

Session 1

## Globalization and Population Change in Bangkok

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### 1. Introduction.

This study investigated the impact of the recent globalization process on the gender-specific migration and changes in population distribution in Thailand, focusing on Bangkok. The main purpose of this study is to point out the implicit consequences of the process of globalization in Thailand for the changing demographic behavior of the Thai population. Bangkok and the surrounding region are important to explore the impact of globalization on population in Thailand because both command and production functions have been settling down in this city in recent years. The command function for Thailand and neighboring countries concentrated mainly on the city center of Bangkok. It stimulated an increasing number of the new middle class population. People from this new middle class were likely to live in the newly developing suburbs. The production function, on the other hand, tends to have located in the surrounding regions which caused so-called extend urbanization (McGee 1995) and led to the development of the Extended Bangkok Region (EBR). Globalization has thereby been acting on the migration and population distribution of these regions. To grasp the situation broadly, we undertook a macro-scale analysis based on statistical data, and used an urban geographical perspective to demonstrate the far-flung influences of globalization. The study focuses on the three concentric zones of the EBR, namely the Bangkok Metropolis (BM), the Vicinity and the Extended Urban Region (EUR).

### 2. Spatial distribution of investment

Since the Plaza Accord in 1985, the Thai economy has been involved overall in the global economy and the investment of foreign capital has increased drastically. In accordance to this trend, the Board of Investment (BOI), which was one of the governmental organizations aimed to promote investment into Thailand, reinforced their spatial policy in 1987. The government accepted export-oriented economy and set up so-called free-trade areas in the country. The BOI classified 76 provinces of Thailand into three categories of tax incentives (Figure 1). The Zone 1 included the BM and five adjoining provinces called the Vicinity has least tax incentives aspiring to adjust the excessive

concentration to Bangkok. The Zone 2 consisted of 12 provinces surrounding the Zone 1 except Phuket Province, which was famous for its tourism located in the Southern Region. The rest of 58 provinces were labeled as the Zone 3 where maximum tax incentives were provided. The Zone 1 was the sum of the BM and the Vicinity while the Zone 2 was attributed to the EUR.

This BOI spatial policy has influenced the decision-making of enterprises for their location of investment to some extent. Recent studies concerning Bangkok and other large metropolises in the ASEAN region, therefore, stressed that the extensive urban growth was stimulated by the settling down of foreign direct investments in accordance with spatial policy of each government (Guest 1994; Guest 2003; Jones 2002; Jones et al. 2000; McGee 1995; McGee and Greenberg 1992). These studies mentioned the importance of the foreign direct investment in the changes in population in the areas in question, but they did not investigate relationships between the changing population distribution and the investment in these areas. The rest of this chapter attempts to illustrate the spatial distribution of investment and its impact on the gender-specific population change in EBR.

As mentioned above, the BOI is the key organization for investment in Thailand. Most manufacturing

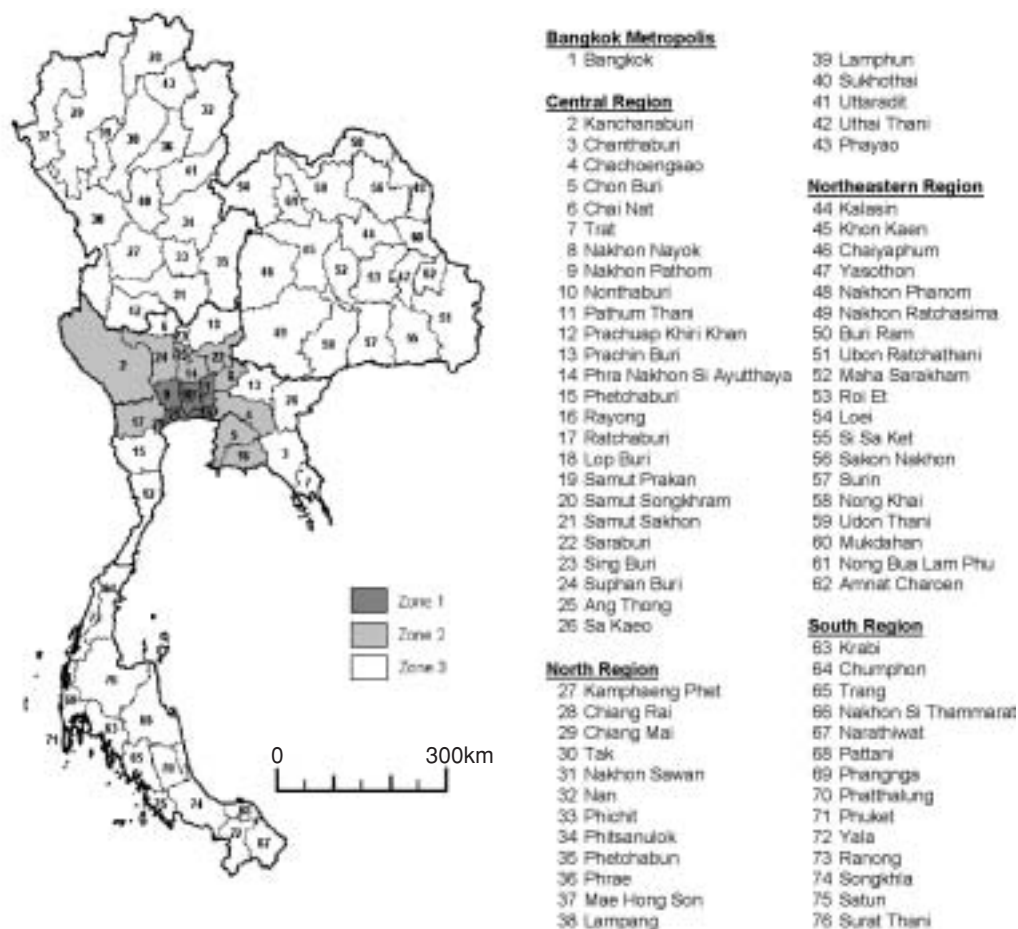


Figure 1 Provinces in Thailand classified by three BOI Zones (2003)

enterprises apply for the BOI to gain promotional privileges when they intend to set up a project in Thailand. The BOI provides us with database on the projects approved and issued certificates on their website. It contains detailed information on approximately 10000 projects, such as the name of enterprises, a type of business, the date of certificates issued for the project, the location of factory, the location of office, the amount of investment, the number of Thai and foreign employees. Despite its potential usefulness this database has not been used by geographers for their research on the economy of Thailand. We thereby try to utilize this database for the investigation of the spatial distribution of investment in Thailand.

The regional policy of the BOI focused mainly on the investments in the manufacturing sector of overseas and domestic capitals. The database of the BOI thus contains most investment projects of the manufacturing, but does not include full information on investments in the service sectors, for which incentives from the BOI do not seem to have enough appeal. Moreover, decisions for the promotion by the BOI are based on the location of factories. A considerable number of projects have their factories and offices in different places namely offices in the BM or nearby and factories in distant locations from the BM. This policy of the BOI on the location of factories and offices has brought about a spatial dispersion of the manual workers' employments from the BM and a further concentration of the service class in the BM.

Figure 2 shows spatial distribution of factories approved by the BOI. Since the reinforcement of the spatial policy in 1987, the location of new factories seems to have shifted from BM and the Vicinity to the Zone 2 and the Zone 3. This trend is observable not only in the distribution of factories but also in the amount of investment and numbers of Thai employees. However, after the Asian Monetary Crisis in 1997, the increase of the number of the projects in the Zone 2 and in particular the Zone 3 has slowed down. This change may have been caused by the transfers of investments from Thailand to other countries such as China and Viet Nam because of their lower cost of production and subduing domestic consumption in the ASEAN countries.

Figure 2 also illustrates the compositions of industrial sectors of each region. It is observed that the BM and the Vicinity were dominated by light industries and electronics industries, while machine industries and chemical industries concentrated on the Zone 2. The BM has been a traditional industrial area since the period of export-oriented economic development in the 1960s and 1970s. The industrial zones to be prepared for investments in the initial stage in the 1980s were often set in the Vicinity. Therefore textile industries and electronics industries tend to be located in the Zone 1.

In the last decade the Zone 2 area, especially Chon Buri and Rayong Provinces, has experienced a drastic economic growth. Three factors have contributed to this economic growth. Firstly Laem Chabang Commercial Port opened in 1991. This port was built in order to take over the role from the

older, narrower and overloaded Bangkok Port. Secondly a petrochemical complex developed based on the natural resource exploit projects initiated by the government in the areas along the Eastern Seaboard. Finally the agglomeration of auto industries grown in these provinces after the Asian Monetary Crisis was widely noticed. Major auto enterprises intended to set up large-scaled assembly factories in this region to take advantage of the proximity to the Laem Chabang Port to export their products to a wide range of countries. These are also the reasons why so many machine and chemical industries are seen in the Zone 2.

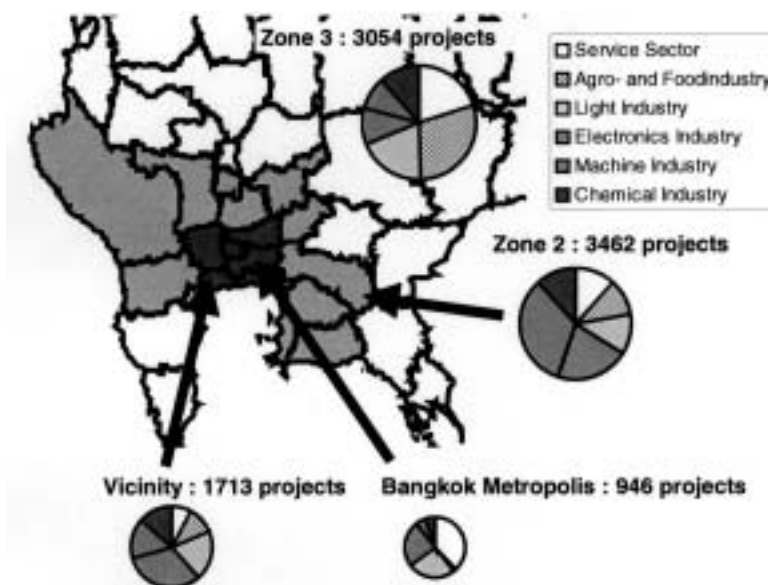


Figure 2 Investment projects by three BOI Zones  
 Source: Website of 'Boared of Invesent' on 23. April 2003  
 Note: The area of circles is proportional to the numbers of projects

The Zone 3 was dominated mainly by agro and food industries and light industries. The factories found in the Zone 3 were not distributed widely in the rest 58 provinces. These factories concentrated on the several provinces that could be classified into two groups. The provinces in the first group were those with regional cities, such as Chaing Mai, Songkhla and Nakhon Rachasima. The second group included the provinces

neighboring to the Zone 2 and they had relatively better accessibility to the BM and to the Laem Chabang Port among the provinces labeled as the Zone 3. The industry observed in the Zone 3 can be accordingly characterized by industries based on agriculture oriented to a domestic market or those with light-weight products in overcoming the relative distant location. According to the analysis of the BOI database it can be suggested that the government spatial policy has been effective for the dispersion of factories and employment, at least until the Asian Monetary Crisis. But when we explored the location of the offices of such investment projects, nearly sixty per cent of them were found in the BM and the Vicinity. Considering that most investments in the service and financial sectors were not registered in the BOI database the actual concentration of office workers' employment can have been much stronger than the database of the BOI shows. The average wage of factory workers is usually lower than the wage of the office workers'. The recent growth of investment created a considerably large number of new employment opportunities in the Zone 2 and Zone 3. However the regional disparity of income still appears to have been large enough for stimulating

further location shifts of factories and labor migration from rural areas. The regional policy of the BOI has promoted and controlled investments to Thailand successfully to some extent, and a new spatial structure of industries (Figure 2) emerged. The next section explores the impacts of the growing investments on migration and population distribution.

### **3. Impacts of globalization -an analysis on spatial gender balance-**

Migration is a selective process because mobility often depends heavily on attributes such as sex, age, family status and socio-economic status of individuals. The gender-specific migration of Thailand and spatial balance / unbalance of gender have not been seriously researched in the previous studies and, therefore, are main issues of concern in this section. The numbers of migrants of Thailand by sex and zone for the two periods, 1985-1990 and 1995-2000, are summarized in Figure 3. Female in-migration to the BM surpassed male in-migration in the number for the both periods. However males outnumbered females with regard to the out-migration. This result indicates that the sex ratio (male population / female population \* 100) of the BM continuously decreased. But, the gap of the in- and out-migrants between males and females was getting narrower. The absolute number of in-migrants had been decreasing recently while increasing number of the out-migrants was observed.

The number of migrants, in particular in-migrants, increased in the Vicinity over time. The same characteristic as the BM was found with regard to the gender balance in migration. The gender gap widened and accordingly the level of female domination in a population of this area became higher. The number of in-migrants into the Vicinity had drastically increased in recent years and this area received more migrants than the BM in the period 1995-2000. During this time, the Vicinity had the highest population growth rate in the country. There are two reasons to be pointed out for the rapid increase of migration in this area. One is the in-migration from the BM as population suburbanization. In the course of economic development after the latter half of the 1980s, the proportion of the new middle class, represented by managers and engineers, was getting larger. Most of them owned their private cars. The increase of the people from the new middle class, who could afford private cars, brought about rapid suburban residential developments and the completion of numerous giant shopping malls. The move of these people from the BM into the Vicinity in pursuit of better housing conditions for their families had led the increase of population in the Vicinity. Because many of these migrants in this category brought their family members with them to their new residence, the sex ratio of this migration was around 100.

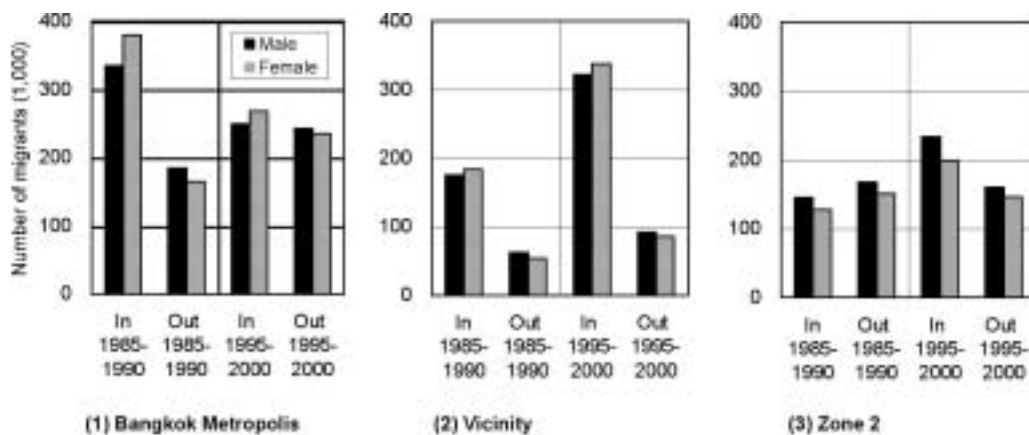


Figure 3 Number of migrants by Sex and Zone in Thailand  
Source: Population and Housing Census, 1990, 2000.

The second factor for the increasing population of the Vicinity was the in-migration of people from rural regions to engage in factory work. As shown in Figure 2, the number of factories in the Vicinity reached only a half of the Zone 2. However the numbers of factories in the Vicinity was still increasing. Compared to the Zone 3, the proportion of employment in the primary sector in the Zone 2 was not high enough (42 % in 1980, 27 % in 1990 and 15 % in 2000) to fill newly created employment in the Vicinity. As a result there were demands in this area for the in-migrants from other regions. Approximately half of the factories in the Vicinity represented for light industries and electronics industries. The both industrial sectors were characterized by their female preference in employment. Young female workers were still preferably selected (Elson and Pearson 1981) in these sectors. This selection of workers caused the female-dominated in-migration to the Vicinity.

In contrast, the Zone 2 was inclined to be dominated by males. Males surpass females in the number in both in- and out-migration. The difference between males and females was larger in in-migration than out-migration. Consequently the sex ratio of this zone was rising. In addition, the Zone 2 showed negative net-migration in the 1980s. This type of migration implied that this zone had still rural labor-sending characteristics in those days. The negative net-migration turned into a positive net-migration first in recent years. Such migratory trend was different from that of the Vicinity. But some provinces in the Zone 2 kept negative net-migration even in recent years. In these provinces laborers were sent to more developed provinces in this zone or to the Zone 1. As pointed out in previous studies such as McGee (1995) and Jones et al. (2000), factories in the EUR were likely to depend on local labor force in the abundant agricultural areas. The labor migration from outside was not regarded as a main means to recruit their workers. The proportion of the workers in the primary sector in the Zone 2 accounted for 38 % even in 2000. These workers were seen as a pool of potential factory workers. Considering these of the labor market in the Zone 2, the number of in-migrants to this zone did not directly reflect the increase of employment opportunities shown in Figure 2.

The reason for male dominance in in-migration to the Zone 2 can be explained by the peculiar characteristics of the industrial sectors in this zone. As described in the last chapter, this zone has experienced an investment boom in the sectors of machine industries and petrochemical industries in recent years. In contrast to light and electronics industries, auto and auto-related industries and petrochemical industries prefer male workers. Many of the employees in the Zone 2 were indigenous, but some workers came from other rural areas of Thailand. The latter workers raised the male proportion in in-migrants in this zone.

The Zone 3, the rest of Thailand, had migration characterized by labor-sending negative net-migration and male-dominance both in- and out-migration. The economic growth of Thailand had accelerated for the last decades and the regional disparity in economic development had been widening. Such regional disparity usually leads to the increase of rural-to-urban migration, but the number of out-migrants from the Zone 3 did not increase as it was expected to. Three reasons for this result can be pointed out. The first is the dispersion of employments from the BM and the Vicinity to the Zones 2 and 3. This dispersion seems to have contributed to reduction of the number of labor migration. The improvement of infrastructure for production and the low labor cost enabled by affluent and indigenous rural population also attracted factories to these regions. The second reason is the decrease of potential migrants in the rural areas. The fertility decline in the 1970s due to the prompt spread of family planning in the whole Kingdom had reduced the proportion of young population among the whole population since 1990s. The third reason is introduction of the compulsory three-year secondary education to Thailand in 1990. This new education system had caused a moratorium of migration from the rural areas in recent years.

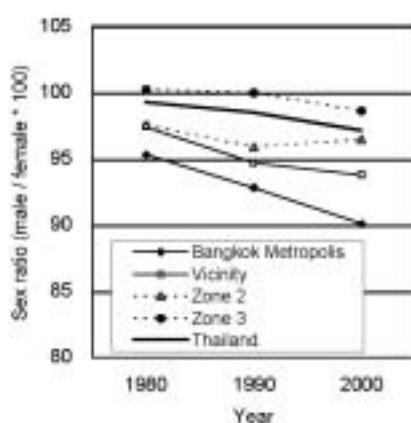


Figure 4 Sex ratio by Zone (1980-2000)

Source: Population and Housing Census, 1980, 1990, 2000.

The gender balance of each zone indicated by sex ratios, which can be regarded as the consequences of the aforementioned migration, is summarized in Figure 4. The sex ratio of the whole Kingdom decreased because of the declining fertility and the on-going aging process in the whole population in Thailand. The international out-migration dominated by males may have also affected this trend. As Figure 4 illustrates, the regional disparity of gender balance had widened for the last decades. This trend of the gender balance was caused by gender selective migration that was induced mainly by the gender preferences of investment projects in each zone.

The BM and the Vicinity, where service sectors, light industries and electronics industries were heavily concentrated, declined their sex ratios and intensified female-dominance among residents in these areas. In contrast, in the Zone 2 that was

characterized for the recent emergence of auto and petrochemical industries its sex ratio rose and its population structure had transformed from female-dominated to male-dominated in recent years.

#### 4. Female-dominate population structure of the Bangkok Metropolis

In this section the factors to decline the sex ratio of the BM will be explored in detail. Figure 6 illustrates the change of sex ratios by age group from 1970 to 2000. The profile of the sex ratio in 1970 shows that in-migrants to the BM aged 10-19 were female-dominant and thereby the sex ratio at the age group 15-19 dropped. The BM had a large number of export-oriented factories, where female young workers were preferred (Elson and Pearson 1981). The population aged 25-29 and over improved the imbalance of their sex ratio. This change suggests that many females went back to their home provinces. Many women in the 1970s seemed to have stayed in the BM for only some years in order to send remittance to their parents (Osaki 1999) and returned home for marriage. In 1980 and 1990, the concentration of a young female population to the BM intensified while the return flow of women to rural provinces became subdued. The decline of the return flow of women to rural provinces suggests that females came to stay in the BM more permanently than before. They used to stay there temporary. Another change suggested by the decline of the return flow of women is that more rural-born females were engaged in their jobs in the BM even after marriage. They left their husbands and children in their rural areas while they were working in the BM. It can be also suggested that more women came to stay single at the age of thirty years and over.

However the recent migration still reinforced the decrement of a sex ratio because the young female in-migration to the BM slowed down to some extent and the age of in-migrants in 2000 was higher than before. As pointed out in the last chapter, this trend was affected by several factors such as the dispersion of employment opportunities from the BM, the decreasing number of potential migrants in the rural areas and the moratorium and the prolongation of education. In addition, the sex ratio of the population aged 25-49 became significantly lower. Sex ratios for the age groups 25-49 in 2000 were

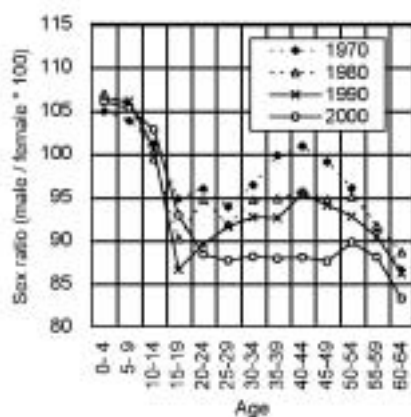


Figure 5 Sex ratio of the Bangkok Metropolis (1970-2000)  
Source: Population and Housing Census, 1970, 1980, 1990, 2000.

well below 90 and it is considered to be extremely low.

The duration of women's stay in the BM extended over time. There are several reasons why women came to stay in the BM for the longer period. Firstly the increasing number of women chose to stay single to send remittance continuously to their families. According to Mills (1999), these women seem to have taken it into consideration that employers were likely to adopt younger females



and it was very difficult for women who gave up their work for their marriage life and child rearing to regain the same kind of work. The Asian Monetary Crisis in 1997 heavily hit the Thai economy. The economic recovery in the BM started earlier and proceeded its recovery more quickly than other regions. This economic condition also seems to have stimulated the longer stay of rural females in the BM.

At the same time, the employment structure by industry in the BM had changed significantly in the recent years, led by the relocation of factories and the intensifying concentration of command functions under the globalization process. The number of workers in manufacturing sectors started decreasing in the 1990s. Consequently the Vicinity surpassed the BM in the number of the workers in these sectors. Service industries, in particular financial sectors, had developed rapidly, and many females had come to be engaged in financial sectors in the recent years. The required qualification for these sectors was substantially higher than manufacturing sectors. As a result the average age of females in financial sectors was higher than those who worked in manufacturing sectors. Migrant women in financial sector were likely stay in the BM for a longer period. The change of the employment structure also seems to affect the lower sex ratio of the recent BM.

## **5. Concluding remarks**

We discussed the economic globalization of Thailand in connection with its impacts on migration and distribution of population by gender. The investment activities controlled by the spatial policy of the Thai government had stimulated the dispersion of employments from the BM and the spatial structure of employment in the EBR had changed substantially for the last decade, where command functions had settled down in the central district and production functions had moved from the inner to the outer areas of the region.

From the analysis on the gender-specific migration, we observed that the change of the spatial structure of employment was not only concerned with the absolute number of employment by region, but the employment by gender was also subject to change. Through their gender preference for employment the peculiar redistribution of industrial sectors had implicitly formed the female-dominant population structure in the BM and the Vicinity while the population structure of the EUR had been becoming male-dominant.

The widening spatial gender imbalance was most apparent in the BM where the accumulation of female population was ongoing. The decline of a sex ratio had been accelerated by the longer duration of stay in the BM to promote their own carriers for qualified women or to cling on a job for those with lesser qualification as well as the further imbalance in the actual migration. In accordance with this trend, female-dominance was significantly obvious for those aged 25-49 in 2000 and the

percentage of the singles among these women was consequently falling down.

Regional policy does in general not closely relate with policies concerning family affairs and a spatial imbalance of population distribution gender is not usually taken into account in regional policy. The Japanese example indicated that the gender balance once lost by the strong pull of male-preferred heavy industries under the rapid economic growth recovered through the migration for marriage in some way however policy makers did nothing for this issue. In contrast to the Japanese, the Thai people are not eager to marriage and such recovery observed in Japan cannot be expected. However the Thai government has made use of the economic globalization efficiently for the economic development of the country, they seem to have overlooked the policy resulted in such gender imbalance. It can be suggested that in the future this gender imbalance may cause changes in family formation behaviors of the Thai population

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