboard, Muang District of Korat, and Muang District of Buriram.

Data used for analysis in this sector were taken from household and migrant follow-up surveys. The life history section in both the household and migrant questionnaires had a specific focus on an individual's migration history that captured the moves between the rural villages and target destinations. The migrant history information was gathered on a yearly basis starting at age 13 for all surveyed individuals age 18-35 for the 1994 household survey and aged 18-41 for the 2000 household survey and aged 13-45 and 18-51 for 1994 and 2000 migration follow-up surveys respectively.

Results

1. Economic Development and Migration to Bangkok and the Five Peripheral Provinces

Economic Dominance of Bangkok

Bangkok has expanded its role as the center of administration and commerce since the Second World War. Bangkok's dominance became accentuated from the early 1950s when the state focused development on Bangkok through investment in infrastructure and the promotion of manufacturing (Wongsuphasawat, 1997).

The reorientation of the import substitution industry in the 1960s accelerated Bangkok's development. Bangkok became a manufacturing and service center as the result of its position as the leading port, the largest market, and the transportation, communications, and financial center of the country (Phongpaichit and Baker, 1995; Wongsuphasawat, 1997).

When manufacturing of export goods was initially promoted during the period of the Third Plan (1972-76), Bangkok was still the desired location for the location of export industries due to its position as the transportation center and because of the availability of basic infrastructure. The rapid growth of manufactured exports subsequently brought about the increase in employment in manufacturing and related service sectors (Douglass, 1995).

As a result of the sectoral and regional imbalances of the past development strategies, Bangkok is greatly affected by the migration (Sussangkarn and Chalamwong, 1994). The higher wages in Bangkok and the surrounding areas, where there was high industrial development, had inevitably influenced people to migrate to those areas. For example, in one study it was found that about 40 and 47 per cent, of all male and female respondents respectively, were migrants from rural areas (Tonguthai and Pattaravanich, 1993).

Migration flow to Bangkok and the Five Peripheral Provinces

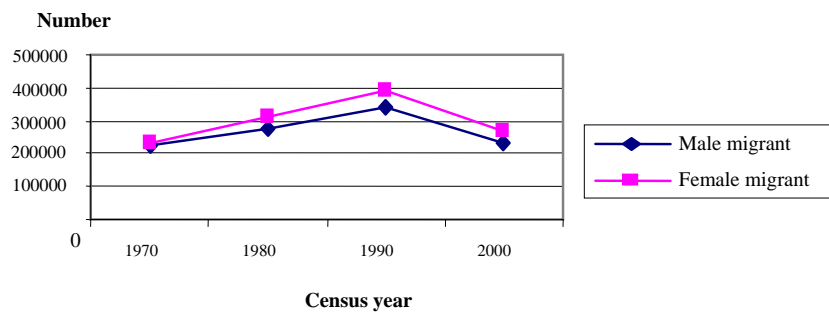
Figure 1 presents the number of migrants to Bangkok during the period 1970-2000. Between 1970 and 1990, migrants to Bangkok gradually increased in number. This may be due to the economic boom in the second part of the 1980s and the widening sectoral and regional imbalances. However, the migrant numbers appeared to decline in 2000. In the meantime, the number of migrants to the five peripheral provinces have continually increased since 1970. Migrants to the peripheral provinces increased to over 350,000 people in 2000. This number was almost the same as the number of migrants to Bangkok in the peak economic growth period in 1990. It reflects the expansion of economic development the surrounding provinces and away from the crowded city of Bangkok. The economic crisis in 1997 seemed not to have any effect on the movement of people to the peripheral provinces.

Female dominance in migration flow to Bangkok and the Five Peripheral Provinces

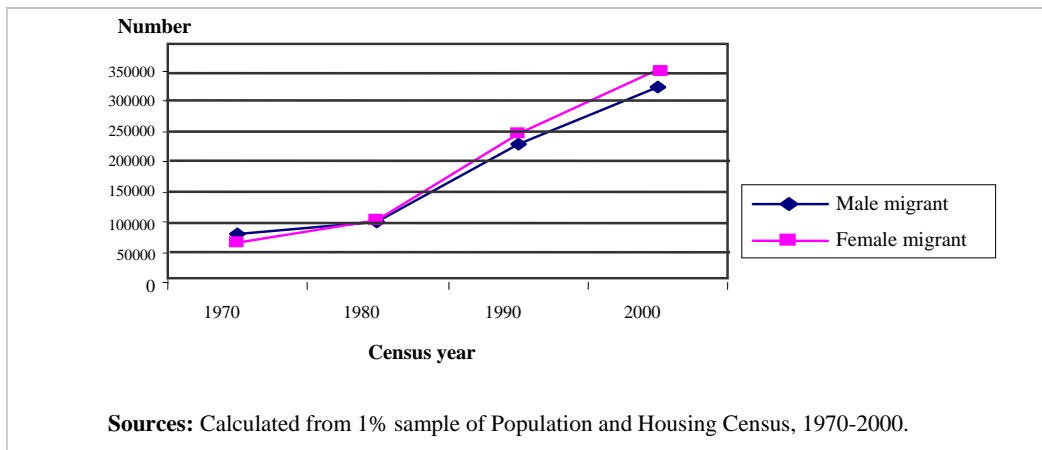
Figure 1 also shows the female dominance in the migration flow to Bangkok and the five peripheral provinces since 1980. This is mainly because many employers in these areas, particularly by the export-led industries such as the garment, food processing, and electronic assembly industries, favored female workers. Moreover, many service sector jobs are attractive to women who have care giving responsibilities for their families. Such jobs allow them to work part time or become self employed and still fulfill their domestic responsibilities as wives and mothers, etc. (Lee and Hirata, 2001 cited in Chang, 2004). In addition, females are also generally accustomed to some

service work such as childcare, cleaning, and meal preparation, which tends to have shifted to the marketplace (Charles, 1992; Chang, 2000).

Figure 1
Number of migrants in Bangkok and the five peripheral provinces by sex,
1970- 2000



Number of migrants to peripheral provinces by sex, 1970-2000



The dominance of female migrants can also be seen from the sex ratio of the migrants. Table 1 shows the sex ratio of five-year migrants to Bangkok by region of their previous residence. A lower sex ratio reflects a greater the number of female migrants over their male counterparts. During 1965-70, it was only female migrants from the Northeastern and Northern regions that outnumbered male migrants. Three decades later, however, female migrants from every region were numerically dominant in all flows to Bangkok. In the first three decades, the sex ratio of the migrants from the Northeastern was the lowest. This means that the gap between the number of female and male migrants to Bangkok from the Northeastern region was wide with many more female migrants than male migrants.

Table 1: Sex ratio of five-year migrants to Bangkok by region of previous residence: 1970-2000

Time/previous regions	Previous region of residence				
	Central	North	Northeast	South	Total
1965-70	114	79	74	114	100
1975-80	87	93	82	95	86
1985-90	88	89	86	90	87
1995-2000	83	85	84	72	82

Sources: Calculated from 1 % sample of Population and Housing Census, 1970-2000.

Female dominance in migration to Bangkok reflected the high demand for female labor. The next section will examine the changes in occupational structure of the capital city, the occupational composition of migrants and non-migrants, and gender-based segregation in the labor force.

2. Changes in Occupational Structure

The change in economic structure is associated with changes in the nation's occupational structures, particularly in urban places. It is evident that employment in the

agriculture sectors is declining while employment in manufacturing, transportation, and service sectors is increasing (Punpuing, 1996).

The transformation of the national economic structure has also had a tremendous effect on employment in Bangkok and the five peripheral provinces. The demand for labor in these areas influences the flow of migration. The labor force structure of Bangkok is affected by in-migration from other areas of the country.

a) Occupational structure of Bangkok and the peripheral provinces

Changes in occupational structure of Bangkok and the five peripheral provinces (BMR) appear to be similar to the national economic changes. Table 2 indicates the decline of the agricultural sector in BMR. This sector employed 27 per cent of the labor force in 1970 but only 11 per cent in 1990. In contrast, the share of manufacturing occupations had been gradually increasing. Work in this sector increased from 26 per cent in 1970 to 33 per cent in 1990¹.

Of course, similar changes in occupational structure occurred in Bangkok. The decline in agriculture was even more dramatic than it was for BMR, from 12 per cent to 3 per cent of the labor force from 1970 to 1990, respectively. In addition, there was a similar change in the production or manufacturing sector. Its share increased from 28 per cent in 1970 to 34 per cent in 1980 and slightly declined to 32 per cent in 1990. The decline might be partly due to a decentralizing strategy to expand economic activities to the areas surrounding Bangkok. The figures for peripheral provinces confirmed this shift. The share of the labor force in the five peripheral provinces employed in manufacturing increased from 21 per cent to 28 per cent and 35 per cent in 1970, 1980 and 1990, respectively. The number of workers in occupations related to sales work in Bangkok proper was also large. Its share was almost 20 per cent of the total. The number of service workers barely changed at all. One reason might be that some informal or unregistered occupations were not included in this sector.

In conclusion, the data reflect the impact of national economic strategies that had shifted from an agricultural to an industrial orientation. There was a resultant decline in the agricultural sector in both BMR and Bangkok itself. Non-agricultural work, particularly jobs in the manufacturing and service sectors, increased its share in the Bangkok occupational structure. A similar transformation occurred in the five peripheral provinces.

Table 2: Occupational structure of population aged 15 and over in BMR, Bangkok, and the five peripheral provinces, 1970-1990

Occupations/year	1970		1980		1990	
	Number	%	Number	%	Number	%
BMR						
Prof.	37,195	3.6	100,543	6.6	248,607	10.6
Admin.	95,041	9.3	115,022	7.5	160,659	6.9
Clerical	67,194	6.6	119,045	7.8	202,741	8.7
Sales	144,496	14.1	215,001	14.1	340,067	14.5
Agri.& mining	273,199	26.7	249,175	16.3	250,367	10.7
Transportation	60,449	5.9	122,786	8.0	224,176	9.6
Production	261,695	25.6	491,278	32.2	774,641	33.1
Service	82,706	8.1	114,071	7.5	137,000	5.9
Total	1,021,975	100.0	1,526,921	100.0	2,338,258	100.0
Bangkok						
Prof.	30,146	4.4	76,941	7.4	205,290	13.2
Admin.	85,100	12.4	94,561	9.1	128,726	8.3
Clerical	58,101	8.5	99,540	9.5	150,773	9.7
Sales	125,887	18.4	176,747	17.0	263,032	17.0
Agri.& mining	81,430	11.9	56,093	5.4	44,970	2.9
Transportation	45,865	6.7	94,428	9.1	159,245	10.3
Production	191,678	28.0	353,899	33.9	497,496	32.1
Service	67,272	9.8	90,527	8.7	101,300	6.5
Total	685,479	100.0	1,042,736	100.0	1,550,832	100.0
Peripheral Prov.						
Prof.	7,049	2.1	23,602	4.9	43,317	5.5
Admin.	9,941	3.0	20,461	4.2	31,933	4.1
Clerical	9,093	2.7	19,505	4.0	51,968	6.6
Sales	18,609	5.5	38,254	7.9	77,035	9.8
Agri.& mining	191,769	57.0	193,082	39.9	205,397	26.1
Transportation	14,584	4.3	28,358	5.9	64,931	8.2
Production	70,017	20.8	137,379	28.4	277,145	35.2
Service	15,434	4.6	23,544	4.9	35,700	4.5
Total	336,496	100.0	484,185	100.0	787,426	100.0

Sources: Calculated from 1% sample of Population and Housing Census, 1970-1990.

b) Occupational Segregation by Sex

According to theories of social stratification and inequality, in highly industrialized societies there should be less occupational sex segregation. In post-

industrial economies, women have high productivity and this implies greater occupational integration. In addition, sex discrimination is also argued to be less prevalent in advanced industrial labor markets in which there is generally a more egalitarian environment (Charles, 1992). However, Charles (1992) argues that the traditional division of labor of women that focused on domestic work has created new caretaking, subordinate, or domestic-type jobs that are defined as “women’s work.” It is evident that the ‘female’ tasks such as laundry and food preparation, the care of preschool children and elderly have been incorporated into the formal economy. This results in a change of women’s responsibility for this type of work from the domestic to the formal public sphere. Consequently, it could lead to the sex segregation in the occupation.

As mentioned before, the high percentage of women in manufacturing sectors in BMR was mainly due to the labor requirements of urban manufacturing jobs. Economic development provided employment opportunities in areas normally thought to be suitable for women as an extension of what have been doing at home, such as work in the food and clothing industries (Tonguthai and Pattaravanich, 1993; Phongpaichit, 1993).

Table 3: Sex ratio of occupations engaged in Bangkok in last year according to migrant status, 1970-1990

(males per 100 females)

Migration status/year	1970			1980			1990		
	Non-mig.	Mig.	Total	Non-mig.	Mig.	Total	Non-mig.	Mig.	Total
Professional	85	105	89	84	103	86	86	102	87
Admin.	576	1,800	750	378	576	397	369	440	371
Clerical	148	169	152	119	101	117	92	64	88
Sales	121	128	122	101	107	102	89	78	88
Agriculture	117	132	118	112	160	116	110	213	117
Transport	2,334	1,877	2,229	8,625	3,263	7,015	2,322	5,811	2,504
Craftsmen/production/ laborer	181	223	189	173	198	178	156	127	147
Service worker	90	43	73	86	35	67	71	26	54
Total	150	157	151	141	124	138	124	96	118

Sources: Tabulated from 1% sample of Population and Housing Census, 1970-1990.

Table 3 shows the sex segregation in the Bangkok occupational structure from 1970 to 1990. The occupations labeled as “men’s work” such as transportation have an extremely high sex ratio. There were many more males who engaged in this kind of work than females. The engagement in transportation occupation of migrants and non-migrants among Bangkok’s population varied between censuses. In 1980, the sex ratio of non-migrants was very high while in 1990 the highest sex ratio shifted to the migrants. In addition, occupations such as craftsmen or laborers whose jobs required some skill and strength were also male dominated. Nevertheless, females appeared to increase their participation in such work over time. Also, the construction industry accepted more women, particularly in jobs that are less strenuous and so less well paid. According to Tonguthai and Pattaravanich’s study (1993), within the Bangkok Metropolitan Region where most of the firms were located, women workers in female-based industries outnumbered men by four to one. In the hiring practices, they found that employers in many industries gave preference to women. The most obvious example was in the textile and garment industries where there were four times more women than men workers. The ratio of women to men among workers in the electronics industry was even higher. This may be the reason for the increased participation over time of women in the craftsmen/production/ laborer sector.

Moreover, clerical and sales jobs that used to be male dominated at the beginning of the export-oriented period declined in their sex ratio in 1990. There were more female migrants than female non-migrants who participated in these occupations.

In contrast, for occupations that are typically defined as “women’s work,” service work in particular, the sex ratio was quite low. This means that there were more females engaged in such occupations than males. The sex ratios of both migrants and non-migrants were continually declining between 1970 and 1990. This reflected the fact that there were many service jobs, including retailing, construction, food preparation, and a wide range of activities related to tourism, that were becoming available for females in the capital city. The urban economy needed more service workers to satisfy the needs of its population as well as that of tourists (Phongpaichit, 1993).

Young female migrants could easily join this sector, particularly during the rapid economic growth period in the 1980s and mid 1990s. For example, the sex ratio of female migrants in the service sector gradually decreased from 43 to 26 in 1970

to 1990, respectively. This reflected the increasing proportion of female migrants, compared to male migrants, in this sector. The data also indicate that female migrants were much more likely than female non-migrants to enter the service sector.

In the professional, technical, and other related work, there were more female non-migrants working than either their male counterparts or female migrants. It was found that the sex ratio of non-migrants in this occupation was approximately 84-86 between 1970 and 1990, while for the migrants, the sex ratios were slightly more than 100 in the same years. This reflected the neutral nature of this type of occupation, which was subsequently accessible to both males and females. This might be because some female-dominated work such as instruction and nursing were included in this occupational class.

In conclusion, the sex ratios within occupations reflect the influence of urban labor force structure and subsequently led to increased gender segregation in the labor force of Bangkok. The export-led economy provided various kinds of work including production and service occupations. Jobs were equally accessible to both native and migrant workers. The preference for female workers by a majority of manufacturing industries and the great demand for service work of the new urban economy had pulled numbers of migrants, particularly women to the city. The young females with low education could easily find jobs. This may have contributed to the gender-based segregation in the Bangkok labor force that can be clearly observed.

This section elaborated the relationship between macro economic situation and the migration to Bangkok including its effect on occupational structure of Bangkok. It mainly captured the influence of economic factors on the propensity to migrate to Bangkok. Unbalanced economic development had led to a disparity in employment opportunities between Bangkok and the rest of the country. The shift of economy to an export-led orientation had also stimulated the demand for workers in the manufacturing and service sectors. This has affected the occupation structure of Bangkok. Moreover, the gender-bias towards women in labor demand dramatically affected gender selectivity to the capital city.

3. Nang Rong migrants and their occupations

The analysis presented in the following section explores the occupations of Nang Rong migrants in Bangkok and the five peripheral provinces during the period 1994 to 2000. The occupations that migrants engaged in during their stay in these more highly developed destinations may reflect their relation to the national economy.

The analysis compares the work of those migrants who had long experience staying in those areas in both 1994 and 2000 and those migrants who had resided in those destinations in 1994 but had returned to their origin households by 2000. The macroeconomic circumstances during these periods may have influenced migrants' decisions to relocate in search of work in specific occupations. Likewise, the decision to return home can be influenced by the types of work one does, especially during periods of economic downturn such as that occurred in 1997-2000.

Sample Selection

Two groups of migrants to Bangkok and the five peripheral provinces were included in the study: 1) those who had experiences of being the migrants in the study destination and were followed up in both 1994 and 2000; and 2) those who had experiences of being the migrants in the study destinations but were living in their origin households in Nang Rong in 2000. The latter group could be classified as return migrants. The occupations they engaged in before moving back to their home could indirectly reflect the reason for their return.

Migrants in Two Periods of Time²

This section presents some details of the migratory experiences of Nang Rong migrants who were found and interviewed in Bangkok and/or the five peripheral provinces in both rounds of the migration surveys. This group of migrants are of particular interest as they have a long period of residence in the destination

Among Nang Rong migrants, females outnumbered males in the migration flow to Bangkok and/or the five peripheral provinces (see table 4). There were 265 people (or 44 per cent of the total 604 migrants) who had resided only in Bangkok. This comprised 58.5 percent females and 41.5 per cent males. Only 144 (or 24 per cent of the total 604 migrants) had stayed exclusively in any of the other five peripheral provinces. And the remaining 195 of the Nang Rong migrants had resided in both Bangkok and the five peripheral provinces.

Table 4: Percentage distribution and number of study migrants who were found in both 1994 and 2000 by sex and destinations in 2000 survey

	Only Bangkok	Only peripheral provinces	Both BKK and peripheral provinces
Male	41.5 (110)	40.3 (58)	43.6 (85)
Female	58.5 (155)	59.7 (86)	56.4 (110)
Total	100.0 (265)	100.0 (144)	100.0 (195)

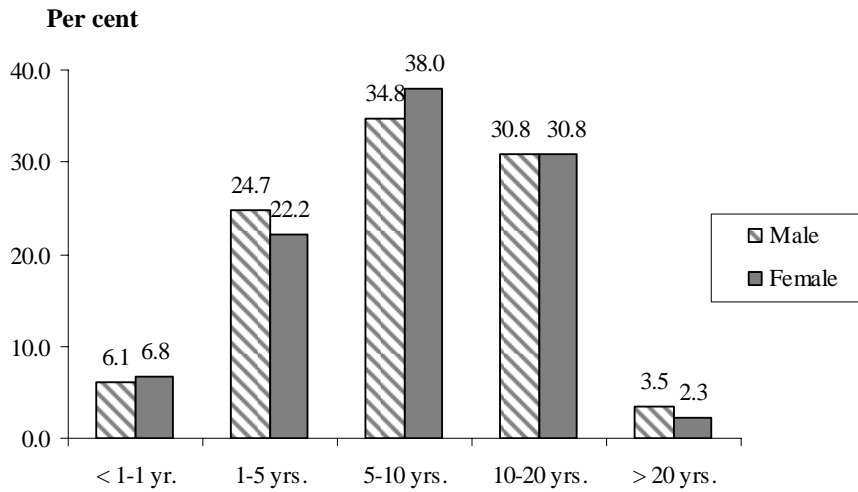
Sources: Calculated from 1994 and 2000 Nang Rong Study data.

Among all migrants who were found and interviewed in Bangkok, it was found that 67 per cent had come to stay in Bangkok only once in their life; 22 per cent had migrated to Bangkok two times; 8 per cent three times and 3 per cent more than three times (data not presented here). The majority of migrants who had been in Bangkok only once for at least two months or so in their lives, were in the 25-29 age-group.

Figure 2 shows that slightly more than one-third of both female and male migrants had stayed in Bangkok for 5-10 years, with a greater proportion for female than male migrants in this category. Approximately one-third of both sexes stayed in Bangkok from 10-20 years. The percentage of males was slightly greater than that of females among the migrants who had stayed 1-5 years and more than 20 years. In all,

70 per cent of both men and women had resided in Bangkok for more than 5 years. It can be concluded that majority of Nang Rong migrants who were found in the two rounds of migration surveys had lived in the capital city for a long time although the stay may not have been continuous.

Figure 2
Percentage distribution of number of years Nang Rong migrants
experiencing in living in Bangkok by sex



Sources: Calculated from 1994 and 2000 Nang Rong Study data.

The data from the migrant life history can also be used to investigate the occupations in which Nang Rong migrants engaged in during each move to any target destination. The demand for labor in the capital city and the five peripheral provinces depended mostly on the national development strategy. In this analysis the period of migration was divided into four main periods based on the nation’s economic situation. These four periods are: 1961-1970; 1971-1985; 1986-1995; and 1996-2000 (the main economic events in each period are shown in Appendix Table A).

Table 5 shows the occupations that Nang Rong migrants engaged in the different periods of time. Only the last occupation they engaged in was taken into account. During 1961-1970, only one female migrant was found in the service sector in Bangkok and only one female migrant had begun to work in a factory in the peripheral provinces. This reflects the fact that during the initial stage of the modern economy, migrants from Nang Rong were not being attracted to the urban economy. This may possibly be due to the availability of land for agriculture in the rural areas.

Table 5: Percentage distribution of last occupation engaged in by Nang Rong migrants who were found in Bangkok and in the five peripheral provinces in both 1994 and 2000 by sex and the time periods

	1961-1970		1971-1985		1986-1995		1996-2000	
	Male	Female	Male	Female	Male	Female	Male	Female
Bangkok								
Agriculture	0.0 (0)	0.0 (0)	0.0 (0)	4.3 (2)	0.0 (0)	2.2 (5)	0.0 (0)	1.5 (3)
Factory	0.0 (0)	0.0 (0)	32.3 (10)	21.7 (10)	28.5 (49)	47.6 (110)	25.0 (39)	45.7 (91)
Construction	0.0 (0)	0.0 (0)	6.5 (2)	10.9 (5)	8.1 (14)	4.3 (10)	6.4 (10)	2.5 (5)
Service	0.0 (0)	100.0 (1)	29.0 (9)	47.8 (22)	27.9 (48)	28.1 (65)	28.2 (44)	27.1 (54)
Others	0.0 (0)	0.0 (0)	32.3 (10)	15.2 (7)	35.5 (61)	17.7 (41)	40.4 (63)	23.1 (46)
Total	0.0 (0)	100.0 (1)	100.0 (31)	100.0 (46)	100.0 (172)	100.0 (231)	100.0 (156)	100.0 (199)
Peripheral provinces								
Agriculture	0.0 (0)	0.0 (0)	0.0 (0)	6.3 (1)	0.9 (0)	0.0 (0)	0.8 (1)	0.0 (0)
Factory	0.0 (0)	100.0 (1)	62.5 (10)	68.8 (11)	53.0 (61)	75.5 (120)	45.5 (55)	78.0 (124)
Construction	0.0 (0)	0.0 (0)	18.8 (3)	6.3 (1)	7.8 (9)	1.3 (2)	5.8 (7)	1.3 (2)
Service	0.0 (0)	0.0 (0)	12.5 (2)	12.5 (2)	16.5 (19)	8.8 (14)	19.8 (24)	6.9 (11)
Others*	0.0 (0)	0.0 (0)	6.3 (1)	6.3 (1)	21.7 (25)	14.5 (23)	28.1 (34)	13.8 (22)
Total	0.0 (0)	100.0 (1)	100.0 (16)	100.0 (16)	100.0 (115)	100.0 (159)	100.0 (121)	100.0 (159)

Sources: Calculated from 1994 and 2000 Nang Rong Study data.

In the second period (1971-1985), Thai economy was beginning to be transformed from an agricultural to an industrial economy. Urban employment opportunities were attracting a growing number of migrants. In this period there was an increase in number of Nang Rong migrants to both Bangkok and the peripheral provinces. Most female migrants in Bangkok (almost 50 per cent) were engaged in service work while men were most likely to work in factories. It is interesting to find that the percentage of male migrants who had taken up factory work was 10 per cent

higher than that for female migrants. The percentage of female migrants working in construction was slightly higher than that for their male counterparts. In the same period in the peripheral provinces, more than 60 per cent of both male and female migrants worked in factories. Almost 20 per cent of male migrants worked in the construction sector while only 6 per cent of female migrants worked in construction.

The third period (1986-1995) was the peak period of economic growth. After the initiation of the export-led industrial strategies, there was an expansion of employment opportunities in the manufacturing and service sectors. As a result, female Nang Rong migrants to both Bangkok and the peripheral provinces were increasingly likely to participate in factory work. Although men in Bangkok tended to do work categorized as "other," their participation in factory work was remained high at 29 per cent. Service work appeared to be more accessible in the capital city than in the peripheral provinces evidenced by the rather high percentage of both men and women who worked in this sector in Bangkok. For the construction sector, it was found that although male migrants in both areas tended to join this sector more than their female counterparts, the percentages of those who worked in this sector were quite low, less than 10 per cent.

The fourth period (1996 and 2000) started at the end of the economic bubble (1992-1995) and finished during the period of the economic crisis (1997-2000). A similar pattern of work was found in this period. The majority of the movers to both Bangkok and the peripheral provinces tended to work in factories, with a higher percentage of female migrants than that of males in this sector. This reflected the growth of female-oriented manufacturing work. In addition, migrants in the capital city seemed to work in the service sector more so than did the migrants in the five peripheral provinces. This might indirectly reflect the higher demand for service work in Bangkok than in the surrounding provinces.

Occupation of Return Migrants³

The pattern of occupational engagement by the return migrants is different from that of the Nang Rong migrants to Bangkok and the five peripheral provinces. However in the first period, the starting of the modern economic environment seemed to have a minimal influence on the return migrants. The results in Table 6 show that there were fewer than ten people who worked in Bangkok and the surrounding provinces in such period. The number of return migrants increased in the next two periods but declined in the period of the economic crisis. During 1986-1995 when there was the economic boom, the number of migrants in Bangkok was the highest, 1,122 for males and 902 for females; these numbers declined to 523 and 373, respectively, after the economic downturn.

During the second period almost 50 per cent of male return migrants engaged in construction work in Bangkok. In the following periods, men took part in construction work at a slightly lower percentage (42 per cent), and this level of participation declined further during the economic recession period. For females in Bangkok, in every period they were mainly engaged in factory work, increasing from 29 per cent during the second period to 41 per cent and 42 per cent in the third and fourth periods, respectively. The participation of female migrants in Bangkok construction work was also high. The high percentage of both male and female return migrants in the construction sector reflected Bangkok's occupational structure, which demanded laborers for the rapid growth of the construction business. However, the impact of economic crisis in 1997 on the construction sector, particularly in the real estate business in Bangkok might be the plausible reason for these migrants returning home. They most likely were laid off or had their wages reduced (Gray, 1999). The qualitative findings of Nang Rong migrants revealed that after the economic downturn, the employer in one construction site asked his workers to go home and call the company to check for any new jobs (Jampaklay, 2003). Therefore, in the period that was most affected by economic crisis, the percentage of both sexes in construction sector declined with more percentage than in the factory work.

In the five peripheral provinces, except for male migrants in the second period (1971-1985), both male and female return migrants tended to work in factories. This may possibly be a result of the economic expansion to the surrounding provinces. Even though the manufacturing sectors were also very much affected by the crisis, there was a high percentage of both sexes who continued working in this sector before returning home. However, the actual number of women had declined by half.

The establishment of small and medium-scale factories in Nang Rong may offer Nang Rong people another alternative in being employed in their hometown. The study of Matsumura, Isarabhakdi and Pleumcharoen (2003) found that Nang Rong return migrants were satisfied with these new job opportunities. However, they have argued that young rural women intended to come to Bangkok to experience the modern lifestyle of Bangkok rather than for purely economic reasons. This may be the indirect implication of their return to Bangkok if they have chance.

Table 6: Percentage distribution of last occupation engaged in by Nang Rong migrants who returned home during the 2000 survey by sex and time periods

	1961-1970		1971-1985		1986-1995		1996-2000	
	Male	Female	Male	Female	Male	Female	Male	Female
Bangkok								
Agriculture	0.0 (0)	0.0 (0)	3.3 (20)	2.9 (7)	11.7 (19)	1.0 (9)	1.0 (5)	1.1 (4)
Factory	0.0 (0)	0.0 (0)	19.9 (61)	29.2 (70)	24.3 (273)	41.1 (371)	28.3 (148)	42.4 (158)
Construction	80.0 (4)	0.0 (0)	48.2 (148)	27.1 (65)	49.6 (557)	34.0 (307)	42.4 (222)	32.7 (122)
Service	20.0 (1)	100.0 (1)	2.6 (8)	7.5 (18)	5.4 (61)	8.0 (72)	9.8 (51)	12.1 (45)
Others	0.0 (0)	0.0 (0)	26.1 (80)	33.3 (80)	18.9 (212)	15.9 (143)	18.5 (97)	11.8 (44)
Total	100.0 (5)	100.0 (1)	100.0 (307)	100.0 (240)	100.0 (1122)	100.0 (902)	100.0 (523)	100.0 (373)
Peripheral provinces								
Agriculture	0.0 (0)	50.0 (1)	20.0 (3)	12.5 (2)	5.6 (6)	6.5 (9)	2.0 (1)	1.6 (1)
Factory	0.0 (0)	50.0 (1)	26.7 (4)	50.0 (8)	43.9 (47)	68.8 (95)	64.7 (33)	73.0 (46)
Construction	0.0 (0)	0.0 (0)	20.0 (3)	0.0 (0)	29.0 (31)	10.9 (15)	19.6 (10)	19.0 (12)
Service	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	4.7 (5)	1.4 (2)	3.9 (2)	0.0 (0)
Others*	100.0 (1)	0.0 (0)	33.3 (5)	37.5 (6)	16.8 (18)	12.3 (17)	9.8 (5)	6.3 (4)
Total	100.0 (1)	100.0 (2)	100.0 (15)	100.0 (16)	100.0 (107)	100.0 (138)	100.0 (51)	100.0 (63)

Sources: Calculated from 1994 and 2000 Nang Rong Study data.

Conclusions and Discussion

Since 1980, there have been more female migrants to Bangkok than their male counterparts. This has been partly due to the influences of economic development strategies, particularly the export-led policy that indirectly favored the employment of females. The increase in the number of manufacturing industries, such as textiles, electronic assembly, and food preservation, led to an increased demand for female labor. The demand for female workers, especially young workers, was mainly due to their perceived desirable characteristics, which included being docile, non-aggressive, and being predisposed to factory work, on account of their nimble fingers and good eyesight (Tyner, 1994; Riley, 1997). The need for service work that derived from the rapid economic growth in the capital city also attracted female migrants. At the same time, female migrants most likely favored work that is often defined as “women’s work,” such as child care, cleaning, and food preparation. For women, such work is similar to their household tasks (Charles, 1992; Chang, 2000). Consequently, the job opportunities provided by the new economic development attracted female migrants to Bangkok.

Similarly, female dominance among migrants was found in the five peripheral provinces. The decentralization policy expanded economic development away from Bangkok. The increasing number of establishments and employees in the peripheral provinces have attracted a large number of migrants to the area since 1980. The number of migrants in the surrounding provinces has increased in each decade, even when the number of migrants to Bangkok started to decline in the 1990s. Also, the economic crisis might have had greater effect on Bangkok’s economy than on that of the peripheral provinces. It could possibly be because there is more variety of occupations in Bangkok—including construction, financial services, and service sectors—while the economic orientation in the five peripheral provinces was mainly in the manufacturing sector.

Therefore, it can be seen that the national economic policies has had a major influence on the dominance of females in migration streams to Bangkok. The large

number of relatively high-paying jobs in the capital city compares to other regions had enticed female migrants to take advantage of such good opportunities. This reflects an equilibrium mechanism that migrants have used to overcome the unbalanced economic situation between their places of origin and other high economic growth destinations. They would move to the places where there were more job opportunities and higher incomes (Hugo, 1993; De Jong and Gardner, 1981; Harris and Todaro, 1970). In 2000, the migration trend had expanded to the five peripheral provinces, where there was similar opportunity for well paid jobs.

The shifts in the national economic structure are reflected in the occupational structure of Bangkok. The shift of the country's economy from an agricultural to industrial orientation increased employment opportunities in the manufacturing and service sectors in the capital city. As a result, there was a dramatic decrease in the number of people in Bangkok who worked in the agricultural sector. Non-agricultural work, such as work in production and transportation, subsequently increased its share in Bangkok occupational structure during 1970-2000. The proportion of population in sales work was also high.

Gender-based segregation was also found in the Bangkok occupational structure. Considering the sex ratio during 1970-2000, there was a dominance of women in service work. In contrast, work in administration, transportation, and production was dominated by males.

The gender-based segregation in occupations in Bangkok reflects the phenomena of "men's work" and "women's work." For example, the service work, which is usually defined as "women's work" is dominated by females. Work in transportation, which is often viewed as tough and requiring some masculine characteristics, is predominantly male. However, the male-female sex segregation in clerical and sales work, which used to be dominated by males at the beginning of the export-led economy, had declined by 1990. This implies that there were more females who engaged in such work than males. For production work, although men were still dominant in such work, it was found that an increasing number of women were engaged

in this work. In conclusion, not only had the urban-based economy provided a large amount of work, particularly for females, but it had also affected the gender-based segregation of Bangkok's occupational structure.

The analysis that used Nang Rong data reveals the influence of macroeconomic phenomena on migration behavior of Nang Rong migrants to Bangkok and/or the five peripheral provinces. Work engaged in during the economic boom and during the economic crisis was found to have influenced the duration of their stay in those destinations or their decision to return home. For example, the vagaries of construction work, in which a majority of returned male migrants had engaged in during the economic crisis, might have forced them to return home due to their being laid off. In contrast, the work that a majority of long-term migrants engaged in during the economic boom and economic crisis was factory work. It was found that although the percentage of long-term migrants who had worked in factories decreased during the economic crisis, most such migrants still worked in this sector, particularly migrants in the five peripheral provinces. This might be because job opportunities in the five peripheral provinces were mainly in the manufacturing sector, compared to Bangkok, where there was more variety in the types of jobs available.

The export-led economy has influenced the gender-based occupation segregation in Bangkok. Regarding the consequences of occupational sex segregation, Reskin and Pandavic (1994) reveal that in contemporary societies, sex segregation in work contributes to women's lower pay and relative lack of social power—at work, in their families, and in the larger society. For example, women, who work in predominantly female occupations, are likely to earn less and enjoy less power and prestige than men. Therefore, there should be a strategic plan to overcome sex segregation in occupations.

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Notes

- 1 Since the occupations in 2000 census have been categorized differently from the previous censuses, it is unable to make the comparison with other censuses.
- 2 We call these migrants as “Nang Rong migrants” in the following section.
- 3 “Return migrants” refer to those who had experiences of being as migrants in Bangkok and the five peripheral provinces in 1994 but were found in their origin households in Nang Rong in 2000.

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Table A: Period classification based on economic situations

Periods	Major economic events	GDP
1961-1970 (2504-2513)	<ul style="list-style-type: none"> • Start of modern economic • 1st and 2nd national development plans (1961-1966&1967-1971) • Launching of <i>ISI</i> 	<ul style="list-style-type: none"> • Between 1960-1970, GDP averaged about 7.9% per annum (Krongkaew, 1996). • During 1960-1970, the share of industry in total GDP increased from 18.2% to 25.2%.
1971-1975 (2514-2518)	<ul style="list-style-type: none"> • 3rd national development plans (1972-1976) • 1st oil crisis (1973) • Starting of focus on manufacturing exports (Phongpaichit & Bakers, 1995) 	<ul style="list-style-type: none"> • Between 1970-1980, GDP averaged about 6.9% per annum (Krongkaew, 1996). • During 1970-1980, the share of industry in total GDP increased from 25.2% to 30.8%.
1976-1980 (2518-2523)	<ul style="list-style-type: none"> • 4th national development plans (1977-1981) enthusiastically pro-export, (Phongpaichit & Bakers, 1995) • 1980 census • 2nd oil crisis (1979) • Launching of Eastern Seaboard (1985) 	
1981-1985 (2524-2528)	<ul style="list-style-type: none"> • 5th national development plans (1982-1986) • Launching of <i>EOI</i> (1985) • FDI (USA, Japan) 	<ul style="list-style-type: none"> • Between 1982-1992, GDP averaged about 8.8% per annum (http://www.worldbank.org/data/-8/26/03).
1986-1990 (2529-2533)	<ul style="list-style-type: none"> • 6th national development plan (1987-1991) • 1990 census • Massive increase in export merchandise; FDI, mainly in manufacturing sectors (Japan, USA, Taiwan, Hong Kong, Singapore) (≥US\$ 1 billion); # of tourists • According to Ayal (1992), between 1987 and 1990, the fastest rate of Thai economic growth • Becoming NICs 	<ul style="list-style-type: none"> • During 1980-1990, the share of industry in total GDP increased from 30.8% to 37.2%. • Between 1987-1990, GDP averaged about 11.5% per annum (Ayal, 1992).

Table A: (Continued)

Periods	Major economic events	GDP
1991-1995 (2534-2538)	<ul style="list-style-type: none"> • 7th national development plan (1992-1996) • Continually increased in export merchandise and FDI • Bubble period (1992-1997) 	<ul style="list-style-type: none"> • Between 1992-2002, GDP averaged about 2.5% per annum (http://www.worldbank.org/data/-8/26/03).
1996-2000 (2539-2543)	<ul style="list-style-type: none"> • 8th national development plan (1997-2001) • 2000 census • Economic crisis (1997) • Between 1997 and 1999, the number of unemployed more than doubled from some 700,000 to 1.7 million and the unemployment rate increased from 2.2 percent to 5.2 percent (ILO, 2000). Reasons for being unemployed due to closed down of establishments, laid off, reduced wages or benefits, and unsatisfied with payment (Gray, 1999). 	