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Low-income housing in a rapidly expanding urban economy

Bangkok 1985–1994

The housing sector in Bangkok has been described as a model for other fast-growing Asian cities, because of the shift by the private sector into low-cost housing, initially rowhouses, later apartments. This article reviews the factors that contributed to the down-market trend: the strong demand for housing as a result of rapid economic growth, the supply by a dynamic private sector constantly in search of new markets, the housing policies of the Thai government and the efficiently operating housing finance system. However, many low-cost housing units are vacant, while many low-income families still live in slums and squatter settlements. Part of the housing demand proved to be speculative in anticipation of future increases in land and house prices, while the low-cost apartments and their location proved unattractive to the low-income population.

Introduction

In the preface to his book about the Thai economy, Warr (1993, xvii) calls Thailand the *flavour of the decade*, because of the worldwide interest in the country and its booming economy. The same can be said about housing in Thailand, or rather housing in Bangkok. Dowall (1989, 327) called Bangkok an efficiently performing housing market which can serve as a model for other fast-growing Asian cities, because of the shift by the private sector into low- and moderately priced housing. According to Mayo (1994, 45), Thailand has escaped the housing crisis gripping many of its neighbours, because even households with incomes well below the average can afford the low-rise condominium which is now common in Bangkok.

It was a study conducted by Dowall, Angel and others in 1986 and known as the Land Management Study that stirred the interest in Bangkok's housing sector. The

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discovery of the down-market trend came more or less as a surprise to the researchers, since it started when the study was already under way (Dowall, 1987, 1.113). In another paper, Dowall (1989, 330) suggested that the slower growth of slum and squatter settlements showed a response by the formal private sector to the needs of Bangkok's lower-income residents. In his view, formal private-sector low-cost housing would provide alternative accommodation for evicted slum dwellers, and as long as similar conditions continued, the share of slum and squatter settlements in the market would decline.

Since 1987, Pornchokchai and others have regularly updated the Land Management Study by comparing prices of private-sector low-cost housing with income levels in Bangkok, but the results were usually published locally and in Thai. The surveys generally found a further down-market trend: formal private-sector housing became affordable to ever larger sections of the Bangkok population. The findings confirmed Dowall's and Mayo's conclusion that Bangkok is a success story as far as housing is concerned. However, the studies did not determine whether housing conditions in Bangkok had actually improved for ever larger sections of the population. They assumed that the private sector would not supply low-cost housing unless there was a demand for it, but hardly studied the demand.

This paper looks at the down-market trend in housing production in a broader context, i.e. over a longer period of time and in a macro-economic context. It tries to answer three questions. What has been the real impact of the down-market trend on the housing conditions of Bangkok's low-income population? Which factors made this down-market trend possible? To what extent can this trend be replicated in other cities and countries?

The demand side: increasing prosperity

ECONOMIC DEVELOPMENT

Thailand experienced very rapid economic growth between 1985 and 1994. In 1985, its GDP growth rate was 3.5 per cent; it reached 13.3 per cent in 1988 and has stabilised around 8.0 per cent since 1991. In 1985, Thailand's per capita GNP stood at US\$800; it is estimated at around US\$2,400 for 1994. During these years, the Thai economy went through a fundamental transformation. In 1970, agriculture was the country's main economic activity, contributing 27.0 per cent of the GDP, while manufacturing contributed 16.0 per cent. In 1994, the shares of agriculture and manufacturing were 11.4 per cent and 31.1 per cent respectively.

The initially export-oriented industrialisation of the past decade was the result of large-scale direct foreign investments by Japan and Asia's newly industrialised countries: Korea, Hong Kong, Taiwan and Singapore (Warr, 1993, 70). The devaluation of the baht in 1984 and its gradual depreciation thereafter due to the falling value of the US dollar relative to the main East-Asian currencies, and the rising labour costs in the newly industrialised countries and Japan played a role in the decision of foreign companies to invest in Thailand in the second half of the 1980s (Warr, 1993, 34). Bangkok attracted most of the investments and reinforced Bangkok's position as the primate city of Thailand, in demographic and economic terms.

The rapid economic growth did not affect the one-third of Thailand's population of almost 60 million that lives in the Northeastern Region. In 1991, the per capita gross regional product was baht 14 904 (US\$596) in the Northeast, while it was baht 142 942 (US\$5781) in the Bangkok Metropolitan Region (BMR). In 1995, the annual per capita household income was baht 76 480 for the BMR and baht 16 680 for the Northeastern region (Krongkaew, 1995, 63). The income difference has resulted in a substantial, partly seasonal migration from the Northeast to the capital, whose population grows by about 10 per cent in the dry season. The Bangkok Metropolitan Area (BMA) has an estimated population of 6–7 million, but most of Bangkok's current growth takes place in the Greater Bangkok Metropolitan Area: two provinces (Pathum Thani and Nonthaburi) to the north and one (Samut Prakan) to the south-east of the city. This area with two provinces to the west of Bangkok forms the Bangkok Metropolitan Region. The region's population is estimated at 9–10 million.

Incomes in the Greater Bangkok Metropolitan Area have increased dramatically over the past 10 years. Sample surveys of socio-economic household characteristics by the National Statistical Office (NSO) showed that the average total monthly household income in the Greater Bangkok Metropolitan Area increased from baht 6949 in 1986 to baht 16 543 in 1994 (National Statistical Office, 1986; 1994). In the BMR, the official minimum wage for a 26-day work-month (which is applied only in the public sector and some large companies) stood at baht 70 per day in 1985, but reached baht 135 per day in 1994. The Consumer Price Index for the Bangkok Metropolitan Area increased from 100 in 1985 to 151.2 in 1994, an average annual increase of 4.23 per cent. During this period, the exchange rate of the Thai baht remained stable at approximately baht 25.00 = US\$1.00.

The economic growth created a shortage of qualified manpower in some industrial and service sectors and a brain drain from the public to the private sector which compelled the government to raise the salaries of civil servants by 13.6 per cent in 1990, by 23.0 per cent in 1992 and by 15.0 per cent in 1994. Those working in the informal trading and service sector may not have benefited much from the economic upsurge, because they faced stiff competition from the formal sector. Still, Krongkaew (1995, 63–64) estimates that the percentage of people in Bangkok in 1995 living below the poverty line of baht 760 per person per month was negligible.

What was said about Thailand for the period 1975–1988 is probably also true for Bangkok during the period 1985–1994: incomes have increased substantially and many people, including lower-income groups, are better off now than before, but the income distribution has become more uneven (Warr, 1993, 68–72).

HOUSING NEEDS

The impact of the booming economy in Bangkok is visible in the large number of private cars on the roads, the proliferation of shopping malls and department stores and the conspicuous consumption of items such as mobile telephones and golf course memberships. A high priority on the wish list of the *nouveaux riches* is home ownership. Evidence of the high demand for new houses is the billboard advertising for housing projects and the frequent housing exhibitions, where dozens of

developers present their projects to thousands of visitors who come to see and book units.

Despite the booming economy, more than one million people in the Bangkok Metropolitan Area live in informal settlements (Bangkok Metropolitan Administration, 1994, 8). Most of the settlements are slums, i.e. settlements on land temporarily rented by households from the owner for a nominal rent. They are found mainly on plots of land not (yet) suitable for development, because of their lack of vehicular access, odd shape or small size. Many slums have been in existence for quite some time, but security of tenure is low, because landowners need to give only one month's notice to evict the slum dwellers from their land. Therefore, the slum dwellers are reluctant to consolidate their houses, and the settlements lack adequate infrastructure. In 1988, only 15 per cent of the informal settlements were squatter settlements. They can be found along railway lines and on canal banks which the landowner, a public agency, cannot give out for rent.

The housing policy in Thailand: an enabling environment

DIRECT INTERVENTIONS

In 1973, the Thai government established the National Housing Authority (NHA) to address the housing problems of the low-income population. During the next decade, the NHA was involved in the direct construction of subsidised rental apartments, the upgrading of slums and squatter settlements and the development of core housing and sites-and-services schemes, but none was very successful. Upgrading is difficult, because owners of land with slums or squatter settlements do not allow a consolidation of the settlements. The NHA developed some sites-and-services schemes for evicted slum dwellers, but their number is too small and their location too remote to make a real impact. One of the NHA's main problems is its procedure to purchase land, which has intentionally been made cumbersome to prevent corruption, but which hampers its ability to compete with the private sector in the land market.

Although its programmes of direct construction of rental apartments were slowed down by a lack of funds and never reached their targets, the NHA is now responsible for over 18 000 rental walk-up apartments in eight centrally located housing estates in Bangkok. The initial rent of most of the apartments was baht 300 per month to keep them affordable to low-income households and was supposed to increase gradually over time; but this never happened. The rents are far below the economic rent, which is estimated at more than baht 1000 per month, and the income which the NHA earned from the estates is insufficient to pay for management, maintenance and repairs. Although the apartments made a good contribution to the low-cost housing stock in the city, they did not solve the housing problems of the low-income groups.

Most apartments have a floor area of 27–36 square metres and consist of a single multi-purpose room and a bathroom/toilet. Life in such small units is difficult for large families and for households that depend on home-based economic activities for their livelihoods. Unlike in a slum house, gradual expansion is not possible except

for the transformation of the balcony to an additional room and encroachment into the corridor. The main attraction of the apartments is their low rent and central location. Realising their market value, many occupants sublet their units or sold their occupancy rights to outsiders. The NHA tried to stop the practice but eventually decided to make the best of it. It asked for a formal registration of all transfers, a transfer fee of baht 5000 (later baht 10 000) to be paid to the NHA, and a rent increase of baht 150 after each transfer. In 1991, up to 70 per cent of the occupants in some estates did not belong to the original target group; they had paid amounts ranging from baht 50 000 to baht 100 000 to former occupants to acquire the occupancy rights. Many occupants paid 5 per cent or less of their monthly household income on rents (Yap et al. 1993).

AN ENABLING STRATEGY

One of the central principles of the Sixth National Social and Economic Development Plan (1987–1991) was the promotion of private-sector participation in national development and a shift in the role of the government: 'The government [would] withdraw from activities which can be carried out better and more efficiently by the private sector' and 'the government sector [would] act primarily as coordinator, advisor and supporter of the private sector in many areas' (NESDB, 1986, 48). The Plan noted that low-income housing was still in short supply and that subletting and resale (in NHA estates) had resulted in the replacement of low-income by middle-income people. For the Sixth Plan, the government adopted an enabling shelter strategy, although this was not reflected in the programmes proposed in the Plan, such as the direct construction of more subsidised rental housing.

The Plan announced that:

- the government would encourage the private sector to participate in the development of housing for the low-income group;
- the National Housing Authority would set up joint ventures with the private sector to construct housing for low-income and middle-income groups;
- the Government Housing Bank would provide financial support for investment by private developers in low-income and middle-income housing;
- the Government Housing Bank would maintain loan interest rates at the lowest level possible in conformity with market interest rates;
- the government would issue rules to encourage financial institutions to offer long-term loans to house buyers and housing developers;
- the government would encourage the public to save or invest with the Government Housing Bank as a strategy to mobilise long-term savings (NESDB, 1986, 48, 52, 262–65, 297).

In 1993, during the Seventh Plan and in response to urgent requests from the Housing Business Association, the government listed low-cost housing as a sector eligible for promotional privileges of the Board of Investment (BOI). Projects that meet the BOI requirements are now exempt from corporate income tax for five years. For the BMR the criteria are:

- a sales price of baht 600 000 or less per unit, including the land;
- a minimum of 150 units per project;

- a minimum floor area of 31 square metres per unit;
- the approval of the project by all concerned agencies.

Other 'enabling' factors for private-sector developers are the limited control exerted by the government over land use in Bangkok and the often ineffective enforcement of laws and regulations. Some developers could reduce costs by exploiting a loophole in the land subdivision regulations, which allows them to keep land for public facilities in housing projects to a minimum. Only in 1992, the government adopted the Bangkok Metropolis General Plan, a land use zoning plan prepared during the 1980s and largely obsolete by the time it was adopted; it is therefore difficult to enforce. Such a plan also exists for two other BMR provinces, Samut Prakan and Nonthaburi, but not for a third one, Pathum Thani, where many new housing projects are located. Developers have generally opposed any government attempt to regulate the development of Bangkok with the argument that it would increase housing costs. For instance, they challenged the introduction of regulations for high-rise buildings with the argument that it was contrary to a statement by a then prime minister that land and property should generate the maximum benefit for the country.

The development of an efficient housing finance system

AN ENTERPRISING GOVERNMENT AGENCY

Until the middle of the 1980s, housing finance was not big business in Thailand. The Government Housing Bank (GHB), established in 1953 as a state enterprise with the sole purpose of providing housing finance to developers and home buyers, particularly low-income groups, had the largest market share among the institutions involved in financing housing, although it was one of the smaller institutions in terms of assets. Most commercial banks spent only a small part of their credit on housing finance, which they saw as an unprofitable line of business and a mismatch with their mostly short-term deposits (Tanphiphat, 1994, 3). Because of its cartel-like structure, the commercial banking sector could keep its lending rates high and maintain a large spread between lending and borrowing rates; it was usually slow to adjust its rates to changing market conditions.

During the early 1980s, after the 1979 oil crisis, Thailand went through a few years of moderate economic growth, and the government introduced structural adjustment programmes to improve the efficiency of the economy. The GHB experienced serious difficulties, which forced the government to reorganise the bank. By 1984, the bank had overcome its problems. Being a specialised bank with fewer branches, the GHB has lower overhead costs than the commercial banks; computerisation and subcontracting of banking operations such as property valuation reduced overhead costs further. This allowed the GHB to maintain higher savings rates than the commercial banks and introduce a new savings-deposit scheme with very attractive interest rates (Tanphiphat, 1994). The total amount of deposits tripled, from baht 1.7 billion in 1983 to baht 5.2 billion in 1984.

In the period 1985–1986, the entire banking system experienced a high level of liquidity. In October 1986, the credit/deposit ratio of the commercial banks stood at

85.8 per cent; the excess amount was estimated at baht 40 billion. The reasons were a low demand for credit due to the slow economic growth, cautious policies by the banks in their credit extension following the economic recession and several crises in the Thai financial sector, a tendency by the public after these crises to deposit their savings with reputable commercial banks and high real net deposit rates due to a low level of inflation.

Not expecting a speedy economic recovery, the government took several measures in 1986 to stimulate the economy. It added low-income housing to the priority development sectors, which forced the commercial banks to extend a certain part of their credit for housing at preferential rates (2 per cent below market rates). In addition, the Bank of Thailand allowed the commercial banks to consider only 80 per cent of the housing loans below baht 400 000 as risk assets which must be covered by a capital adequacy of 80 per cent. Furthermore, the Ministry of Finance exempted interest on savings for housing purposes from taxes and made an amount of baht 7000 in interest paid on housing loans tax deductible. The government also reduced the price of petroleum, which led to a reduction in the costs of construction.

Once it was able to tap the local savings market with attractive deposit instruments, the GHB reduced its lending rates in five steps from 15.5 per cent in February 1986 to 10.25 per cent in December 1986. When it offered to re-finance the high-interest-rate mortgage loans of other banks, the commercial banks had to reduce their rates to a level slightly above that of the GHB to keep their market share. With lower interest rates and improved loan conditions, developers targeted larger sections of the population, and the expanded supply by private-sector developers increased the demand for mortgage loans. The unexpected rapid economic growth during 1987–1988 did not affect the housing finance sector immediately, because it was driven by direct foreign investments rather than financed out of domestic savings.

The rapid development of the housing finance system is reflected in the volume of outstanding housing loans. In 1981, the total amount of outstanding housing loans of all financial institutions was baht 19.1 billion; the share of the commercial banks was 37.0 per cent and that of the GHB was 49.3 per cent. In 1992, the amount had risen to baht 241.8 billion, of which the commercial banks had a share of 68.4 per cent and the GHB 22.1 per cent (Kirinpanu, 1994, 53). The credit-to-value ratio (i.e. the ratio of mortgage loans for housing to the total investment in housing) in Bangkok in 1990 was 66.3 per cent (UNCHS/WB n.d.). This indicates that the population of Bangkok had considerable access to long-term mortgage finance.

FAVOURABLE TERMS AND CONDITIONS

Commercial banks are now generally prepared to finance up to 80 per cent of the project cost of experienced developers with whom they have an established relationship, through overdrafts or loans for 1–5 years. The developer has to complement the bank loan with other, sometimes informal, loans, with advance payments by customers and with equity capital. Most developers offer units for sale with the option of a mortgage loan from the same bank that provides the project loan, because the developer and the bank often negotiate the terms and conditions for the individual mortgage loans as part of their negotiations on the project loan.

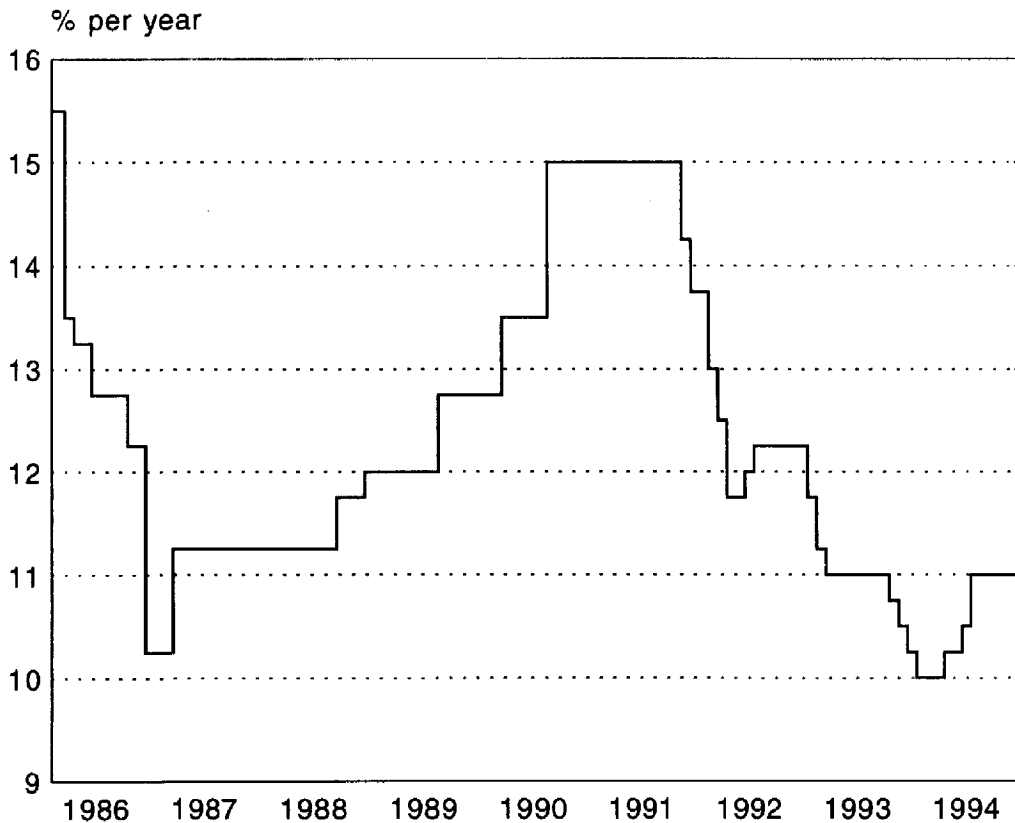


Fig. 1 Lending rate of the Government Housing Bank (1986-1994)

Source: Government Housing Bank (personal communication)

Note: Lending rates for mortgage loans between baht 150 000 and 750 000 for the period 1986-1993, and between baht 200 000 and 750 000 for 1994.

Sometimes, the developer serves as a guarantor for the buyer and has to maintain a deposit with the bank to cover possible defaults (Kirinpanu, 1994, 37).

In the early 1980s, mortgage loans were rarely for longer than 15 years, the loan-to-value ratio was 70 per cent or less, and the interest rates were at least 2-3 per cent above the prime rate. At present, loan-to-value ratios of 80 per cent are common, repayment periods are extended to 25 years, and lending rates are only slightly above the prime lending rate. The GHB offers a range of mortgage loans with lower interest rates for smaller borrowers. At the end of 1994, the interest rate for loans below baht 100 000 was 10.0 per cent per year, that for loans up to baht 200 000 was 10.5 per cent per year and that for loans up to baht 750 000 was 11.0 per cent, while other loans had an interest rate of 11.5 per cent. A borrower could choose a loan with a fixed or adjustable interest rate. For the savings-and-loan scheme, borrowers have to make 24 monthly deposits to prove their creditworthiness to qualify for a loan 75 times the instalment saving amount, with a maximum of baht 500 000.

The supply side: private sector developers

Although the first developers started their operations in the late 1960s, housing production was mainly an affair of individual home builders until the middle of the 1980s. Initially, developers constructed detached houses for the higher-income groups, but the demand for such housing decreased by 1980, because of high land prices, increasing construction costs and high interest rates. In response, developers shifted to town-houses, shop-houses and condominiums for the upper-middle class, but by the middle of the 1980s, an oversupply of more expensive shop-houses and condominiums had developed. In response to this oversupply, but also to the improved economic conditions and the increased purchasing power of the growing middle-income population, private-sector developers moved down market in 1986, and targeted lower-middle-income groups. They produced a low-cost single-storey rowhouse, which ranged in price from baht 150 000 to 200 000.

Although average land prices increased from baht 700 to 850 per square metre between 1980 and 1986, the average sale price of low-cost houses decreased from baht 3500 to 2600 per square metre owing to cheaper construction methods and materials, lower interest rates, shorter construction times and lower quality (Angel and Chuated, 1987, 3.7–3.8, 23). In many projects, plots did not exceed the minimum plot size of 64 square metres; floor areas averaged less than 50 square metres. A developer would build standard units and not allow the buyer to change the design or the finishes, in order to reduce costs further. Down payments could be made in instalments, so that a lower-income family with little or no savings could also buy a house. In brief, the developers discovered mass marketing: lower prices, higher volumes, a lower-cost product with mass market appeal (Dowall, 1987, 1.106–1.109, 115). (See Table 1.)

Around 1990, the prices of land, labour and building materials began to increase rapidly, and it became impossible to produce the same type of housing in the same locations at the same price. So developers discovered a new product: the low-cost condominium apartment. The projects consist of one or more buildings of 4 or 5 floors with up to 100 units per building. A unit is built on both sides of a central corridor, has a floor area of 21–35 square metres and consists of a multi-purpose room, a bathroom/toilet and a balcony. A 1994 study of 64 low-cost condominium projects found that the average price of a unit was baht 280 000, but there were units costing as little as baht 180 000. Many projects were located at 20–30 kilometres

Table 1 *Composition of the housing stock in BMA*

Year	1974%	1984%	1988%	1993%
Public sector	5	8	7	6
Informal sector	24	17	14	9
Individually built housing	45	38	43	35
Developer-built:				
shop-houses	23	26	20	16
houses and condominiums	3	12	16	34
TOTAL	100	100	100	100

Source: Pornchokchai, 1993, 61

Table 2 *Annual increase in land prices in the BMA (1986–1991)*

<i>Location</i>	<i>1986</i> %	<i>1987</i> %	<i>1988</i> %	<i>1989</i> %	<i>1990</i> %	<i>1991*</i> %
CBD	34.2	27.0	58.4	46.6	50.2	30.1
Inner-city	23.0	18.5	54.5	64.0	55.6	24.4
Subcentres	40.0	28.6	72.8	73.8	91.5	11.9

Source: Pornchokchai, 1991, 101.

* the first six months of 1991.

from the city centre and away from the main road (Pornchokchai, 1993, 63; Siriyongsawad, 1994, 1–19).

Because land prices continue to rise (see Table 2), many people see real estate as a good investment, and this keeps the demand for housing high. In response, many other people who own or are able to buy land develop it for housing. The sector is attracting individual people with money to invest as well as companies from a completely different line of business. In urbanised parts of Bangkok with high land prices, plot owners demolish detached houses to build low-rise condominiums. However, projects by these new and inexperienced developers have many shortcomings. One is the lack of market research; the main sources of information on demand and supply are visual surveys and the mass media (Foo, 1990, 51). Some developers seemed to have produced low-cost housing, because they used the original purchase price of the land rather than its current values for their profit calculations (Foo, 1992a, 1144).

New developers have a fairly easy entry into the housing sector, except when it comes to project finance, which an inexperienced developer may find difficult to obtain from a commercial bank. The market is, therefore, quite fragmented and competitive, with a large number of small and medium-size developers and a few large ones (Foo, 1990, 47). There are currently an estimated 1500 developers active in Bangkok. In Bangkok in 1990, the industrial concentration (defined as the percentage of new formal-sector housing units placed on the market by the five largest developers) was only 9 per cent (UNCHS/WB, n.d.).

The impact of the down-market trend

LOW-INCOME HOUSING OR LOW-COST HOUSING?

Low-cost housing in Bangkok is undoubtedly a success story. Unlike in some other countries, where governments are trying to encourage the private sector to produce low-cost housing, the private sector in Thailand started a down-market trend on its own initiative. It experimented with designs, construction technologies and sales methods to develop a marketable product and it adjusted its product when the market conditions changed. The increased supply of lower-cost housing, the improvement in people's incomes and the availability of housing loans at lower interest rates have made housing affordable to ever larger numbers.

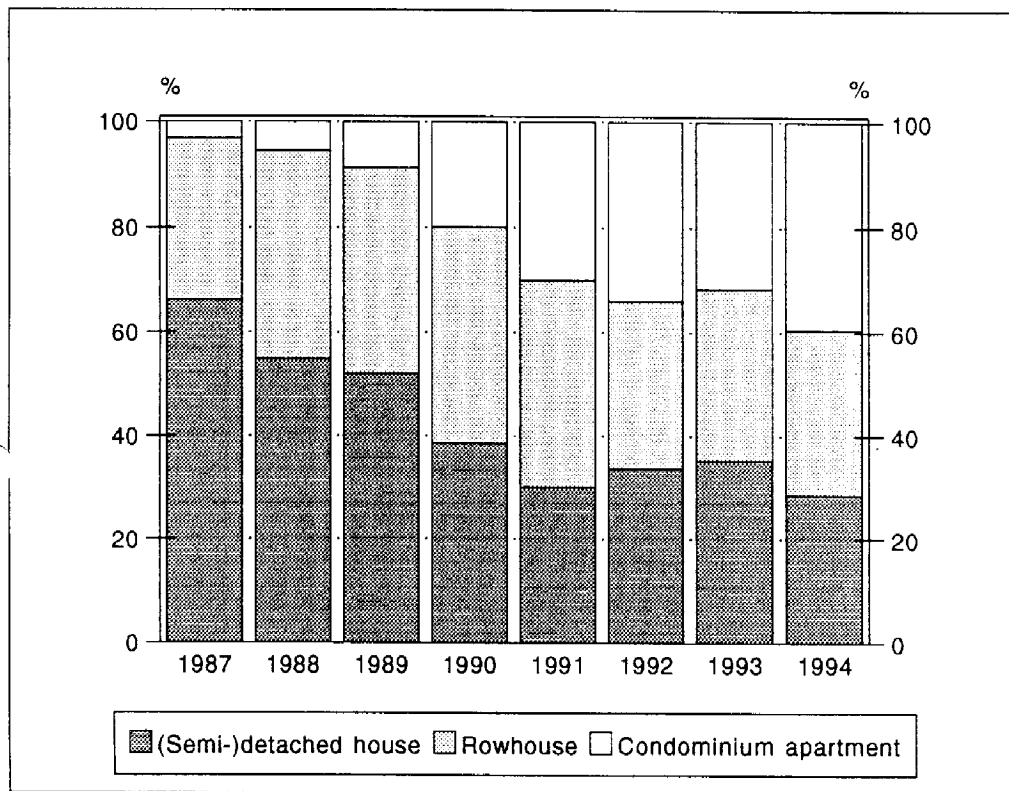


Fig. 2 Newly registered residential units by type in the Greater Bangkok Area

Source: Government Housing Bank (personal communication)

In Bangkok in 1990, the house-price-to-income ratio (i.e. the ratio of the median free-market price of a dwelling unit to the median annual household income) was estimated at 4.1; the 1990 down-market penetration ratio (i.e. the ratio of the lowest-priced, non-subsidised formal dwelling unit produced by the private sector in significant quantities to the median annual household income) was estimated at 1.7 (UNCHS/WB, n.d.). In 1980, the cheapest private-sector housing unit on the market was affordable to only 15 per cent of Bangkok's households; in 1988, the cheapest unit was affordable to 55 per cent, and, according to the GHB, 70-80 per cent of the households could afford the cheapest housing units in 1994.

However, the mere supply of low-cost housing units (see Table 3) does not imply that the housing demand has been met and that the housing conditions of low-income families have improved. Only limited information is available about the sales of low-cost housing units, the characteristics of the buyers and the improvement of the living conditions of Bangkok's inhabitants. Low-cost rowhouses which were constructed in the period 1986-1988 seem to have been in great demand, but this is not necessarily true for low-cost condominiums. They appear attractive for low-income groups because of their price and the financing terms and conditions, but

Table 3 Annual housing completions in the Greater Bangkok Area ($\times 1000$ units)

Year	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994*
Completions	30.5	30.1	53.4	67.5	80.0	102.3	129.7	108.0	96.6	171.0

Source: Government Housing Bank (personal communication)

* Estimate for the Bangkok Metropolitan Region.

despite the increased supply of such units many low-income households still live in slums and squatter settlements, and many low-cost condominium units are vacant. Price is obviously not purchasers' only concern; type, location and size are also issues. Here, low-cost condominiums score rather negatively for slum dwellers, who still depend for their livelihood on centrally located informal-sector activities.

However, the low-income population is not a homogeneous group. Low-cost housing on the outskirts of the city may be attractive for lower-middle-income groups if they work in the same area or if they can commute reasonably quickly to their places of work. For a young working couple without children a small condominium unit may be the ideal housing until they can buy a detached house on the outskirts. Housing-demand studies show that many buyers of low-cost condominiums are not low-income, but rather middle-income households who buy housing as an investment.

A small housing-demand assessment by the Land Management Study found that the buyers of low-cost housing had monthly incomes averaging more than double the median monthly household income in Bangkok and that the typical home-buyer made a down payment of 52 per cent of the house price (Dowall, 1987, 127-30). A 1991 study of one low-cost condominium project found that 130 out of 468 units were vacant; 79.7 per cent of the remaining units were occupied by renters and 20.3 per cent by owners. The owner-occupants had an average monthly household income of baht 15 098 and a median monthly household income of baht 10 250 (Foo, 1992b, 25, 41). A 1994 survey of 64 low-cost condominiums showed that 96.1 per cent of the units were sold, but only 64.3 per cent were occupied. Among the occupants, 38.5 per cent were owners and 58.7 per cent were tenants; the rest said they were friends or relatives of the owner (Siriyongsawad, 1994, 18-24). Pornchokchai estimated that speculators had bought 67.5 per cent of the low-cost condominium units in Bangkok, while developers held on to 22.0 per cent for resale or rental (*Bangkok Post*, 18 July 1994).

In some parts of the BMR, a glut of low-cost housing developed in 1994. The oversupply, which is partly due to the dumping of units by speculators in the face of higher interest rates, resulted in a fierce competition between developers. They tried to attract buyers with discounts and lucky draws; some extended the period to make down payments in instalments to 36 months and offered fixed interest rates for a period of two years.

A study of 317 453 housing units in 1512 projects in Bangkok and surroundings commissioned by the GHB in early 1995 found that 59.6 per cent of them had been sold and were occupied, 5.4 per cent had remained unsold and 35.0 per cent had been sold but were unoccupied. Among the vacant units, 50.7 per cent were condominium units and 27.3 per cent were condominium units costing less than

baht 600 000. The study found four reasons why condominium units remained vacant: the unit had been purchased for resale (23.1 per cent); the units remained unsold because of the large size of the project (22.3 per cent); the facilities were incomplete (17.0 per cent); the unit had been purchased for rental (19.1 per cent) (GHB, 1995, 8–13).

The mixture of owner-occupied, rented and vacant units creates management problems in low-cost condominiums. The Condominium Act requires that the developer of a building establishes an owners association to take charge of it, but not all of them take the task seriously, and associations are often weak. Some developers use their ownership of unsold units to control the owners association, either to force the owners association to hire an expensive service firm with financial links to the developer to maintain the building or to ensure that the conditions do not deteriorate before they have sold all the units. Without adequate management and maintenance, a low-cost condominium can easily turn into a vertical slum, because many occupants have no experience of living in multi-family housing; they make a lot of noise, use common areas for personal purposes, convert the apartments into shops or change the basic design of the units (Siriyongsawad, 1994, 69).

Quality of construction is more important in multi-family, collectively owned housing than in single-storey, single-family slum housing, but developers have made it clear that they cannot build condominium units of 31 square metres for a sale price of baht 600 000 or less (the BOI requirements) unless they reduce the infrastructure or use inferior materials and allow lower-quality work. In the first years, maintenance and repair are still limited, but they are likely to increase over time, while owners associations are unlikely to build up any financial reserves. According to the survey of 64 low-cost condominiums, service charges averaged baht 216 per month (Siriyongsawad, 1994, 25). Suggestions have frequently been made to establish a consumers protection organisation, especially for low-cost housing, to protect home buyers from unscrupulous developers, but until now no action has been taken.

SLUMS AND SQUATTER SETTLEMENTS

Despite the glut of low-cost housing, the population of slums and squatter settlements in Bangkok has not decreased (see Table 4). In fact, the slum and squatter population has increased in recent years and has been evicted from the city centre to the suburban areas. The economic boom put pressure on land prices in the centre of Bangkok and, as land prices increased, plots of land which had not been attractive or suitable for development and had been rented out to low-income

Table 4 *Informal settlements in the Bangkok Metropolitan Area*

Year	1984	1987	1990	1994
Core districts	563	488	374	373
Other districts	550	561	607	776
TOTALS	1113	1049	981	1149

Source: Pornchokchai, 1985; Yap, 1992; BMA, 1990, 1994.

Note: not included in the data for 1994 are settlements in the rural district of Nongchock, and the NHA apartments in Dindaeng.

Table 5 *Slum and squatter population in the Bangkok Metropolitan Area (1990 and 1994)*

	<i>District</i>	<i>1990</i>	<i>1994</i>	<i>Change %</i>
Settlements	core	374	373	-0.3
	other	607	776	+27.8
Population	core	411 438	362 573	-11.9
	other	540 204	840 463	+55.6
Households	core	97 553	86 153	-11.7
	other	116 622	197 855	+69.7
Dwellings	core	62 304	57 233	-8.1
	other	86 235	140 997	+63.5

Source: BMA, 1990; 1994.

Note: not included in the data for 1994 are settlements in the rural district of Nongchok, and the NHA apartments in Dindaeng.

households gradually became worth developing. As a consequence, many slums in the city core have been demolished and many slum households have been evicted. In addition, large infrastructure works such as the express-ways required the removal of slums, while providing vehicular access to other plots with slum settlements, which thereby became attractive for development.

Informal settlements in the Bangkok Metropolitan Area have been surveyed by Pornchokchai in 1984, by the NHA in 1987 and by the BMA in 1990 and 1994 (see Table 5). The NHA and the BMA used different methods to collect data and the comparability of the information is, therefore, not assured. According to the surveys, the number of informal settlements in the 17 core districts of the BMA decreased by 33.9 per cent between 1984 and 1994, while the number of informal settlements in the remaining 20 districts (the rural district of Nongchok was excluded) increased by 41.1 per cent.

There is little information regarding the whereabouts of evicted slum dwellers. They can apply for a plot in the NHA resettlement sites-and-services scheme in Rom Klao to the east of Bangkok, but many prefer not to move there because commuting times between Rom Klao and the centres of informal employment are long. There are employment opportunities in the industrial areas near Rom Klao, but most factories recruit young semi-skilled women, while the slum dwellers are usually older unskilled men and women who are more likely to depend for their livelihood on the informal sector in and around commercial centres.

It has been suggested that rather than buy a low-cost condominium unit or resettle in Rom Klao, evicted slum dwellers would resettle in other informal settlements in the city centre. Since the expansion of a settlement is nearly impossible owing to a lack of land, they would have to move in with relatives or friends or rent a room in an existing slum house. This would result in higher densities in slum areas in the centre and deteriorating environmental conditions. The results of the BMA survey of slum communities in Bangkok does not show this densification. However, pavement dwellers have appeared in Bangkok in recent years: families are living under bridges and under the elevated express-way. In 1989, 52 communities consisting of 564 families and 2449 persons lived under bridges and elevated express-ways; in 1990,

their number had increased to 76 communities, 672 families and 2032 persons; in 1993, there were 65 communities, 620 families and 2165 persons under bridges and express-ways (Housing Policy Sub-Committee, 1995, 114).

Conclusions

Over the past ten years, ever larger numbers of Bangkok's people have been able to improve their housing conditions and achieve home ownership. This is a result of effective government policies and favourable economic conditions. The rapid growth of Bangkok's economy resulted in a substantial increase in real income for many people, and in a growing middle class, whose priorities included home ownership. The private sector was able to respond to this new demand by producing large numbers of middle- and low-cost housing units, thereby showing its willingness and ability to produce housing for lower-income groups provided there is an effective demand. The private sector was able to reduce the price of housing by introducing new house types and designs, by applying new marketing techniques and by making profit through volume sales rather than through high profit margins. Financial institutions offered housing finance to private-sector developers as well as to home buyers of all income groups, at easy terms and conditions and at interest rates which directly reflected the market situation.

The government, particularly through the Government Housing Bank and later through the Board of Investment, played an active facilitating role in the development of the low- and middle-income housing sector. Without government subsidies, the GHB, a state enterprise, introduced innovative saving and loan instruments which attracted new customers and forced the commercial banks to give more attention to housing finance. The result was an efficient and competitive housing finance sector, with a minimum of government intervention. The generally high liquidity in the capital market due to a continuous inflow of capital into Thailand allowed the housing finance sector to expand despite the high capital demand from other sectors of the rapidly growing economy. In 1993, the government encouraged private-sector developers to move further down market by granting tax privileges for lower-cost housing through the BOI.

However, the housing policy of the Thai government was not completely successful. A housing policy should have two objectives:

- 1 to improve the efficiency of the market by removing the obstacles that prevent the private sector from increasing the supply of affordable housing or the public from buying or renting housing units produced by the private sector, so that larger sections of the population can occupy adequate housing;
- 2 to ensure that those who cannot afford to buy or rent housing produced by the private sector, despite government actions to remove obstacles to an efficient housing market, are nevertheless adequately housed.

While the government removed most of the obstacles that prevented the private sector from supplying affordable housing, it did little to improve the housing conditions of those in Bangkok who could not afford even the lowest-cost housing. Thai government policies have generally been oriented towards the promotion of economic

growth rather than of social development on the assumption that the benefits of economic growth will eventually trickle down to the poorer sections of society. However, this happens only to some extent; while many people benefited from the economic growth, the booming economy forced many slum dwellers from the land they occupied without a suitable alternative, because the low-cost housing produced by the private sector was often not suitable and/or was not in a suitable location for low-income households. So the number of slums and squatter settlements in Bangkok did not decrease, despite the availability of private-sector low-cost housing. Evicted slum dwellers merely moved from the central areas to the peripheral areas of the city.

The private sector continued to construct low-cost housing because part of the demand for it proved to be speculative. Expecting that in a rapidly expanding economy with ever increasing incomes and rapidly rising land prices incomes and housing demand and, therefore, land and house prices would continue to increase, middle- and high-income families bought low-cost housing units as a form of investment. As a result, many of the low-cost housing units in Bangkok, in particular in the urban periphery, have been sold, but remain vacant, while over one million people still live in slums and squatter settlements.

The enabling policies of the Thai government can serve as an example for other governments wanting to improve the urban housing sector. The performance of the housing finance sector of Thailand shows the importance of an efficient housing finance sector for the development of the housing sector; it also shows how a relatively small government agency can improve the efficiency of the housing finance market. Removal by the government of the obstacles that prevent the private sector from producing more affordable housing will improve market efficiency and allow developers to move down market, provided there is an effective demand. However, the removal of such obstacles not only facilitates the supply of more affordable housing but also allows some developers to ignore the longer-term interests of home buyers and the public at large.

Neither the growth of the real estate sector nor the development of the housing finance sector can, however, be seen in isolation from the long-term rapid economic growth that Bangkok has experienced in the past ten years, and which is unique in the world. Thailand's experience shows the close relation between the developments in the housing sector and those in the economy as a whole; without the economic growth, the housing sector would probably not have developed to this extent.

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