



**UNIVERSITI PUTRA MALAYSIA**

**AFFORDABILITY LEVEL AND DETERMINANTS OF LOW-COST  
HOME OWNERSHIP IN T HE FEDERAL TERRITORY  
OF KUALA LUMPUR**

**Chew Geok Luan**

**FEP 1989 2**

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OF KUALA LUMPUR**

by

**Chew Geok Luan**

Thesis Submitted in Partial Fulfilment of the  
Requirements for the Degree of Master of Science in the  
Faculty of Economics and Management  
Universiti Pertanian Malaysia

May, 1989



## ACKNOWLEDGEMENTS

My thanks are due to numerous people who have helped me with the completion of this work. I am very grateful to my supervisor, Associate Professor Dr. Mohammed Yusof, whose guidance and patience are most appreciated. I have also benefited much from the comments and encouragement of Professor Eric Gibbons. Special thanks goes to Mr. Siow Kiat Foo and Jose who have taught me the use of the computer. The encouragement and friendship of Colin Nicholas and Zaldy Catedrilla have meant much. Lastly, my utmost appreciation to my husband who has given me endless support in every way.



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## GLOSSARY

- Bandar** : Township or city.
- Berhad** : Limited company.
- City Hall** : Refers to Dewan Bandaraya — the administrative body for the city of Kuala Lumpur.
- Core-housing** : A housing unit built with bare minimum having potential for future enlargement and improvement if so desired by the owner.
- Household** : A group of persons consisting of two or more related members of a family who occupy a dwelling unit.
- Jalan** : Road.
- Kampung** : Village.
- Longhouses** : One storey terrace, wooden structure with unit partition for each household, built as temporary shelters.
- Low-cost housing** : Houses costing below M\$25,000 per unit.
- Low-income household** : Household earning a monthly income of M\$750.00 or less.
- Private developer** : Private company which operates housing development projects.



- Second best solutions** : A combination of housing services which falls short of the finished products. It includes a wide range of possible options such as provision of unserviced or serviced site, upgrading of infrastructure in existing housing units or provision of bare framework or more complete varieties of core-housing.
- Self-help housing** : Houses built using own labour or families working together in groups.
- Site and services** : Provision of new serviced sites in small plots whereby individual households may build their own dwellings.
- Wilayah Persekutuan** : The Federal Territory of Kuala Lumpur.
- Urban centres** : Gazetted areas each with a population of 10,000 persons and more at the time of 1980 Housing and Population Census.
- Urbanisation** : The state of being or the process of making or becoming urban.

Abstract of thesis presented to the Senate of  
Universiti Pertanian Malaysia in partial fulfilment of the  
requirements for the Degree of Master of Science

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May, 1989

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Faculty : Economics and Management

The provision of housing for low-income population has been a key issue in Malaysia. With the rapid rate of urbanisation in recent years, housing problems especially for the urban poor have become even more acute. To understand some underlying factors, the present work is an attempt to study the determinants which affect home ownership rate by low-income households and the affordability level of such households in the Federal Territory of Kuala Lumpur.

Ordinary least squares and logit analysis are employed in the analysis of home ownership while the



functional form of  $a \geq C_j / Y_i$  is used in evaluating affordability where 'a' is the proportion a household is willing to spend on housing;  $C_j$  is the housing cost associated with a given level of housing service,  $j$ ; and  $Y_i$  is the monthly income of a household at the  $i^{\text{th}}$  percentile income distribution.

Home ownership rate of the Federal Territory's low-income households is largely explained by income and the household head being Chinese. There is no difference between male and female-headed households towards home ownership; so is between public and private sector employees. Household size also does not exert much impact.

On affordability issues, the low-income households of the Federal Territory on the average are able to spend about 18 percent of their income on housing cost. The present bank ruling of having one-third of one's monthly income as monthly housing installment has in fact induced many poor households to spend beyond their means. The market price of a low-cost house at M\$25,000 is still unaffordable to a majority of the poor households. For a housing programme to be successful, the project design should be one that reflects the true willingness to pay by house seekers.



## ABSTRAK

Abstrak tesis yang dikemukakan kepada senat Universiti Pertanian Malaysia sebagai memenuhi sebahagian dari keperluan untuk Ijazah Master Sains.

### TAHAP KEMAMPUAN DAN FAKTOR-FAKTOR PENENTU DALAM PEMILIKAN RUMAH KOS RENDAH DI WILAYAH PERSEKUTUAN KUALA LUMPUR

oleh

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Penyediaan tempat kediaman bagi penduduk yang berpendapatan rendah merupakan suatu isu utama di Malaysia. Dengan kadar urbanisasi yang begitu pesat sejak beberapa tahun kebelakangan ini, masalah perumahan di kalangan penduduk bandar yang miskin telah menjadi semakin meruncing. Untuk memahami beberapa faktor yang berkaitan dengan masalah ini, kajian ini dilakukan untuk mengkaji beberapa faktor penentu yang mempengaruhi kadar pemilikan rumah serta tahap kemampuan bagi isirumah yang berpendapatan rendah di Wilayah Persekutuan Kuala Lumpur.



Analisis Logit dan ganda dua terkecil digunakan dalam analisis pemilikan rumah, sementara satu bentuk fungsi  $a \geq C_j / Y_i$  digunakan dalam analisis tahap kemampuan di mana 'a' ialah sebahagian pendapatan yang sesuatu isirumah mampu membelanja untuk perumahan;  $C_j$  ialah kos perumahan berkaitan dengan sesuatu tahap perkhidmatan perumahan,  $j$ ; dan  $Y_i$  ialah pendapatan bulanan sesuatu isirumah pada persentil ke  $i$  taburan pendapatan.

Kadar pemilikan rumah bagi isirumah di Wilayah Persekutuan Kuala Lumpur didapati berkaitan dengan pendapatan dan bangsa sesuatu ketua isirumah. Tiada perbezaan didapati terhadap pemilikan rumah sama ada ketua isirumah itu lelaki atau wanita; begitu juga antara kakitangan kerajaan dan sektor swasta. Saiz isirumah juga tidak memberi banyak kesan.

Jika dilihat daripada sudut kemampuan, secara puratanya, isirumah berpendapatan rendah di Wilayah Persekutuan berupaya membelanja setakat 18 peratus dari pendapatan mereka untuk membeli rumah. Mengikut peraturan bank-bank sekarang yang menetapkan satu pertiga pendapatan seseorang peminjam sebagai bayaran ansuran bulanan telah mengakibatkan banyak isirumah miskin berbelanja lebih daripada kemampuan mereka. Walaupun harga pasaran rumah kos rendah dihadkan kepada M\$25,000, namun harga ini masih lagi tidak mampu dibeli oleh kebanyakan isirumah

miskin. Untuk menjamin kejayaan sesuatu program perumahan, projek-projek perumahan seharusnya mengenakan kadar bayaran yang mampu dibayar oleh pembeli-pembeli rumah.



## CHAPTER I

### INTRODUCTION

#### Housing: An Overview

Urbanisation is a worldwide phenomenon especially during the twentieth century. Between the period of 1920 to 1970, the proportion of the world population living in urban centres increased from 19 to 37 percent (World Development Report, 1979). By the year 2000, it is expected that more than half of the world's population is likely to live in cities (Table 1). The rapid increase in urban population causes great stress on the existing stock of shelter and on the service infrastructure, including transportation, education and public services. More than half of the population in many cities of developing countries live in slums and squatter settlements, while between one-fourth to one-third of these urban dwellers do not even have access to safe water supply (World Development Report, 1979.) The high population concentration, the affordability factor, and the visibility of deficiencies in urban housing have made it one of the most urgent problems facing developing countries. The high population density problems of urban



**Table 1**  
**Urban Population Growth (1950, 1975, 2000)**

=====

Urban Population as Percentage  
of Total Population

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	1950	1975	2000
	-----	-----	-----
Developing countries	20.6	31.1	45.8
Industrialized countries	62.4	74.4	83.6
Capital Surplus Oil Exporters	16.9	55.5	77.9
Centrally Planned Economies	20.7	34.4	49.2
World	29.0	39.3	51.5

=====

Source: World Development Report 1979

centres such as Bombay, Calcutta and Lagos are well documented and understood. What is not always appreciated is the pace at which urbanisation is growing and likely to grow.

In Malaysia, it is not uncommon to see the poor, both rural and urban, living in deteriorating and deplorable dwellings. The phenomenal upward trend of Malaysian property prices during the past decade has made house ownership even more unattainable. Figure 1 demonstrates clearly such a trend in property prices. The problem is particularly acute in urban centres where heavy demand has caused house prices to spiral. The above situation is expected to worsen since by the year 1990, an estimated 42 percent of the total population of Malaysia are likely to live in urban areas (Third Malaysian Plan, 1976-80).

The Government, in its efforts to provide access for housing, has launched a major construction programme under the Fourth Malaysian Plan (1981-1985). Emphasis is being placed on the construction of low-cost housing for households whose income is less than M\$750.00 (U.S.\$300) per month. Low-cost houses are priced not more than M\$25,000 per unit. Under the Fourth Malaysian Plan (FMP), the public and private sectors are expected to build 376,500 low-cost units. This represents 40 percent of the FMP target of 923,300 housing units (Table 2).



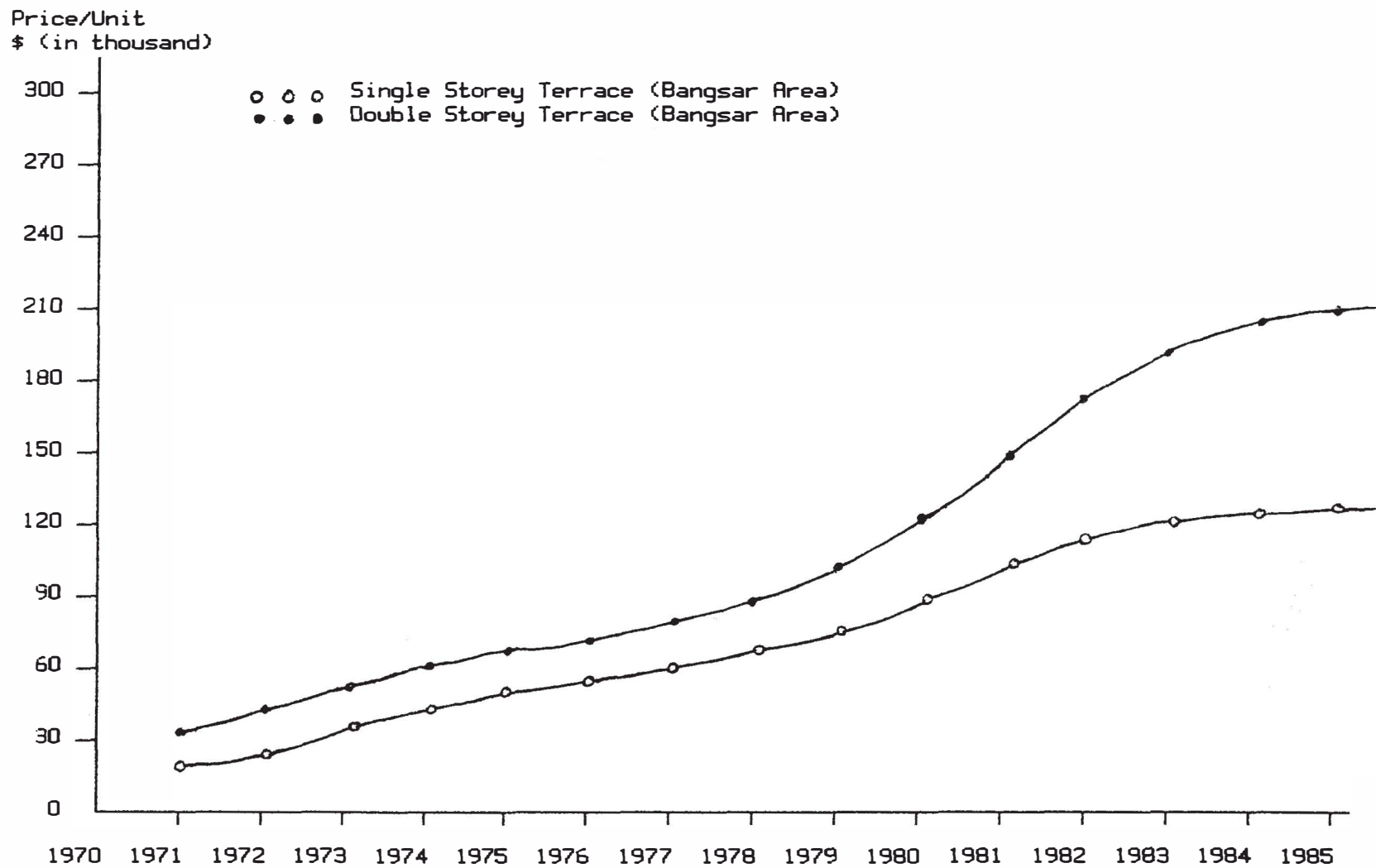


Figure 1. Price Movement for Terrace Houses in the Federal Territory of Kuala Lumpur



Table 2

Housing Programmes : Public and Private Sector(1971-1990)  
Second to Fifth Malaysian Plan (Units)

	Second	Third	Fourth	Fifth
Public Sector				
Public Low-cost Housing Scheme	13,244	62,200	176,500	45,800
Federal Agencies and Regional Development Authorities Housing Programmes	41,965	60,000	110,010	57,500
Federal Institutional Quarters	24,240	41,300	58,500	27,000
Medium and High-Cost Houses	6,627	57,300	53,560	-
Other Housing Programmes	-	-	-	18,700 <sup>a</sup>
	86,076	220,800	398,570	149,000
Private Sector				
Private Developer's Low-Cost Housing	64,862	100,000	90,000	370,400 <sup>b</sup>
Private Developer's Medium and High-Cost Housing	3,582	12,000	259,470	169,600 <sup>b</sup>
Cooperative Societies	-	-	25,260	12,500
Individuals and Groups	105,287	150,000	150,000	-
Sub-Total	173,731	262,000	524,730	552,500
TOTAL	259,807	482,800	923,300	701,500

Source: Second, Third, Fourth and Fifth Malaysia Plans

<sup>a</sup> Inclusive of low-cost, medium and high-cost homes

<sup>b</sup> Inclusive of housing developers, individuals and groups

The proposed 376,500 units include the combined construction by the public sector (including Federal Agencies and Regional Development Authorities) as well as the private sector. Under the Fifth Malaysia Plan (1986-1990) the public sector has however taken a substantial reduction in its low-cost housing programmes. The public sector is to build 120,900 units while the private sector is expected to contribute 374,100 units bringing to a total of 495,00 units of low-cost houses (Table 2). In terms of total low-cost housing units to be built, the Fifth Malaysia Plan however showed an increase of 31.5 percent.

In June 1986, the government has announced the launching of the Special Low-Cost Housing Programme which aimed at building 80,000 units of low-cost housing per year over a three-year period; that is, during the period 1986-89, it is expected that 240,000 units of low-cost housing units will be built by the private sector. The construction of these low-cost houses will be concentrated in eight urban centres, namely, the Federal Territory of Kuala Lumpur, Petaling Jaya, Klang, Ipoh, Penang, Johor Bahru, Seremban and Kuantan. This housing programme is expected to be financed with a fund of M\$2 billion. It is anticipated that this spurt of activities in the construction sector will act as a catalyst for other industries related to housing. The multiplier effects, may bring about a two percent increase in our economic growth rate for the period.

The official maximum price for a low-cost housing unit is M\$25,000 (Ministry of Housing and Local Government Publication, 1982). Since April 1982, banking institutions, in compliance with Bank Negara Malaysia (Central Bank) guidelines, have begun to provide 100 percent end-financing for eligible low-cost house buyers at a preferential interest rate of 10 percent per annum and a repayment period of 25 years (Ministry of Housing and Local Government Publication, 1982). In order to be eligible for the purchase of a public low-cost housing, the applicant must be a citizen of Malaysia above 18 years of age, married, does not own a house and has a household income that does not exceed M\$750.00 per month. However, the rigidity of having monthly repayment not exceeding one-third of the applicant's monthly income has left many potential low-cost house buyers in a dilemma. On the basis of the above criteria, a potential low-cost house buyer would need a minimum monthly income of M\$688.56 to be eligible for a loan consideration. The calculation is based on the discounted Annuity Repayment Formula of Malayan Banking Berhad given as below:

$$R = \frac{r ( 1 + r )^n}{( 1 + r )^{n-1}} \cdot L \cdot 1/12$$

where R = monthly repayment,  
 r = annual interest rate,  
 n = period of repayment (years),  
 L = amount of loan.

Presently, the percentage of urban Malaysian household earnings below this level is approximately 70 percent (Table 3).

Table 3

## Urban Income Distribution in Malaysia (1981 - 1985)

Income Group (M\$)	Urban Household (%)	Urban Housing Needs (units)
Less than 200	12.0	60,656
201 - 400	27.6	139,510
401 - 600	19.1	96,545
601 - 800	11.3	57,118
801 - 1,000	7.2	36,394
1,001 - 1,500	10.1	51,052
1,501 - 2,000	4.9	24,768
2,001 - 3,000	4.1	20,724
3,001 - 4,000	1.6	8,087
Above 4,000	2.1	10,616

Source: Fourth Malaysian Plan cited in Housing and Property Nov/Dec 82.



The Malaysian population in urban centres is growing at an average rate of 5 percent per annum, and with a 7 to 9 percent increase of the squatter population annually (Sen, 1982), urban housing problems are likely to be aggravated as urbanisation continues. If the National Low-Cost Housing Programme is to be successful, its inherent weaknesses, such as the exclusion of the 70 percent of urban Malaysian households from owning a home, should be remedied.

In view of the Government's limited capacity to meet its targets to provide low-cost housing, the private sector is compelled by policy to contribute a fair share. Since the Fourth Malaysia Plan, private developers are required to allocate 30 to 50 percent of their housing projects (if development site exceeds 2.03 hectare or 50 units of terrace type houses) for low-cost housing. To ensure that the targeted low income group would benefit, all low-cost units are to be bought over by the Government through the Malaysian Building Society Bhd. (MBSB), Housing and Development Commission, Sarawak (HDC) and the Housing and Town Development Authority, Sabah (HTDA). These units are either rented out to the low-income group or sold to eligible buyers who have the means to buy (Ministry of Housing and Local Government Publication, 1982). In the Federal Territory of Kuala Lumpur, the City Hall undertakes the responsibilities of implementation, management, sales and transfers of public sector low-cost