Socioeconomic Changes and Suburban Housing Forms in the Bangkok Metropolitan Region of Thailand under the Globalizing Economy

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Abstract

Rapidly expanding metropolitan areas of Bangkok are frontiers of industrialization and housing. This study aims to analyze suburban housing forms and their socio-economic characteristics of the Bangkok Metropolitan Region (BMR), an area that is transforming into a modern society, with integration into the global economic system. I have attempted to understand the housing forms of the BMR from a socio-economic perspective, using the conceptual framework "integration into the global economy — industrialization and changes in employment and household economy—land and house markets / housing policies / urban development — housing forms." The questionnaire survey targeted married families was conducted to clarify the socio-economic attributes of the households and their housing forms in the Eastern Development Corridor (Samutprakarn) and Northern Development Corridor (Pathumthani) of the BMR. A total of 324 sets of valid responses were obtained.

The housing markets of the BMR has been transforming rapidly. Overall housing forms of the BMR has been formalizing and improving in the national economic growth and the modernization of urban society. However, for every generation, there was a large income gap, with a ratio of 1.8 to 3.3 times between different levels of educational groups. This gap in economic strength resulted in a housing disparity in terms of housing ownership, the quality of housing and living environments, and the formality of housing, since in Thailand there is little government intervention in the

housing market. In the BMR, the following four factors worked to inhibit the gap in income from leading directly to a housing disparity: (1) easy access to housing loans by provided by the GHB and private financial institutions, (2) an affordable rental housing market, (3) purchase timing, and (4) the government housing programs such as the BUA program and the BM program.

~~1. Introduction~~

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Based on its outward-oriented economic policy, Thailand has incorporated capital and technology from the outside through direct foreign investments to achieve rapid modernization in industry, a process often referred to as "compressed industrialization." What socio-economic changes did the industrialization and economic development of Thailand produce in different generations and social strata under the global economic system, and what housing opportunities did they provide? Rapidly expanding metropolitan areas in ASEAN countries are frontiers of industrialization and housing. This study aims to analyze suburban housing forms and their socio-economic characteristics in the Bangkok Metropolitan Region (BMR), an area that is transforming into a modern society as a product of the global economic system.

This study is an extension of the ongoing research into global cities, the aim of which has been to analyze changes and the reorganization of spaces in urban societies under the global economic system (Friedmann, 1986; Sassen, 1994; McGee, 1991; Scott, 2001, etc.), but this study focuses on changes in housing forms in an Asian newly industrial society, in particular the BMR, Thailand. I have attempted to understand the housing forms of the BMR from a socio-economic perspective, using the conceptual framework "integration into the global economy — industrialization and changes in employment and household economy—land and house markets / housing policies / urban development — residential forms." Fukushima et al (1996) examined the changes in suburban housing forms in the BMR under rapid industrialization and globalization based on their field survey conducted in 1995, which corresponds to the early stage of the industrialization process. Fukushima (2000, 2001) evaluated the impact of the Asian financial crisis on suburban housing forms, in particular on the fluctuation in housing ownership. This study functions as a kind of follow-up to these past studies.

2. Analytical Framework and Main Surveys

Economic growth, development, and industrialization have had particular influences on different generations and social groups, resulting in varied occupation structures and economic conditions. Different generations and social classes have had varied housing options at the time of settlement and also during successive eras, along with distinct economic conditions. These varied options, together with housing preferences, have created diverse housing demands and conditions. Thus, it is clear that industrialization and rapid economic development have influenced the housing forms of different generations and social groups. (Figure 1)

In this study, I will categorize sample households based on the generations and educational level of the family heads. The heads of the households are classified into three generational groups: those in their forties who entered the labor market in the 1980s when Thai society and its economy were at a turning point, those in their twenties and thirties who entered the labor market during years of drastic change, i.e. during the booming economy, Asian financial crisis and recovery from that crisis, and those in their fifties or older who entered the labor market when the economy was that of a developing country. In Thai society, educational background is a primary factor that determines the social stratum to which one belongs. I will distinguish three educational categories, and regard respondents with a primary-school-level education or lower as the "low education group (LEG)," those who graduated from junior or senior high school or vocational schools as the "medium education group (MEG)," and those with two-year college, technical college, or university level education or higher as the "high education group (HEG)." Sample households are therefore classified into nine groups, since each of three generational groups are each split up into three educational background groups. Based on this nine-group classification, the characteristics and mechanisms of formation of each housing form were analyzed.

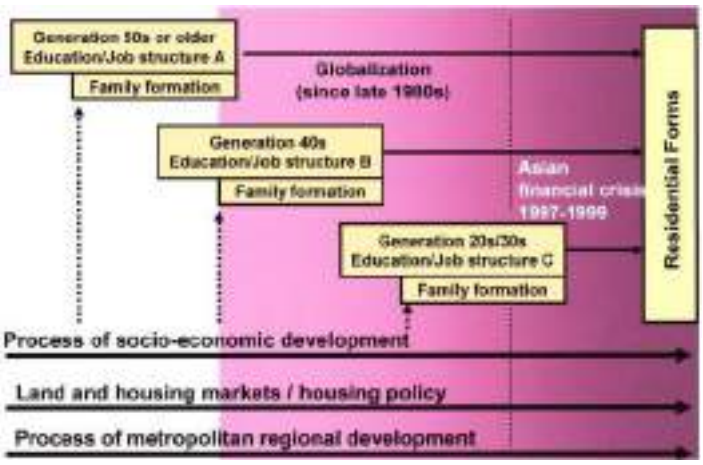

Figure 1.
Analytical framework: Suburban residential forms in development process

The questionnaire survey targeted married families living in the suburban areas of the BMR was conducted to gain the data of socio-economic attributes of the residents and their housing forms, by visiting each household in January 2005. A total of 324 sets of valid responses were obtained. The BMR consists of the Bangkok Metropolitan Administration (BMA) and five surrounding provinces, including Nonthaburi, Pathumthani, Samutprakarn, Samut Sakhon, and Nakhon Pathom. In this study, the Eastern Development Corridor (Samutprakarn) and Northern Development Corridor (Pathumthani) were selected as the areas to be surveyed. The Eastern Development Corridor is expanding from Bangkok to the east coast industrial area, and the Northern Development Corridor is expanding northward from Bangkok to the central development area, such as Ayutthaya and Saraburi. In conducting these questionnaire surveys, sampling was carried out using the point sampling method.

3. Developments and Housing Market Trends of the BMR

3.1 Socio-economic Developments and Changes in the Housing Markets in BMR

Industrialization has accelerated since the late 1980s in the BMR as direct investment increased rapidly, and the economic growth caused the employment structure and labor market to undergo changes. The BMR became a very important node linking the global economy and the national economy. The city center of Bangkok accumulated the functions for financial, business and commercial center, while the development of many manufacturing, housing, and retail facilities took place in the nearby provinces (Tasaka, 1998). Although the Asian financial crisis of 1997-1999 affected the Thai economy and society very seriously, the Thai economy was able to recover by promoting export-oriented industries with the depreciation of Thai bahts and continuous inward foreign direct investments. The GDP per capita which had fallen by 1,827 dollars in 1998 recovered to the same level as just before the crisis in 2006, and reached 4,984 dollars in 2010. The population of the BMR has expanded from 7,537,700 for the BMA and 3 vicinity provinces in 1988 to 10,326,100 for the BMA and 5 vicinity provinces in 2010 due to the economic development of the BMR. Young workers continued to form households, creating a demand for housing.

The housing markets in the BMR have been changing in association with these economic development circumstances. The housing market trends of the BMR can be described as follows: (1) a dual structure of housing delivery with formal and informal housing before the mid-1980s, (2) the housing boom from 1990 to 1996, (3) the deadlock in the housing supply from 1998 to 2002 after the Asian financial crisis, (4) recovery and stable housing developments since 2003. Since the late 1980s, the commercialization and formalization of housing delivery have progressed. Private

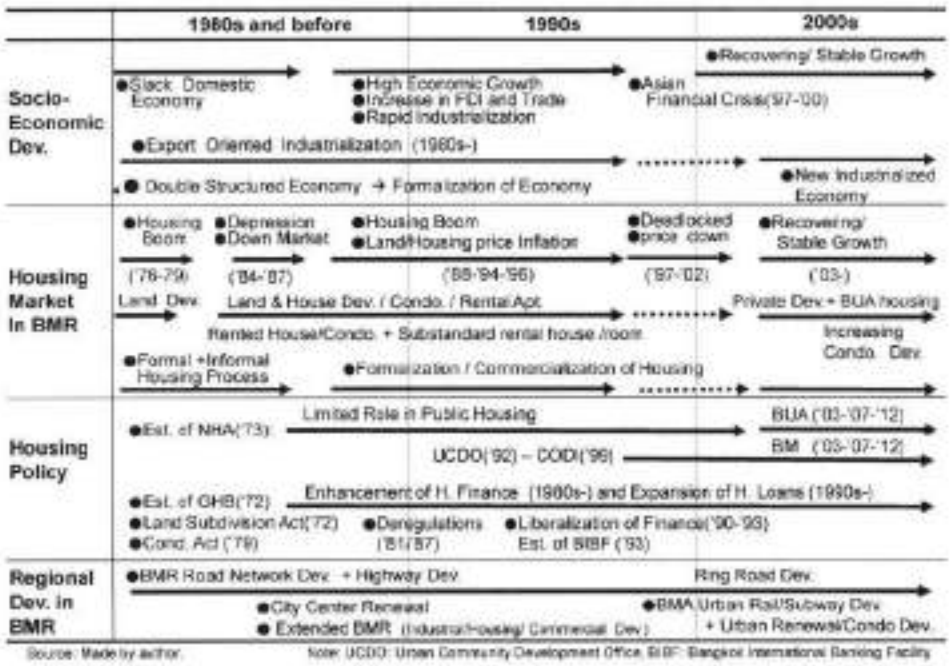

Figure 2. Development Process and Housing Market in BMR

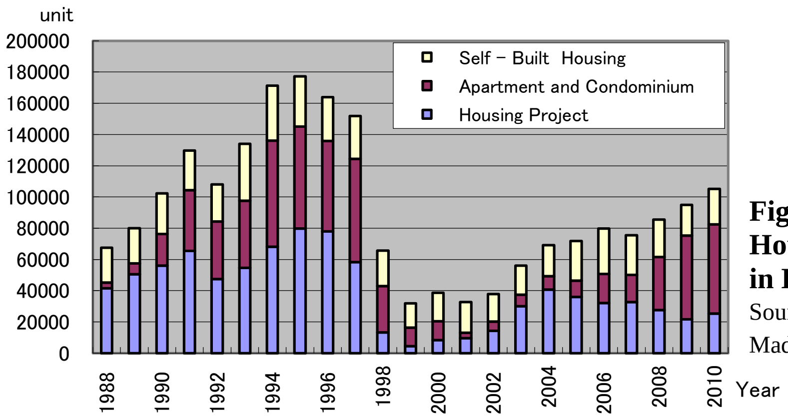

Figure 3.
Housing Supply Trends in BMR

Source：

Made by author based on data of GHB

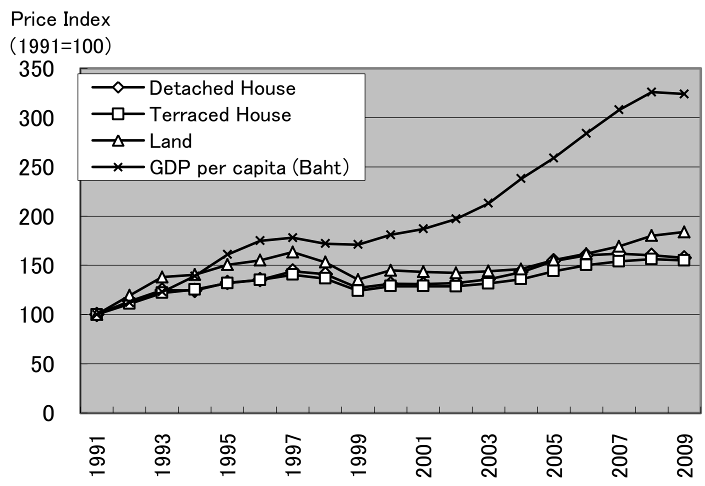

Figure 4.
Housing Price Trends in BMR
Made by author based on data of REIC

housing developers responded to the increased housing demand in the BMR very actively. During the housing boom, 142,279 housing units were supplied annually on average, among which 113,012 units were developed by developers.

This large supply of housing units was made possible by the lenient regulations on land and housing development and an ample supply of funds through domestic and foreign money markets (Yap and Kirinpanu, 1998). However, this huge housing supply did not develop only in response to the real housing demand, but also to the speculative demand. The inflation trends in housing prices after the late 1980s attracted many speculators and lowered housing affordability for workers in lower income groups. The Government Housing Bank (GHB) reported that the price of land and townhouses in the BMR increased 1.63 and 1.41 times, respectively, during the period from 1991 to 1997 (GHB, 1999).

The financial crisis caused the housing market of the BMR to change completely. Many housing development projects reached deadlock as the supply of funds was discontinued. After the crisis, the number of housing developers dropped drastically, from around 2,000 to only 200 companies (Vanichvatana, 2007). The annual housing supply also dropped to 41,350 units on average from 1998-2002, and most of these were completed units started before the crisis or self-built by the owners. Since 2000, as the Thai economy has recovered, the housing markets of the BMR have followed suit, and the housing supply recovered gradually, from 56,040 units in 2003 to 105,152 units in 2010.

3.2 Characteristics of Thai Housing Policy

Thai housing policies are traditionally characterized by little public intervention. Although the government has been promoting public housing developments through the National Housing Authority (NHA) since 1972, the share of public housing, remained only a few percent of all housing supplied. The government's stance on housing policy seems to be closer to an enabler that promotes private housing development through the deregulation of development control, the enhancement of housing finance by the GHB, and community development and improvement of the living environment by the Community Organizations Development Institute (CODI) (Yap, 2002; Yap and De Wander, 2010). In particular, the GHB has increasingly helped to supply housing loans and development financing in, response to the expansion of the housing demand during rapid economic development. Both the expansion of housing finance and the deregulation of the Land Subdivision Control Act in 1981 and 1987 led housing developers to supply lower-priced housing units, opening up segments of the market for the lower medium income group (Archer, 1991; Angel and Chuated, 1987).

Under the former Taksin administration, the government started to intervene in the housing market in 2003, although it did so through temporary programs rather than the permanent public housing system. The NHA has conducted the *Baan-Ua-Arthorn* (BUA; "we are concerned with housing" in Thai) program, a home ownership promotion program for low income people. The government provided a subsidy of 80,000 bahts per unit for the BUA program, and the NHA sold the units for 390,000 bahts per unit. The NHA completed construction of 172,107 low-cost housing units in the BMR by 2012 (Kolaka, n.d.), although there are criticisms such as delivering the units to not only low income group (the eligible income level was later relaxed from 15,000 bahts to less than 40,000 bahts). The CODI has conducted the *Baan-Mankong* (BM; "housing security" in Thai) program which supports poor communities in securing land and housing tenures and improving their housing and living environments. The CODI has conducted 282 of the BM projects, which benefitted 35,933 households in BMR by 2010.

4. Housing Options and Housing Forms in the Suburban Areas of the BMR

Based on an analysis of the survey results and the analytical framework mentioned in Section 2, I will examine the housing options and housing forms of the suburban areas in the BMR.

4.1 Housing Options in the Suburban Areas of the BMR[1]

Here I examine the options for housing available in the housing market and public housing delivery to verify how the suburban areas had functioned as a frontier for housing. It should be noted that there were transitional points along the hierarchy of household income at which one option for housing changed to another. The transitional point between formal and informal housing was in the income range of 5,000 to 10,000 bahts (monthly household income, hereafter referred to as household income). If the household income was less than 5,000 bahts, the available options were squatter housing or a rented room in a slum settlement. There were hardly any households whose household income was less than 5,000 bahts in the BMR, where double incomes were commonplace and even unskilled factory workers could usually earned 5,000 to 7,000 bahts monthly. As income increased to the 5,000 to 10,000 bahts range, formal rental housing became an option. This rental housing, in ascending order of price, included wooden tenements with shared utilities and rented rooms (rent: 1,000 to 1,500 bahts), simple wooden row houses (rent: 1,200 to 1,800 bahts), and apartment houses with utilities (rent: 1,800 to 2,500 bahts). Wooden tenements, rented rooms and wooden row houses were regarded as a kind of substandard rental housing, although these were not like slum and squatter housing. In the 10,000 to 15,000 bahts income range, the percentage of people living in substandard rental housing decreased, with terraced houses, detached houses or condominiums for rental (32%) or apartment houses with utilities or low-cost flats for rental (29%) becoming prominent. As the people in this income range could not afford to purchase a small terraced house that would involve paying the monthly installment of about 5,000 bahts for a housing loan, they opted to rent a terraced house and pay 3,000 to 4,000 bahts for the rent.

There were many terraced houses and condominiums that were bought as investments and then turned over to the rental housing market until their resale time (Pornchokchai and Perera, 2005) [2]. The owner of a rental house made investments in anticipation of a rise in the price, and expected that when it would be sold, the interest payment burden and other investment costs, as well as part of the opportunity cost, would be covered by the rent until a profit could be secured. More importantly, the rent of such an investment property was usually undervalued, as the rent was determined based on its affordability to potential tenants. Thus, this type of rental house helped to improve living conditions for people in the income range of 10,000 to 20,000 bahts.

The income range of 15,000 to 20,000 bahts must be a transitional point between owned and rental housing, as the levels of ownership and rental were comparable. The home ownership rate likewise increased to 67%, 74%, 84% and 91% as household income moved up along the hierarchy of income ranges, i.e. the income ranges of 20,000 to 30,000 bahts, 30,000 to 50,000 bahts, 50,000 to 70,000 bahts, and more than 70,000 bahts.

There were several options for home ownership for people in the income range 10,000 to 15,000 bahts, such as low-cost flats, BUA housing provided by the NHA, and self-built simple detached houses in spontaneous development sites. Low-cost flats as owner-occupied housing were unpopular due to maintenance problems and to their low quality, while self-built simple detached houses were losing popularity among the younger generations. The number of BUA housing units supplied was still very limited at the time when the survey was conducted. As suggested by the fact that the NHA relaxed the eligible income condition for BUA housing from less than 15,000 bahts to 40,000 bahts, the lower creditability of housing loans for people in this income range made it difficult for them to achieve homeownership.

Table 1 Housing Options of the Suburban BMR (2005)

Household Income [baht]	Ownership		Rental	
	Price range [1000 baht]	Options	Rent range [baht]	Options
50,000 and over	3,000 and over	●Detached house [Upper grade estate]		Prefer to ownership
30,000 - 50,000	1,500 - 3,000	●Terraced house [Upper grade estate] ●Detached house [Ordinary grade estate] ●Shop-house [Local town center]		Prefer to ownership
	800 - 1,200	●Terraced house [Ordinary grade estate]		
20,000 - 30,000	600 - 800	●Small terraced house [Ordinary grade estate] ●Small/simple detached H. [Lower grade estate]	5,000-7,000 3,000-4,500	●Shop-house [Local town center] ●Terraced house [Ordinary grade estate]
10,000 - 20,000	200 - 500	●Self-built house [Land subdivision site]		
	300 - 500	●Low cost condo	2,500-3,500	●Rental apartment with better finishing/design
	390	●BUA house (by NHA)		
5,000 - 10,000	-2 00	●Self-built simple house [Spontaneous dev. Site without infrastructure]	2,000-2,500	●Low Cost Condo
			1,500-2,500	●Factory workers' apartment with utilities
			1,000-2,000	●Wooden row house ●Wooden simple house
			1,000-1500	●Rental room of wooden apt. with shared utilities
Less than 5,000	Less than 50	●Squatter/slum house [Informal settlement]	Less than 1,000	●Rental room [Informal settlement]

Source: Author's survey 2005

4.2 Housing Forms in the Suburban Areas of the BMR by Generation and Level of Education

(1) The Generation in Their Fifties or Older

2: The majority of low-cost flats were acquired for speculative or investment purposes. According to my survey, 92% of low-cost flats were rented, while only 20% of terraced houses were rented.

1) Socioeconomic attributes

In this generation, the majority (76%) belonged to the LEG, while the shares belonging to the MEG and HEG were estimated to be 15% and 8%, respectively, based on the 2000 census. There is a clear tendency for different employment patterns according to the level of education. As of the survey conducted in 2005, 20 to 30% of people in this generation had retired from active life. Therefore, I checked the past occupational status of the heads of households as of 1995. High percentages of the HEG and MEG worked as government employees (33% and 45%, respectively). Other major occupations included managerial/specialist personnel in private companies (33%) for the HEG and self-employed workers (25%) for the MEG. The employment patterns of the LEG in 1995 varied rather widely: other unskilled wage workers (27%), factory workers (18%), self-employed workers (25%), informal workers (14%) and farmers (13%). In 2005, the share of self-employed workers increased to 34% due to people retiring from their original jobs and shifting from agriculture.

Differences in educational background affected household income. The monthly household incomes (median value) of the HEG, MEG and LEG were 27,500 bahts, 23,000 bahts, and 15,000 bahts, respectively. The income disparity of 1.8 times between the HEG and LEG was not very large compared with those of the younger generation. This was because (1) many of the HEG and MEG members were government employees whose salary level was not very high, (2) around 20-30% had already retired, and (3) the LEG included successors to ownership of small-scale businesses.

2) Housing forms

There were considerable differences in housing forms among the different education groups. This housing gap seems to be larger than the level of difference in their incomes due to the accumulation of income over the years, differences in accessibility to housing loans, and differences in the assets and family support available. Ninety-four per cent of the HEG and 71% of the MEG had their own houses, while only 57% of the LEG was able to achieve formal home-ownership (excluding owned houses built on leased lands). With regard to types of housing, 93% of the HEG and 79% of the MEG lived in detached or terraced houses, while 47% of the LEG lived in such housing types and more impressively, 20% of them lived in informal houses such as slum and squatter settlements and 14% lived in simple detached houses or simple wooden row houses in spontaneous development sites. With respect to public services and local infrastructure, 10 to 15% of the LEG, mainly those living in informal settlements, could not access drainage facilities, garbage collection services, or access roads, although almost 100% had access to water and electricity supply services.

Table 2. Household Attributes and Housing Forms in the Suburban BMR

Age	Level of education	Occupation	Household income (bahts)	Housing ownership status	Type of housing	Ownership status and Housing quality	Room configuration	Purchase price (1,000s of bahts)	Average rent (bahts)
Twenties and thirties	LEG n = 24	① Self-employment (46%) ② Other types of wage labor (17%) ③ Informal employment (13%)	11,600 12,910 (1.6 persons) Has stable income: 63%	① Rental house (42%) ② Own house (29%) ③ Own informal house (13%) Rented room (13%)	① Terraced house (35%) ② Apartment house, detached house, informal house (13% each)	① Rental - A (30%) ② Ownership- A (26%) ③ Informal (17%) ④ Rental-B (13%)	① 2BR+LR+DK (54%) ② One room (25%) ③ 1BR+LR+DK (13%)	645 581 [1999]	2796
	MEG n = 54	① Factory work (30%) ② Other types of wage labor (28%) ③ Self-employment (22%)	18,250 22,340 (1.9 persons) Has stable income: 87%	① Rental house (46%) ② Own house (33%) ③ Owned family house (9%)	① Apartment house (26%) ② Terraced house (21%) ③ Detached house (15%) ④ House with shop (11%)	① Rental- B (32%) ② Ownership -A (30%) ③ Rental- A (13%)	① One room (33%) 2 BR + LR (33%) ③ 1BR+LR+DK (15%) ④ 4–5BR+LR+DK (10%)	625 773 [1997]	2716
	HEG n = 36	① Self-employment (37%) ② Other types of wage labor (20%) ③ Govt. employee (administrative work, specialist work) (14%)	36,250 45,870 (2.0 persons) Has stable income: 88%	① Own house (64%) ② Rental house (31%)	① Terraced house (42%) ② Detached house (28%) ③ Apartment house (14%)	① Ownership- A (61%) ② Rental - B (22%) ③ Rental - A (13%)	① 3BR+LR+DK (40%) ② 2BR+LR+DK (31%) ③ One room + L (23%)	1,400 1,846 [2000]	2942
Forties	LEG n = 22	① Self-employment (43%) ② Other types of wage labor (23%) ③ Factory work (14%), Informal employment (14%)	15,000 28,860 (1.8 persons) Has stable income: 68%	① Rental house (41%) ② Own house (36%)	① Simple detached house (19%) ② Detached house, terraced house, apartment house, wooden row house (14% each)	① Ownership - A (27%) ② Rental - B, (18%) Rental - C, (18%) ③ Rental - A (14%) Ownership- B (14%)	① One room + L (41%) ② 2BR+LR+DK (23%) ③ 1BR+LR+DK, (14%) 3BR+LR+DK (14%)	733 877 [2000]	2409
	MEG n = 50	① Self-employment (36%) ② Other types of wage labor (30%) ③ Factory work (12%)	22,920 29,990 (1.9 persons) Has stable income: 88%	① Own house (72%) ② Rental house (18%) ③ Owned family house (8%)	① Terraced house (35%) ② Detached house (25%) ③ Simple detached house (12%) ④ House with shop (10%)	① Ownership - A (32%) ② Ownership - B,(14%) Rental - A (14%) ④ Ownership - B (P) (12%)	① 2BR+LR+DK (46%) ② 3BR+LR+DK (26%) ③ One room + L (18%)	562 834 [1997]	3453
	HEG n = 23	① Managerial/specialist work(26%), Other types of wage work (26%) ② Self-employment (22%) ③ Govt. employee (administrative work, other types, 13% each)	41,670 54,480 (1.8 persons) Has stable income: 90%	① Own house (87%) ② Rental house (13%)	① Terraced house (48%) ② Detached house (30%) ③ Apartment house (9%)	① Ownership - A (78%) ② Rental - B (9%)	① 3BR+LR+DK (57%) ② 2BR+LR+DK (26%) ③ 4BR+LR+DK (9%)	935 1,359 [1997]	–
Fifties or older	LEG n = 69	① Self-employment (34%) ② Retired, unemployed (18%) ③ Other types of wage labor (13%), Factory work (13%), ④ Informal employment (7%)	15,310 23,450 (2.3 persons) Has stable income: 64%	① Own house (57%) ② Own informal house (16%) ③ Rental house (12%) ④ Leased land, own house (10%)	① Detached house (28%) ② Terraced house (27%) ③ Informal house (16%) ④ Simple detached house (9%)	① Ownership - A (49%) ② Informal (20%) ③ Rental - B (12%)	① 2BR+LR+DK (45%) ② 3BR+LR+DK (19%) ③ One room + L (17%) ④ 4BR+LR+DK (7%)	380 999 [1993]	2025
	MEG n = 28	① Retired, unemployed (29%) ② Govt. employee (administrative work, specialist work) (21%) Other types of wage labor (21%) ③ Self-employment (18%)	23,800 23,480 (1.9 persons) Has stable income: 85%	① Own house (71%) ② Owned family house (14%) ③ Rental house (7%)	① Detached house (54%) ② Terraced house (25%) ③ LC-Condo (7%)	① Ownership - A (75%) ② Ownership -B (P) (11%) ③ Rental - A, (7%) Informal (7%)	① 2BR+LR+DK (33%) 3BR+LR+DK (33%) ② One room + L (15%)	450 677 [1992]	–
	HEG n = 15	① Managerial/specialist work (20%) Govt. employee (administrative work, specialist work) (20%) Retired, unemployed (20%) ② Clerical work (13%)	27,500 50,570 (2.1 persons) Has stable income: 100%	① Own house (93%) ② Rental house (7%)	① Detached house (69%) ② Terraced house (33%)	① Ownership - A (93%)	① 3BR+LR+DK (33%) ② 4BR+LR+DK (27%) ③ 2BR+LR+DK (19%) 5BR+LR+DK (19%)	400 939 [1991]	–

*1: Age, education level, and occupation are those of the head of the household.
*2: The household income at the top is the median value. That at the bottom is the average value. In the household income row, the value shown in parentheses is the average number of income earners per household.
3: In the type of housing column, "own house A" includes detached houses, terraced houses and shop-houses,* "own house B" includes simple detached houses and LC-Condos,* "rental house A" includes detached houses, terraced houses, and houses with shops, * "rental house B" includes apartment houses and LC-Condos, and * "rental house C" includes wooden row houses and rented rooms.
*4: In the purchase price row, the value at the top is the median value, the value at the bottom is the average value, and the year shown in brackets is the average year when housing was purchased.
*5: The differences between the categories are significant at 1% level by the analysis of variance.

It could be said that the HEG and MEG were able to enjoy a stable life and better housing conditions. This was not true for the LEG as mentioned above, since the majority of members of this group were self-employed and their economic and housing situations were dependent on whether or not their businesses were successful. As the majority of individuals in this generation were in the LEG, this created an overall polarization between those with satisfactory and unsatisfactory living situations.

(2) The Generation in Their Forties

1) Socioeconomic attributes

The education level of the respondents improved in comparison with the older generation. Although more than a half (56%) still belonged to the LEG, the HEG and MEG made up 17% and 28%, respectively. Amid the rapid expansion of direct investment and the rapid economic growth that occurred from the late 1980s until the mid-1990s, many people in the HEG and MEG were employed as high-level or middle managerial personnel, as there was a scarcity of qualified labor force. However, because the impact of the Asian financial crisis on the labor market was so serious, the share of self-employed workers increased greatly for all of the education groups between 1995 and 2005. In 2005, the major occupations of the HEG included government administrators (26%), managers/specialists in the private sector (26%), sales/service personnel (26%) and self-employed workers (22%), while the MEG and LEG worked as self-employed workers (36% and 32% respectively), sales/service personnel (30% and 23%) or factory workers (12%, and14%). Fourteen per cent of the LEG was engaged as informal workers, although there were no informal workers in1995 before the crisis.

Differences in monthly household income (median value) according to level of education were large. The household incomes of the HEG, MEG and LEG were 50,000 bahts, 21,750 bahts, and 15,000 bahts, respectively. The household income of the HEG was 3.3 times more than that of the LEG. Involvement in the global economy caused the wages of the workforce with higher levels of education to rise significantly and, as a result, caused the income gap between the HEG and LEG to widen (Fukushima et al. 1996, Funatsu and Kagoya 2002).

2) Housing Forms

Diverse socioeconomic conditions and being in a life stage transitional for home ownership caused diversity in the forms of housing this generation used. The home ownership (formal) rate for people in their forties varied greatly depending on level of education. Although 87% of the HEG and 72% of the MEG had achieved home ownership, only 36% of the LEG had done so. There was also a gap in the level of housing quality. The HEG and MEG generally lived in terraced houses or detached houses (78% and 60%, respectively), while only 14% of the LEG did so, and a considerable number of them lived in low-quality housing. i.e., 19% in simple detached houses and 19% in simple wooden row houses or rented rooms in spontaneous development sites. The percentage of those living in informal housing, however, was 5%, which is much lower than that of people in their fifties or older.

In the BMR, the rental housing market gained attention as a mechanism to reduce the housing disparity. Many members of the MEG and LEG used this sector of rental housing. MEG households living in rental housing paid an average rent of 3,455 bahts; they lived in terraced houses or housing at an equivalent level. A large income gap among the LEG led to a housing disparity in this group, ranging from substandard rental housing to rented terraced houses.

(3) The Generation in Their Twenties and Thirties

1) Socioeconomic attributes

The level of education of people in this young generation was substantially improved compared with the previous generation. The ratio of the LEG dropped to 33%, while those of the MEG and HEG rose to 44% and 23%, respectively (estimated based on the 2000 Census). The MEG became the majority, and one out of four or five people had a high-level educational background.

The improvements in educational background affected the labor market. As the number of new graduates of tertiary education expanded rapidly, the time when university graduates were automatically promoted to be white-collar employees or managerial level personnel was passing. The marginalization of the labor force with a low level education progressed, because a large young labor force with a secondary education entered the labor market. The HEG worked as self-employed workers

(37%), sales and service personnel (20%) or specialist/managerial level personnel (12%), while the MEG worked as factory workers (30%), sales or service personnel (28%) or self-employed workers (22%), and nearly a half of the LEG worked as self-employed workers (46%). There were also people in the LEG who were informally employed (13%) and some who were not employed (4%) at all. This was evidence of the marginalization of the LEG. It is difficult to judge whether this tendency to opt for self-employment among all the education groups was driven by the financial crises, mismatches in the labor market, or was a step that the younger generation took in order to become successful.

Although the gap in employment patterns depending on level of education decreased, there was still a large gap in household income. The monthly incomes (median values) of households in the HEG, MEG and LEG were 37,500 bahts, 18,250 bahts, and 12,000 bahts, respectively. The income for households in the HEG was 3.1 times that for those in the LEG.

2) Housing Forms

For this younger generation, there had already been a gap in the home ownership rate (for formal housing) depending on the level of education due to the income disparity. While 64% of the HEG had their own houses, the corresponding percentage was only 29% for the LEG and 33% for the MEG. Although a gap was also seen with regard to their housing types, it was smaller than that in the ownership rate due to the presence of affordable rental options. For example, even 47% of the MEG and 57% of LEG lived in detached houses, terraced houses or shop houses, while 75% of the HEG did so. In fact, there was not a large difference in the average rent paid by the different education groups, i.e. 2,700 to 2,900 bahts. Even 30% of the LEG rented terraced houses or similar quality of housing, spending more than 30% of their household income for rent. This was not seen for the LEG of the other generations. However, the fact that 22% of the LEG lived in wooden row houses (tenements), rented rooms or informal housing showed the polarization of living conditions for the LEG.

5. Conclusions

In this study, I researched how the industrialization and rapid economic development of Thailand have influenced the suburban housing forms of the BMR for different generations and social groups. For every generation, there was a large household income gap, with a ratio of 1.8 to 3.3 times between different levels of educational groups. This gap in economic strength resulted in a housing disparity in terms of housing ownership, the quality of housing and living environments, and the formality of housing, since in Thailand there is little government intervention in the housing market.

There were transitional points along the hierarchy of household income at which one option for housing changed to another. The transitional point between formal and informal housing was in the income range of 5,000 to 10,000 bahts. If the household income was less than 5,000 bahts, the available option was informal housing. As income increased to the 5,000 to 10,000 bahts range, formal rental housing became an option. The transitional point between owned and rental housing was in the income range of 15,000 to 20,000 bahts. With regard to household income (median value) categorized by level of education, the LEG earned 11,600 bahts to 15,000 bahts, the MEG earned 18,300 bahts to 23,800 bahts, and the HEG earned 27,500 bahts to 41,700 bahts. Home ownership was, therefore, very affordable for many members of the MEG and most members of the HEG, while it was not so for many in the LEG. As there were hardly any households whose household income was less than 5,000 bahts in the BMR, the forms of housing were becoming more formal, and fewer informal housing options were chosen.

In the BMR, the following four factors worked to inhibit the gap in income from leading directly to a housing disparity: (1) easy access to housing loans by provided by the GHB and private financial institutions, (2) an affordable rental housing market, (3) purchase timing, and (4) the government housing programs such as the BUA program and the BM program. For the lower medium or the above income group, it was easy to gain access to housing loans, and the inflation of wages allowed housing loan debtors to enjoy “subsidies from the past”. Many houses acquired for speculative and investment purposes were then supplied to the rental housing market at reasonable rents. Many of the members of the MEG and LEG in the younger generation who could not afford to purchase a house were thus able to rent adequate housing units. With regard to purchase timing, some of the LEG and MEG members in their fifties or older acquired private low-cost housing in the early 1980s, when a down-market trend prevailed, before land values and housing prices soared in the booming economy. Some members of the younger generations could buy a house during the period when housing prices dropped and during the initial recovery stage in the early 2000s.

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