

Abandoned Housing Development: The Malaysian Experience

By

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ABSTRACT

The issue of abandoned housing project is a matter of grave importance in Malaysia. This study sought to identify the causes leading to the problem from the view point of neo-classical and institutional economic analysis. Having that aim in mind, the research focused on reviewing available literature on the applicability of neo-classical and institutional theories in land and property market analysis, understanding the abandoned housing projects, identifying institution affecting housing development in Malaysia, examining the role of market signal, identifying the causes of abandoned housing projects and recommending suitable policies to prevent and solve the problem of abandoned projects. Extensive field work was done in order to collect primary data for the study. Surveys and semi-structured interviews were done using sample study areas which comprises of 6 different states in Malaysia. The respondents in this study are sample from the population of private developers. Based on the findings, it can be concluded that the cause of abandonment of housing projects relates to institutional factors and failure to respond appropriately to market signal.

DEDICATION

For my beloved wife, daughters, son, and family...

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DECLARATION STATEMENT

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LIST OF GLOSSARY

BLR	Base Lending Rate
BNM	Bank Negara Malaysia
CCC	Certificate of Completion and Compliance
CFA	Confirmatory Factor Analysis
CFO	Certificate of Fitness for Occupation
CIDB	Construction Industry Development Board
CIOB	Chartered Institute of Building
EFA	Exploratory Factor Analysis
FOMCA	Federated Association of Consumer Malaysia
GDP	Gross Domestic Product
GLC	Government Link Company
GNP	Gross National Product
HBA	Home Buyers Association
MHLG	Ministry of Housing and Local Government
NEP	New Economic Policy
NGO's	Non Government Organisation
NLC	National Land Code
OPP2	Second Outline Perspective Plan
PLI	Poverty Line Income
PPRT	Program Pembangunan Rakyat Termiskin
REHDA	Real Estate and Housing Developers Association
S&P	Sales and Purchase Agreement
SARS	Serve Acute Respiratory Syndrome
SLCHP	Special Low Cost Housing Programme
SPNB	Syarikat Perumahan Negara Berhad
SPSS	Statistical Packeage for the Social Science
UBBL	Uniform Building By Laws
UUM	Universiti Utara Malaysia

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Malaysia has made great strides in meeting the requirements of its citizens in relation to housing. Under various five-year plans¹, the government has implemented numerous housing programmes, in both rural and urban areas, with the aim of making Malaysia a 'home owning society' (Othman, 1993). The public sector has concentrated mainly on low-cost housing programmes, while the private sector has focused on medium- and high-cost housing programmes.

The house-building industry in Malaysia is in line with the goals of the Habitat Agenda as well as the principles of Agenda 21. This is the blueprint for sustainable development in the 21st Century, adopted by 179 nations, including Malaysia, at the 1992 summit in Rio de Janeiro (Ismail, 2002). One of the main elements in sustainable development is to provide shelter for all.

The government has shown keen interest in providing housing, in particular for low-income groups. However, the government could not provide sufficient housing for everyone because of inadequate financial and physical resources. Owing to these inadequacies, the Malaysian government has allowed more opportunities for the private sector to play a role in providing housing. The private sector that is responsible for providing housing has become a key factor in overcoming the burden of social obligation in housing provision, even though private housing developers are entrepreneurs who construct houses for profit.

Under the Seventh Malaysia Plan (1996-2000), the Malaysian government decided to involve the private sector actively in their new housing programmes. The private

¹ A five-year plan consisting of national housing policies in Malaysia.

sector is expected to produce 570,000 housing units out of the target of 800,000 units over the plan period.

The private sector has succeeded in completing 737,856 units of houses, which is higher than the target. However, under the Eighth Malaysia Plan (2001-2003 - Mid Term), private developers completed 339,854 units of houses, more than the target of 303,000 units. This means that the contribution of private sector developers towards achieving the planned level of new housing output is highly significant. Nevertheless, the existence of abandoned housing projects as a result of the failure by private developers to complete the housing schemes that had been approved by local authority has led to the predictable under-performance of private developers in the construction of housing provision. At this stage, it is important to highlight the definition of 'abandoned project'. The term 'abandoned housing project' refers to a housing project which has not been completed according to the Sale and Purchase Agreement² (S&P) signed between developer and homebuyer. The particular project had lapsed by more than a year after the period for completion. Indeed, the homebuyers lodged a report with the Ministry of Housing and Local Government, and the government had to intervene and rehabilitate the projects.

In 1986, the Ministry of Housing and Local Government³ (MHLG) reported that in the period up to 31 December, there were 126 housing schemes which could not be completed as scheduled and had been left totally abandoned by private developers. The total number of housing units concerned at that time was 14,568, involving 6,834 buyers. The Ministry of Housing and Local Government has monitored the existence of housing abandonment in Malaysia since 1986 and reported that the cumulative figure of the total projects involved up to 31st December 2001 was 526. At that time, there were, in total, 114,568 housing units, involving 72,543 homebuyers in Peninsular Malaysia.⁴

² Hereafter the Sale and Purchase Agreement is referred to as the S&P agreement.

³ Hereafter the Ministry of Housing and Local Government is referred to as MHLG. The MHLG is a ministry that is fully responsible for the housing industry in Malaysia.

⁴ This study focuses only on the existence of abandoned housing projects in Peninsular Malaysia and does not include Sabah and Sarawak.

The situation has been worsened by the fact that a down payment of 10% of the estimated house value is required from buyers prior to completion or at the time of booking, and many buyers have already made payments for houses that have not been built. At the same time, they also have to pay for rent for their existing accommodation, which creates a financial burden for the homebuyers. For these reasons, the high performance of private developers in completing housing units over the target has been questioned in relation to the existence of abandoned housing projects. The reasons for the existence of abandoned housing projects might be related to various factors. Therefore, this study specifically undertakes to determine the exact causes of abandoned projects. It employs both neo-classical and institutional economics to attempt to understand more fully understand how development projects can be abandoned.

1.2 Background of the Study

Before further discussion on the housing abandonment in Malaysia, it is useful to highlight some knowledge of Malaysia in terms of location and the background of governance. Malaysia is located between 3 N 104 E and 7 N 120 E, with a total land area of approximately 333,000 sq km. This total area comprises Peninsular Malaysia (132,000 sq km), also known as West Malaysia, Sabah (76,000 sq km) and Sarawak (125,000 sq km). Historically, Malaysia came into existence on September 16, 1963 as the Federation of Malaya, Sabah, Sarawak and Singapore. However, Singapore was withdrawn from Malaysia in 1965. There are 11 states in Peninsular Malaysia: Perlis, Kedah, Penang, Perak, Selangor, Negeri Sembilan, Melaka, Johor, Pahang, Kelantan and Terengganu. There are two states in the northern part of Borneo Island, which is comprised of Sabah and Sarawak. Figure 1.1 shows the map of Malaysia.

In terms of the background of governance, Malaysia has a three-tier government (i.e. the Federal Government, the State Government and the Local Government). The Federal Constitution separates the function and power of each level of government, based on the legislative lists constituted in the Federal Constitution. The Constitution divided the legislative power into three main subjects: Federal List, State List and

Concurrent List⁵. However, the legislation under the Concurrent List may not be operative until after consultation between the Governments concerned. For instance, the subject related to urban housing development is in the concurrent list. The Constitution revealed that urban housing development is related to housing, land, local government and urban planning.

Both the Federal Government and the State Government exercise legislative power which is related to housing. However, the Federal Government exercises power over the licensing of developers and related parties in the house building industry for the purposes of legislation uniformity and professional practice. In terms of housing development, both governments are involved in constructing housing throughout Malaysia. In terms of land matters, the State Government is fully responsible for the use of land for housing development and other urban uses under the legislative power of the State Government as provided by the Constitution. Nevertheless, the Federal Government has certain powers on land legislation and development if the National Land Council has voted for formulating such policies associated with land, mining, forestry, agriculture or any other purpose, and for the administration of any laws relating thereto; and the Federal and State Governments shall follow the policy so formulated. If we look at the Local Government level, we can see that the Local Government is under the control and jurisdiction of the State Government. This is because the formation of the Local Government was done at the discretion of the State Government. Indeed, the appointment of the Chairman of every Local Government in Malaysia is appointed with the prior consent of the State Government. Therefore, the Local Government is responsible to the State and, in terms of the administration the Local Government shall follow the policy formulated by the Federal and State Governments.

⁵ For further information on the legislative power between the each level of government, please refer to the Federal Constitution of Malaysia.



From the discussions above, one can see that the Federal Government has full responsibility for issuing licences to of developers and related parties in the housing industry in Malaysia. Therefore it is not surprising whenever the government becomes very concerned about the issues of housing abandonment in Malaysia. Instead of meeting the housing need, the existence of abandoned housing projects should be given serious concern because the victims were private homebuyers. In fact, there are purchasers among those who were categorised under the totally abandoned projects, even though they had paid a deposit, and some of them had started to repay mortgage loans to the financial institutions.

In relation to the issues of abandoned housing projects, Siong (1994, p.4) argues that:

“ The abandoned housing estate problems which emerged in the mid 1980s posed serious problems to the Government (National, State and Local Government), bankers, purchasers and developers, especially when housing estates development are on an increasing trend, and future abandoned housing should be avoided. The Ministry of Housing and Local Government had taken a serious view towards solving current abandoned housing projects and preventing future abandoned housing projects in Malaysia. A Committee has also been set up to monitor and control abandoned housing projects”.

Owing to the seriousness of abandoned housing projects, the government has intervened in an attempt to overcome the problems of housing abandonment in Malaysia. Pertaining to the government intervention in order to solve current abandoned housing projects, the Government established the Abandoned Housing Projects Fund in 1990 under the administration and supervision of Bank Negara Malaysia for undertaking the rehabilitation programmes. A Coordination Committee was set up in each state to coordinate and facilitate the rehabilitation of abandoned projects. However, in 1992, Syarikat Perumahan Negara Berhad (SPNB)⁶ was given the responsibility for undertaking the reviving programmes of housing abandonment.

⁶ Syarikat Perumahan Negara Berhad (SPNB) is a Government Link Company (GLC) that has been given responsibility by the government to revive the abandoned housing projects in Malaysia.

Ismail (2002) points out that an initial allocation of RM300 million was provided. This was subsequently increased to RM600 million for the rehabilitation of abandoned projects. In addition, the National Property Information Centre or NAPIC (2004) reported the government had allocated RM5.06 billion for rehabilitation work. In this context, the government had been forced to allocate approximately 4.13 per cent out of RM122.655 billion of government spending for rehabilitating the abandoned projects.

However, the government's effort to solve current abandoned housing projects through the rehabilitation programmes has not been totally successful. These programmes focused only on those projects which were categorized as having the potential to be revived. Conversely, those buyers whose projects were totally abandoned with no chance of revival will keep suffering, with dreams of owning their own homes completely destroyed.

In addition to rehabilitation programmes, the government has taken a few regulatory actions for preventing future abandoned housing projects. This matter will be described in detail in chapter two. In this context, the government has imposed a few amendments to the Housing Developers (Control and Licensing) Act of 1996. The amendments were implemented on 26 August, 1991. In relation to this, Din (1997) points out that government intervention is necessary, especially in the formulation of policies in order to avoid these problems. The government has a responsibility to protect buyers' interests, as well as to reduce the number of abandoned housing projects. Nevertheless, the number of abandoned projects is still rising.

1.3 Problem Statement

The previous sections have provided an overview of housing abandonment in Malaysia. They outlined the seriousness of abandoned housing projects that forced the government to intervene via the rehabilitation programme for solving current abandoned housing projects. In addition, the Housing Developers (Control and Licensing) Act of 1996 has also been amended in order to avoid the existence of housing abandonment in future. Nonetheless, the abandoned housing projects still

exist and the problem is not being solved. Therefore, the effort should focus on the study of the factors which contribute to housing abandonment, and recommendations should be made for avoiding the problems.

Housing has been one of the main concerns of the government since Malaysia became independent in 1957, with a target on housing provision for lower income groups (Malaya, 1961). However, with the rapid growth of the national economy and the population, housing provision for all in Malaysia has been the focus of the government. In this context, the government has invited the private sector to engage actively in housing provision, and has given it the responsibility for constructing housing units through the particular Malaysia Plan. As mentioned before, private sector output has been above the government's target, especially during the 6th, 7th and 8th Malaysia Plans. Thus, the private sector's contribution in providing housing for people has become the main target, and the government has allowed more opportunity for the private sector to play a role in housing provision. Nevertheless, the private sector is not involved in producing housing for the hardcore poor groups. The government has taken full responsibility for providing housing for this group.

At this stage, it is important to make a clear definition of the income groups. This is because the low cost housing units in Malaysia can be sold to lower income household or poor groups only. In this context, the proportion of lower income household is based on the definition of the Seventh Malaysia Plan of lower income households. The lower income household or poor groups have been defined as those earning more than the poverty line income (PLI)⁷ but less than RM1,500 per month. The poverty line income increased from RM656 in 1999 to RM764 in 2004 (Ninth Malaysia Plan 2006-2010). The size of the middle-income household is defined as one earning between RM1,501 and RM3,500. Those households, who are earning more than RM3,500 are considered to be in the upper income household group. In addition, the hardcore poor income household has been defined as one earning less than PLI per month. With respect to

⁷ Poverty line as defined in the Third Malaysia Plan, takes into account minimum food requirements and minimum needs with respect to clothing, housing, consumer durable goods and transport services. Poverty is defined as the lack of income needed to acquire the minimum necessities of life, and those who lack the resources to sustain life are considered poor.

providing housing for the hardcore poor groups of society, the government has produced a programme called the Program Perumahan Rakyat Termiskin (PPRT).

Concerning the production of housing in Malaysia, the private developers have been allocated development areas which have been identified by local authorities for housing development. The allocation for housing development by local authorities is made via development plans, such as structural or local plans. This means that land supply for housing development in Malaysia has been allocated by the local authority, and developers initially have to select a site which has been allocated for housing. Therefore, the developers have to study the market before making a decision on any housing development, and have to select a suitable site within the area which has been allocated.

Nevertheless, the existence of abandoned housing projects in Malaysia where the house buyers have suffered has jeopardised the housing industry and contributed to the housing industry problem. The issues of abandoned projects have been open for public debate and there have been some comments from public opinion suggesting that the government should intervene in these problems, using methods such as taking immediate action for rehabilitating the current abandoned projects (Harian Metro, 15 July 2003). In addition, the public also urged the government to impose legal requirements for preventing abandoned housing in future.

In terms of the seriousness of the issues of abandoned housing projects, a report in the *Utusan Malaysia* (2004) stated that Prime Minister Abdullah Ahmad Badawi considers the existence of abandoned housing projects in Malaysia a major problem in the housing industry. He urged private developers involved in housing provision to be sincere and fully responsible when completing the projects, and not merely to think of profit. In this case, some authors, such as Singh (1992), Othman (1993), Lawrence (1997) and Md. Dahlan (2001) contend that the existence of abandoned housing projects is a national issue in which the victims affected are mostly private purchasers, and these problems could lead to other problems, such as the project sites being used for criminal activities. In this context, the President of the Federated Association of

Consumer Malaysia (FOMCA)⁸ argues that the existence of abandoned housing projects might be related to the housing system that has been practised in Malaysia based on the 'sell then build' system (Mingguan Malaysia, 24 January 1999).

As highlighted in section 1.2, the government has taken some action, such as rehabilitation work, to protect the buyers' interests. However, this action has not been entirely successful. At the same time, the increase in the number of abandoned housing projects suggests that the few amendments to the Housing Developers Act have been unsuccessful. As described before, the government had to allocate RM5.06 billion in order to revive the abandoned housing projects.

From the above discussion, one can see that the existence of abandoned housing problems should be considered seriously, as the rehabilitation work done has not solved these problems totally, even the current abandoned projects. In addition, these problems may also influence the housing stock available in the market, thus affecting the supply. It also affects resources in housing provision, such as land supply, manpower and time consumption. If one looks at this problem from an organisational perspective, the existence of abandoned projects could affect the credibility of the relevant authority that is involved in giving approval for housing development. Furthermore, these problems have occurred on the sites that have been allocated by local authorities as being suitable for housing development.

For this reason, this research will evaluate the housing abandonment problems, specifically the causes of abandoned housing projects from the perspectives of neo-classical and institutional economics because the existence of abandoned housing projects may be best understood by considering the market and the institutional perspectives and their interaction owing to the nature of the land and property market governed by various institutions while also being dependent on the market perspective.

⁸ Federation of Malaysia Consumer Association (FOMCA) is a non profit organization. Its role is to gather all issues and problems related to the consumer, including issues related to housing, such as housing abandonment.

1.4 Research Aims and Objectives

The aim of this research is to address the issue of abandoned housing projects with particular reference to Malaysia from the perspectives of neo-classical and institutional economics, especially in terms of identifying the cause of abandoned projects. The discussion of housing abandonment related to housing provision should consider the market and institutional perspectives, since housing provision is influenced by both perspectives.

In achieving the aim of the study, the following objectives are set:

1. To understand the abandoned housing projects in Malaysia
2. To review the literature on the applicability of neo-classical and institutional theories in land and property market analysis;
3. To identify the institutions affecting housing development in Malaysia;
4. To examine the roles played by market signals in housing development;
5. To identify the causes of abandoned housing projects;
6. To recommend policies which will lead to the avoidance of the problems of abandoned housing projects.

1.5 Research Questions

The formulation of relevant questions will assist in focusing the research towards assessing the role of the institutions affecting housing development in Malaysia, and also in assessing the role of institutions in the existence of abandoned housing projects. In addition, the question of the market perspective will assist in answering the interrelationship between markets and project abandonment. These questions are directed towards achieving the research aims and objectives.

Accordingly, this research sets out to answer the following questions:

1. What is meant by project abandonment in the context of Malaysian?

2. What are the theoretical approaches that are relevant in understanding the causes of abandoned projects?
3. What are the institutions relevant in explaining the housing development?
4. How are the institutions perceived as a barrier to the housing development?
5. How do the institutions explain the existence of abandoned housing projects in Malaysia?
6. How does the information signalling interact with project abandonment?

1.6 Scope of Research

This study on housing abandonment by the private developers focused on Peninsular Malaysia, but excluded the states of Sabah and Sarawak because both these states are governed by a separate Act. Therefore, it is useful to emphasise the definition of developers at this point, because there are few sources of producing housing units in Malaysia; these include individuals, government bodies, cooperative bodies, contractors and private developers.

The definition of developers in this study is based on the definition by Kok (1997:15); “the business of constructing more than four units of housing accommodation on housing project land with the intention of selling to members of public for profit”. The developers involved must obtain a licence from the Ministry of Housing and Local Government (MHLG) (Goh, 1997) and they must also register as members with the Real Estate and Housing Developers’ Association Malaysia (REHDA)⁹ (Othman, 1999). Thus, the term ‘private developers’ in this research refers to those developers involved in housing provision with the intention of selling the housing units and holding both a licence from the MHLG and membership of REHDA.

The study concentrates on the abandoned housing in the sample study areas¹⁰, which comprise the states of Selangor, Wilayah Persekutuan, Perak, Pulau Pinang, Kedah and Perlis. These states are representative of other states that have abandoned housing

⁹ For this research, the list of private developers in Malaysia will be taken from the REHDA Directory (2004/2005).

¹⁰ There are 13 states in Malaysia.

projects in Peninsular Malaysia. In the chapter on research methodology, the researcher explains the sample study area in detail. The findings from the sample study areas can be generalized for other states in Peninsular Malaysia.

1.7 Significance and Contribution of the Study

As discussed before, the existence of abandoned housing projects in Malaysia is considered a major problem in the housing industry. Therefore, the government's intervention is highly significant in order to solve current abandoned projects through the rehabilitation programme. For instance, in 2004, the government spent approximately RM5.06 billion on rehabilitating programmes. The proportion of GDP is 2.04 per cent of RM247.88 billion (in 1987 real prices). In addition, this allocation can help only 36,815 house buyers out of the total of abandoned housing units of 55, 126 (MHLG, 2005). Therefore, this study has makes a significant contribution to the body of knowledge in the area of the housing industry.

First, the study has made a significant contribution to the body of knowledge in the area of the house building industry in Malaysia. For instance, relatively little is known about the existence of abandoned housing projects in Malaysia. This study should prove valuable in providing a better understanding of the issue, and thereby further contribute to the literature in relation to comparative house building industries.

Second, although there has been some attempt to study housing development in Malaysia, relatively little is known about the applicability of utilising the perspectives of neo-classical and institutional economics in order to explain the problems of abandoned housing projects. Thus, the study will make a significant contribution to the body of knowledge in the area of land and property market research. For example, the methodology of combining the perspectives of neo-classical and institutional economics theories can be used together to explain the issues of abandoned housing projects, rather than using the theory separately in relation to the existing literature in assessing the issue of the land and property market.

Third, the findings of the study will be useful for giving guidance in developing a model that could explain the real determinants of the causes of abandoned housing projects to the developers and to the government agencies that are involved in the house building industry. This model will be helpful in providing for the government reliable forecasts of the factors that cause the projects to be abandoned; this would then aid planning to prevent housing development being abandoned.

Fourth, the findings will also significantly assist the federal government to revise the present housing provision in Malaysia from the 'Sell then Build' to the 'Build then Sell' systems. In this context, developers have to fund the completion of the housing projects themselves, rather than being dependent on the progressive claims from the house buyers in order to protect the interests of the house buyers.

Finally, this study has produced significant policy recommendations which could help prevent the problems of abandoned housing projects in Malaysia in future.

1.8 Organisation of the Study

The thesis is divided into eight chapters. Chapter 1 is an introductory chapter which focuses on the overview of the topic, the statement of problems, the research aims and objectives, the research questions, scope of research, significance and contribution of the study and the thesis structure.

Chapter 2 contains a review of the literature related to housing development in Malaysia. It reveals the descriptive background of housing development in Malaysia in terms of the housing market perspective, and outlines the housing performance based on the five-year Malaysia plan. These chapters also contain a discussion on the overview of housing provision in Malaysia, specifically in terms the role played by the various institutions that governed housing provision in Malaysia. The chapter also discusses on the issues of abandoned housing in Malaysia. Finally, this chapter highlighting the issues of housing provision and it links to the existence of housing abandonment.

Chapter 3 contains a review of the literature on the neo-classical and institutional economics theories in the context of the land and property market. It examines the application of both these theories in understanding the land and property market. This leads to the description of the applicability of both theories in addressing the issues of abandoned housing projects in Malaysia.

Chapter 4 focuses on the methodological aspects of the research. It begins with a description of the research process, data collection and the administration of fieldwork. This chapter also describes the instruments used in this study.

Chapter 5 deals with the data analysis and reports the results of hypotheses testing pertaining to the roles played by the institutions and market information in affecting housing development.

Chapter 6 elaborates the results of the factor analysis.

Finally, Chapter 7 summarises the research according to the three main stages in this study: theoretical, empirical and evaluative. It presents the findings in relation to the research objectives. This is followed by the strengths and limitations of the research, as well as making policy recommendations. Finally, the chapter proposes future research in the subject matter.

CHAPTER 2

HOUSING DEVELOPMENT IN MALAYSIA

2.1 Introduction

This chapter presents an overview of housing development in Malaysia. It is divided into ten sections. In Section 2.2 emphasis is placed on the housing in Malaysia. The section contains discussion on the issue of housing development via the five-year Malaysian Plan. It also emphasizes the performance of the private housing developers in housing production. Section 2.3 outlines an overview of housing provision in Malaysia. It covers a discussion on various institutions that govern housing provision as well as the role played by the financial institutions in housing provision. Section 2.4 focuses on the issues of housing abandonment in Malaysia. It emphasizes the outlines of the definition and the concept of housing abandonment from the Malaysia perspective. The section also contains a discussion on the criteria of housing abandonment and illustrates the types of projects abandoned by private developers. Section 2.5 contains a discussion of the role of Syarikat Perumahan Negara Berhad (SPNB) in reviving the abandoned projects. In Section 2.6, the description focuses on the reviving process of abandoned housing projects. Section 2.7 interprets the SPNB strategy in the reviving processes of abandoned housing projects. Section 2.8 contains a description of the problems of reviving the abandoned housing projects. The discussion in Section 2.9 focuses on the steps of prevention taken by the Ministry of Housing and Local Government to avoid abandoned housing projects. Section 2.10 discusses the effects of the abandoned housing projects on homebuyers. Section 2.11 contains a summary of the chapter.

2.2 Housing in Malaysia

In Malaysia, housing developments are carried out by three sources: the public sector, the private sector and co-operative societies. The developments of housing projects by these groups were basically based on the same form of economic planning which has been set up by the government through the Five Year Malaysian Plans. To date, Malaysia has implemented nine economic plans since the 1950s. According to Omar (2009), the national housing policies can be determined within each of the five year plans as demonstrate in table 2.1.

Table 2.1: The summary of national housing policy based on the Five Year Malaysian Plan

No of Planning	Main Agenda
1 st Malaya Plan (1966-1970)	Providing low cost housing units to lower income groups
2 nd Malaysian Plan (1971-1975)	Providing national housing programmes to all citizens that categorized under low income groups
3 rd Malaysian Plan (1976-1980)	To develop a national unity via housing programmes To improve life quality for rural area
4 th Malaysian Plan (1981-1985)	To ensure all citizens especially for low income groups have a fair chances to have their own housing units in town and rural area
5 th Malaysian Plan (1986-1990)	Private sector has given more chances to provide housing and the government responsibility has been reduced
6 th Malaysian Plan (1991-1995)	The national housing policy has been focused on providing shelter that can be owned by all citizens and to encourage national integration
7 th Malaysian Plan (1996-2000)	Private sector has been given more responsibility to provide about more than 70% of housing target during this particular period
8 th Malaysian Plan (2001-2005)	Emphasized has been given to provide high quality of housing schemes at prime location
9 th Malaysian Plan (2006-2010)	To provide enough housing schemes that can be owned by all citizens via government agencies

Source: Omar, 2009

If we looked at the Sixth and Seventh Malaysia Plans, the government has made a decision to engage the private housing developers actively in their new housing programmes. The Sixth Malaysia Plan (6MP) which was launched in 1991 planned to construct 573,000 units of houses during the period of 1991-1995, as can be seen in table 2.2. The public sector was to construct 174,000 units and the private sector was to build 399,000. The distribution of housing target by house types was 343,800 low-cost houses (126,800 public low-cost and 217,000 private low-cost houses). The balance was 229,200 units of medium- and high-cost houses (47,200 public and 182,000 private sector houses). From table 2.2, one can see that during the period of 6MP (1991-1995), about 647,460 housing units were completed above the targeted plan. In terms of housing performance by the private sector, one can see that the private sector managed to construct 562,918 housing units, 41% higher than the target. Of the total units completed, 214,889 were low- cost houses, 247,241 medium- and 100,788 high-cost.

In relation to the performance by the private sector, Othman (1999, p.138) argues that:

“There could be various reasons for this. Firstly, it is due to the government mandatory requirement of 30 per cent low-cost housing. Developers could not escape from this provision even though there are cases of trying to get exemption. But appeals only cause delays in launching the projects as longer time is spent in making appeals to the government to waive the low-cost housing requirement. The other reason, which is more important, is economic conditions, which allow the private sector to secure high returns. As a result of a healthy and prosperous economy, there was an increasing demand from the high-cost housing market and this created a better environment for developers as they can apply the concept of cross subsidy in providing the low-cost housing”. In relation to the mandatory requirement of constructing 30 per cent low-cost housing, the developers are allowed to apply the concept of cross subsidy in providing the low-cost housing. In other words, the private developers are allowed to construct 70% of housing development with medium- and high-cost houses. Therefore, the profit obtained from the development of medium- and high-cost housing projects will be used for financing the low-cost housing projects.

Table 2.2: Public and Private Sector Housing Targets and Achievement, 1991 -1995 (units)

PROGRAMME	Sixth Plan Target				Completed, 1991 - 1995							
	Low Cost	Medium cost	High cost	Total	Low cost	% of target	Medium cost	% of target	High cost	% of target	Total	% of target
PUBLIC SECTOR	126,800	44,600	2,600	174,000	46,497	36.7	35,195	78.9	2,850	109.9	85,542	48.6
Public Low Cost Housing	24,430	-	-	24,430	10,669	43.7	-	-	-	-	10,669	43.7
Sites and Services	15,570	-	-	15,570	4,707	30.2	-	-	-	-	4,707	30.2
Housing by Commercial Agencies	13,100	29,900	2,300	45,300	18,804	143.5	20,802	69.0	2,709	117.8	42,315	93.4
Housing by Land Schemes	56,100	-	-	56,100	7,517	13.4	558	558.0	-	-	8,075	14.4
Institutional Quarters & Staff Accommodation	17,100	14,700	300	32,600	4,800	27.3	13,835	94.1	141	47.0	18,776	57.6
PRIVATE SECTOR	217,000	155,900	26,100	399,000	214,889	99.0	247,241	158.6	100,788	386.2	562,918	141.1
Ordinary Low Cost Housing	44,080	-	-	44,080	80,678	183.0	-	-	-	-	80,678	183.0
Special Low Cost Housing Programme	171,620	-	-	171,620	131,325	76.5	-	-	-	-	131,325	76.5
Medium Cost Housing	-	145,800	-	145,800	-	-	240,069	164.7	-	-	240,069	164.7
High Cost Housing	-	-	24,900	24,900	-	-	-	-	99,541	399.8	99,541	399.8
Co-operative Societies	1,300	10,100	1,200	12,600	2,886	222.0	7,172	71.0	1,247	103.9	11,305	89.7
TOTAL	343,800	200,500	28,700	573,000	261,386	76.0	282,436	140.9	103,638	361.1	647,460	113.0

Source: Seven Malaysia Plan, (1996)

Instead of constructing medium- and high-cost houses, the private sector has also contributed 99 per cent of the targeted units for low-cost housing (Othman, 1999). Siong (1994) argues that the high percentage of the private sector contribution shows that the role of the private sector will continue to be important in housing provision in Malaysia. Under the Seventh Malaysia Plan (7MP) 1996-2000, as shown in table 2.3, of the total 800,000 units planned to be constructed, the private sector was to build 570,000 units, or 71%. The distribution of housing plan by house types was 140,000 low-cost, 240,000 low-medium-cost, 110,000 medium-cost and 80,000 high-cost units. The private sector is expected to construct about 230,000 units of the total target, which comprises 35,000 housing for 60,000 low-cost, 110,000 low-medium-cost, 20,000 medium-cost and 5,000 high-cost units.

From the indication of the housing distribution to be constructed, as shown in table 2.3, one can see an active role from the private sector in producing housing in Malaysia. Indeed, it is not only expected to provide for the high- and medium-cost housing but it should also focus on producing low-cost housing. Another important aspect introduced under the 7MP was that “A major development proposed by the plan is the substantial provision of low-medium-cost houses costing between RM26,000 and RM60,000 per unit to enable buyers with monthly incomes below RM1500 to purchase” (Othman, 1999, p. 135). Under the Eighth Malaysia Plan (8MP) 2001-2005, 615,000 units were projected to be built. The public sector was to build 312,000 units or 50.7%, and the private sector was to develop 303,000 or 49.3%. As can be seen in table 2.3, the distribution of housing target by house types was 232,000 low-cost (192,000 or 61.5% public low-cost and 40,000 or 13.2% private low-cost) and 16,000 houses for the poor. The balance was 242,125 units of low-medium-cost, medium- and high-cost units (131,300 low-medium-cost, 110,700 medium- and 125,000 high-cost houses). In terms of housing distribution targeted by the housing types, about 131,300 low-medium-cost (37,300 or 12% public low-medium-cost and 94,000 units or 31% private low-medium-cost). Table 2.4 shows the medium- and high-cost houses (66,700 public and 158,000 private sector houses). In relation to the role played by the private developer in producing housing, Israel (1990) points out that, during the 1980s, there was an almost universal acceptance of reducing the role of the government in direct provisory roles in the economy, and increased reliance on the private sector.

Table 2.3: Public and Private Sector Housing Targets and Achievement, 1996 -2000

	Target						Achievement											
	Housing For hardcore poor	Low cost	Low Medium Cost	Medium cost	High cost	Total	Housing For hardcore poor	% of target	Low cost	% of target	Low Medium cost	% of target	Medium cost	% of target	High Cost	% of target	Total	% of target
PUBLIC SECTOR	350,000	60,000	110,000	20,000	5,000	230,000	17,229	49.2	60,999	101.7	18,782	17.1	21,748	108.7	2,866	57.3	121,624	52.9
Public Low Cost Housing	-	29,000	-	-	-	29,000	-	-	45,583	157.2	-	-	-	-	-	-	45,583	157.2
Housing Rehabilitation	23,000	-	-	-	-	23,000	13,626	59.2	-	-	-	-	-	-	-	-	13,626	59.2
Sites and Services	12,000	-	-	-	-	12,000	3,603	30.0	-	-	-	-	-	-	-	-	3,603	30.0
Housing by Commercial Agencies	-	23,000	16,000	10,000	5,000	54,000	-	-	11,693	50.8	16,002	100.0	9,048	90.5	2,866	57.3	39,609	73.4
Housing by Land Schemes	8,000	1,000	300	-	-	9,300	-	-	3,723	46.5	230	23.0	3,235	1,078.3	-	-	7,188	77.3
Institutional Quarters & Staff Accommodation	-	93,000	9,700	-	-	102,700	-	-	-	-	2,550	2.7	9,465	97.6	-	-	12,015	11.7
PRIVATE SECTOR	-	140,000	240,000	110,000	80,000	570,000	-	-	129,598	92.6	53,800	22.4	206,208	187.5	348,250	435.3	737,856	129.4
Private Developers	-	137,000	237,000	102,000	79,000	555,000	-	-	127,514	93.1	49,035	20.7	201,266	197.3	346,338	438.4	724,153	130.5
Co-operative Societies	-	3,000	3,000	8,000	1,000	15,000	-	-	2,084	69.5	4,765	158.8	4,942	61.8	1,912	191.2	13,703	91.4
TOTAL	35,000	200,000	350,000	130,000	85,000	800,000	17,229	49.2	190,597	95.3	72,582	20.7	227,956	175.4	351,116	413.1	859,480	107.4

Source: Eighth Malaysia Plan (2001)

Table: 2.4: Public and Private Sector Housing Targets and Achievement, 2001-2005

Programme	Housing for the hardcore poor			Low-Cost			Low Medium-Cost			Medium-Cost			High-Cost			Total		
	Target (Units)	Achieved (Units)	% of Target	Target (Units)	Achieved (Units)	% of Target	Target (Units)	Achieved (Units)	% of Target	Target (Units)	Achieved (Units)	% of Target	Target (Units)	Achieved (Units)	% of Target	Target (Units)	Achieved (Units)	% of Target
PUBLIC SECTOR	16,000	10,016	62.6	192,000	103,219	53.8	37,300	22,826	61.2	46,700	30,098	64.4	20,000	22,510	112.6	312,000	188,669	60.5
Public Low Cost Housing	-	-	-	175,000	81,180	46.3	-	-	-	-	-	-	-	-	-	175,000	81,180	46.3
Housing Rehabilitation	15,000	9,531	63.6	-	-	-	-	-	-	-	-	-	-	-	-	15,000	9,531	63.6
Sites and Services	1,000	480	48.0	-	-	-	-	-	-	-	-	-	-	-	-	1,000	480	48.0
Housing by Commercial Agencies	-	-	-	15,000	16,386	109.2	10,000	15,442	154.4	16,000	9,924	62.0	15,000	5,753	38.4	56,000	47,505	84.8
Housing by Land Schemes	-	-	-	2,000	5,725	286.3	1,000	695	69.5	-	-	-	-	-	-	3,000	6,420	70.4
Institutional Quarters & Staff Accommodation	-	-	-	-	-	-	26,300	6,689	25.4	30,700	20,174	65.7	5,000	16,757	331.5	62,000	43,620	70.4
PRIVATE SECTOR	-	-	-	40,000	97,294	243.2	94,000	61,084	65.0	64,000	222,023	346.9	105,000	274,973	261.9	303,000	655,374	216.3
Private Developers	-	-	-	39,000	94,029	241.1	90,000	53,607	59.6	60,000	215,267	358.8	100,000	269,320	269.3	289,000	632,223	218.8
Co-operative Societies	-	-	-	1,000	3,265	326.5	4,000	7,477	186.9	4,000	6,757	168.9	5,000	5,653	113.1	14,000	23,151	165.4
TOTAL	16,000	10,016	62.6	232,000	200,531	86.4	131,300	83,910	63.9	110,700	252,121	227.8	125,000	297,483	238.0	615,000	844,043	137.2

Source: Ninth Malaysia Plan (2006)

With respect to reducing the role of the government in direct provisory roles in the economy, Andrews (1997) contends that the increasing reliance on the private sector in housing provision is almost an acceptance of a reduced role for the public sector. Therefore, the involvement of the private sector in housing provision is highly significant, and such involvement could lead to a contribution to national growth, especially in terms of the property sector. In general, government's housing policy has been formulated to strengthen the role of the private sector in providing housing. Even though the private developers have been given high responsibilities in producing housing units through the Five Year Malaysian, they are still bound by all regulatory and procedures in housing provision. This means that there is no short cut for the developers in terms of constructing housing development. They have to go through the development process as usual. Therefore, it is necessary for the researcher to describe the housing provision process in Malaysia. This is because the development process or housing provision could be linked to the existence of abandoned housing projects. The following section contains a discussion about the housing provision in Malaysia.

2.3 An Overview of Housing Provision in Malaysia

The previous section emphasized the roles of the private sector in housing provision. In this context, it succeeded in constructing a larger number of houses than the target set by the government. Nevertheless, in order to achieve the housing target as well as to gain as much profit through the development of housing projects, there are regulations and a housing policy which need to be fulfilled by private developers.

In terms of housing regulation in Malaysia, Loi (2000, p.28) explains that "The Malaysian housing and property industry is highly regulated. It is governed by more than 50-60 pieces of legislation ranging from laws on land and buildings to the environment and worker's safety. In addition this is compounded by the fact that separate laws, policies and guidelines are administered by federal, state and local government and agencies". The basic requirement of the regulations in housing provision is to obtain planning permission or the development order within the development process, as shown in figure 2.1. Figure 2.1 above summarises the housing development process in Malaysia. However, in real life, the process of obtaining approval for housing developments is not as smooth as stated in figure 2.1. In fact, the housing development process has been criticized for the length of time it takes to

process applications and gain approval at every stage of the development process. In relation to these criticisms, Loi (2000, p. 29) states that “Research on the total time required for processing and approvals of conversion, layout plan, pre-computation plan, subdivision, qualified titles, infrastructure as well as building plans in a typical housing development project indicates that at least 24 months are needed from land acquisition time before construction work could actually commence”. He added that a typical mixed development project would require over 6 years from conception to delivery of vacant possession.

In line with this, Abdul Wahab (1994) contends that in terms of time, the development process can take a period of 1 to 3 years before approval is given. Salleh and Meng (1996) assert that the greatest stumbling block is the lengthy approval process, and this process may take two to four years. They add that the government agencies are not entirely to blame for the delays in the approval processes. There are a few reasons for the delays in the approval processes by the local authority; these include staff shortages, lack of professionalism, and bureaucracy (Loi, 2000). Salleh and Meng (1996) state that one reason for delay in the approval process is also a weakness of the private developers. They add that the professional consultants who take on too many projects and are unfamiliar with local standards, and developers who want just a little bit more density, are just some of the problems. They further explain that “there are always the accusations of impropriety amongst government officials but the conscientious officials have to shoulder the responsibility if they fail to safeguard public interest (as when structural failures occur or inadequate facilities are provided)” (Salleh and Meng, 1996, p. 231). However, the problem of delay in the planning approval has been resolved since the government introduced the fast-track approval (Salleh and Khalid, 2002).

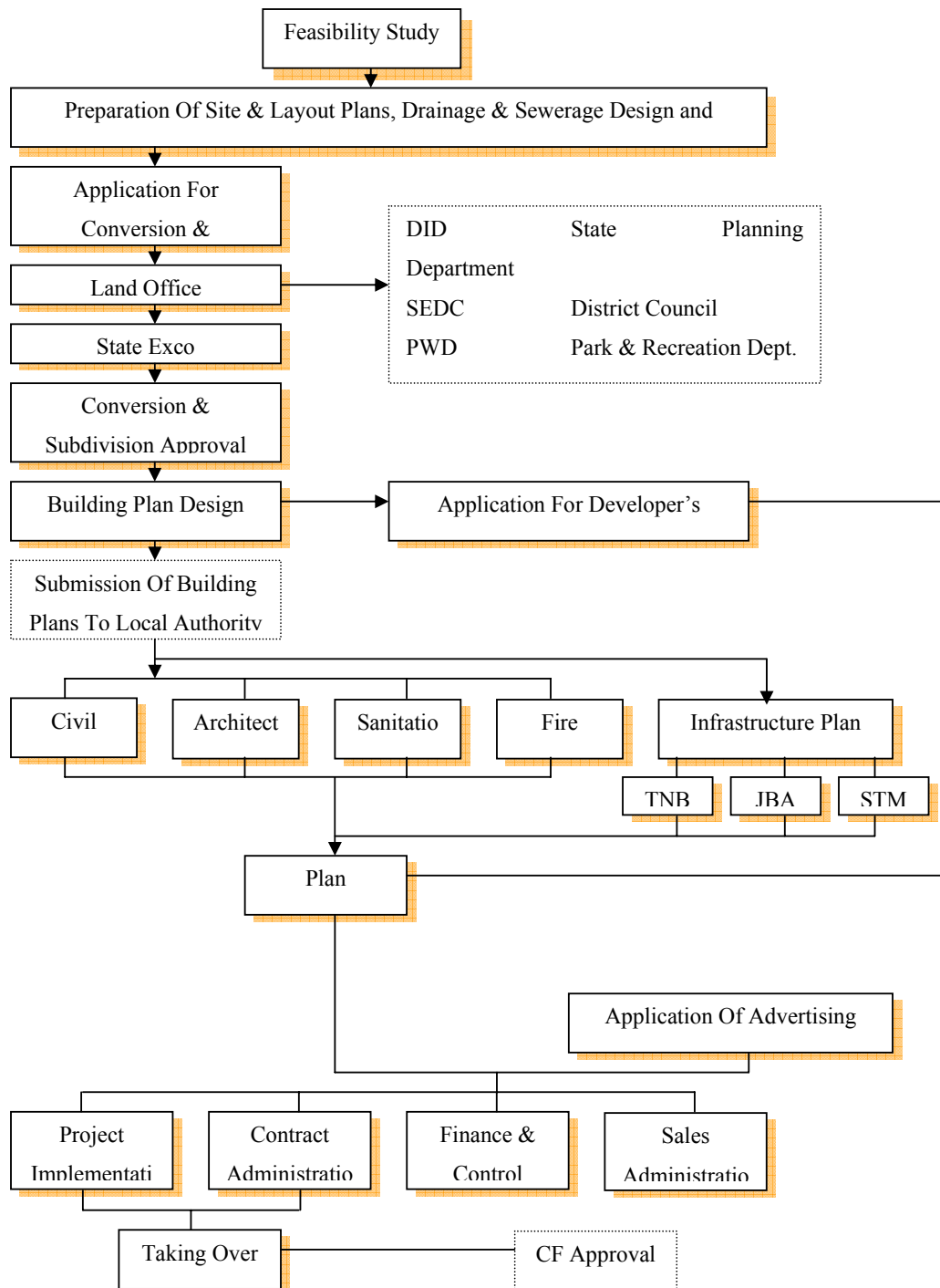


Figure 2.1: Summary of Housing Development Process

Source: National Housing Department, 2002

From the discussion of the issues of delays in the development process approval, it may be deduced that both parties, whether public agencies or private developers, are responsible for the problems. However, the most important factor here is that the issues should be tackled immediately because they could lead to delays in the housing development. It is fair to say that the private developers in Malaysia have to face the problem of delays in the approval processes.

Nevertheless, the enforcement of housing plan approval is compulsory in order to ensure that the houses constructed meet the minimum structural standards under the Uniform Building By-laws (UBBL) 1984 for safety reasons (Ismail, 2002). Besides that, the enforcement of housing plan approval should ensure that housing projects which have been constructed provide various social facilities such as schools, recreation facilities, religious worship buildings, commercial facilities like shops and markets (Othman, 1999). On the other hand, developers are required to fulfil planning requirements in order to obtain housing approval, as stated in the Town and Country Planning Act, 1976 (Act 172)¹¹. Nevertheless, the problem of delay in the planning approval has been resolved since the government introduced the fast-track approval (Salleh and Khalid, 2002).

In the Malaysian context, the operation of planning control is highly significant in housing development, especially in terms of land development processes (Othman, 1999; Ismail, 2002). Anybody who becomes involved in housing development in Malaysia has to follow all the regulations imposed by the government, starting from planning permission approval, and proceeding to the rules that govern construction activities and the rules imposed on the completion stage, such as the rules for obtaining Certificate Fitness of Occupation (CFO).

As a result of the planning requirements, Act 172 under section 24(1) declares that the planning permission will be invalid after 12 months after the date of approval if no development work has been undertaken at the site, while section 24(4) says that any planning permission which has been approved for extension will be invalid after 12

¹¹ Town and Country Planning Act, 1976 (Act 172) hereafter known as Act 172

months from the date of approval of extension if no development work has been undertaken at the site.

In this context, housing developers are required to develop the particular site or land for which planning permission has been granted within one year from the date of approval. Even though no development work has been undertaken during the first 12 months, and before the time expires, the developers can appeal for an extension of time. Another 12 months of time can be granted. If the extension of time is given for another 12 months but still that particular site or land has not been developed, the approval will be invalid. In this situation, the housing developers have to go through the normal procedures from the beginning for applying for planning permission for the same particular site or land. If this happens, money and time will be wasted for the developers, and the physical development within the local authority territory jeopardised.

Therefore, housing developers will normally take into account the validity of planning permission when they make a decision for commencing construction work, and this might put pressure on the developers.

In terms of exercising control over the private housing developers can also be considered from the aspect of government control in granting the housing developers' licences to private developers, as stated under Section 5 (1) in the Housing Development (Control and Licensing) Act 1966 (Act 118) and Regulations¹², which states that no housing development shall be engaged in, carried on, undertaken or caused to be undertaken except by a housing developer in possession of a licence issued under this Act.

In addition, the government imposed another rule which requires developers who are intending to obtain the housing developer's licence to pay a deposit fee of RM200,000 to the Controller¹³. Furthermore, the developer company must have a paid-up capital of

¹² The Housing Development (Control and Licensing) Act 1966 (Act 118) and Regulations is used to control private developer activities in Malaysia.

¹³ 'Controller' means the Controller of Housing appointed under section of Housing Development (Control and Licensing) Act 1996 (Act 118) and Regulations.

not less than RM250,000. These regulations can be seen in the Housing Development (Control and Licensing Act) Act 1966 (Act 118) and Regulations in section (6) (1) (a) which declared that:

“Subject to the exercise of power of waiver by the Minister under subsection (2), the licence applied for under section 5 shall not be granted: (a) unless the applicant has a capital issued and paid up in cash of not less than two hundred and fifty thousand ringgit and makes a deposit with the controller of not less than two hundred thousand ringgit in cash or in such other forms as the Minister may determine, if the application is made by a company;”

After all the approval has been granted from various departments then developers will start with the construction activities. At this stage, developers are dependent on contractors to transform their needs into reality in terms of the final product. Therefore, the developer is ultimately responsible for appointing the right contractors based on past experience in terms of manpower, reputation, financial stability and so on. In the context of Malaysia, the developers are given full responsibility for the success of the particular housing development projects by appointing capable contractors and monitoring the construction activities done by the contractors. This is because the developers outsource all the construction activities to the contractors. However, it is important to note here that the contractors are not legally bound by the agreement signed between the developers and the house buyers. The developers and the contractors will have a separate agreement. In addition, the responsibility of the contractor will be mentioned in the tender document.

In terms of the regulatory framework and registration, the contractors have different bodies compared with the private developers. In relation to this, the Construction Industry Development Board (CIDB), established in December 1994, has become the main regulatory agency for the construction industry, and it is responsible for registering contractors. According to Abdullah (2004, p.72), “Registration for local contractors is on a one to three years basis and is granted to qualified contractors under the relevant grade which defines the limits of the value of the work they

undertake”. For the private developers, the Real Estate Housing Developer’s Association of Malaysia is responsible for their registration.

Overall, the private developers are responsible for ensuring that the housing units constructed can be delivered with vacant possession to the purchasers within the particular period as stated in the S&P agreement. This is the requirement by the Housing Developers (Control and Licensing) Act 1966. Upon the completion of the project, the developer will apply for a certificate of fitness (CFO) from the local authority. Without the CF, all the housing units would not be able to be handed over to the homebuyers.

Instead of fulfilling all the requirements by the various departments, developers also need to fulfill the housing policy requirement in housing provision in Malaysia. Therefore, it is important to be precise here that the housing policy refers to the institution or formal written rules of allocation whereby 30% of housing units constructed must be low-cost housing units. In this context, when designing the layout of the proposed housing project, the housing developers have to take into account the requirements imposed by the local authority as well as the demand factor.

However, there are slight differences in terms of policy imposed between states, where some State Governments have clearly specified in their housing policy that developers are required to build 30 per cent of low-cost, 40 per cent for medium-cost and 30 per cent for high-cost housing. However, the split between medium and high cost is at the developer’s discretion in view of the state of the market. Nevertheless, for the purposes of this study, the term ‘housing policy’ refers to the requirement that 30% of the housing projects must be developed with low-cost housing units. The main objective of this requirement is to ensure that the private developers not only focus on developing medium and high cost houses, but they should also complement the public sector by constructing the low-cost houses for the lower income groups. Failure to fulfil this requirement could lead to the rejection of planning permission approval from the local authority, and could delay the development of a housing project.

Furthermore, housing provision in Malaysia is also governed by the National Land Code¹⁴ (NLC) 1965. It is the main reference in terms of land administration for housing provision. In line with the housing provision, the NLC 1965 under section 116 affirms that residential projects can only be developed upon the land used for building. The purpose of this clause is to avoid any overlapping of development. However, the landowners still have the right to change the land use, subject to approval by the state government.¹⁵

Another aspect that should be taken into account when discussing the issues of land administration with respect to housing provision is the land tenure. This is because the homebuyers are concerned mainly with the type of title, freehold or leasehold (Salleh and Khalid, 2002). They added that freehold titles are preferred to leasehold titles but are now becoming a rarity. However, in terms of leasehold title, questions revolve around remaining tenure of the lease, the possibility of extending that tenure, and cost. The leasehold terms in Malaysia refer to a term of 30 years, 60 years and 99 years. Private developers have carried out housing development upon both freehold and leasehold land titles. Normally, if the housing project is a joint venture between the private sector and government, the government may issue the leasehold land title. In this case, the housing purchasers have to decide whether to purchase housing units with freehold or leasehold land titles.

At this stage, one can see that there are many actors involved in housing provision in Malaysia, such as various government agencies, developers, contractors, consultants, homebuyers and financial institutions or financiers. The next section contains a discussion of the role of financial institutions in housing provision.

At this stage, one can see that housing provision in Malaysia is governed by the various institutions to which the private developers are required to conform. These consist of various government agencies in terms of the requirement of regulations, contractors, consultants, homebuyers and financial institutions. Therefore, it is important in this research to identify the developers' perception of whether the formal

¹⁴ The National Land Code 1965, hereafter known as the NLC 1965

¹⁵ Please see National Land Code 1965 for detail explanation on land conversions.

written rules that are considered as an institution from the perspective of institutional economics are perceived by the developers as negative or a barrier to institutions that affect housing development in Malaysia. The next section contains a discussion of the role of financial institutions in housing provision.

2.3.1 The Role of Financial Institutions in Housing Provision

In general, funds for housing in Malaysia are provided by both public and private sectors. The public sector provides housing funds for the government employees only. In this sense, the Housing Loans Department under the Ministry of Finance is responsible for processing loan applications and the release of payment to the developer.

For instance, the progressive payment will be applied if the housing unit bought is under construction. The amount paid is dependent on the work progress at the site. However, for a completed housing unit that has been obtained from the CF, the full payment will be made to the developer. In terms of private sectors, funds for housing come from commercial banks, merchant banks and financial companies. In this context, the private financial institutions provide facilities such as bridging finance for developers and end financing for homebuyers. The end-financing fund is open to the government servants or non-government servants. However, the amount of funds provided by local banking institutions in Malaysia is influenced by government policy¹⁶, the state of the economy and real-demand (Salleh and Khalid, 2002). In relation to the housing funds provided by the financial institutions, there are several facilities available, such as refinancing on completed units, flexible terms and conditions on loans, longer repayment periods thereby decreasing monthly instalments and increasing the size of housing loans (Ting, 2000).

In terms of housing development, the end-financing for house buyers is very important for the developers, because they will use the fund to finance the undertaking of the

¹⁶ Banking institutions in Malaysia are influenced by the policy of Bank Negara Malaysia (BNM). Federal entities set housing policies and strategies, as well as housing targets; they define licensing and enforcement regulations, and guide financial institutions in providing bridge and end financing.

project through the progressive claims, based on Schedule G and Schedule H as discussed earlier (see appendices 1 and 2). Because of the Sell then Build concept, the house purchasers are required to pay a 10% deposit upon signing up the S&P agreement between the house buyers and the developer. Therefore, those house buyers who are not capable of paying by cash for the balance of the house price need to obtain end-financing from the financial institutions. In this context, the balance will be paid to developers based on the progress of the construction work. In doing so, the financier can monitor the work progress, and this aids the financier to release payment to the developer according to the actual work done at the site. In this context, the developer has to claim the progressive payment that has been certified by the architect of the particular project.

In terms of providing housing funds for the developers, the banks and financial institutions provide the term loans to aid the developers for purchasing a particular piece of land for housing development. Nevertheless, because of the instruction by the BNM, the banks and financial institutions are not allowed to offer this facility to a private developer unless the particular piece of land has been approved in terms of the change of land use (Mohamed and Ahmad, 1995). This is to avoid any speculation by the private developer. The terms of loan financing are extremely important for the developers, especially for purchasing the high value of land. Therefore, before any approval is given to finance the purchase of the particular piece of land, the financial institutions will study the background of the applicant and viability of the proposed project.

Also, the bridging loan facility is provided to the private developer during the construction activities. The bridging loan fund is considered as a bridge for implementing any particular housing development. Based on the Housing Development (Control and Licensing) Act 1966 (Act 118) and Regulations, the bridging loan can be provided only to finance a particular housing project comprising four units or more. In other words, those projects that have constructed fewer than four units are not eligible to obtain a bridging loan from the financial institutions. In terms of the bridging loan approval, the financial institution will check the background of applicant based on the past experience of the developer in housing development, to establish how many projects have been completed, what projects are currently being worked on, and the

financial aspect. In addition, the financial institutions will also check the background of the proposed housing project in terms of the viability of the project.

In general, the bridging loan fund is a short-term loan which provides funds for private developers to finance costs and expenses during the construction activities. These include preliminary cost, building cost, cost of site supervision and infrastructure, advertising and marketing costs, professional fees and other expenses (Mohamed and Ahmad, 1995; Salleh and Khalid, 2002). The private developer is responsible for bearing all the costs while awaiting cash flow from the house purchasers via the progressive claims.

As highlighted earlier, the housing provision in Malaysia is based on the Sell then Build; the private developer is dependent on the progressive claims to proceed with construction activities for the projects undertaken. Therefore, the bridging loan fund is extremely important for the developer to finance the undertaking project at an early stage (Hamid, 1992). In this context, if the cash flow from the house buyers is low because of the lack of house purchasers, and the bridging loan fund has been delayed or rejected by the financial institutions, the developer will face financial problems and this could affect the completion of the project.

In relation to this, Hamid (1992) argues that the private developers require almost 30% for the bridging loan, but this is dependent on the credibility and the capability of the developer to market and sell the constructed house units. He further contends that most of the banks and financial institutions offer the bridging loans subject to 60% of housing units constructed being sold. However, a new regulation has recently been imposed by the BNM; this requires the private developer to sell about 80% of the total houses in order for the bridging loan fund to be approved¹⁷. Therefore, this study will identify whether the formal written rules that are considered as an institution from the perspective of institutional economics which require that 80% of the constructed units must be sold for obtaining the bridging loan are perceived by the developer as negative or a barrier that affects housing development in Malaysia.

¹⁷ Interviews with the elite group and the developers in May to July, 2006

From the explanation above, one can see that the role of financial institutions in providing housing facilities funding has been strengthened through the regulation imposed by the BNM. In terms of mortgage facilities, private sector employees have to source financing from financial institutions which normally have much higher interest rates compared with the government housing funds. For full finance, the house purchasers are highly dependent on the mortgage loans provided by the financial institutions. However, the interest rates fixed by the financial institutions will be based on the Base Lending Rate (BLR). In relation to this, the government employees are eligible for low interest rate loans from the government for the maximum payback period of 25 years at the flat interest rate of 4 per cent. Also, one can see that access to funds and availability of funds is extremely important for property development. For the house purchasers and developers, the provision of credit facilities by the banks and financial institutions, especially in providing them with the end-financing and bridging loans, is extremely important.

From the discussion on the housing provision in Malaysia, one can deduce that the housing provision in Malaysia is highly regulated. It can be seen from the approval of planning permission stage, since, at this stage there are various planning regulations and housing policy that must be complied with by developers. During the construction stage, developers have to ensure that they manage to complete the undertaking project within the period given as stated in the S&P agreement. In terms of financing projects, developers are dependent on financial institutions to finance the undertaking of projects. However, in order to obtain the bridging financing, developers have to fulfil all requirements by the financial institutions as discussed earlier. Because of the complexity of the development process, it is no surprise if the incidence of abandoned housing projects is related to this process. The following section contains a discussion about the issues of abandoned housing projects in Malaysia.

2.4 Abandoned Housing

Generally, the housing programmes which have been stated in five-year plans require government and private sector effort for fulfilling the social needs, and they also contribute towards growth in the national economy. Mohd Zain (1989) argues that the housing industry has a multiplier effect that influences the growth of the economy. For

instance, this industry provides new occupation, increases the gross development product, the existence of new housing areas and the existence of supporting industries that are indirectly related to the construction industry. Nevertheless, the existence of abandoned housing developments is another phenomenon in the Malaysian housing industry. It has become a serious problem and is considered as one of the national problems, since it involves a high number of housing projects and homebuyers. Indeed, development housing abandonment has caused a waste of money for reviving processes and the waste of resources: land and human resources. For the purpose of this study, it is therefore important to understand the matter of abandoned housing in Malaysia through the analysis of secondary data.

2.4.1 The Definition of Abandoned Projects

It is useful to offer a precise definition of the concept of housing abandonment for this study. This is because the definition and the concept of housing abandonment in Malaysia might be different from those of other countries. For example, in the United Kingdom, housing abandonment refers to the existence of housing projects which have been completed, and is related to low demand for housing that is usually more to do with second-hand stock (Lowe *et al.*, 1998). In this case, the developers faced a problem: whether to sell the units or to rent out the completed units. In other words, the term ‘housing abandonment’ in the UK refers to empty property. In the case of Malaysia, the term ‘abandoned housing projects’ refers to “incomplete or unbuilt housing projects approved by the Housing Authority and abandoned by the housing developers” (Siong, 1994, pg.121).

Sallehudin (1991 in Md.Dahlan 2001) states that the abandoned housing project in the court case of Syarikat Faber Merlin Sdn.Bhd referred to a project in which some money had been spent and the physical work had been stopped. However, if the amount of money which has been spent on that project is small, i.e. less than 10 per cent of the total project cost, and the construction work has stopped, it is not considered as an abandoned project. He further contends that the definition of abandoned housing projects was derived from the project management perspective. This definition contradicts that of the Ministry of Housing and Local Government, as described in the forthcoming section.

Md. Dahlan (2001) argues that different parties in housing development can define abandoned projects differently: for instance, either the receiver in the case where the developer company has been winding up defined the abandoned project as the project which had to be stopped owing to financial problems, or the developer of that project has disappeared. He further contends that, from the planning point of view, the term ‘abandoned project’ refers to a project in which the construction work has been postponed, even though planning permission has been granted to the developer.

The definition of abandoned projects by the Ministry of Housing and Local Government (MHLG) was more detailed and comprehensive. The MHLG has two definitions: one for 1990 and one for the year after 1990 (Rahmat, 1994). The definition of housing abandonment in 1991 was as follows:-

- i. Any housing scheme where activities at the construction site have been stopped for more than 1 year after the expiration of the scheduled completion period (24 months – according to the Sales and Purchase Agreement signed by the developer and buyer).
- ii. If the developer has collected 10 percent payment from the buyer, and the Sales and Purchase Agreement has been signed, but the developer has not carried out any activity at the construction site after a lapse of one year from the date of signing of Sales and Purchase Agreement (S&P)

However, the Ministry of Housing and Local Government defined the term ‘abandoned housing project’ differently as follows, before the year 1990:-

- i. Any housing scheme where activities at the construction site have been stopped for 6 months or more and it is continuously within or after the expiration of the scheduled completion period (24 months – according to the Sales and Purchase Agreement signed by the developer and buyer), or
- ii. The developers are not capable of continuing the projects; or

- iii. The Controller considers that the developers are not keen to carry out their responsibility to complete the projects.

The controller means the Controller of Housing appointed under section 4 (1) of the Housing Development (Control and Licensing) Act 1966 that stated:

“For the purpose of this Act, the Minister may appoint a Controller of Housing and such number of Deputy Controllers of Housing, Inspectors of Housing and other officers and servants as the Minister may deem fit from amongst members of the public service”. The Controller of Housing will responsible to the MHLG in terms of managing and monitoring the approved housing development.

From the above definitions of abandoned projects in Malaysia, it can be concluded that the term ‘abandoned housing project’ refers to a housing project which is incomplete and the construction work has stopped.

For the purpose of this study, the definition by the Ministry of Housing, which was established in 1991, has more relevance and significance. Therefore, it is very important to stress here that the term ‘abandoned housing’ used in this research refers to housing projects which have not been completed by the private developers, and the house buyers have lodged a report with the Ministry of Housing and Local Government. On the other hand, the government has to intervene and revive the projects which have been abandoned by the private developers. The following section will discuss the criteria related to abandoned housing projects.

2.4.2 The Criteria of Housing Abandonment

The Ministry of Housing has established a list of criteria for the housing projects which have been abandoned by the developers. The criteria of abandoned housing projects are as follows:-

- i. Completion stage of progress work is between 10% and 95%.
- ii. Expiration of the Sale and Purchase Agreement if the project has been abandoned for 6 months or more.

- iii. The developer has been penalised as a result of the delay in handing over the projects and the amount of the penalty is too huge.
- iv. The developer's licence has expired and no renewal action has been taken by the developer.
- v. The financier for the project has registered a personal caveat to protect his interest whenever the developers are not capable of settling the instalments as agreed between the developers and financiers.

2.4.3 The Types of Abandoned Housing Projects by the Private Developers

According to the Ministry of Housing (MHLG), the abandoned housing projects can be classified into four categories as follows:-

- i. Projects which are still abandoned
- ii. Projects which have been revived
- iii. Projects taken over by another developer; and
- iv. Projects with no chance of revival

2.4.4 Projects Have Been Revived

The term 'abandoned projects' under this category refers to those projects which have been completely revived and have obtained the Certificates of Fitness (see Table 2.5). From 1990 to 2002, 359 projects were revived. These projects comprised 67,792 units of houses involving 47,887 house buyers. The total value is estimated to be RM4116.58 million. Table 2.5 outlines the numbers of abandoned projects which have been revived by the units of houses, homebuyers and the total estimated value of the projects from 1990 until the end of 2004.

2.4.5 Projects Which Are Still Abandoned in Year 2004

It is reported that from year 1990 until the end of 2004, the number of abandoned projects is 227; these comprise 75356 units of houses involving 50813 homebuyers. The total value is estimated to be RM7033.08 million (see Table 2.6).

Table 2.5: Number of projects revived by number of houses, homebuyers and cost of projects from 1990 until 2004

Year (As At 31 December)	No. of Projects Revived (with CFO and TCFO)¹⁸	No. of Units	No. of Home Buyers	Estimated Value of Project (RM' 000 million)
1990	104	17,803	12,760	994.58
1991	152	25,386	18,304	1,471.61
1992	190	32,686	22,850	1,854.11
1993	216	40,364	28,517	2,153.15
1994	242	45,464	32,850	2,346.70
1995	265	50,366	36,744	2,588.67
1996	285	52,418	38,936	2,745.32
1997	295	55,323	40,690	2,866.46
1998	311	57,650	42,215	3,042.36
1999	317	58,371	42,791	3,079.57
2000	324	59,616	43,448	3,164.72
2001	342	63,731	46,115	3,461.48
2002	359	67,792	47,887	4116.58
2003	77	12,972	9,209	1,228.18
2004	86	14,869	10,844	1,422.63

Source: MHLG, 2005

¹⁸ TCFO refers to the Temporary Certificate Fitness of Occupied

Table 2.6: Number of projects abandoned in year 2004

No. of State	No. of Projects	No. of Units	No. of Homebuyers	Estimated Value of Project (RM Million)
1. Perlis	3	181	132	5.475
2. Kedah	17	2673	1470	242.49
3. Pulau Pinang	24	11684	9173	1043.77
4. Perak	19	2974	1785	150.22
5. Selangor	55	27106	17512	2367.54
6. W.Persekutuan	18	10618	6992	2021.63
7. N.Sembilan	22	3803	3029	162.95
8. Melaka	12	1320	793	190.5
9. Johor	19	6798	4655	370.9
10. Kelantan	9	1006	688	32.16
11. Terengganu	8	636	501	30.09
12. Pahang	21	6557	4083	415.35
TOTAL	227	75356	50813	7033.08

Source: Ministry of Housing and Local Government, 2005

2.4.6 *Projects that Have Potential to be Revived*

Abandoned projects that have potential to be revived can be divided into four categories: new projects identified; projects under feasibility studies; projects that are ready to be revived; and projects under construction. As reported by the MHLG (2005), there were 121 projects under the category of abandoned projects that had potential to be revived in 2004, as can be seen in table 2.7. The estimated cost for reviving a programme is about RM5.06 billion, and this allocation can help 36,815 house buyers to acquire their house. Table 2.7 shows the projects that had potential to be rehabilitated by units of houses, homebuyers and the total value estimated. In relation to this, there was an increase in the number of projects under this category, from 121 projects in 2004 (Table 2.7) to 149 projects in 2005 (see Table 2.8). The reason for this situation is that the failure developers faced financial and management

problems. Therefore, the developers were not capable of continuing the housing projects under their control, and the MHLG categorised these projects as being abandoned and having potential to be revived. Also, table 2.8 shows that the total number of projects which are still abandoned was reduced from 227 in 2004 to 168 projects in 2005. In this context, projects that are ready to be rehabilitated are those in which all parties involved agree, and they are in the process of getting feedback from the government agencies about the rehabilitation programmes. For the project, what is categorised under feasibility studies refers to those projects in which all parties involved are having a discussion on the reviving programme. The parties involved normally comprise house buyers, original developer, savers, financiers and MHLG.

Table 2.7: Potential projects to be revived by units of houses, house buyers and estimated value of projects

Year As at (31 st December)	No. of Projects Potential to be Revived	No. of Units	No. of House Buyers	Estimated Value of Projects (RM Million)
1990	277	63,558	36,131	2,629.50
1991	173	40,363	26,129	1,918.40
1992	118	27,833	18,786	1,285.40
1993	94	20,371	13,122	955.53
1994	87	21,056	13,209	1,014.50
1995	63	14,171	9,435	673.15
1996	52	12,979	8,625	491.12
1997	43	10,027	7,201	491.17
1998	42	10,258	6,944	605.48
1999	46	13,855	9,331	1,313.19
2000	56	21,182	13,514	2,823.69
2001	59	27,164	16,652	3,177.37
2002	82	38,049	22,685	4,032.565
2003	99	48,073	30,797	4,497.47
2004	121	55,126	36,815	5058.54

Source: Ministry of Housing and Local Government (2005)

Table 2.8: Total number of projects abandoned by categories from as at December 2005

No. of States	Project potential to be revived	Project take over by other developer	Project with no chance of revival	Total Project Involved
1. Perlis	0	0	0	0
2. Kedah	7	1	0	8
3. Pulau Pinang	15	0	0	15
4. Perak	6	0	1	7
5. Selangor	42	4	2	48
6. W.Persekutuan	10	0	1	11
7. N.Sembilan	17	2	1	20
8. Melaka	5	1	1	7
9. Johor	30	0	1	31
10. Kelantan	5	0	1	6
11. Terengganu	2	0	0	2
12. Pahang	10	2	1	13
TOTAL	149	10	9	168

Source: Ministry of Housing and Local Government, 2005

2.4.7 *Projects Taken Over by Other Developers*

Another method of reviving is to let other developers take over abandoned projects. In this case, all parties, including the original developer or court order or the landowner, must agree the process from the beginning. According to the MHLG, projects under this category are not yet completed and most of the projects are under construction.

As reported by the MHLG (2005), most of the projects comprise high-cost terrace houses involving 1210 units, and medium-cost houses involving 601 units.

2.4.8 Projects that Have No Chance of Revival

As reported by the MHLG (2005), various factors that caused the projects to be abandoned and have no chance of revival are as follows:-

- i. No buyers, or the number of buyers is very low;
- ii. No work is done at the site, or work has been done at the site but at the beginning stage only;
- iii. The original developer has been winding up and the financier has sold the project to another party.
- iv. The application from the Abandoned Housing Projects Fund, Bank Negara (TPPT)¹⁹ for carrying out the revival programme has been rejected. This is because it is not viable for abandoned projects to be revived.
- v. The developer who abandoned that project has disappeared and homebuyers for that project have no interest in reviving it; and
- vi. Those parties, such as landowners, developers, financiers, creditors and house buyers who have an interest in that abandoned project, have not compromised²⁰ in this issue.

As reported by the MHLG (2005), the total number of projects to have been identified that have no chance for revival for 2005 were 9 projects; these comprise 2866 units of houses involving 1364 house buyers (refer to table 2.8). The total value is estimated to be RM452.29 million. The difficulties for reviving those abandoned projects are related to the problems between the landowner and house buyers; these abandoned

¹⁹ The Abandoned Housing Projects Fund was formed for reviving programmes before the SPNB took over the responsibility after 1992. This fund was controlled by Ban Negara Malaysia (Central Bank of Malaysia)

²⁰ Compromise here refers to the willingness of all parties involved to expedite the abandoned housing projects. If there is no compromise amongst them, it will not be possible to revive the particular abandoned project.

projects are still under court jurisdiction, and the estimated cost for reviving the programme is very high and indeed it is not viable.

It is extremely important to explain that the MHLG is responsible for gathering information and identifying those who are capable of reviving the projects. Previously, the Abandoned Housing Project Fund did the reviving programmes under the control by Bank Negara Malaysia (Central Bank of Malaysia). In 1992, the government has given the responsibility to Syarikat Perumahan Negara Berhad (SPNB) to revive the abandoned projects throughout Malaysia. The next section will further discuss the reviving process conducted by SPNB. Before that, it is useful to discuss the background of SPNB.

2.5 The Role of Syarikat Perumahan Negara Berhad (SPNB) in Reviving the Abandoned Projects in Malaysia

2.5.1 The Background of (SPNB)

The Syarikat Perumahan Negara Berhad (SPNB) was formed on 21st August 1997 by the government, and it is fully owned by the Ministry of Finance. This company has been given the following responsibilities:-

- i. To produce affordable housing units for lower income groups and hardcore poor groups; it is a main item on the agenda of the government's housing policy.
- ii. Being the government agency that is involved with the construction of government quarters for government servants, and also in any construction projects that are directed by the Ministry of Finance.
- iii. Being the government agency that is responsible for implementing the reviving process of abandoned housing projects that have been determined by the Ministry of Housing and Local Government throughout Malaysia.
- iv. The SPNB is encouraged to plan and to improve a housing programme for the lower income group, and to develop affordable housing for this group.

In terms of reviving abandoned housing projects, in 2004 the SPNB was given the responsibility to study whether 173 out of 227 abandoned projects (see Table 2.6) were viable for reviving or not. Following the discussion, it is fair to say that the SPNB plays a very important role in abandoned housing problems, especially in terms of reviving the projects. The SPNB really needed full commitment from other parties in order to ensure that all the programmes which had been planned could be implemented as scheduled.

2.6 Reviving Process of Abandoned Projects

The most important step for the SPNB is to carry out a feasibility study. This is because SPNB is required to identify whether the projects are viable for reviving or not. The SPNB then presented its case to the top management for their approval concerning whether the projects are viable for reviving or not after obtaining all the information required. Therefore, some information, as listed below, is useful for this purpose:-

- i. the developer status
- ii. bridging loans
- iii. the status of land ownership
- iv. total number of housing units sold and the total number of house buyers involved
- v. the progress of work at the site
- vi. the outstanding balance which has not yet been claimed
- vii. the list of consultants for particular projects
- viii. identification of whether there is any legal action pending for the particular projects

Based on the above information, the SPNB then presented its case to the top management for their approval concerning whether the projects are viable for reviving or not. Figure 2.2(p.47) shows a detailed flow of the reviving process by the SPNB. Before any reviving programme can be formed, the approval of implementation should be obtained from the management. If we look at the early stages, the Enforcement Department of the Ministry of Housing has identified the abandoned

projects. Then the SPNB will arrange for a site visit, and before that the SPNB will have gathered all information required, as discussed earlier.

The next step is to present the report to the JKSP. ²¹ At this stage, approval can be given or not, based on the information gathered. If the committee rejects the report, then the SPNB has to carry out a further study. At this stage, the SPNB will discuss the matter with the Ministry of Housing and Local Government as well as with the other parties involved. After the further study has been carried out and the JKSP still does not approve, these issues will be presented to the Board of Directors of the SPNB for approval. If approval is obtained, the reviving programme will be implemented by the SPNB. Figure 2.2 illustrates the flowchart of reviving procedures of abandoned housing projects by the SPNB. The next section will discuss further the reviving procedures of abandoned projects. With reference to the earlier discussion, after the working paper has been approved, the SPNB will arrange an official ceremony for explaining and signing the agreement with the new developer for reviving the projects. It is very important to stress here that the SPNB will not be responsible for any debts incurred by the developers, and the house buyers have no right to claim a penalty for the delay in handing over the projects.

In order to avoid any unforeseen circumstances, the SPNB will obtain written approval from all of the buyers that they agree to allow the SPNB to carry out the reviving programme of the particular projects. The written approval by the house buyers will be used by the SPNB to claim the unspent mortgage loans from the house buyers' financier(s). This amount will be injected into the SPNB account in order to reduce the losses incurred by carrying out the reviving programmes.

²¹ Jawatankuasa Skim Pemulihan Projek (JKSP) is an approval committee for SPNB

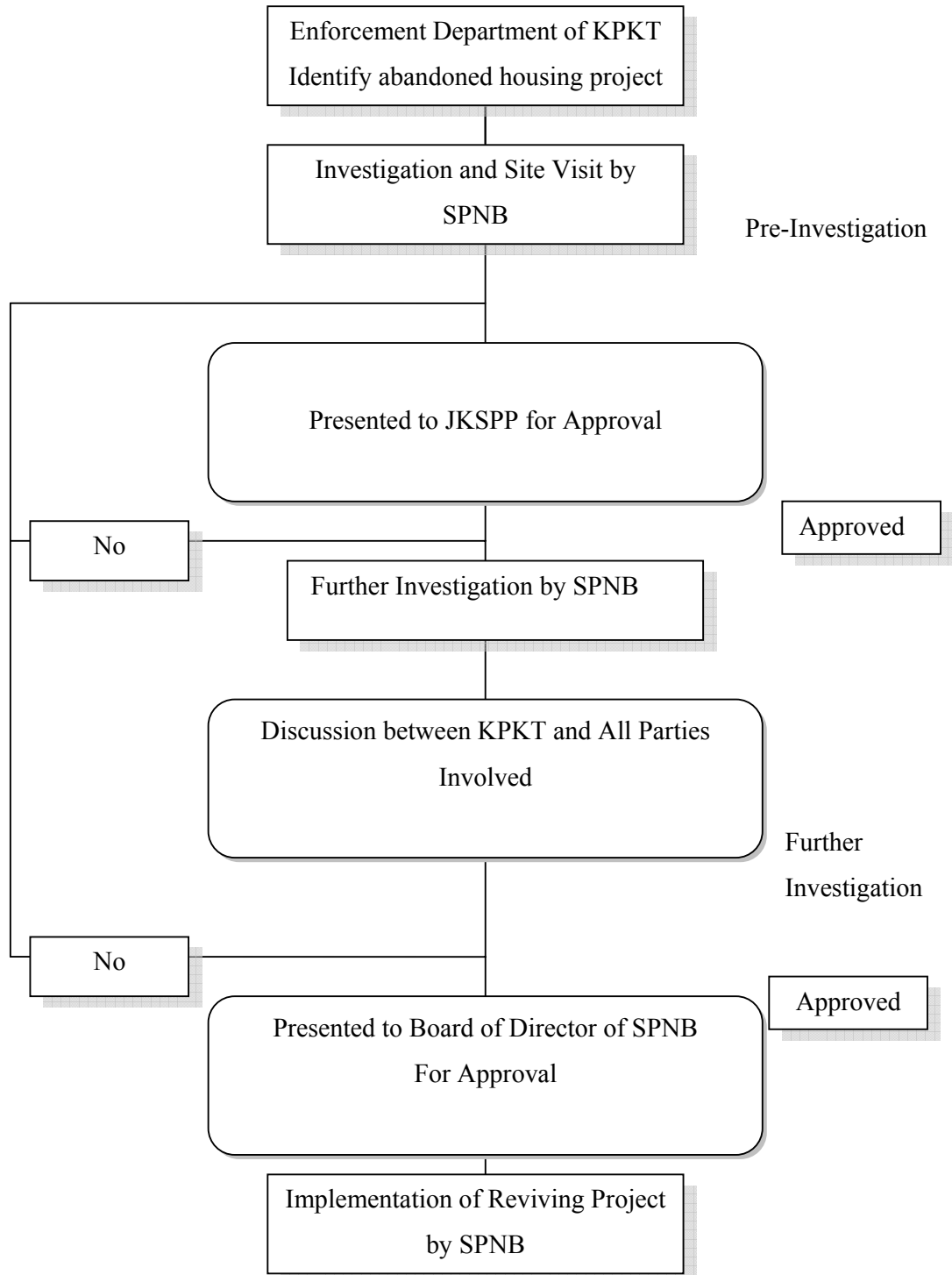


Figure 2.2: The Processes of Reviving Programmes by SPNB

Source: Syarikat Perumahan Negara Berhad (2005)

2.7 The SPNB Reviving Strategy

SPNB has designed various strategies in order to carry out reviving programmes. This is because each of the abandoned projects has different characteristics, such as building design, location, financial status and so on. Therefore, various strategies are required to ensure the success of reviving the programme, as shown in figure 2.3.

In Figure 2.3, one can see that the SPNB has implemented various strategies in carrying out the reviving processes. For example, if the developer is still operating his business, the SPNB requires an agreement between the house buyers and the particular developer. The reason for having such an agreement is to prevent the house buyers making claims on the delay of handing over the projects before the project is completed. The agreement is very important to the SPNB because it represents consent for them to undertake the project and to complete it. The agreement between the SPNB and the developer is very important, because the agreement contains the terms and conditions laid down by the SPNB that must be agreed by the developers for the purpose of reviving the abandoned projects. Appendix 4 shows the photographs of abandoned projects.

In the case of the developer no longer existing or having stopped his operation, the SPNB has to produce a different strategy. In this case, the SPNB will obtain approval from the house buyers, the bridging loans and end loan financiers, and from the receiver or liquidator. If the developers still exist and are operating the businesses but refuse to co-operate, the homebuyers will draw up a petition for winding up that company. After this process, the SPNB will request approval for being an assignee for that project. Then all parties involved will sign an agreement for the purposes of reviving the project.

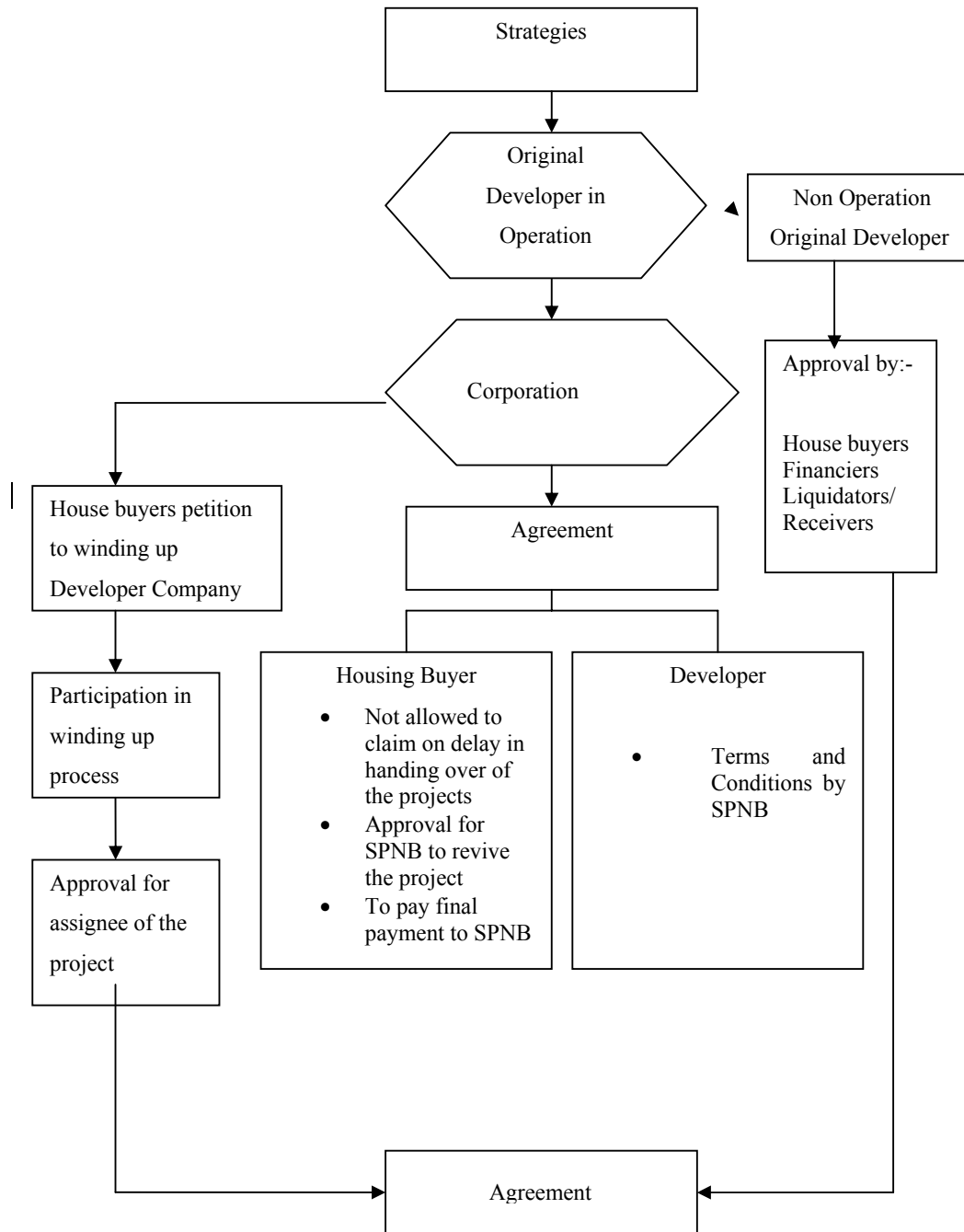


Figure 2.3: Reviving Strategies by Syarikat Perumahan Negara Berhad (SPNB)

Source: Syarikat Perumahan Negara Berhad (2005)

2.8 The Problems of Reviving the Abandoned Housing Projects

Reviving programmes is not a clear-cut process. The SPNB has also faced many problems. The problems that occurred during the reviving programme can be summarised as follows:

- i. the reluctance of developers to cooperate, and their attempt to withhold information associated with the particular project
- ii. the failure of developers to settle all the bridging loans with the bank or financier
- iii. the status of land ownership of a particular project
- iv. legal action has been taken towards the contractor, supplier and house buyers
- v. lack of information about the project, supplier, house buyers' financiers and there is no information about the legal firm²²
- vi. the SPNB has to fulfil all requirements by the local authority, even though that project has been approved before, because it has been abandoned for a long time. In some cases, resubmission is necessary, and this process may take time for approval.
- vii. the reluctance of the consultants of these abandoned projects to co-operate in terms of revealing information about the project's approval, expected cost for completing the project and other technical problems relating to these projects.

From the explanation above, one can see that reviving programmes is not a clear-cut process. It needs co-operation from all parties involved, and a delay in carrying out the reviving programme could occur as a result of the lack of co-operation among them. Also, it is impossible for the SPNB to revive all the abandoned projects which have been identified by the MHLG. This is because some projects are not viable for reviving owing to problems such as those highlighted in section 2.4.8. Furthermore, there are some projects where the developers had claimed progressive payment for

²² Legal firm is a legal company which has been appointed by developers for conveyancing purposes. This firm also plays the role of mediator between house buyers and developers.

more than the actual work done at site and this is related to fraudulent claims. However, this is not easy to prove. In this case, it is difficult for the SPNB to commit itself for the purposes of reviving. Therefore, the SPNB prefers to give full commitment to genuine projects that are involved with the abandoned problems.

2.9 Steps of Prevention by the Ministry of Housing and Local Government to Avoid Abandoned Projects

The government realised that the existence of abandoned housing should be controlled and reduced. Therefore, the government has implemented a few steps for prevention of abandoned housing projects, as follows:-

- i. Strengthen the procedures of granting a developer's licence to those who are really financially strong and capable;
- ii. Implementation of Housing Development (Control and Licensing) Act 1966 (Act 118) and Regulations that require a developer to open up a developer account (1991). This regulation was implemented on 26 August, 1991. Each project should have a separate account to ensure that all money used is for a the particular project only;
- iii. The MHLG has implemented continuous monitoring of construction work. In doing so, developers are required to submit a progress report every six months. Besides that, site visits will be carried out regularly.
- iv. The MHLG monitored the audited financial statement of developers. This means that developers are required to submit reports of audited financial statements. If developers fail to do so, they can be compounded or the MHLG will take legal action against them. The MHLG will analyse developers' financial situations, based on the audited financial statements. If it is found that a developer is financially unstable and cannot continue with the project, the MHLG will discuss this matter further with the developer in order to find the best solutions.

- v. Enforcement on the Housing Development (Control and Licensing) Act 1996 (Act 118) and Regulations will be strengthened. Developers who are found to be irresponsible and who break the law will be compounded or the MHLG will take legal action.

From the above statements, one can see that the MHLG is making every effort to prevent housing projects from being abandoned by the private developers. Nevertheless, the number of abandoned projects increases every year (Laporan Projek Terbengkalai, MHLG, 2005).

In relation to this, section E in the questionnaire has focused on the issues of the effectiveness of the policy remedies taken by the government in order to avoid housing abandonment. The results obtained, as shown in table 6.11 in the results chapter, indicate that the respondents who come under this study believe that none of the policy remedies taken by the government were sufficient for avoiding abandoned housing projects. In addition, most of the interviewees mentioned²³ that the inadequate remedies put in place by the government lacked enforcement and monitoring.

2.10 The Effects of the Abandoned Housing Project on the Homebuyers

Owing to the difficulties in the reviving process, the existence of abandoned housing projects has also had some effects on the homebuyers. According to Kamal and Ab.Wahab (2004), homebuyers face 3 main problems that are related to the abandoned housing projects. These are:

- i. Homebuyers have committed with financial institutions for housing loans, and they have managed to settle the loans, but the housing units that have been purchased are not ready and have not been completed.
- ii. The housing loans have been approved by the financial institution and the homebuyers have started to pay back the loans; at the same time, the

²³ Interviews with the developers in May to July, 2006.

homebuyers are also paying for the house that they are occupying while waiting for the abandoned project to be revived.

- iii. The homebuyers are not occupying the housing unit that has been purchased, but they have to pay the quit rent and the council tax.

In addition, Kamal and Ab.Wahab (2004) argue that there are situations in which the legal company responsible for handling the transaction is collaborating with the developer, in actions such as changing the contact number without informing the homebuyers. Indeed, there was one legal company which never informed the house buyers whenever they moved to a new office. These situations will become more complicated and the homebuyers are the victims; they are extremely dependent on the government's intervention to expedite the solving of problems, such as reviving the abandoned projects.

2.11 Conclusion

Based on the discussion on housing provision in Malaysia, one can see that the housing development in Malaysia is associated with the Federal Constitution. As discussed before, under the Concurrent List of Constitution, the Federal Government and State Government are responsible for housing development. This can be considered in the role played by the government from various perspectives, i.e. to plan housing provision through the five-year plan and to provide necessary support in terms of regulations. The government is also dependent on the private sector to provide housing in order to meet the housing needs owing to the rising demand.

However, providing housing for the hardcore poor group of society does not involve the private sector. In this context, the public sector is fully responsible for providing housing for the afore-mentioned group. In relation to this, the government has put forward a programme for the hardcore poor group. This can be seen in the five-year plan in which the government has continued to plan for providing housing units for this group. In terms of providing housing units for lower income groups, the private sector has contributed a significant number of low cost houses, from the 6MP until the 8MP, even though its focus is to construct the medium- and high-cost houses. In the other

words, the private sector has shown considerable performance in housing provision in Malaysia, where in general the number of houses constructed exceeded the targeted plan, especially during the 6MP and up to the 8MP.

In relation to the public intervention in housing provision, one can see that the public intervention is extremely important, even though the housing development in Malaysia is based on the free market economy, specifically, in terms of developing low cost housing units. In this context, the private sector is still required to follow all rules and regulations formulated by the government, especially the policy that is relating to housing provision for low-cost houses. This can concern the pricing of low-cost houses, the specific number of low-cost houses to be built for the approved housing scheme and the limitation of house buyers that are categorised under lower income group only. Indeed, it stipulated that these must be completed within a period, as stated in the S&P agreement. In addition, the government also has to ensure that only capable and credible developers should be involved in the housing industry, by making it necessary for those developers who intend to get involved in housing provision to obtain a developer housing licence. Also, the government imposed the regulation that requires private developers and house purchasers to enter the S&P agreement provided by the government, as stated in the Housing Development (Control and Licensing) Act 1966 (Act 118) and Regulations. In order to make sure that the housing development approved proceeds with construction work, the government has made it necessary for private developers to undertake the approved projects within 12 months of planning permission having been granted. If this is not done, the approval will be invalid and the developers will have to start the process of obtaining planning permission all over again.

Despite that, the government also intervened in the banking system through the Central Bank of Malaysia (BNM) in order to ensure that the banks and financial institutions provide credit facilities for the enhancement of property development as a whole. As discussed before, the banks and financial institutions play a very significant role in housing provision in Malaysia. This is because all parties in housing development, such developers and house purchasers, are dependent on the credit facilities provided by the financial institutions, especially in terms of bridging loans and end-financing facilities. Without the bridging loan fund, it is impossible for developers to complete the housing

projects, and house buyers without end-financing will be given no chance to purchase their own house. In fact, the end-financing provided for the house buyers is very significant to private developers for completing the projects undertaken via the progressive claims, as highlighted earlier. Therefore, it is not surprising that the government has instructed the banks and financial institutions not to approve the bridging loan facilities for those developers who do not achieve the sale of 80% of housing units. This regulation was put in place to ensure that the particular project undertaken by the private developers is absolutely viable.

From the discussion above, one can conclude that various institutions that govern the housing provision in Malaysia are intended to underpin housing development. Indeed, it is also designed to control and monitor the developers who are directly involved in producing housing units. This means that, even though the purpose of producing housing units by the private developers is based on profit orientation, the private developers are not allowed to proceed in their own way; they must follow the regulations and policies set out by the government. Nevertheless, the existence of various institutions or formal written rules of the government relating to housing provision might affect and be perceived as a barrier to housing development. Therefore, it is important in this study to identify whether the private developers perceive the above-mentioned institutions or written rules as a barrier that affects housing development in Malaysia, and whether this could be related to the problem of housing abandonment.

If we considered the existence of abandoned housing projects from the perspective of housing provision, one can see that there could be a link between them. This is because developers have to fulfil all requirements, especially in terms of the formal institutions such as rules and regulations by local authorities, i.e. planning requirements, land policy and housing policy might be the causes of housing abandonment. In addition, the strictness of approving bridging loans imposed by financial institutions could also be one of the causes of abandoned projects. However, informal institutions such the behavior of developers in misuse and mismanagement of project funds could also be relevant factors contributing to the housing abandonment. In this context, developers also need to respond appropriately to market signals before entering the housing market. This is because the successful of housing provision is also based on the market

environments. Therefore, market signals will be extremely important perspectives that could contribute to the existence of abandoned housing projects. In other words, the existence of abandoned housing projects is not exclusively temporary or as a result of the economic cycle during the recession period, as reported by MHLG (2005). In relation to this, Kamal and Ab. Wahab (2004) state that there are some factors that are associated with the abandoned housing development; these include over supply, uncompetitive selling prices and the developer has been winding up his business. According to the report by the MHLG (2006)²⁴, some of the factors that are attributed to abandoned housing project are financial, management, and marketing factors.

In conclusion, it can be understood that various factors could be related to abandoned housing projects. Therefore, this study will identify the causes of abandoned housing projects from the perspectives of neo-classical and institutional economic approaches. In doing so, this research could contribute to the body of knowledge in which a combination of these two theories is capable of analysing the issue of abandoned housing projects. In addition, this chapter indicates that research *Objective 1* has been achieved, in which the researcher intended to understand the matter of abandoned housing projects in Malaysia through the analysis of secondary data, in which the analysis provided information regarding the overview of the abandoned housing projects in terms of history, definitions, category of abandoned projects, reviving strategy and the problems, the steps taken by the government to avoid abandoned projects, and finally the effects of abandoned projects on the house buyers. Also, this chapter succeeded in highlighting the complexity of the problems where there is a link between the housing provision or development process and housing abandonment in Malaysia.

²⁴ Elite interview with MHLG senior officer at MHLG office on May 13, 2006

CHAPTER 3

LITERATURE REVIEW

3.1 Introduction

The previous chapter clearly described how housing provision in Malaysia is highly regulated. Developers have to comply with the various regulatory and procedures set up by the government. In fact, the developers are also required to react appropriately to the market environment in housing provision. Therefore, at this stage, it is fair to say that the land development process of housing provision which consists of various factors could contribute to the incidence of housing abandonment. In relation to the central thesis of this study, which is an attempt to identify the cause of abandoned housing projects based on the perspectives of neo-classical and institutional economics analysis, it is important to provide a clearer link between this meta position and the analytical framework. This is because the neo-classical perspectives that believe in the role played by the market information, specifically in terms of the role played by the market signals in housing development, might be relevant when explaining the causes of housing abandonment issues. Furthermore, the perspectives of institutional economics that perceived the land and property market to be governed by various institutions - for instance, the formal rules or institutions and the unwritten rules or informal institutions may also affect the decisions of the market agents - might also be related to highlighting the causes of abandoned housing projects.

Based on the discussion above, this chapter attempts to focus on the relevance and application of the neo-classical and institutional economic approaches in the study of the existence of abandoned housing projects. This will be followed by a discussion of an operational framework for analysis.

For that reason, it is important in this chapter first to examine the relevance and application of neo-classical and institutional economic theories in land and property markets. The employment of neo-classical and institutional economic theories in this study follows the statements by various authors who have been involved in the

property research, based on both theories. For instance, Adams *et al.* (2005) argue that, as a result of the growth of institutional approach across the social sciences, the employment of this approach in the land and property market should be regarded as an extension of mainstream economics, rather than a challenge to it.

Samuels (1995, p. 578) describes how new institutional economics ‘works largely within neoclassicism, and shares its rationality, maximisation, and market or market-like orientation and likewise tends to seek, though with less formalisation, the conventional determine, optimal, equilibrium solutions to problems’. Adams *et al.* (2005, p. 18) contend that ‘Over the past two decades, ‘institutionalism’ has grown to such an extent that its influence now infuses much of mainstream thought’. Ball (1998) suggests that there are three theories, i.e. game theory, information theory and technical production characteristics, which are examples of institutionally associated theories in the mainstream. For that reason, it is mistaken for one to counterpoise mainstream economics theory in land and property markets with institutionalism in its broadest sense, since Ball (1998, p. 1502) stressed that ‘the perceived dichotomy between the economics of property markets and institutions is a false one. It will be argued here that there is a continuum of issues rather than opposition’.

Therefore, it is appropriate to develop a theoretical framework that would be able to precise the richness of the theoretical pluralism in the land and property market. In relation to this, the theoretical pluralism proposed by Hodgson (1983) should take this into account in the research relating to property, instead of setting neo-classical and institutional economic theories in competition with each other. In other words, the growth of neo-classical economics theory and institutional economics theory should be seen as being supplementary to each other, rather than as being a challenge to each other (Samuels, 1995). Guy and Henneberry (2002, p.299, 301) contend that ‘Instead of trying to shoe-horn property research into competing disciplinary models or prioritising methodological approaches, we might begin to take a more heterogeneous route (or routes)... If we approach developers and development from many perspectives, equipped with the theories and methodologies of many disciplines, we will take a challenging analytical path’. Therefore, the study of abandoned housing projects might be understood well by applying neo-classical and institutional

economic approaches, specifically for the study of identifying the causes of abandoned housing projects.

This chapter is divided into eleven sections. In Section 3.2, emphasis is placed on the review of the neo-classical economics. Then, in Section 3.3, the discussion focuses on analysis of the land and property market within the neo-classical framework. It also contains a discussion about the theoretical position of neo classical economic theory. Section 3.4 contains a description of the review of the institutional economics. Section 3.5 contains a discussion of the emergence and re-emergence of the institutional economic theory. Section 3.6 contains a discussion about the institutional framework for land and property market operations. Section 3.7 contains a discussion on the theoretical position of institutional economics theory. Section 3.8 focuses on the discussion of land development process. Section 3.9 contains a description of the combination of the perspectives of neo-classical and institutional economic theories for studying the causes of abandoned housing projects. Section 3.10 proposes a theoretical framework which is based on the perspectives of neo-classical and institutional economics for the purpose of the research. Section 3.11 presents a summary of the chapter.

3.2 Review of Literature on Neo-Classical Economics Theory

Neo-classical economics is a well-established approach within mainstream economic theory, and it dominates the explanation of all economics problems. The neo-classical economics theory recognises that prices are determined by the interaction between supply and demand in the market. Demand and supply will be adjusted to determine the equilibrium price, at which level the quantity demanded is equal to the quantity supplied. In terms of land and property prices, Adams *et al.* (2005) argue that ‘if supply is constrained or demand stimulated by public policy, then other things being equal, prices will rise’. Therefore, the price mechanism operates to return supply and demand to equilibrium. In relation to the concept of the equilibrium, Ball *et al.* (1998, p.63) argue that, for equilibrium to be feasible, ‘buyers and sellers must be able to use the full available information when making their decisions and operate according to the arguments of their demand and supply schedules. This may not occur, for example, if planning regulation freezes land and supply or restrictive long leases severely distort demand.’

In this context, Adams *et al.* (2005, p. 19) contend that ‘Whether and how fast equilibrium is achieved will therefore depend on the institutional characteristics of the market.’

3.2.1 *The Assumptions of Neo-Classical Economics and Its Relevance to the Land and Property Market*

The assumptions which underlie neo-classical economic theory can be considered within the perfectly competitive market and the rational behaviour of market agents who are constantly striving to maximise their well-being. In short, the axioms of neo-classical economic assume that the markets function perfectly, where rapid changes balance quantity demanded with quantity supplied, and as a result this interaction will determine the equilibrium level. In this situation, there are no forces acting on the market which could cause the price to be changed. This means that a price which is far from the equilibrium price indicates shortages or surpluses. On other words, imbalances between demand and supply are removed by the market, or prices are adjusted. In this situation, producers will bid down the market price. The purpose of bidding down the market price is to ensure that they can sell their abundant product. In relation to this, the model of the traditional theory of land prices by Bramley *et al.* (1995)²⁵ provides a detailed explanation of how the interaction between supply and demand determines a level of price for a particular piece of land at a particular period of time.

In terms of the perfectly competitive market, the neo-classical theory assumes that the markets are not distorted by external influences. Therefore, it will produce resource-efficient allocations. As a result of the perfectly competitive market, neo-classical approaches consider the role of rationality in the maximisation of utility and profit in the market in which the market agents are well informed or have perfect information to enhance their economic well-being (Mair and Miller, 1991). In terms of the perfectly competitive market, Adams *et al.* (2005, p.20) contend that ‘Perfect competition requires many buyers and sellers who have freedom of entry and exit, perfect information and a homogenous product’.

²⁵ Refer to Bramley *et al.* (1995, p. 52) for further explanation of the traditional theory model.

The question which arises here is whether the assumptions outlined above are relevant to the land and property market. It might be suggested that the assumptions of neo-classical approaches are neither applicable nor relevant to the land and property market. No perfect market exists in the land and property market, owing to the various characteristics of the property market itself (Eccles *et al.*, 1998, p.90). Ball (2002, p. 1454) argues that ‘Built structures are heterogeneous and last a long time. There is no standard good, but rather a whole series of interlinked markets with various limitations on the information available to market agents operating in them.’

Eccles *et al.* (1998) described the characteristics of property as a product. Some of the characteristics which set property as a product to be ‘marketed’ apart from other products include the following:-

- *each parcel of land or property is heterogeneous;*
- *it can often only be traded in a large inflexible unit;*
- *it may be inflexible in its use (i.e. fit for use by only one occupier);*
- *transactions take a long time;*
- *the costs of transaction tend to be higher than with other products;*
- *it needs to be managed;*
- *ownership implies ongoing costs of holding;*
- *given the requirement for management, it can provide the opportunity for restructuring to release value and facilitate further trading;*
- *it is possible to have other than absolute ownership (i.e. partial ownership or restricted ownerships can be created and, in most cases, traded);*
- *no central marketplace exists;*
- *the level of knowledge regarding transactions is low;*
- *there is an imprecise pricing mechanism and imperfect knowledge of the pricing mechanism;*
- *unlike most other products, ownership may not be linked to consumption (op. cit., p.94)*

Similarly, Adams *et al.* (2005, p. 20) argue that “Imperfections arise in the form of heterogeneity, infrequent trading, significant transactions costs, relative illiquidity and product differentiation”. These in turn affect the quantity and quality of information. Meanwhile, Balchin *et al.* (1995) suggest that the widespread nature of such imperfections renders property markets among the least efficient of all.

Thus, in the case of a property market, the assumption that individuals will react rationally and expect maximum profit is not valid, because it is clear that the characteristics of the property market with imperfect information and various limitations act as a constraint in decision making. Furthermore, the fact that the property market has heterogeneous products and no central marketplace will also contribute to more difficulties for the market agents when predicting the consequences of the market situation. As a result, it might be a constraint for market agents to maximise the profit. In addition, the property market itself is heterogeneous with heterogeneous groups of individual actors and organisations which operate on the market (Van der Krabben and Lambooy, 1993). This means that the property market differs in different places, at different times and involves different organisations, buyers and sellers, who are free to participate in the market. Therefore, there is a possibility of any one participant affecting the market, such as sellers who prefer not to sell their property, expecting an increase in property prices in future. This action creates a shortage of supply in the market, and prices will increase if the demand for property increases. This situation could increase the profit margin of the sellers as well, if the property could be sold at the right price, the right time and the right place.

In addition, the existence of institutional factors in the property market can also be considered as a constraint for market agents to maximise the profit, because institutional factors, such as planning and financing regulations, could distort market performance. In addition, Omar (1999), in his study on the land supply constraint of indigenous land for development, argues that in practice the supply of land is influenced by several anomalies which exist, such as government intervention, uncertainty and speculation about future land values, and a monopoly of land supply.

In relation to this, individual preferences, i.e. monopoly and speculation, might distort human decisions and thus affect the smooth flow of demand and supply in the market (Adams, 1994; Evans, 1983, 1985; Wiltshaw, 1985, 1988). Therefore, the interaction between demand and supply towards the equilibrium level will be disturbed by the existence of external distortions.

From the above discussion of neo-classical assumptions and their relevance to the land and property market, it can be concluded that such assumptions are not valid in the case of land and property markets. This is because of the characteristics of the land and property market with its imperfect information; indeed, the land and property market operates with various limitations, such as no central market. Furthermore, the market differs in different places and at different times. In addition, it is constrained by institutional factors, such as planning and financing regulations, which could distort market performance. In short, there is no relevance of the assumptions of neo-classical economics approaches to land and property, since the land and property market is multi-disciplinary in nature, and contains aspects of planning, law and economics. All these factors have important influences on the collective behaviour of the market agents within the property market, and thus could contribute to the market imperfections. Therefore, land and property markets are far removed from meeting the conditions of perfect competition. This affects their performance and suggests a role for public policy (Adams *et al.*, 2005). However, in terms of reacting rationally and expecting maximum profit, market agents can react rationally and have maximising behaviour, but perhaps only to a limited extent, given information problems and the other ways in which the property market diverges from neo-classical axioms.

3.2.2 Criticisms of Neo-Classical Approaches

Although the neo-classical approach has been recognised in the mainstream literature for many years, it is no surprise whenever the neo-classical assumptions, especially in land economics, have often been criticised by the institutional writers on account of their perceived unrealistic assumptions.

For instance, Van der Krabben and Lambooy (1993, p. 1384) argue that ‘Neoclassical economists assume that only rationally acting individual actors operate on the market. Price adjustments will automatically lead to an equilibrium.’

Another critique on the equilibrium assumptions of neo-classical approaches was the behaviour of market agents to expect maximum profit. As discussed earlier, it is impossible for agents to strive constantly to maximise their economic well being, owing to constraints by the external distortions which govern the market processes of the land and property market, such as the institutional factors, i.e. planning regulations which could alter market performance and affect the market agents’ decisions and actions. However, they will try to maximise their welfare, even though they might not achieve it because of the constraints. In this context, Omar (1999), in his study on the land supply constraint of land for development, found that the formal rules or institutions and unwritten rules which govern the market processes have affected the decisions of the market agents.

The broader view of the neo-classical economics definition is also open for criticism. Hodgson (1999, p. 102) asserts that ‘an approach which assumes rational, maximising behaviour by agents with given and stable preference functions, focuses on attained, or movements towards, equilibrium states, and excludes chronic information problems’. In this context, while Hodgson (1999) regards the recent development in mainstream economic such as game theory place it at the border of neo-classicism framework, Adams *et al.* (2005) observed that the accumulation of recent works on game theory is well positioned within the realm of neo-classical analytical framework. Instead of the criticism of the neo-classical assumptions, the neo-classical economic models have been criticised as abstract models which ignore many aspects of reality. Therefore, it is important to discuss the recent development in the neo-classical economic analysis of property markets.

3.2.3 Recent Developments in the Neo-Classical Economic Analysis of Property Market

The comments and criticisms which were made before about neo-classical assumptions might have been ignoring the recent development of the theory.

According to Adams *et al.* (2005, p.20): “such comments ignore recent developments in neo-classical theory and have generated the response from Ball (1998) that neo-classical economics is often treated as a straw man, fashioned by its critics in a form which can be most easily knocked down”. Neo-classical theory, which assumes perfect market competition and that market agents have full information and believe in equilibrium, is no longer maintained. In this sense, there are some writers of neo-classical economics who have been explaining why such criticism on neo-classical economics should be ignored.

Maclennan and Whitehead (1996) contend that most of the techniques used by housing economists are from mainstream economics. This approach is more dependent on models and is econometrically oriented. The models developed were based on assumptions which often seem to bear little relation to reality, such as the existence of a perfect market. Therefore, from recent developments in housing economics, one can see that housing economists have taken into account the existence of various factors, such as the finance system and the effect of public policy as well as the institutional arrangements in their housing economic models. Maclennan and Whitehead (1996) contend that neo-classical theory is no longer reliant on the assumptions of perfect competition, full information and instant equilibrium.

Ball (2002) responded to the article by Guy and Henneberry (2000), who claimed that the results of empirical analyses of property markets were incorrect in using mainstream economic methods because, for example, economics models are too abstract, ignore social value and the conceptual tools are too simple. Indeed, they still claimed that mainstream economics assumes that the market agents behave rationally. Ball (2002) explains that rationality should be regarded as merely a working hypothesis or methodological standard.

Rational market outcomes do not necessarily need rational behaviour by all market agents. Ball *et al.* (1998) contend that, even though neo-classical economics shares many assumptions of the equilibrium model, it seeks to make clear actual behaviour, especially in terms of rational expectations, transaction costs and asymmetric information.

In terms of the methodology, the use of models for explaining the property market outcomes which are based on a mathematical approach has also been criticised for being abstract models. Ball (2002) argues that recent developments in the approach of mainstream economics which used econometric models can produce the answers in land and property market analysis. Ball (2002, p.1455) further argues that “it is abundantly evident that abstraction, modelling and working through the consequences of competitive market processes can both help to structure analysis and lead to important conclusions, many of which are so widely accepted that they are regarded as self-evident”. Therefore, the application of economic models cannot be denied in the property market context, and in this case, Needham (1994) makes clear that property markets can be better explained by using the quantitative approach of neo-classical economic theory than by using non-quantitative approaches, such as Marxist economics.

Adams *et al.* (2005) assert that for the last decade there has been considerable development of neo-classical economics in the analysis of property markets. In fact, the substantial development of neo-classical economics to the analysis of property markets has travelled far from the criticism made by Healy (1991), who claimed that the neo-classical models of the development process have failed to make a distinction between user and investor demand.

Various authors using neo-classical economics have contributed to the development of models of the development process; these include Keogh (1994), Di Pasquale and Wheaton (1996), and Colwell (2002), who challenge the criticism made by Healy (1991). These studies evaluate how the functional divisions of the property market interact. They identify how market signals are linked to the use, investment and development sectors. The next section will contain further discussion about the land development process models since this could be the link for developing a theoretical framework for this study, as highlighted earlier.

For instance, Keogh (1994) provides a new concept of how the different functional divisions of property markets, which consist of user market; investment market and development market, can be linked by the flow of information between them and the

adjustments which occur in response to that information. In addition, he also describes how both the short and the long term react to changes in user demand.

The most important aspect of the conceptualisation of the functional divisions, i.e. use, investment and the development sector in the property market, is the signalling mechanism. The discussion of the role of the signalling mechanism is useful for this research. Therefore, it is important to explore in more detail the conceptualisation of the market signals in the land and property market, especially from the work done by Keogh (1994). The market signals, such as capital value, prices and income, can be used to explain why investment demand is responsive to the user market, and how the changes in use and the investment market will affect the development sector. In this case, the changes in use and investment markets will stimulate development activity and development, which in turn will supply new user and investor rights into the market (Keogh, 1994). From the models provided by Keogh (1994), one can see the importance of responding appropriately to market signals based on the reasonably efficient flow of information. This means that if there is a failure to respond correctly to the market signals, it might contribute to wrong decision making by the investor or user, and as a result it will affect the development sectors.

Therefore, for this study, the perspective of market signalling which has been established as one of the neo-classical economics approach framework (Adams *et. al.*, 2005) is very important for studying the causes of abandoned housing projects in Malaysia. This factor could be included as one of the factors in the land development process that could contribute to the incidence of abandoned projects. In relation to this, it is important to highlight that even Old Institutionalists recognise the importance of price/market signals. However, that would argue that the impact on behaviour is socially and culturally mediated rather than atomistic and rational. In the context of this study, the behaviour of developers is perceived to be based on an atomistic and rational. This means that if developers ignore market signals, this could lead to projects being abandoned. Therefore, this study intends to examine the developers' perception of the roles played by market signals in housing development in Malaysia, and to determine whether failure to respond correctly to the markets signals could contribute to the abandoned projects. In this context, private housing developers play an important role in responding appropriately to the market signals,

i.e. mortgage procedures, supply and demand for housing. These variables are related to housing development in Malaysia, as discussed earlier in chapter two. In addition, the market signalling concept from the perspective of neo-classical economics refers to the role played by the market information. Failure to respond correctly to the market signals might contribute to the problem of housing abandonment. Concepts such as market signalling will be more precisely defined in the next section.

In addition to the models provided by Keogh (1994), Adams *et al.* (2005, p.21) referred to work done by Di Pasquale and Wheaton (1996), who contend that the model provided by them ‘present(s) a long-run equilibrium model connecting the use, investment and development sectors. While these conceptualisations do not, for example, fully integrate with capital markets, they can be applied to explain the current two-speed market in commercial (especially office) property, where user demand remains weak while investor demand is strong. Differentiating between functions and identifying appropriate signals (e.g. yield gaps in the investment market, rental growth and security of income stream in the user market) has helped explain why investment demand, particularly from overseas, has remained buoyant in a weak user market’.

The Di Pasquale and Wheaton (DW) model has been extended by Colwell (2002). He developed this model by exploring protracted adjustment, vacancies and expectations²⁶. This model has also been applied to investigate the UK office market and to estimate, econometrically, the quantitative relationship between function-specific demand and supply variables (Tsolacos *et al.*, 1998). It also highlights the dependent variables of rent, capital value and new office construction.

These dependent variables are reflected by the user, the investor and the development sectors. The model has been estimated by Tsolacos *et al.* (1998) where, for instance, rent is written as a function of demand and supply variables. The model showed that data availability frequently acts as a constraint in neo-classical model building, especially in UK and European studies.

²⁶ See Colwell (2002) for further explanation.

The property research in the US also involved the recent development in neo-classical economics analysis of the land and property market. For instance, in the US, many authors have applied structural models which have separate equations for demand and supply.

According to Adams *et al.* (2005), “Most US models incorporate a rental adjustment equation where rental change is seen as a function of the difference between actual and natural (or long run) vacancy rates”. In relation to this, Hendershott (1995, 1996) relates the changes of rents to the difference between actual and natural rent levels as well as to vacancy rates. Meanwhile, there is no exact specification of rental adjustment equations among authors, and the modelling of this process reflects a theoretical position in which markets achieve equilibrium, even though in reality the equilibrium might not be immediate or perpetual (Adams *et al.*, 2005).

Wheaton *et al.* (1997), in their study of the London office market, have designed equations for construction, net absorption and rental adjustment. These factors have been used as a function of lagged vacancy rates, net absorption, and lagged rents. This study identified that there is slow adjustment to equilibrium level; it can take a number of years. In relation to this, Adams *et al.* (2005) state that the application of modelling, such as for instance the adjustment processes in the rest of the UK, cannot be undertaken using a structural model because of lack of data, especially on vacancy rates.

Instead of using neo-classical economics models as a tool to explain equilibrium in the property market, the models have also been designed to explain disequilibrium in property market analysis. In relation to this, Rosen (1997) has questioned whether disequilibrium is possible in neoclassical economics theory. This question has been answered by Hendershott *et al.* (2002) in their study of the UK regional and office market.

The result indicates that the short run disequilibrium in property markets can be handled properly in a neo-classical economic model by using an error correction mechanism. Adams *et al.* (2005) state that there are similarities between an error

correction and the structural model, which embodies the possibility of slow adjustment to economic shocks and market imbalances.

In the housing market, mainstream economics has been recognised as influencing spatial differentiation studies. Relating to spatial differentiation, Meen (1996, p. 370) suggests that “a housing market is defined by appropriately aggregating over sub-market where coefficient equality exists”. He added that many studies of aggregation at a national level may be biased. This is because many researchers assume homogeneity where it does not exist. One of the aspects of his research is examining the degree of independence across regional housing markets, with particular attention to the nature of spatial dependence as well as to the related concept of spatial convergence. This can also be associated with co-integration of regional house price time series. The research carried out by Meen found evidence supporting a ripple effect and convergence within three regions: the South, the Midlands and the North of England.

Similarly, Maclennan and Tu (1996) and Tu (2003), in their studies of housing, discuss the notions of the housing market and sub-market with respect to disaggregating to a local level analysis. Adams *et al.* (2005, p. 23) argue that ‘In relating their analysis to housing search, various outcomes to this process are suggested’. If the potential purchaser is not interested in the housing units on offer, this could lead to a housing mismatch, which happens frequently. In this situation, searching for a suitable housing unit could be prolonged and this will increase the transaction cost. Nevertheless, the existence of multiple buyers will direct the properties to be sold to the highest bidder. In this sense, Tu (2003, p. 40) states that “Differences across housing product groups in the price of particular housing attribute give rise to topographically based housing submarkets”. Instead of a housing mismatch, disequilibrium may be pervasive as a result of the existence of housing submarkets. Therefore, there will be a continuous process of house searching.

The discussion about recent developments in neo-classical economics analysis of land and property market indicates how neo-classical economics has broadened its base in both theory and method. It also shows that the neo-classical economics approach is no

longer dependent on restrictive behavioural assumptions. However, in terms of the criticisms, it might be suggested that not all criticisms can be accepted.

For example, the rational behaviour of market agents to strive for maximising their economic well-being is not appropriate for criticism. This is because the market agents in any situation will try their best to maximise their profit, even though they have to work within the constraints. Therefore, it is normal for market agents to react rationally in order to maximise their economic well being, even though they may not achieve it, owing to the constraints. If we relate this context to the incidence of abandoned projects, the developers might abandon the projects undertaken if there is no demand or the sale percentage of the housing units was very low. In other words, the developers might abandon the projects if there is no profit to be made from the investments.

However, it may be fair to criticise the models used in analysing the land and property market for being too abstract, and also because they ignore social value; it may also be fair to say that the conceptual tools are too simple. The criticism may be justified since, even though econometrics models are often developed and used to support neo-classical interpretations, this in itself does not support the criticism of it (neo-classicism) being an abstract model. However, the most important factor is the applicability of the models to explain the property market outcomes by using the quantitative approach of neo-classical economics, as suggested by Needham (1994). In addition, the neo-classical models used can provide quantifiable results which can be used for prediction. In relation to the criticism on the equilibrium model of neo-classical economics, it might be suggested that the criticism is appropriate. The reason for this is that it is impossible to achieve the equilibrium level based on the interaction between supply and demand in the short term, owing to the external distortions. However, neo-classical economists believe that the interaction between supply and demand will contribute to the equilibrium level, and it is just a matter of time. That is why, in their recent development, the slow adjustment and disequilibrium in property markets have been accepted. Therefore, it is fair to support the equilibrium models of neo-classical economics, owing to its recent development.

In conclusion, Adams *et al.* (2005, p. 25) contend that recent developments in the neo-classical economic analysis of the property market have proved “how neo-classical analysis can be adapted to take into account information signalling, slow adjustments, spatial specificity and disequilibrium in property markets. It also reflects the transfer of developments in mainstream economics and econometrics to the analysis of property markets. The literature explicitly recognises the imperfections of property markets but seeks to analyse and accommodate them within a neo-classical framework. This has made the framework increasingly useful for policy analysis, especially since it can provide quantifiable results of policy impacts”. Therefore, it is fair to say that the recent development in neo-classical models have proved that neo-classical analysis is applicable for analysing the land and property markets, and the answers from the analysis will be used to lead to vital conclusions.

3.3 Review on the Application of the Neo-Classical Approach to Analysing the Land and Property Market

A significant amount of research has been undertaken to investigate the impact of public policies on the land and property market using the application of neo-classical economics. These studies concentrated strongly on how policy directly affects supply and demand outcomes. It might be suggested that most of the study in this direction focuses on the impact of planning constraints on land and housing markets. For example, quite a number of studies have focused on the inter-relationship between supply and price of housing and the operation of the planning system. According to Othman (1999), Rose (1989) continued the work done by Hamilton and Fischel. The work done by Rose (1989) further confirms that monopoly zoning and other restrictions introduced in the US have affected land prices.

In terms of the methodology of the studies, Rose (1989) analysed data from 45 urban areas. The data were analysed using regression analysis, and the results show that the restrictions (natural and contrived) combine to describe 40 per cent of typical interurban price differentials. In addition, the enforcement of the government policy measures, i.e. taxation, control on land use and zoning areas, affects the decision of landowners to restrict land supply. As a result, land prices increase, thus affecting the rate of development.

In general, most of the studies which were carried out in the UK in the late 1980s examined the relationships between planning, housing supply and house prices. All the studies focused on the land market, the housing market or the effects of planning systems. Some of the work which was based on the neo-classical approaches includes studies by Needham (1981) and Bramley (1989). These studies are concerned with the determination of land values. Attempts concerned with similar issues have been made by Evans (1983), Wiltshaw (1985) and Neutze (1987). These studies noted the importance of the behaviour of landowners and developers in influencing the land price by restricting land supply in the market. The studies showed in detail that land on the urban fringe has an upward supply curve, rather than a horizontal one, although one would expect the supply curve to rise eventually. An upward supply curve reflects the additional land supply coming from landowners on the urban fringe. This model assumed that, as the price of housing land rises, more land will be released or offered for sale by the landowners. In relation to this, Monk *et al.* (1991) argued that, as the price of housing land rises, more land will be released or offered for sale by the landowners.

Nevertheless, landowners also consider how uncertainty and speculation about future land prices might influence their decision to release land for development. For instance, even though a high price is paid in the market, the landowners might not sell their land in expectation of higher land value in the future (Tsolacos, 1997).

Another study which applied neo-classical approaches in land and property markets and which was concerned with the issue of high land prices was that of Evans (1988). He contended that restricting the total supply of land is, in the longer term, bound to raise prices as well as raise densities. The study by Evans (1988) showed that the land prices of housing in the South East of England had risen considerably faster than income and prices. The consequence of this is that the price of housing has been affected where houses built on relatively large amounts of land rose in price faster than others. He further explained that the high land price diverted demand for developing high-rise residential buildings, such as flats and maisonettes.

In terms of the land development process, the neo-classical approaches have been broadly applied in the study of government interventions, such as those in which the government controls land development. Government intervention can be considered from different perspectives; i.e. the government imposes various controls and requirements over land development through the application of the planning system, through land acquisition and the application of taxation on land development, as well as controlling the land market by imposing a levy on property transactions. In terms of government intervention, there are several ways in which the government controls land development, such as through regulating land development. In this context, the government can enforce certain controls and requirements over land development. This can be considered from the granting of planning permission. In order to obtain planning permission, the developers have to fulfil the requirements made by the local authority. Another approach of government intervention is through land acquisition. Those landowners affected will be paid compensation. The government may also implement control by fiscal means, i.e. imposing land development taxation and controlling the land market by imposing a levy transaction. According to Evans (1983), the power of compulsory purchase implemented by the government might be used to acquire land for development as a direct intervention on land.

In the Malaysian context, government intervention can be considered from the granting of planning permission, whereby private housing developers had been given 12 months to start the construction work after planning permission had been granted, as discussed in the previous chapter. Failure to meet this requirement will make the planning permission invalid, and it requires that developers reapply for planning permission from the beginning. Another government intervention is through certain requirements; for example, the rules set up by the government require 30 per cent of housing development to be constructed by low cost housing units. In addition, the government also instructed housing developers to sell the low-cost housing units to lower income groups only, as emphasised before in chapter two.

Government policy in areas such as control on land use and zoning might affect the decisions of landowners to restrict land supply. This behaviour will increase land prices, thus affecting the rate of development (Evans, 1983; Rose, 1989). In addition, Bramley *et al.* (1995) state that the availability of land for development might be

restricted through government enforcement on the activities of the land market, i.e. restrictions on foreign buyers, enforcement of levies on property transactions or raising the rate of interest and restricting the transactions of certain properties for development. Therefore, the neo-classical approach considers mainly the constraints on land supply through land resources allocation by government intervention in land policy and certain controls and requirements over land development. In this context, Evans (1983) argues that the imposition of planning controls might restrict the land use and development outcomes.

Neo-classical economics adopts a positivistic epistemology, and also considers uncertainty and speculation about future land values and the characteristics of agents. Several authors, such as Bramley *et al.* (1995), Evans (1983), Markusen and Scheffman (1978), Needham (1981), Wiltshaw (1985) and Neutze (1987), have conducted research related to this matter. These studies perceived uncertainty and speculation on the increase of land values in future - as well as the agents' characteristics - as factors which may affect agents' behaviour towards land development. There are also studies which have concentrated on the effect if the controls of land were relaxed. Quite a considerable number of studies are concerned with this issue, such as those of Rydin (1985) and Cheshire and Sheppard (1989). This includes work done by Bramley (1989) and Bramley and Watkins (1996).

If we look at the work done by Rydin (1985), we will find that he focuses on the effects of planning systems and the approaches by which those effects were attained, given the context of the development process and its economic imperatives. For the study, Rydin had chosen two residential development areas in South East England in order to achieve the research objective. The selected areas were Epping Forest and Colchester. These two areas chosen were areas in which developers were active. In terms of methodology, this study was based on three major sources: development control data, development control planning files and company accounts. In addition, this study has significantly depended upon case studies as the basis of analysis and generalisation. From the study, Rydin (1985) found that the proposition in which the economic context of development in an area was a vital issue in understanding the approaches, effects and role of planning as far as residential development was

concerned. This study also showed the relationships between economic structures and planning processes.

Cheshire and Sheppard (1989) also compared two different planning regimes, i.e. those of Reading and Darlington, where Reading is perceived as having a strong planning stance and more relaxed planning control than Darlington. Cheshire and Sheppard (1989) employed hedonic pricing modelling to estimate house prices in these two areas. They found that there was a price differential of 2 to 12 per cent between both areas, depending on the house type. Like Cheshire and Sheppard (1985), Bramley (1993a) made attempts to measure empirically the impact of planning on the housing market. The central focus on this work was to estimate supply responsiveness (elasticity) and to understand the underlying factors. Bramley (1993a) employed cross-sectional data in determining the differential effects. He looked in detail at the inter-relationship between the supply and the price of housing and the operation of the land use planning system. Bramley used the multiple regression analysis, using data from 90 local authority districts. He developed a model of the housing market in which the housing price is determined by the existing demand conditions, and the amount of new stock. The results showed that the new output is determined by price, land supply, construction industry supply factors and population density. In addition, the important point in this work is elasticity, which shows how the impact of planning policy contributes to new output.

Following the discussion above, it might be suggested that most of the authors who studied the relationship between planning policy and its impact on the housing market employed a neo-classical approach. In line with this, White and Allmendinger (2003) also assert that a neo-classical approach has been employed by most of the authors who have concentrated on the study of the relationship between planning and its impact on the housing market.

In terms of the methodology of the studies, Adams *et al.* (2005, p.24) state that 'there is a notable degree of sophistication in the econometric models developed in Bramley (1993a, 1993b), Bramley and Watkins (1996a) and Pryce (1999). Bramley (1993a, 1993b) constructs a multi equation (structural) model covering demand, supply and planning permission. Since the number of new planning permissions is responsive in

part to the degree of pressure in the housing market, the behaviour of the planning system in this model is in part endogenous, rather wholly exogenous. Pryce (1999) investigates which econometric approach is most suited to modelling housing supply. He adopts a two stage least squares method, also called an instrumental variables approach. His study permits the price elasticity of housing supply to vary over time, and suggests that supply might fall at higher prices. This could occur if developers expect price rises in the future and withhold new supply from the market by way of increased land banking'.

The work done by these authors proves the applicability of econometric theory to construct models which offer unbiased and reliable parameter estimates. However, how best to measure the impact of planning in housing markets is still being debated among the authors. That is why it was no surprise when there was a debate between Bramley (1996) and Evans (1996) on the most efficient way to measure the impact of planning in the housing market.

Adams *et al.* (2005, p. 24), referring to work done by Pryce (1999), contend that 'Pryce (1999) also disputes the results suggested by Bramley, arguing that the estimation method employed can lead to inaccurate results. Despite these criticisms, Bramley clearly attempts to combine appropriate econometric techniques with a consideration of how to measure the impact of planning. He demonstrates how a neo-classical economics approach can capture the importance of planning impacts while maintaining intellectual and econometric modelling integrity'. Therefore, it might be suggested that the neo-classical approach, based on the econometric models, has become increasingly practical for policy analysis; in particular, the models used can offer quantifiable results of the policy impacts.

Another application of the neo-classical approach to analysing the land and property market is based on work done by Keogh (1994). As discussed earlier, the three functional divisions within commercial property markets which are linked to each other are examined, and it may be seen that they are linked by the flow of information. In addition, the adjustments will occur in response to new information. The assumption of the models is that with efficient flow of information, every sector in the property markets will establish responses which are shown in various forms, such as

rent, capital values, etc. However, the most important aspect of the models provided by Keogh (1994) is correctly responding to the market signalling. In the residential market, if the investment market shows an increase of profitability or high return as a result of the high demand in the user market, the private housing developers will automatically respond to this and will adjust the supply to meet the demand. In relation to this, the development sector is supposed to bring in new buildings. The decision to invest in the housing market will also depend on the current interest rate and other facilities provided by the financial institutions, such as bridging finance for developers and end-financing to the homebuyers. In this context, the concern of the developers is whether the rules and procedures of the facilities provided are very strict or not. Therefore, for the study, information signalling, which has been considered as one of the perspectives of the neo-classical framework, is useful for studying the causes of housing abandonment. This is because the model demonstrates the importance of responding appropriately to market signals, and that failure to do so could jeopardise the whole system of the functional divisions. Following the discussion of the concept of market signals, if this concept were applied to the study of identifying the cause of abandoned projects, it may be realised that failure by the private developers to respond appropriately to market signals may cause the existence of abandoned housing projects. The next section contains further discussion on the conceptualisation and operationalisation of the market signals.

3.3.1 Theoretical Position of Neo Classical Economics Analysis

Following the discussion above, the review of neo-classical economics has shown that this approach has broadened its base in both theory and method. In fact, one can see that the atomism of neo-classical theory allows a focus on outcomes. This can be analysed quantitatively. Therefore, it might be suggested that the neo-classical approach adopts a positivism epistemology based on the quantitative approach. This can be seen from the developments of the theory and econometrical techniques used to ‘explored the potential of public policy directly to alter supply and demand for land and property and to have both absolute and relative impacts on the pattern of land values’ (Adams *et al.*, p.35, 2005). In relation to this, the illustration on the property market models describes the ability of neo-classical economic theory in explaining the property market.

Besides that, the discussion also indicates that there is a significant contribution of neo-classical economics in analysing property markets, following the advances made so far. In this context, Adams *et al.* (2005, p.35) contend that the significant contribution made by neo-classical economics in analysing property markets can be looked at thus: 'Policy relevant issues such as the price elasticity of new housing supply, adjustment to market disequilibrium, the development of submarkets level analysis and the impact of planning on commercial property markets have been analysed using sophisticated econometric techniques developed in other areas of mainstream economics. Indeed, the emergence of a submarket's level of analysis recognises that the concept of a single market is not applicable to land and property markets'. Therefore, it is suggested that those who are involved in policy making should consider the impact of changes at submarket level. In this context, neo-classical economics has taken into account in terms of exogenous factors such as planning policy that could affect the property market. This can be considered from the discussion above, since many authors have discussed the impact of planning policy on land and the property markets.

In terms of the theory, it might be suggested that the neo-classical economics approach is no longer dependent on restrictive behavioural assumptions, as discussed earlier in recent developments in neo-classical economic analysis of the land and property market. This assumption is difficult to hold, as a market agent's decisions are constrained by institutional factors, hence preventing the market from performing efficiently towards the expected outcome. The constraints faced by market agents may prevent supply from moving towards demand (Fothergill *et al.*, 1987; Healey, 1992). In relation to this, the assumption that the market will move towards a level of equilibrium is also rejected. Neo-classical economics realised that there is difficulty in determining the equilibrium points immediately, because the property market is dynamic and is always changing. However, as highlighted earlier, neo-classical economists believe that the interaction between supply and demand will contribute to the equilibrium level, and it is just a matter of time. Following the discussion on the rational behaviour of neo-classical economics, one can conclude that the rational behavioural aspect of market agents should be considered as a norm, because it is their right to strive for economic well-being, even though they might not achieve it because of the constraints.

Similarly, this chapter also highlighted the property market models - for example, the model which described the different functional divisions in the property market, such as the user market, the investment market and development sectors, demonstrating the ability of the neo-classical theory to explain property market behaviour. These models illustrate how the functional divisions of the property market relate to each other. The important aspect of the functional divisions is how market signals link the use, investment and development sectors. The role of the signalling mechanism can be seen to be useful for this research, because market agents or developers should respond appropriately to the signals which exist in the market. Therefore, information signalling in the property market should be used by the market agents. In other words, developers would react to such information to correct the imbalance, by either increasing or decreasing supply. With respect to this research, failure by the private developers to respond correctly to market signals before entering the housing market could subsequently lead to the existence of abandoned housing projects, and this could be better explained in terms of the land development process or housing provision.

At this stage, one can see that the author has provided a clearer statement of his theoretical position: that neo-classical economics analysis can be used for this study. However, since an intention of the study is to combine the perspectives of neo-classical and institutional economics, the discussion of the theoretical aspects of institutional economics analysis should be carried out first. This is because the researcher needs also to establish his theoretical position of the institutional economics analysis before suggesting any combination of both theories for the purpose of the study, as highlighted earlier. Following the establishment of the theoretical position of both theories, the author must provide a link between them in terms of developing an analytical framework for this study. At this moment, it might be suggested that the link between these theories will be based on the land development process, since it consists of various factors that could be operationalised for the purpose of this study. This will be discussed further in the next section.

3.4 An Overview of the Institutional Economics Analysis

Institutional economics is one of the approaches applied in land and property market analysis, rather than neo-classical economics. Therefore it is useful to investigate the

ability of the institutional economics approach in property research, especially for the purposes of combining both these theories for achieving the research objectives. According to Hodgson (1998), development within institutional economic theory suggests that the institutional body of knowledge follows different paths. He further contends that one path tends to expand upon and complement the work of neo-classical economics, which tends to fill the gaps in the neo-classical explanation. For instance, Samuels (1995, p. 578) states that new institutional economics ‘works largely within neoclassicism, and shares its rationality, maximisation, and market or market-like orientation and likewise tends to seek, though with less formalisation, the conventional determinate, optimal, equilibrium solutions to problems’.

The other path of the institutional explanation is to promote the concept of human agency (Hodgson, 1998). This path applied the psychological view which associates habit as the basis of human action and belief. In this context, Adams *et al.* (2005) highlight the growth in institutional approaches across the social sciences over the past 20 years. However, the principles underpinning the institutional analysis of state-market analysis are relations in economics, politics, sociology and related disciplines, regardless of the confusion frequently caused by the different terminology used in each of these (Adams and Watkins 2002).

If we compare the UK and the USA, the institutional analysis is far more prevalent in the UK than in the USA. In relation to this, Ball (1998, p. 1502) suggests that “At the heart of the British literature is a firm belief in the efficacy of public policy. It can either override markets or steer market forces to achieve desired political ends. Although the form of intervention may have changed, the emphasis is still on putting policy rather than markets in the driving force of urban development”.

Specifically, the adoption of an institutional approach in land and property markets is based on the spirit of a property market which is multi-disciplinary in nature, and where an understanding of property involves a blend of law, economics, planning and valuation (Kamarudin, 2004). Indeed, land and property markets operate in an environment created by the society and governed by relevant institutions or rules and conventions. According to Graaskamp (1992) and Mair and Miller (1991), the economic analysis of institutions is one of the economic schools of thought which

believe in the collective values and rules of a particular culture and agency power relations which establish individual and group action in society. In relation to this, North (1996) argues that institutional economics analysis focuses on the importance of various rules or institutions which govern the collective decisions and economic performances of actors. In this context, institutional economics emphasised the importance of rules or institutions within social, political and power relations which determine and constrain an individual or group action in society. In addition, institutional economics investigates the social relationships amongst and across agents or actors. Therefore, it might be suggested that the institutionalists recognise the existence and importance of institutional relations in a society.

In this context, Eggertsson (1990) and North (1996) show that institutionalists believe that human activity is governed by the rules or institutions which underlie these social-political and economic conditions. In other words, the institutional approach is developed from the argument that it is the power structure of the society that determines the economy and market performances. Samuels (1995) argues that the economy is approachable by evaluating the evolutionary changes which take place within the society.

Specifically, institutional economics is based on the belief that changes in society will lead to economic and market changes (Miller and Mair, 1991; Samuels, 1988). The argument put forward here is that the process of change is driven by society, and the evolutionary process of change describes the dynamics of the market. Thus, the structure of institutions affects the dynamics of the market. In this sense, institutionalists believe that it is through qualitative evaluations of institutional change, rather than through mathematical models, that one can understand the market (Hodgson, 1988). Indeed, the institutional economists believe that the market agent's collective decisions, which determine supply and demand, are affected by institutions.

The formation of organisations facilitates the functions of the market (North, 1990). Therefore, an evolutionary process of change may explain the changes in the market, and that is why operational changes and the behaviour of market agents are important elements of institutional explanations. Furthermore, institutionalism refers to the changing and dynamic nature of formalised rules, as well as the culture or the

unwritten rules which govern human co-ordination and integration in a society. In relation to this, Foster (1991) contended that the whole organisational structure of the economy allocates resources and distributes income.

Therefore, in order to understand market outcomes, there is a set of explanatory variables which is broader than those included in the demand and supply analysis (Samuels, 1988; 1995). This is because the institutional economics approach perceives that organisation and control are the explanation for the economic outcome.

Indeed, the interest of institutions lies mostly in matters relating to the formation of institutions, the effect of institutional change, the relationship between power structure or institutions and the belief system, and also the effect of technical change on institutional structure (Foster, 1991; McMaster, 1999; Megan and Kent, 2000).

Omar (1999, p. 49), referring to work done by Eggertsson (1990), Hodgson (1993) and North (1996), contends that ‘institutions are a way of life of individuals or groups of people which establish a collective arrangement and, thus, are responsible for the institutional changes of a society’. In other words, institutions can be defined as the ‘rules of game in a society or more formally, are the humanly devised constraints that shape human interaction’ (North, 1996, p.3). In addition, the formal and informal institutions can be seen as dynamic forces which govern the decisions and actions of agents. In this context, Scot (1995, p. 140) argues that ‘institutional rules invent rationality, defining who the actors are and determining the logics which guide their actions’. From this, one can say that agents make their decisions and actions within given rationality, as governed by the rules of institutional frameworks. Omar (1999, p. 50), following work done by (Giddens, 1995; Scott, 1995), argues that ‘these rules, thus, enable and/or constrain human behaviour and economic activities’. According to North (1996), the changes of formal and informal rules will affect cultural and institutional change but under different rules. Hence, ‘informal constraints modify, supplement, or extend formal rules, whereas the changes in formal rules depend on the adjustment in ideas, norms and values in the society’ (North, 1996; Van der Krabben, 1995 in Omar, 1999, p. 50).

Following the above discussion, it is important to note here that, for the present, there is a significance distinction between neo classical and institutional economics theories. In this context, the social ontology of the institutional economics analysis perceives that the theory puts the focus on the complex process that underpins outcomes (and cannot be measured as readily). In this context, institutionalists believe that in order to understand the market outcomes, there is a set of explanatory factors which is broader than those included in the demand and supply analysis. In other words, they believe that understanding the market is achieved through qualitative evaluations of institutional change rather than through mathematical models. It is contradictory to the atomism of neo-classical theory which allows a focus on outcomes (that can be analysed quantitatively). In this context, neo classical economics theory used the outcomes to explain the property market and institutional economics theory perceived that on how the institutional arrangement provides constraints or facilitates decision for actors and thus provides means for agent's behaviour. In the context of land and property markets, institutionalists perceived that market actors play an important role in determining property market outcomes; thus their collective decisions lead to specific outcomes. In line with this, Ball *et al.* (1998) suggest that the behaviour of actors such as developers, lenders and valuers may explain the property market. Therefore, in terms of housing abandonment, the developers' decisions that are governed by various institutions in the land development process might lead to the incidence of abandoned projects. That is why again, the land development process that contains various factors might be the starting point to link the combination of both theories for the purpose of the study.

Based on the discussion above, it is useful to review the broad concepts used in institutional economic perspectives with reference to the re-emergence and different views of institutionalism. The following section will deal with these issues.

3.5 Emergence and Re-Emergence of the Institutional Economic Theory

Generally, early approaches to institutional economics criticised the reasoning of neo-classical economics: attacking the assumption of rational economic man and the importance of habit (Veblen, 1899). Veblen proposes that a variety of institutional

arrangements, i.e. the role of technological transformation, should be included in the production process.

According to Mair and Miller (1992), the influence of institutionalism in economics declined during its early years. This is because institutional economics analysis offers a less scientifically precise analysis of the ideological, social, political and economic changes, compared with that of neoclassical economics. The reputation of institutional economics declined when neoclassical economics introduced the market mechanism during the early 1900s. Indeed, market mechanism goes back to 1776 at least. Hodgson (1988, 1993, 1998 in Omar, 1999, p. 61) argues that, ‘during the 1940s, the proposition of an evolutionary context of agents’ behaviour was further elaborated with the reinforcement of technological changes and the collective behaviour of agents’. Hodgson further explains that, during the 1980s and 1990s, institutionalism regained its momentum in providing a means to analyse social, political and economic situations. In addition, some economists recommended a more flexible concept of new institutionalism during the 1990s²⁷. The recommendation focuses mostly on the importance of institutional frameworks and the changing nature of collective agents’ behaviour.

3.5.1 Old Institutionalism

The old institutionalist perspective refers to an evolutionary context of actors’ behaviour in relation to habit, which elaborated upon the strengthening of technological changes, information and the collective behaviour of actors or agents (Veblen, 1899; Commons, 1934). In line with this, Hodgson (1993, p.261) argues that Old Institutionalists perceive that ‘A fully evolutionary view would take into consideration both the emergence and effect of the cultural and institutional framework on the purpose and actions of the individual. In this richer sense we are able to appreciate the significance of the past in structuring the present, as well as the intended or unintended consequences of present acts in forming the institutions of the future’. Veblen, however, focused on how habit of thought affects human decision. Meanwhile, Commons observed institutions, i.e. the role of technological and

²⁷ See, for example, Hodgson 1988, 1993, 1998 and North 1990 and 1996.

information rules, as the collective action of human agents (D'Arcy and Keogh, 1996). Generally, the old institutionalism concentrated commonly on the notion of economic sociology approaches²⁸. In this context, it might be suggested that the psychological view has been adopted in institutional analysis which associates habit as the basis of human action and belief, and thus habit is regarded as an important aspect in the formation and sustenance of institutions (Omar, 1999; Kamarudin, 2004).

3.5.2 *New Institutionalism*

As discussed above, generally, the old institutionalism concentrated on the notion of economic sociology approaches, while in contrast new institutionalism deals with the importance of collective decisions in economic processes (Hodgson, 1988, 1993; Commons, 1934 in Omar, 1999). In this context, Hodgson (1993) describes how new institutionalism concentrates on the existence and importance of political, legal and social institutions which govern human behaviour within the 'bounded rationality' of agents' decisions. He further contends that the agent's behaviour is established by environment, choices and goals.

Another aspect of new institutionalism is the role of the organisation in the economic process. Williamson (1985), following the work by Coase (1937), refers pertinently to transaction costs, highlighting the roles of organisations in economic processes. In this context, human decisions and their performance are governed by the "rules of the game" which exist within the cost of transaction (North, 1996). Transaction cost, from the perspective of property markets, is related to all costs incurred for property transfer, 'Such as costs of measurement, information, bargaining, contracting and policing agreements' (Pitnelis, 1998, p. 999). In this context, North (1996) suggested that searching for information on house purchases comprises transaction cost. The purchaser or seller has to bear the cost; so that, in market analysis, all costs incurred during the process should be taken into account.

²⁸ See Hodgson 1988, 1993 and 1998.

Relating to the transaction cost, Adams *et al.* (2005, p. 41)²⁹ state that one of the four main strands which can be identified in new institutional economics is “Transaction cost theory deriving from the work of Coase (1937 and 1960) and developed by Williamson (1975 and 1985), with its associated organisational and agency theories”. Based on the above discussion, one can see that new institutionalism believes in institutions and their evolutionary nature, whilst old institutionalism centres on the holistic views of the economic process. The discussion on new institutional economics is very important, because this approach is “conceptually grounded within mainstream economic theory and represents an extension of the neo-classical” (Adams *et al.*, 2005, p. 40).

In fact, there is actually an institutional explanation within neo-classical analysis (North, 1990; Williamson, 1975; Ball *et al.*, 1998 in Kamarudin, 2004). That is why this study intends to use the theoretical framework based on the perspectives of neo-classical and institutional economics to achieve its research objectives. Another different theoretical conceptualisation and development of institutionalism is neo-institutionalism, upon which the following section will elaborate.

3.5.3 *Neo Institutionalism*

In relation to the discussion on neo institutionalism, Eggertsson (1990) argues that there are also differences between neo and new institutionalism. In this context, Omar (1999, p. 63) refers to work done by D’Arcy and Keogh, (1996); Hodgson, (1993, 1998), Maki *et al.* (1993) and Van der Krabben (1995) contend that ‘The former subscribes to the neoclassical notion which embraces the rational choices and tendency towards the equilibrium point in relation to transaction costs, whereas the latter is concerned more with the economic decisions within a bounded rationality of human agents’. In addition, Eggertsson (1990) states that neo- institutional economics comprises an alteration of the neo-classical paradigm by introducing transactions costs and the constraints of property rights. In relation to this, neo institutional economics

²⁹ See Adams *et al.* (2005) for further explanation on the four main strands in new institutional economics.

perceived the role of institutions as minimising transaction costs of production and exchange. Transaction costs have been defined by Eggertsson (1990, p. 14) as ‘the costs that arise when individuals exchange ownership rights to economic assets and enforce their exclusive rights’. In this sense, firms exist to encounter problems of market failure which arise from transaction costs and thus serve to increase efficiency (Coase, 1937; Williamson, 1975, in Kamarudin, 2004).

According to Ball *et al.* (1998, p.114), “Firms, according to transaction costs theory, exist only because it is frequently difficult or expensive to organise activities through market exchange”.

In general, the problems of uncertainties and transaction costs associated with land and property markets lead to the creation of institutions. The purpose of forming institutions is to assist individuals or society in dealing with such problems. Firms, or institutions, therefore play an important role in minimising transaction costs in market exchange (Williamson, 1975). In this context, firms act as organisations and institutions which control and enforce market transactions and thus reduce costs for the relevant parties in a market exchange. Firms which adopt the role of mediator in property transactions have to act professionally in order to ensure that the transaction costs are reduced and that any potential problems of duplicity or dishonesty by involved parties are avoided (Kamarudin, 2004).

In relation to the above discussion, there are clearly advantages and problems that occur with the application of this framework in property market research. The main point of this approach is to resolve problems of transaction costs in properties and to redefine property rights (Jaffe, 1996). Jaffe further argued that there are different rules and contractual provisions which define property rights in the housing market structure, and these outline the type of housing market that exists. This means that some contracting rules or institutions, such as ‘listing agreements, sales contracts, mortgages and leases’, will incur transaction costs, and these elements will affect the housing market as a whole (Jaffe, 1996, p. 425).

However, Ball *et al.* (1998) argue that if all transactions were made through firms, problems within the firm’s hierarchy, or through the specification of market contracts,

could also lead to inefficiencies and thus increase transaction costs. The firm's hierarchy here refers to internal firm governance rules. In this context, it is cheaper to transact using contracts. In addition, no party to the contract will try to cheat in the competitive market, as such action will affect future business. Another problem highlighted by this approach is the difficulty in determining the real effect of the transaction cost; it is not easy to indicate that specific outcomes arise from transaction costs, and there are difficulties in measuring the transaction cost in property markets, such as cost of time taken for finding a suitable piece of land for development purposes in terms of prices, location and a right time for purchasing and developing the site.

From the above discussion on institutional economics analysis, one can see that there are different views of it. According to Omar (1999, p.64), there are various main strands of institutional economics analysis, as highlighted below:

- 1. First, the Austrian school, which refers to the dynamic and peculiar characteristics of the market. This type of institutionalism emphasises the roles of entrepreneurs in activating economic change;*
- 2. Second, the school of thought which considers transaction cost and stresses the roles of transaction costs in allocating resources which affects agents' decisions in various contexts (Coase, 1937; Williamson, 1985);*
- 3. Third, the market hierarchy networks which distinguish a network mechanism for resource allocation;*
- 4. Fourth, structure and agency (Healey, 1992) which refers to rules, resources and ideas of the structure and the link to roles, interests, strategies and actions of agents in affecting the land development process (Ball, 1998). Although the structure and agency derives most of its fundamentals from a broad framework of institutionalism, there are also some dissimilarities between the structure and agency and broad views of institutionalism (Op.cit., p. 64).*

Therefore, it is no surprise when there are various versions of institutionalism which attempt to describe the existence and role of institutions in society. In relation to this, Omar (1999, p. 65), referring to work done by Ball (1998) and Ball *et al.* (1998), emphasised how institutionalism can be divided into two groups: 'firstly, the

economics theories which consider institutions within related themes centred on transaction costs including moral hazards, adverse selection and signalling; and secondly, the broader literature on property institutions within the models of land development process’.

Instead of discussing the different views of institutional economic analysis, it is important to look at the fundamentals of institutional economics perspectives. In relation to this, it might be suggested that institutional economics concentrates on the rules which affect agents’ decisions in considering institutional changes and economic performance (Samuels, 1988 in Kamarudin, 2004). Mair and Miller (1992) argue that the institutionalists establish collective values and the way these were applied in a particular in a holistic way. They further contend that institutionalists are mainly policy-oriented, and refer to the importance of social relationships within and between institutions. According to Omar (1999, p. 66), the main elements of institutionalism are described below, as suggested by Mair and Miller (1992):

- *First, institutionalism is a theory of social change. It explains the roles and importance of social changes which are responsible for bringing about institutional changes and vice-versa (North, 1996). These social changes (also known as institutional changes) are the features of the importance of various institutions or rules which govern human collective decisions and actions (see, for example, North, 1996). It is important to note that the path of economies (also known as path dependency) which underlie the institutional change are the mechanisms that reinforce the economic directions in the long-run (North, 1996). Van der Krabben (1995) noted the importance of path dependency to enable agents to understand and interpret variations in economic performance;*
- *Second, it is a theory of institutions (social and economic, as mentioned by Hodgson (1988)) which concerns social control, collective choices and economic efficiency. It focuses on the causes and consequences of various formal and informal rules within the social, political and economic frameworks. In other words, institutions enable and/or constrain human decisions and actions in a society;*

- *Third, it is a theory of the economic role of the government which refers to the existence, importance and implications of formalised rules designated and established by the government, and the informal rules within customs and traditions or values in the society. According to Graaskamp (1992), institutionalism refers to the co-ordinated efforts (or formalised rules) to change human behaviour in a collective manner;*
- *Fourth, it is a theory of technology which considers the relative scarcity of resources. Technology usually plays an important role in minimising transaction costs, and drives the institutional changes and economic performance and development (North, 1996);*
- *Fifth, the fundamental principle of institutionalism refers to the real determinant of resource allocation, which is the role of institutions. In this context, it is not only the price in the market which characterises and organises human economic activities and performances, but the institutions which drive and/or constrain human interactions and their activities (North, 1996);*
- *Sixth, it is a theory of both financial and ideological values which conceptualises agency relations within informal rules of custom and values of agents or a group of agents in a society (Hodgson, 1993; North, 1996);*
- *Seventh, it is also a theory of business enterprise (and organisation as well) within cultural and value situations which involve factors such as social costs, values, religion and ownership. It concentrates on wider institutional arrangements, and deals with the complexity of social relations of agents and their interactions. The interaction among and between different agents and their economic behaviour is important in all economic situations consumption (op. cit., p.66).*

From the discussion above, one can see that the focus of institutional economics analysis is on the origins, function and efficiency of institutions within the broader political, legal or social frameworks (Omar, 1999). It might be suggested that the

institutions also play an important role which affects human behaviour and the related economic performances. Indeed, the institutions or rules determine the direction of social change in the society (Omar, 1999).

3.6 The Institutional Framework for Land and Property Market Operations

There are specific institutional frameworks governing land and property market operations which have to be understood in order to enable an analysis of the said market. According to Adams *et al.* (2005), the institutions or rules, organisations or players, social institutions, network of rules, conventions and relationships all relate to the institutional framework for the land and property market. North (1990) defines institutions as the “rules of the game” in contrast to organisations which he defines as “players”. The definition of an institution by North (1990) has been used within both new and old institutional economics (Adams *et al.*, 2005). Hamilton (1932, p.84) defined an institution more specifically: he describes it as ‘a way of thought or action of some prevalence, which is embedded in the habits of a group or the customs of people’, suggesting that ‘institutions fix the confines of and impose structure upon the activities of human beings’.

In this sense, Lawson (1997 in Adams *et al.* 2005, p. 39) ‘applies the term institutions to those systems, or structured processes of interaction (collecting together rules, relations and positions as well as habits and other practices) which are relatively enduring and can be identified as such’. Pertinently, it is fair to imagine land and property markets as networks of rules, conventions and relationships (Keogh and D’Arcy, 1999a).

The institutional economic approach opposes simple neoclassical notions such as the rational individual, maximizing utility, perfect market, full information, etc. In addition, institutional economics also opposes the neoclassical notion that only market processes allocate resources (Adams *et al.*, 2005). The institutional approach believes that markets both reflect and help to operationalise the institutional structure of society (Samuels, 1995). That is why the institutional approach is developed from the argument that it is the power structure of the society that determines the economy and market performances.

In this sense, Samuels (1995) argues that the market economy can be understood by examining the evolutionary changes which take place within society. Thus, a broader set of explanatory variables is required to explain market outcomes. The variables, such as cultural influences and power distribution, should be taken into account in explaining market outcomes, because “the market economy *per se* is itself a system of social control” (Samuels, 1995, p. 573). In addition, the market will function properly based on the rules, norms and regulations which govern the market in which they are created by society. In other words, despite enabling the market to function properly, institutions also reflect prevailing power and interest.

In this sense, Rutherford (1994) contends that, in order to ensure successful market operations, institutions should not be confined to formal and informal processes of conflict resolution from which they develop *per se*; they must also be effective in generating ‘workable mutuality’ out of that confinement. Relating to this, as much attention must be spent on legal and cultural feasibility as on technological feasibility (Keogh and D’Arcy, 1999b). In this sense, the discussion of institutions for land and market operations indicates that market outcomes are influenced by various institutions.

Various institutions such as law, economics, financial, planning and valuation can be linked to the land and market operations. For instance, the planning system has significant influence which affects the supply of land for development. This will affect the new stock of housing units. In addition, there have been many studies which have focused on the impact of public policy on land and property market outcomes, as discussed earlier. In the Malaysian context, for instance, private housing developers have been instructed to construct 30 per cent of housing development with low-cost housing units. Indeed, the government has fixed the low-cost housing units for which the selling price is not more than RM25,000 per unit. This demonstrates how institutions such as law and policy influence the market outcomes. The private housing developers have to respond correctly to these rules and procedures set up by the government.

The institutional economic approach perceives the market as a social institution. However, this theory does not consider the market to be a single uniform entity. Specifically, Adams *et al.* (2005, p. 39) state that ‘Indeed, a strong disaggregated view is taken of market structures, with each particular market seen as having its own procedures alongside its own distinctive relations with a particular social culture and other institutions’. In this context, Hodgson (1999, p. 94) states that ‘Accordingly, there is not just one type or set of markets – perhaps differentiated merely by the type and degree of market structure and competition according to textbook typology – but many different markets, each depending on its cultural and institutional context’.

If the institutional economic approach is examined from another perspective across the social sciences, the term institution can be viewed differently. In this context, Jepperson (1991) suggests that institutions, or the rule of the game, can be divided between ‘regimes’ and ‘cultures’. These two elements act as important carriers of institutionalisation.

According to Adams *et al.* (2005, p. 40), ‘the former refers to explicitly codified rules and sanctions which are monitored by a central authority, while the latter is customary or conventional in character and is not monitored in the same way³⁰’. If this is considered from the perspective of land and property markets, one can observe an important distinction: for instance, the land use planning system could be considered as an important regime because it provides a set of codified rules, etc. This requirement might contribute to the notion that ‘the greatest impact of planning on the economics of property markets is through the restriction of land supply, the consequent constraint on building development and the resulting effects on property rents/prices and on welfare’ (Adams *et al.*, 2005, p. 105).

In terms of culture, which is one of the important carriers of institutionalisation, Adams *et al.* (2005, p. 40) state that “embedded cultures can also have important influence, for example, on what is considered adventurous or conservative behaviour by market operators. An illustration of this is the notion of what should be regarded as

³⁰ As an example, entrepreneurial behaviour may be constrained by both the formal rules of bankruptcy and individual fear of the wider cultural connotations which bankruptcy might imply.

‘prime property’, which, while never firmly defined, is transmitted and refined from one generation of surveyors to the next”.

In relation to the regimes and cultures, each acting as important carriers of institutionalisation, formal organisations are another important carrier of institutionalisation (Jepperson, 1991). In this context, the important aspect of formal organisations is the way in which organisations operate and associate with each other, accepting and reinforcing or challenging and transforming prevalent regimes and cultures (Adams *et al.*, 2005, p. 40). They further explain that ‘This might be described as assessing the richness of the ‘actor-network relationship’, which is often termed ‘institutional thickness’, with its important implications in institutional theory for examining, for example, the nature of relations between the public and private sectors in urban land development’. This idea is relevant to this research, especially in terms of the relations between private housing developers and the public sector as regulatory bodies in housing provision in Malaysia.

This is because the lack of enforcement and monitoring by the government agencies in relation to housing development by the private housing developers could be linked to the existence of abandoned housing projects. Therefore, it is important to take into account the variable of enforcement and monitoring by the government agencies in developing an analytical framework in order to examine the causes of abandoned housing projects.

3.7 Theoretical Position of Institutional Economics Analysis

Following the discussion above, the review of institutional economics analysis shows that institutionalists adopt the social ontology, which approaches economics problems subjectively. This means that it puts the focus on the complex process that underpins outcomes (and cannot be measured as readily). In this context, Samuel (1998) argues that the institutionalists perceive the market as an institutional complex formed by institutions, and it interacts with other institutional complexes in society. Therefore, it is not the market which allocates resources; rather, the markets give effect to the institutional relationship or power structure which forms and operates through it.

Samuel (1995) contends that an economy and market can be described from various aspects from the institutionalist point of view; for example, the market is operated through the power structure of the society. This means that the society allocates resources through the rules, norms and practices which are created for the market to be operationalised. Institutions, on the other hand, are man made and they are created for the market to function efficiently. Because they are created by the society, their importance is on social and economic evolution. Thus, institutions are important and cannot be taken for granted. Following this, changes in institutions are determined by the society, and, although such changes take place slowly, they have a significant effect on both the economy and the markets.

If we look at the social economic evolution, the institutionalists perceive the importance of social control and exercise of collective actions. In this context, they believe that the market is not free and independent of human control, as declared by neo-classicalists. Institutions oblige social control and practices of collective action in markets. As suggested by Commons (1931), collective action and enlargement are necessary for creating and structuring the market. In doing so, the markets can perform as they do because institutions act as social control, which enables business to function and hence determines the economy (Samuel, 1995).

Besides that, the institutionalists perceive the effect of technology on the market. In this context, they believe that the technologies react as a major force that affects economic transformation. Changes in technology are mediated via human activity, and it affects the production process and the markets. In this context, the production process could be shortened through the application of new technologies, which might also save the production costs. Through time this may force institutional changes. Therefore, institutionalists believe that the technological changes have a significant impact on institutions and the economy.

In addition, the review of institutional economics analysis indicates that the institutionalists also focus on the role of institutions in determining prices and values. They believe that prices and values are determined via a process in which habits, custom and culture play an important role. In this context, the institutions functioned in giving means for human interaction and as a result have an effect on prices. That is

why the institutionalists claimed that price does not arise from any equilibrium level or through the mode of production. Institutions force changes on the manner in which prices are determined and thus give effect to the market.

Furthermore, the institutionalists argued that the institutional economics is the effect of culture and values on the economy and markets. Since power structure is the mechanism that distributes resources, the influence of culture and values in the society have an important impact on the market. Thus, culture and values give effect to the formation and survival of the market. They form exogenous factors which must be included when analysing the market. The institutionalists also believe that the economy is a non-deterministic and non-mechanistic decision-making process. It is governed and determined by power relations. Thus, the views and ambitions of the working class and the masses are given attention in explaining the markets.

In terms of the epistemological view of the institutional economics, one can see that the institutional economics is based on the belief that changes in society will lead to economic and market changes. The process of change is driven by the society. The evolutionary process of change explains the dynamics of the market. Therefore, the institutionalists believe that the objective approach of mathematical models cannot explain the market (Hodgson, 1988). In this context, the institutionalists believe that the approach to understanding the market is via the qualitative evaluations of institutional changes. As the market is non-deterministic, the creation of institutions gives effect to collective decisions of market agents which determine supply and demand. In relation to this, North (1990) argues that the creation of organisations will facilitate the functions of the market. Therefore, as an evolutionary process of change is able to explain the changes to the market, the organisational changes and qualitative behaviour of market actors are an important aspect of institutional explanations.

From a methodological perspective, the methodology of institutional economics is characterised by the holistic, systematic and evolutionary processes of change (Wilber and Harrison, 1978, and Maki, 1993, in Kamarudin, 2004). The reason for this is that they believe that the economic system is similar to a process of change inherent in a set of social institutions. This means that the process of change is not mechanical, but determined by human action and shaped by society (Samuels, 1988). In relation to

this, institutionalism believes that the implementation and implications of policy affect the agents' collective decisions and actions in a holistic and integrated approach in the way agents behave and perform their economic activity within social, political and economic institutions (Kamarudin, 2004).

In relation to land and property markets, market actors play an important role in determining property market outcomes; thus their collective decisions lead to specific outcomes. In this context, Ball *et al.* (1998) suggest that the behaviour of actors such as developers, lenders and valuers may explain the property market.

Meanwhile, institutional methodology is holistic, because it focuses on patterns of relations among the different parts of the whole system (Wilber and Harrison, 1978; Maki, 1993, in Kamarudin, 2004). These inter-relations explain the whole parts systematically, and these parts build up a coherent structure and can be understood only if the whole system is considered. The evolutionary analysis refers to the changes in the pattern of relations, which are seen as the essence of social reality. In terms of institutional change, North (1996) and Van der Krabben (1995) argue that the direction of institutional change is influenced by an effective and informative institutional interaction. This means that an effective and informative institutional interaction is responsible for shaping the direction of institutional change, because the dynamics of an economy depend on the institutional framework and interaction between institutions.

If we look at the discussion on the institutional economics methodology, one can see that the application of institutional methodology illustrates that institutions do matter in land and property market. They have also been applied in various forms to address different issue of properties. The emphasis has been the role of institutions in determining an actor's behaviour in the land and property market process. Although the use of institutional analysis has been given attention, there are also disputes about how it should be applied to specific studies. The disputes arise from the wide meaning of institutions themselves.

Following the discussion on the theoretical position of the institutional economics analysis, one can conclude that the strength of the institutional explanation is on the

argument that it is the power structures that determine how the market will function in allocating resources. Through this argument, the theory has made it possible to supplement the weaknesses of the neo-classical economic theory and at the same time address the imperfect characteristics of the property market. Besides that, the argument of the institutional economic theory is that it is the institutions that provide constraints or facilitate decisions for actors, and thus provide means for the behaviour of market agents. This is relevant in the analysis of the property market, where information is difficult to obtain and the market is full of uncertainty.

The nature of the land and property market where information is difficult and imperfect is another reason that supports the application of the institutional economics theory for land and property market analysis. The institutional economics theory acknowledges the problem of information in land and property market. Information is costly and thus the market operates with transaction costs. Institutions provide the structure for market agents to work with information and determine the effect of the transaction costs that are incurred in the market.

The other aspect that contributes to the strength of the institutional approach in resolving problems regarding properties is the aspect on its multi-disciplinary nature. This is because the approach to property is multi-disciplinary in nature where there is a need for knowledge in aspects such as economics, law and planning. Analysis on the land and property market process examines the above aspects in understanding land and property market behaviour. Hence, the application of institutional theory is relevant in understanding the behaviour of land and property markets.

However, the main weakness of the institutional economic theory is the fact that the term 'institution' itself encompasses a wide scope of meaning. There is actually no definitive meaning to the term 'institution', as suggested by Commons (1931). Even though the lines of argument revolve around the society and power structure, the perspectives that one may take in a particular study may vary. One view may regard institutions as organisations and agencies whose role in the property may affect use and development. Some examples of these institutions are the financial institutions and other institutional investors (Massey and Catalano, 1978). Others may regard

institutions as ‘a structure or framework for agent’s decision or strategies’ (Healey, 1992; Van der Krabben, 1995).

Finally, there are also views that institutions act as a framework of relationships for interaction among market agents, and these relationships will determine the process in which properties are developed and traded (Ball, 1983; Ball, 1998). Since there are various perspectives in which institutions can be applied in property research, care must be taken to select the framework which will address the particular interest of the research. As for this research, the framework of the land development process that is governed by various institutions could be linked to combine the perspectives of neo classical and institutional economics analysis in order to develop an analytical framework for identifying the causes of abandoned housing projects in Malaysia.

With respect to this research, the private housing developers might have abandoned the projects undertaken as a result of the constraints imposed by the various formal and informal institutions that govern housing provision in Malaysia. Therefore, the factors that could subsequently lead to the existence of abandoned housing projects could be better explained in terms of the land development process.

At this stage, one can see that the author has provided a clearer statement of his theoretical position: that institutional economics analysis can be used for this study. However, in terms of the combination of the perspectives of neo-classical and institutional economics theories, the author must clearly define the link between this meta position and the analytical framework to be used. Therefore, it is important to discuss the land development process which is considered as an appropriate link between both theories for developing the analytical framework of this study. The following section presents further discussion on this matter.

3.8 The Models of the Land Development Process

Since this study is actually about developer behaviour and developer relationships with financial institutions, land policy, housing policy and the importance of market signalling to be responded correctly in housing provision, there should be a more comprehensive and focused review of the literature on developers and the development process,

specifically, the work of Healey on structure-agency and Ball on structures of provision. These authors have contributed to the development of the theoretical models of the development process. Again, at this stage, it is important to stress that the development process models which have been produced by the above mentioned authors might be the best link for developing the analytical framework of this study, since the central aim of the thesis is an attempt to identify the cause of abandoned housing projects based on the perspectives of neo classical and institutional economics analysis.

With reference to the discussion on the land development process, there has been an increase in interest in understanding the land and property development process. This is because land development could be perceived as a complex process in the built environment. The complexity is related specifically to the spatial and temporal variation between one development project and others (Ratcliffe and Stubbs, 1996; van der Krabben, 1995). The complexity is also the result of participation by the various agents in a multitude of objectives and operations which contribute to the complexity of the land development process (Healey, 1992; van der Krabben, 1995). As a result, various conceptual models of the land development process have been produced. In this context, the various models that have been produced will be useful for simplifying the wide variety of land development processes. This is because each of the models owns a different theoretical framework, forms and components (Gore and Nicholson, 1999; Healey, 1991). However, even though most of the models were based on different conceptual framework and different theoretical underpinnings, the concern of this study is to identify which theoretical framework of land developments process can be used to develop an analytical framework for the purpose of the study.

3.8.1 The Conceptual Approaches Used in Modelling the Land Development Process

As highlighted earlier, there were numerous models of the development process that were based on different conceptual frameworks and theoretical underpinnings. Therefore, there must be a variety of conceptual approaches employed in modelling the land development process. For instance, the land development processes have been established from certain philosophical boundaries such as positivism, empiricism, humanism, structuralism, structure and agency, and institutionalism

perspectives (Ball, 1998; Gore and Nicholson, 1991; Healey, 1992). In relation to this, Healey (1991) and Ball *et al.* (1998) contend that there are a few categories of models of the land development process, as described below:-

1. The equilibrium model. This model is based on the neo-classical economics theoretical framework within the parameters of a positivist approach;
2. The event sequence model. This model establishes the development process as chronological sequence of stages. This means that at each stage certain events will occur. These models were categorised under the empiricist theoretical framework;
3. The agency model. This model is categorised within the humanist framework, which highlights the roles of different agents in the process and the importance of the decisions by these agents in order to ensure smooth operation;
4. The structure models. These models describe the development process as a specialised form of productive economic activity. This is from the perspective of the economy as a whole. Therefore, these models may be categorised as structuralist;
5. The structure and agency models which consist of different types of development are characterised by different institutional, financial and legislative frameworks, as well as the complexity of the social relations;
6. The structures of provision. This model is another form of institutionalism which is applied to the land and property market. This approach examines the role of institutions in forming the structure for the property market to function. Ball (1998) and Ball *et al.* (1990) define the structure of provision as the contemporary network of relationships related with providing particular types of buildings. In this context, structure is confined to the main organisations in property provision and the relationship amongst them. Provision includes all forms of development construction and use of properties. Therefore, the property market institution can be regarded as a structure of provision. It comprises the rules, practices, conventions and relationships that affect property development and use (Ball *et al.*, 1998). In this context, institutions can be regarded as the rules, practices and conventions which determine the relationship between actors and organisations seeking interest from the creation of institutions.

Following the discussion on the categorisation of models of the land development process, one can see that the incidence of housing abandonment in Malaysia might be well understood, by use of the models of the development process, especially on the models of structure and agency and structures of provision. Besides that, one of the frameworks of neo-classical economics theory which establish the importance of market signalling factor could be combined for developing the analytical framework of the study. Therefore it is very important to discuss both these approaches in the land development process, and later further discuss how the analytical framework that is based on neoclassical and institutional economics perspectives can be operationalised for this research.

3.8.2 Structure and Agency Approach

The model of the development process that is based on the structure and agency approach discovered the relationship between structural forces and agency relations in the land development process (Healey and Barret, 1990; Healey, 1992). In this context, the land development process is viewed as not only the physical process of creating and transferring buildings to their occupiers but also a social process dominated by economic interest involved. That is why, in order to understand such provisions, it is argued that the institutional and other structures within it take place, while the social agencies related in such structures should also be taken into account. In relation to this, structure and agency viewed that the social system and individual factors are equally important in order to explain social phenomena. Healey (1992) produced the complexity of events in the land development process as well as the actors involved within the diversity of situation and conditions.

Following the discussion on structure and agency models, Healey (1992) perceived structure as the rules, resources and ideas relating to the social, economic and political frameworks that govern market agents' decisions, while 'agency' refers to the roles, interest, strategies and actions of agents in the land development process. Nevertheless, as contended by Ball *et al.* (1998), it is very difficult to differentiate between structure and agency as two different entities. Therefore, there is no perfect dichotomy between structure and agency, as proposed by Healey (1992). In addition,

Healey (1992) also claims that the models of structure and agency are derived from the institutional framework. Nevertheless, Healey (1992) has not theorised the institutions evidently. In this context, she has not provided an adequate theorisation of institutions, even though she highlights the rules, resources and ideas of organisation in the land development process. Therefore, it seems that Healey (1992) tends to diverge from the basic conceptual approach of institutional economic analysis. However, the model of development process produced by Healey (1992) has been indirectly derived from the conceptual approach of institutional economics analysis, whereas she highlights the concept of driving forces within the broader social, economic and political institutions that are related to the land development process. This effort is based on the work done by Giddens (1984, 1989, 1995 in Omar, 1999). In this context, Giddens argues that the existence of sets of rules and regulatory procedures might constrain and/or enable market agents' activities and their social relations.

From the models developed by Healey (1992), one can see that she acknowledged the existence of the formal and informal rules that are related in the land development process. These rules might affect human behaviour in the land development process. If consider the issue of housing abandonment, private housing developers may be affected by the formal and informal rules that govern housing provision in Malaysia, and as a result could contribute to the problem of abandoned projects. Like Omar (1999), Healey (1992) suggests that a set of rules may be formalised like laws and administrative procedures, or informal laws such as cultural values and customary ideas, to influence the roles, interests, strategies and actions of human agents in the land development process; however, Healey (1992) has not provided a clear definition of the term 'institution's. Therefore, it is fair to say that Healey's (1992) models of the structure and agency of the land development process have been produced without a full theorisation of the institutions in her models, and it seems that she had not extensively explored the importance of formal and informal institutions in the land development process, whereas the existence of these both rules could initiate and/or constrain the behaviour of market agents and their interactions.

On top of that, the structure and agency models produced by Healey (1992) also suggested that there is a connection between structure and agency. This can be

viewed through land rights, labour, finance, information and expertise. According to Omar (1999), the idea of connection between structure and agency is based on work done by Giddens's (1984, 1989, 1995). However, some authors, such as Barret and Whiting (1981, 1983) and Healey and Barret (1990), explored in greater detail the relationship between structure and agency. As a result, they put forward a suggestion that the micro and macro-politics of land development can be combined in the economic analysis of the property market and its relations to economic development, financial investment trends and directions in public policy (Omar, 1999).

The application of the model of structure and agency of the land development process by Healey (1992) produced four different levels of analysis that address the importance of the broader structural, economic and political forces affecting various actors' decisions in the land development process. The first stage involves the mapping of the development process via identifying the events of the process, the agencies and its outcome. The second level relates to the analysis of agent's strategies, i.e. to identify their roles and power relations within the development process. It is important to stress that, at this stage, it is possible to explain the significant event in which agencies and their nexus relationship describe property development. The third stage involves the assessment of strategies and interest of agents. At this stage, the assessment focuses solely on the set of relationship within the development process. In this context, the forces that governed the different roles played and the relationship developed. The final stage is related to the resources, rules and ideas governing the development process. This involves describing the mode of production and regulations, and the ideology and relations between them.

With regard to the structure and agency model and the connection between them, Healey (1992) argues that this model could be applicable to all types of development projects. This is because Healey (1992) believes that the details of events and agency relationship are related to wider social, political and economics forces (Kamarudin, 2004). Nevertheless, Hooper (1992) claims that since the land development process is varied and dissimilar from one project to another, the bases of the structure and agency approaches are diverse and thus are weak for analysing social relations in that specific process. In relation to this, van der Krabben (1995) contends that the model of structure and agency developed by Healey (1992) does not indicate the economic and non-

economic reasons of factor behaviour in the land development process. This is against the nature of property market, since it is imperfect with limited information accessible. That is why the information issues should be included in the model approach because the information problems need to be fully explained. Because of the weaknesses of the structure and agency models approach of the land development process, one can conclude that Healey's (1992) model is perceived to be static, limited and one which neglects the time factor, especially in terms of material, financial and technologies resources. As a result, Healey's model has not fully theorised the dynamics behind institutional change and the property market, nor the complexity of human behaviour therein' (Omar, 1999, p.61).

As a result of the above criticisms of Healey's approach, the structure and agency model revealed that there are problems related with the application of the approach in property research. Ball *et al.* (1998) proposed that there is a possibility for the approach to be partially applied to complement other conventional approaches. With regard to the property market, the emphasis on the approach seems to be more confined to the development process rather than dealing with the property market. For instance, Healey noted different constraints within the instruments of planning which might constrain the land development process via policy, rules and procedures. In fact, Healey's (1992) model also refers to the broad formal and informal rules within the social, political and economic institutional framework which control actors' decisions in the land development process. From the discussion on the structure and agency model, one can see that this model attempts to explain the development process within the institutional theoretical framework. Nevertheless, this model is associated with the problem of interpreting the term 'institution'. However, the most important thing is that in these models, the core analysis is that the land development process is not only the physical process of land development but also a social process dominated by the economic interest involved.

Following the discussion above, for the purpose of the study, one should consider that the framework of this model approach which revealed the existence of the formal and informal rules that governed the development process may influence the market actors' decisions in the land development process. In other words, in its own way, this model facilitates an understanding of the development process. Therefore, it is important to

discuss other related propositions on the importance of the formal and informal rules within a broad institutional framework. The next section will discuss further the model of structure of provision to explain the development process within the institutional theoretical framework. Indeed, the following model further explains the importance of formal and informal rules and the exercise of agency relations within the land development process.

3.8.3 *Structure of Provision Approach*

Another form of institutionalism which may be applied to the land development process and property market is known as the structure of provision approach. This approach investigates the role of institutions in forming the structure for the land development process and also on the property market to function. Basically, the approach of structure of provision is related to the extensive work done by Ball (1983; 1985; 1986a; 1986b). The most important aspect to have emerged from his work referred to the analysis that production and consumption (that is, provision) of buildings are not only taken into account from the physical process, which refers to the process of producing final products for their occupiers (Gore and Nicholson, 1991). It is more than that, whereas a social process is dominated by the economic interest involved.

Before further discussion on the structure of provision approach, it is helpful to determine the definition of the structure and provision. With respect to the definition of the structure of provision, Ball (1998) and Ball *et al.* (1990) provide a clearer definition of it. They define the structure of provision as the contemporary network of relationships associated with providing particular types of buildings. This means that the structure in this context is confined to the main organisations in property provision and the relationship between them. In line with this, the provision refers to all forms of development construction and use of properties. Therefore, the institutionalists perceived that the land development process and property market institutions can be seen as a structure of provision. In this sense, it comprises all the rules, practices, conventions and relationships that affect property development and use (Ball *et al.*, 1998). From this explanation, it is fair to say that within this definition institutions can be regarded as the rules, practices and conventions which establish the relationship

between actors and organisations seeking interest from the existence of these institutions.

If we look at the perspective of residential property, the structure of provision can be defined thus: ‘a structure of housing provision describes an historically given process of providing and reproducing the physical entity housing, focusing on the social agents essential to that process and relations between them’ (Ball, 1986a, p.158). According to Gore and Nicholson (1991, p.726), the theoretical propositions of structure of provision can be summarised as follows:

1. *The production, exchange, and consumption of building as a usable physical entity feature a series of interconnected social relations between the agents and institutions involved, the legal framework regulating such activity, and the financial arrangements that allow it to proceed;*
2. *These sets of social agents are defined by their economic relationship to the physical process of provision, which includes the production, exchange, distribution and use of a built structure;*
3. *Different types of building provision are characterised by different combinations of these elements and by specific relations between them. Wherever a particular combination is identified it can be termed a separate structure of building provision;*
4. *The exact content of these structures of provision can be identified only by the process and the relations between them;*
5. *Such structures of provision are intrinsically dynamic, mainly because of the pressures brought about by the way in which the social relations within them operate. Thus, both conflict and collaboration between agents may lead to the imposition of new legal controls or to the provision of new forms of finance, and so on. As well as this internal change, external forces in the wider economy and in society as a whole may also bring about further adjustments in a structure of provision (op.cit.,p.726).*

Following the theoretical proposition outlined above, one can see that the application of structure and provision is one way to assess the effect of institutions on the land development process and the property market. According to Ball *et al.* (1998), although

institutions matter, they provide only a partial explanation for the market. This is because the observed pattern of outcome could not be analysed on its own. That is why a theory is required to interpret an observed pattern. It needs to be applied prior to other theories to help to provide a hypothesis of how the market functions. Ball (1983; 1988) has applied the structure of provision to investigate the problems in home ownership and the change in the British construction industry. The study reveals that institutional structure has basically caused problems in home ownership in the UK.

The model of the development process depends on various series of diagrammatic maps. However, in order to understand the process, detailed examinations of the organisations, operations, financial mechanisms, personnel, and hardware involved, of the operating frameworks in which they work, and of the ways in which all these fit together are required (Gore and Nicholson, 1991). In relation to this, the model of structure of provision by Ball is only approach promises to reach such broad coverage. Ball has provided the necessary theoretical basis for such investigations. With regard to the advantages of the application of the structure of provision in the land development process and property market behaviour, it is fair to suggest that the application of the structure of provision is not in conflict with other theoretical views. Indeed, they can be applied together with other conventional theories to explain the land development process and property markets. How they are used reflects entirely to the problem addressed. Nevertheless, the structure of provision can be applied in various ways. In this context, Ball *et al.* (1998) proposed that the extent to which institutions matter depends entirely on the empirical analysis. In other words, the use of institutional theory is a structure of provision which only guides the researcher in the methodology, rather than providing any explanation by itself.

Following the discussion on the structure of provision and structure and agency approach of the development process, one can see that both approaches suggest that there are various institutions which govern the land development process/housing provision; these include financial policy, land policy, housing policy and government agencies which could be linked to the incidence of housing abandonment.

In terms of institutions from the perspective of the land development process, these could comprise formal and informal institutions. Besides that, institutions could also be

the organisations as institutions. For instance, the weaknesses of the government agencies as an enforcement body could also be a factor that causes projects to be abandoned.

Since the central aim of this study is to determine the causes of abandoned projects based on the neo classical and institutional economics theories, there should be a link between this meta position and the analytical framework to be used. At this stage, it might be suggested that the structure of provision of the land development process is an appropriate link to combine the theories of neo classical and institutional economics for developing the analytical framework for analysis. The following section contains further discussion on the combination of these both theories for the purpose of this study.

3.9 The Combination of the Perspectives of Neo-Classical and Institutional Economic Theories for Studying the Causes of Abandoned Housing Projects

The idea of combining the theories of neo-classical economics and institutional economics is to extend the theoretical pluralism proposed by Hodgson (1983), which suggests that this should be taken into account in property research, instead of setting them in competition with each other. The reason behind this is that many studies to date have focused on the individual applicability of each of the neo-classical and institutional economics theory approaches in property market analysis, and highlighted their respective strengths and weaknesses. There is, however, no research which emphatically focuses on combining the perspectives of both these theories.

However, the most important thing is that the researcher must provide a clearer statement of the theoretical position used for this study. From the review on neo classical and institutional economics theories, it is clear that both theories are useful and capable for analysing the land development and property market. Nevertheless, the review has indicated that the idea of combining both theories has not been adopted by property researchers who, at best, adopt one position but adapt the theory to accommodate insights selectively from different perspectives. The reason for adopting solely one position – whether neo classical or institutional economics theory - is the distinct and incompatible ontology of some theoretical position (such as neo-classical

and old institutional economics). In this sense, a key distinction is that the atomism of neo-classical theory allows a focus on outcomes (that can be analysed quantitatively), while the social ontology of other theories puts the focus on the complex processes that underpin outcomes (and cannot be measured as readily). Therefore, it seems impossible to combine both of these theories for the purpose of this study.

Following the discussion on the combination of these theories, it is very important for the researcher to provide a clearer link between this meta position and the analytical framework to be used. For this purpose, the review on the land development process models that are based on the structure and agency approach and the structure of provision approach has provided significant justification for combining these theories. The main reason for focusing on these both approaches of the land development process is that the incidence of housing abandonment might be related to the land development process or housing provision. This is because the issue of housing abandonment is related to the developers who are operating within the various institutions that govern the housing provision, such as financial institution rules and procedures, land policy and housing policy, as discussed earlier in Chapter 2. In this context, these factors might be the cause of the existence of abandoned projects.

From the review of structure and agency approach on the land and development process, one can see that this approach has been criticised from various aspects such as the problem is associated with interpreting the term institution, not theorised the institutions clearly, no clear differentiation between structure and agency as so on as discussed earlier. Nevertheless, this approach considers the relationship between structure and agency which noted that there are formal and informal rules which may affect human behaviour in the land development process. In this context, it is very important that this argument be used for developing the analytical framework, as housing provision is governed by the formal and informal institutions, as discussed earlier. In fact, this model points out the role of wider driving forces in initiating and/or controlling market agents' decisions in the land development process. However, the model of structure and agency is not an appropriate link for combining these theories, since the structure and agency models are not considered within the institutionalism approach, as claimed by Healey (1992).

Following the discussion on providing a clearer link between this meta position and the analytical framework for analysis, the review on the structure of provision of the land development process seems to be an appropriate one. This model tends to explain the land development process broadly, by providing a much richer insight into the connection between the formal and informal rules or institutions via the exercise of agency relations by agents in the land development process. Therefore, for the purposes of developing analytical framework, the structure of provision can be applied together with other conventional theories to explain the land development process. Thus the structure of provision claims that one of the institutionalism theories can be combined with other theories to explain the land development process/housing provision that is related to the incidence of housing abandonment. In this context, the market signals of neo classical theory will be used as one of the combinations of the analytical framework. In fact, neo-classical economic analysis accepts the imperfections of the simplistic approach, and also takes into account information signalling, slow adjustment, spatial specificity and disequilibrium in property markets (Adams *et al.*, 2005).

Figure 3.1 shows the schematic model of the land development process/housing provision that may be linked to the incidence of housing abandonment. At this stage, it is fair to suggest that housing provision in Malaysia, which is highly regulated by regulatory procedures, might contribute to the existence of abandoned housing projects, as discussed earlier in Chapter 2.

From the institutional perspectives which govern the institutional structure of the property market with respect to housing development or housing provision, the existence of the formal and informal rules or institutions which govern the decisions and actions of the market agents could also contribute to the problems of housing abandonment. In other words, this research should take into account the rules or institutions which govern market agents' decisions in terms of the existence of formal and informal rules in the market process.

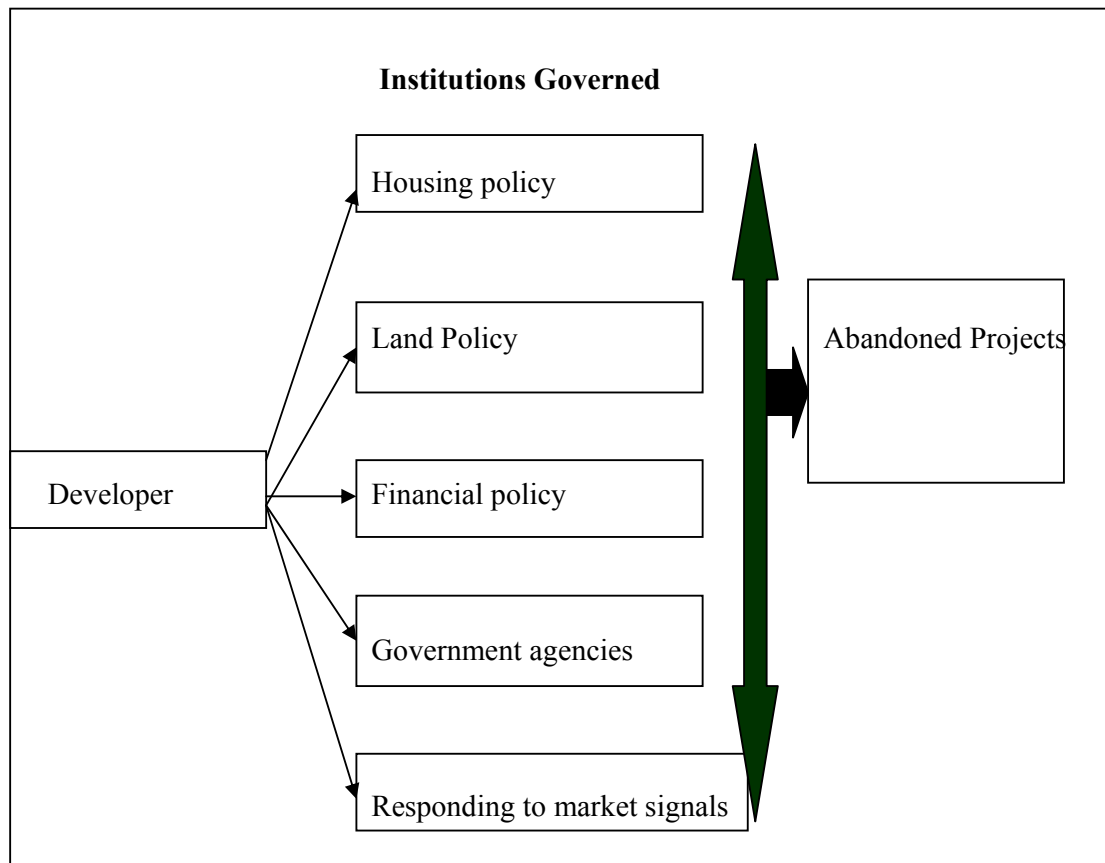


Figure 3.1: The schematic model of housing provision in Malaysia which is governed by various institutions

Source: The researcher, 2006

Concerning the discussion on the link between neo classical and institutional economics theory, the application of the structure of provision is not in conflict with any theoretical views; this suggests that they can be applied together with other conventional theories in order to explain the land development process, especially in terms of the causes of abandoned housing projects. In this sense, the use of the structure of provision approach reflects entirely the problem addressed. The structure of provision approach is flexible and can be employed in various ways. In addition, Ball *et al.* (1998) suggested that the extent to which institutions matter depends entirely on the empirical analysis. That is why, even from the theoretical position, it is clearly stated that both these theories are distinct from each other: neo classical theory allows a focus on outcomes (that can be analysed quantitatively), while the social ontology of institutional theory focuses on the complex process that underpins outcomes (and cannot be measured as readily); both of these can be combined for

identifying the causes of abandoned projects. In addition, the use of institutional theory in the structure of provision only guides the researcher in the methodology. Therefore, the combination will lead to the development of an operational framework for analysis.

In methodological terms, it might be suggested that the concept of both perspectives must be operationalised, and data must be quantified using the appropriate statistical test analysis which can be used to accomplish the research aims and objectives. This is because the central aim of this study is to determine the perception, attitude and opinions of developers towards the cause of housing abandonment. In addition, the neo-classical theory has recognised the existence of transaction costs in property markets. In other words, neo-classical theory recognises the role of organisations in economic processes and the impact of human decision making governed by rules or institutions in relation to transaction costs. In addition, human behaviour operates with bounded rationality, with limited knowledge, and is frequently opportunistic. The bounded rationality concepts which are acceptable within both theories also provide a means for combining the theoretical framework of the study (see for example, Hodgson, 1993).

The latest discussion by Adams *et al.* (2005) highlights the way in which institutional economics can be considered as an extension rather than as an alternative to neo-classical economics analysis, which should be taken into account in property research. Because of the nature of the study, which intends to examine the causes of abandoned housing projects, combining or integrating the perspectives of both these theories would appear to be a feasible way forward. This is because applying either a purely neo-classical approach or a purely institutional economics approach in examining the causes of abandoned housing projects is not viable, owing to the nature of the study. In addition, neo-classical economics in terms of market signals which play important roles in housing development should be taken into account in the study of abandoned housing projects. This is because failure to respond appropriately to market signals could contribute to the existence of housing projects.

From the discussion above, one can see that there is a possibility of combining the perspectives of neo classical and institutional economics theories in order to identify

the causes of abandoned projects. In this context, the use of the structure of provision is another form of institutionalism which provides a link between this meta position and the analytical framework to be used. Indeed, both theories can be seen as being supplementary, rather than a challenge to each other. The acceptability of the bounded rationality concept within both these theories can be seen as a main point for combining the perspectives of the neo-classical and institutional economics approach in this study of housing abandonment. Indeed, both theories perceive that human decisions on the property market process, which is governed by various institutions, would affect the market outcome.

The following section contains further discussion on the research proposal framework, with particular reference to the study of identifying the causes of the existence of abandoned housing projects in the Malaysian context.

3.10 Conceptual Framework of the Study

The literature review outlined above on neo-classical economics analysis demonstrates how the neo-classical approach can be used in land and property market analysis. It also shows how the neo-classical approach has been adapted to consider information signalling, slow adjustment, spatial specificity and disequilibrium in property markets. In other words, the neo-classical approach has accommodated the market signalling within a neo-classical framework. Therefore, it might be suggested that the market signalling perspective of the neo-classical framework is relevant for the study of the causes of housing abandonment in Malaysia. In this context, it is important to emphasise that even Old Institutionalists recognise the importance of price/market signals; however, they would argue that the impact on behaviour is socially and culturally mediated rather than atomistic and rational. Nevertheless, the following section will describe further and make a clearer statement explaining why the researcher considers the signal mechanism to be one of the frameworks of the neo classical approach.

With regard to the conceptual framework of this study, it is important to stress that the structure of provision and structure and agency approach demonstrates that they are various institutions that govern housing provision, as shown in Figure 3.1. These

factors could be a cause of abandoned projects. The following sections describe the main elements or perspectives which constitute the research framework.

3.10.1 The Developers

The private sector includes individuals who have acquired land financed by themselves, co-operative societies that build housing units for their members, employee housing constructed by large mining companies and estates for their workers, and houses developed by the private housing developers. For the purposes of this study, the term ‘private developers’ refers to entrepreneurs who build housing units for profit, as highlighted earlier in Chapter 1 section 1.6. In relation to this, the private developers are supported by contractors to build housing units. In this sense, the developers are dependent on contractors to transform their needs into reality in terms of the final product. This final product must suit the users’ needs, because it is the users who are going to utilise the final product. Therefore, the developer is highly responsible for appointing the right contractors based on past experience in terms of manpower, reputation, financial stability and so on.

In the context of Malaysia, the developers are given full responsibility for the success of the particular housing development projects by appointing capable contractors and monitoring the construction activities done by the contractors. This is because the developers outsource all the construction activities to the contractor. However, it is important to note here that the contractors are not legally bound by the agreement signed between the developers and the house buyers. The developers and the contractor will have a separate agreement. In addition, the responsibility of the contractor will be mentioned in the tender document. In terms of the regulatory framework and registration, the contractors have different bodies compared with the private developers. In relation to this, the Construction Industry Development Board (CIDB), established in December 1994, has become the main regulatory agency for the construction industry, and it is responsible for registering contractors. According to Abdullah (2004, p.72), “Registration for local contractors is on a one-to-three years basis and is granted to qualified contractors under the relevant grade which defines the limits of the value of the work they undertake”. For the private

developers, the Real Estate Housing Developer's Association of Malaysia is responsible for their registration.

The explanation above indicates that the role of contractor is very important in the building process. However, the developers are fully responsible for the success of the housing projects undertaken and legally bound by the S&P agreement signed between the developers and the purchasers. Therefore, the developer has to ensure that the contractors who have been appointed for undertaking construction activities for the particular housing project must be competent and highly capable in terms of finance and experience. From that, one can see the extremely significant relationship between the developers and contractors in housing provision in Malaysia. In addition, it distinguishes the role and responsibility between them. Overall, the private developers are responsible for ensuring that the housing units constructed can be delivered with vacant possession to the purchasers within the particular period, as stated in the S&P agreement.

3.10.2 Signal Mechanism

As discussed earlier, neo classical economics analysis claims the importance of information signalling in this theory. This is because neo classical economics believes that it is very important that the information signalling or signal mechanism be responded to correctly. In this context, Keogh (1994) uses to link the use, investment and development sectors. The three functional divisions are linked by the flow of information between them. The argument put forward was that use and investment decisions are separate, and the market can distinguish between them by the rights they hold. Therefore, it may be assumed that, with efficient flow of information, each of the market sectors will establish responses to the market signals, such as rental, capital values and yields. In this context, market signals must be responded to appropriately by them. In the Malaysian context, similar types of price signals exist in the Malaysian house building industry. As house prices rise, the private housing developers find that profitability (for given costs) has risen and thus would wish to supply more housing units.

For the study, it is important to identify whether private developers have perceived the role played by market signals and whether ignoring or not understanding this role could contribute to the existence of abandoned housing projects. The corresponding hypothesis of the statement is summarised as follows:

H1: There is a significant statistical difference between successful developers and failure developers in the mean of the role of the market signals dimension in housing development

In relation to this, the market signals concept or the information signalling in the property market affect the behaviour or action of the agents in the market. However, information is scarce and there are uncertainties in the property market. Because of the imperfect nature of the property market, problems of coordination in the markets arise. In this context, improved information signalling will help the market agents or private developers to make decisions, and this will affect the market outcomes.

Instead of responding to house prices, developers also have to respond appropriately to the supply and demand of housing. In addition, information of mortgage procedures by the financial institutions, as well as any housing development procedures, should be responded to correctly. The importance of responding to the information is quite significant in affecting supply and demand. Therefore, it might be suggested that it is appropriate for the perspectives of the neo-classical approach to be applied for developing the theoretical framework of the study. Failure to respond correctly towards market signals could contribute to the abandonment of housing projects.

3.10.3 Formal and Informal Rules or Institutions

From the review, one can see that the perspectives of formal or informal rules or institutions of institutional economics analysis are significant to the study of identifying the causes of abandoned housing projects. Following the earlier discussion on the institutional economics approach to the land and property market, it is proved that the formal and informal rules or institutions govern human decisions and actions, and affect property outcomes. As shown in figure 3.1, one can see how various

institutions, such as financial institutions, housing policy and land policy, have governed housing provision through the formal and informal rules of institutions.

In relation to this, institutionalists are able to highlight how formal and informal rules or institutions influence the supply of land in the land development process (North, 1996; Van der Kraben, 1995). The institutionalists emphasise that the formal rules or written rules and policies in the land development process refer to the planning and development regulations which restrict the supply of land for development purposes.

If one looks further within the broad social, political and economic framework, one can see the various formal and informal rules which govern human interactions, decisions and actions in the property market and land development. North (1996) argues that the form of institutions provides a pillar to human interactions and limits the choices of actors, hence reducing uncertainty and costs. According to Kamarudin (2004), there might be, nevertheless, a trade-off between limiting choices and certainty. In terms of property market efficiency, the property market as a set of institutions contains a set of rules affecting the decisions of potential buyers and sellers. He further contends that the property market as an institution embodies various political, legal, economic and social rules or institutions which might initiate or constrain agents' activities by way of their behaviour, thinking and conduct (Eggertsson, 1990; Hodgson, 1993,1998; North, 1996; Scot, 1995 in Kamarudin, 2004). Subsequently, the operation and function of the institutional property market involve social relationships and negotiations among various individuals or groups of people in dealing with the formal and informal rules within their social, political and economic framework (Omar, 1999). Therefore, one can see that the property market, as a set of institutions, can be viewed as the rules of the market process, consisting of formal rules and informal or unwritten rules or unwritten codes of conducts of buyers and sellers, which might constrain or facilitate the negotiating process, i.e. the co-ordination and interaction among people, North (1996).

Following the discussion above, the institutional economics establish the existence of formal and informal perspectives which are constraints within the written rules and the attitudes of agents by way of agency relations in society (North, 1996). The perspectives of the institutional analysis approach are, therefore, able to address the

institutional constraints in land development which are embedded within written and formal rules, such as land policy, planning and development measures, financial provision and guidelines, and informal or unwritten rules or institutions of collective and continuous attitudes of agents towards land development.

Adams *et al.* (2005) contend that informal conventions or the unwritten rules may also be affected by policy decisions. They explain how the market agents' behaviour and actions are affected by the policy through the governance processes. In the context of this study, these formal and informal rules or institutions may cause agents in housing development decisions, in particular, to abandon the housing projects undertaken.

In the Malaysian context, there are three main institutions which are related to the housing development: financial institutions, land institutions and housing policy (Salleh and Khalid, 2002). Chapter two contained a detailed discussion on the role played by the financial institutions, especially in providing bridging loans to the private developers and end-financing to the house purchasers. As mentioned earlier, in order to obtain bridging loans, the private developers have to ensure that at least 80 per cent of the total housing units under construction will be sold. This regulation, which may be very strict, can influence the construction progress. For example, if any developers fail to comply with the rules, and at the same time they need bridging loans for completing the projects undertaken, of course this will jeopardise the cash flow of the projects. In addition, if the developers do not have any alternative to overcome the cash flow problem, the projects might be abandoned.

The rules or institutions which govern land development, especially in terms of the strictness of time limited for undertaking the approved projects, might also be a barrier to the developers. As emphasised in chapter two, after planning permission has been granted, the developers have 12 months to proceed with the construction work. Otherwise, the approval granted will be invalid. This means that if the developers are ready (in terms of finance, management teams and equipment), the constructions works must be implemented. If the developers do not comply with this rule, they have to apply for planning permission from the start. As a consequence, the project might be abandoned if the developers are not able at the point of time to undertake the

approved projects because of the above factors, and this could lead to housing projects being abandoned.

Apart from that, the regulation which requires private developers to construct 30 per cent of the total housing units approved with low-cost housing units could also be a reason for the developers abandoning the projects. This is because a mismatch of supply and demand for low-cost houses may occur, because the units can be sold to certain groups only, as mentioned in chapter one. Therefore, all these strict formal rules or institutions which govern housing development in Malaysia might contribute to the existence of abandoned housing projects. However, whether they do or not, the result from the empirical work will provide the answer, and this is discussed in chapter 7. Therefore, the empirical work will also try to identify whether the developers perceived the existence of these three mentioned institutions as being a barrier or obstacles in housing development in Malaysia.

The corresponding hypotheses of the three main institutions related to housing development are summarised as follows:

H1: There is a significant statistical difference in the mean of the role played by the financial institutions affecting the housing development in Malaysia between successful developers and failure developers.

H1: There is a significant statistical difference in the mean of the role played by the land institutions affecting the housing development between successful developers and failure developers.

H1: There is a significant statistical difference in the mean of the role played by the housing policy affecting the housing development in Malaysia between successful developers and failure developers.

3.10.4 Institutions as Organizations

Another perspective of institutional economics analysis which can be used for developing the theoretical framework of the study is an institutional organization. North (1990) has formed a distinction between organisations and institutions.

According to North (1990, p. 5), organisations are ‘groups of individuals bound by some common purpose to achieve objectives’. Institutions are both formal and informal unwritten rules which form the set opportunities as well as constraints in human behaviour and interaction (Hardoy, 2001).

Rules are prescriptions which ‘refer to which actions are required, prohibited, or permitted’ (Ostrom, 1986, p. 5). In this context, North (1990) argues that rules act at multiple levels, and their enforcement characteristics matter for their effectiveness. Therefore, the transaction costs exist in the institutional framework because it is significant in the relationship between institutions and organizations. Transaction costs in the property market arise as a result of the problems of coordination leading to a lack of information, and, therefore, there are uncertainties (Omar, 1999 and Kamarudin, 2004). The problems of transaction costs are resolved through the creation of institutions which structure the way property rights are exchanged and thus facilitate the process. In other words, the role of interaction between institutions and organisations is to reduce the loss or uncertainties. For instance, house buyers searching for a house will incur costs in obtaining information through a real estate agency. In turn, it will offer better chances for the purchasers to obtain a better quality of house. For the purpose of this study, institutions are formed within the political structure which reacts as a mediator to the society, - specifically government agencies, - and this institution reacts as an organisation which plays an important role in housing development.

The role of this institution or organisation is to facilitate the developers and to ensure the smooth process of housing development. For example, the government agencies, specifically, the Enforcement and Control Department of the Ministry of Housing and Local Government (MHLG), acting as institutions which are responsible for enforcing

the rules and regulations which are related to housing development, can be seen as an organisation from the institutional economics perspective.

Instead of enforcing all the regulations which are related to housing development, as discussed in chapter two, this organisation also has responsibility for monitoring the work progress of housing projects undertaken by the developers.

In short, the government responsibility starts from granting a developer's housing licence, to enforcement of all the regulations related to housing development and monitoring the construction progress. Indeed, they are also responsible for handling any complaints pertaining to developers and the projects themselves. In terms of housing abandonment, several actions have been taken by the MHLG, as discussed before, but the problem of abandoned housing projects still exists. Therefore, it is important to identify whether the abandoned housing projects exist as a consequence of the weaknesses of the government agencies as the organisations. To operationalise the conceptualisation of the weaknesses of the organisations, this study proposes two variables: a lack of enforcement and lack of monitoring. The empirical work done will identify whether the developers perceived that the weaknesses of the government agency in terms of lack of enforcement and lack of monitoring could contribute to the existence of abandoned housing projects.

3.11 Conclusion

As discussed above, the review of the land development process and property market from the perspectives of neo-classical and institutional economics theories suggests that it would be possible to combine these perspectives to identify the causes of abandoned housing projects in Malaysia. The combination of both these perspectives could provide better understanding of the causes of housing abandonment. Nevertheless, it is important to provide clearer link between the meta position and the analytical framework. In this context, the structure of provision of land development models has provided a clearer link which allows the combination of both theories for developing an analytical framework. The summary of the operationalised analytical framework is shown in figure 3.2. Another important factor is that the nature of the land and property market, governed by various institutions and also influenced by the

market mechanism which affects agents' decisions and actions, provides a broad methodology for property research. In fact, the theoretical pluralism should be taken into account in property research, as contended by Hodgson (1993). Therefore, this study attempts to combine both these theories. Indeed, both of these theories accepted bounded rationality. In this context, both theories perceive the existence and importance of the political, legal and social institutions which govern human behaviour within the 'bounded rationality' of agents' decisions. The bounded rationality concept can be seen as a link between both these theories, which makes it possible for them to be combined for developing the theoretical framework of the study.

The following chapter contains a detailed discussion of the research methodology.

Neo-classical economics theory perspectives

Market signals

1. Mortgage rules
2. Demand
3. Failure to respond to market signals

Institutional economics theory perspective

Formal rules

1. Strictness of the rules and regulations
2. Legal requirement
3. Time to complete housing development

Informal rules (developers' behaviour)

1. Mismanagement of financial
2. Misuse of financial
3. Fraud
4. Profit motive
5. Social obligation
6. Loss aversion
7. Profit orientation
8. Financial gain

Institution organisations

1. Lack of enforcement
2. Lack of monitoring

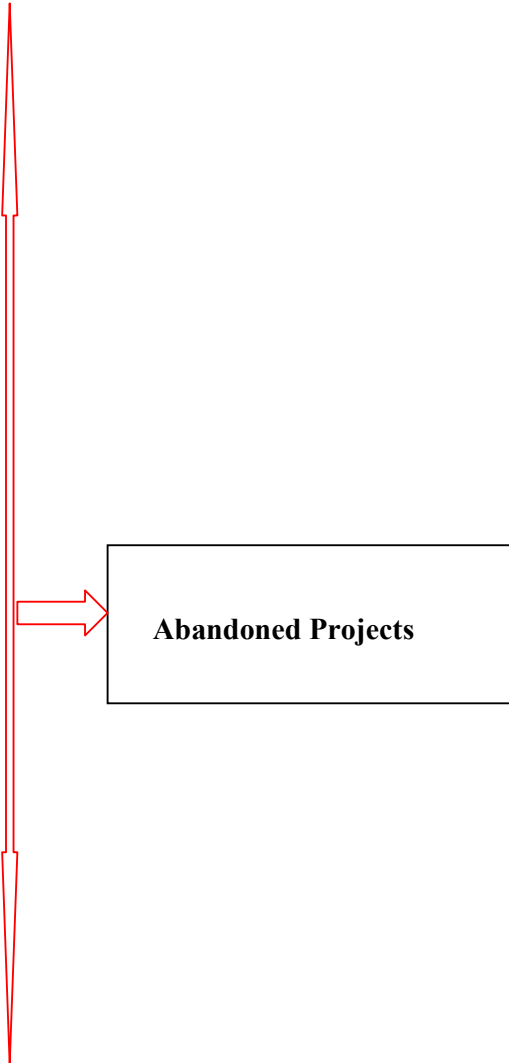


Figure 3.2: Analytical framework of the study, based on the perspectives of neo-classical and institutional economics theories

CHAPTER 4

RESEARCH DESIGN AND METHODOLOGY

4.1 Introduction

As discussed in chapters two and three, there are some factors which might be expected to cause projects to be abandoned, owing to the nature of housing provision which is highly regulated and governed by various institutions; these include formal and informal rules or institutions; institutions as organizations and signal mechanisms. Therefore, this study has highlighted a series of research questions, such as the appropriate theoretical approaches that are relevant in understanding the causes of abandoned projects; the institutions relevant in explaining the housing development, the institutions perceived as a barrier to the housing development; whether the institutions explain the existence of abandoned housing projects and how the information signalling interacts with project abandonment.

The purpose of this chapter is to describe the research design and method used in the study. Doing so is very important, as the research design guides the researcher during the collection of relevant data.

The chapter is divided into ten sections. In Section 4.2, emphasis is placed on the description of the research design adopted in this study. Section 4.3 contains a description of the issues relating to the method of data collection. Apart from secondary data, this study also employed a survey method which uses questionnaires to collect primary data. In this chapter, the researcher will further explain the processes of collecting secondary data and the development of the questionnaires.

Section 4.4 details the execution of the survey approach and discusses the survey questionnaires as well as the ways in which the researcher measured relevant concepts related to the perspectives of neo-classical and institutional economics. This study also involved interviews. Two interview techniques were employed in this study: face-to-face interviews and telephone interviews. This section details the methods used for

collecting the data and for conducting the interviews. It also described and justified the use of the survey research approach for this study, and gave a specific explanation of the interviews in detail. This section also contains an explanation of the sample population of respondents as well as a description of the sample state selection.

In section 4.5, the discussion focuses on the organisation of the questionnaire as an important instrument used for data collection. Section 4.6 presents the phases involved in the fieldwork for the data collection process. Section 4.7 describes the statistical analysis used for data analysis in this study. It also explains the appropriateness of factor analysis as a main analytical technique in this research. Section 4.8 outlines the several assumptions of this study that should be used to guide the interpretation of the results obtained in this study. In Section 4.9 the achievement of the chapter is summarized.

4.2 Research design

This section deals with the research methodology of this study. This study starts by introducing the theoretical aspects of research to establish this study. The next step is to describe the research procedure undertaken in order to achieve the above aim and objectives. Before further discussion on the research methodology, it is useful to outline the definition of research methodology. In relation to this, many authors derived the definition of research methodology, as described below:

For instance, Hart (1998, p.28) defined the research methodology as

“A system of methods and rules to facilitate the collection and analysis of data. It provides the starting point for choosing an approach made of theories, ideas, concepts and definitions of the topic; therefore the basis of a critical activity consisting of making choices about the nature and character of the social world (assumptions). This should not be confused with techniques of research, the application of methodology”.

According to Nachmias and Nachmias (1996, p.13), the research methodology can be defined thus: “Methodology is a system of explicit rules and procedure upon which research is based and against which claims for knowledge are evaluated”.

In relation to this, Johnston (1983, p.4) contends that research methodology may be similarly defined, as follows: “Methodology is a set of rules and procedures that indicate how research and argument are to be conducted within the discipline, that is, how information can be collected and organised”.

From the various definitions of the research methodology, the conclusion can be reached on defining the research methodology, whereby research methodology is a system of rules that comprises the techniques and procedures used for data collection as well as the data analysis, with the aim of revealing the new information in claims for knowledge.

This study adopted a research methodology that can be seen to belong to positivistic philosophies and strategies. With reference to the research philosophy, Bryman (2001) argues that there are two extreme research philosophies: positivism and interpretivism. The two major types of research strategies are quantitative and qualitative. In terms of disciplinary philosophy, Johnston (1983, p.4) argues that any disciplinary philosophy “contains both an epistemology³¹ and an ontology³², a framework which defines what we can know and how we can come to know about it”. Ismail (2005, p.9) notes that “research methodology can be defined on the basis of the link between theory and research, epistemological considerations and ontological considerations”. She further contends that, although demarcation is not always straightforward, and the differences should not be exaggerated, the division of quantitative and qualitative research can be based on these. The quantitative research involves a deductive approach to the relationship between theory and research. In this context, Brayman (2001) contends that a deductive approach is based upon the testing of theories and concepts composed of variables measured and analysed with statistical procedures. The results from the statistical procedures will be used for the prediction and generalisation of the theory (Barnes, 2000; Creswell, 2003). The employment of the deductive approach in quantitative research will emphasise quantification in terms of data collection and

³¹ Epistemology relates to theory of knowledge. It gives answers to fundamental questions such as what we can know and how we can we know it.

³² Ontology is the theory of existence, or what can be known. It relates to what are accepted facts.

analysis of data. Indeed, it places considerable trust in numbers that represent opinions or concepts (Brayman, 2001; Amaratunga *et al.*, 2002).

Following the discussion on quantitative research outlined above, Ismail (2005, 10) argues that “Epistemologically, quantitative research bears the characteristics of positivism³³. Ontologically, it is objectivist; that is, it embodies a view of social reality as an external objective reality”.

Therefore, it is important to stress here that this study is a quantitative study because of the employment of statistical techniques such as factor analysis, which is based on quantified variables as the main method in addressing the research issue of the factors that contribute to the existence of abandoned housing projects.

For the purposes of achieving the objective outlined, the research procedures that have been implemented in this study involved three main stages. These are the theoretical, empirical and analysis stages. The theoretical stage involves a theoretical overview and the literature. This is employed to find evidence to substantiate the need for the research, and it is used for developing the theoretical framework in order to address the research issue. This stage examines two areas: the first is housing development in Malaysia, and the second is consideration of the applicability of neo-classical and institutional economics theories in land and property market analysis.

Chapters 2 and 3 cover the description of the undertaking of this stage and its output. The completion of this stage addresses Objective 1 and Objective 2.

The following stage of the research is empirical³⁴. This stage aims to gather information in order to address the issue of abandoned housing projects from the perspectives of a neo-classical and institutional economics framework. The secondary

³³ “A positivist approach is concerned with objectivity and focuses on facts. It involves the making of empirical generalizations based on empirical findings. As such, this approach is basic to what is widely known as scientific method, and is central to the methodology and philosophy of the natural sciences (Johnston, 1983, 11). Quantitative methods are key features of positivism (Foss and Ellefsen, 2002)”

³⁴ According to Nachmias and Nachmias (1996, 6), if science is to help us understand the real world, it must be empirical; that is, it must rely on perceptions, experiences, and observations.

data have been gleaned from the annual report from the Ministry of Housing and Local Government of Malaysia and Central Bank of Malaysia. The primary data were collected from the survey questionnaires from the developers who managed to complete the housing projects on time, and from the developers who failed to deliver housing within the legal time frame.

For this purpose, the field survey method was used as it is most suitable for this type of study. This is because the survey questionnaire is capable of generating quantitative data, enabling useful generalisations to be made about people's behaviour, attitudes and opinions (Kerlinger, 1986; McCormack and Hill, 1997; Creswell, 2003). In addition, the survey method was employed in this study because of the quantitative approach of the study, as highlighted earlier. The next section will highlight the justification of the employment of survey method for this study.

In addition, interviews were conducted with developers and elite groups in order to gather more information about the issues that were covered in the survey. The next section will discuss further the justification for employing the interview method. The interviewees among elite groups came from the government and private agencies, i.e. Ministry of Housing and Local Government³⁵, Syarikat Perumahan Negara Berhad³⁶, Bankers Associations³⁷ and Non Government Organizations (NGOs) such as the Real Estate and Housing Development Authority (REHDA)³⁸, Home Buyers Association (HBA)³⁹ and Federation of Malaysia Consumer Association (FOMCA)⁴⁰. The next

³⁵ The Ministry of Housing and Local Government (MHLG) is a ministry that is fully responsible for the housing industry in Malaysia.

³⁶ Syarikat Perumahan Negara Berhad (SPNB) is a Government Link Company (GLC) that has been given responsibility by the government to revive the abandoned housing projects in Malaysia.

³⁷ Bankers or financial institutions play an important role in providing end-financing for house buyers and bridging loans to the housing developers.

³⁸ The Real Estate and Housing Development Authority (REHDA) is a non government organization that is responsible to the private housing developers in Malaysia, and all developers have to register with REHDA. In addition, this agency plays a role as a mediator between the government and the private housing developers.

³⁹ The Home Buyers Association is a non government organization in the housing industry in Malaysia. This is a non profit organization and it plays a role in conveying all the complaints to the government that are related to the housing development in Malaysia, including abandoned projects.

session contains a precise description of the interviews method. The following session will describe or justify on the use of interviews with elite groups.

The final stage of evaluation involves the data analysis and policy recommendation. The data were analyzed using SPSS with the types of statistical tests available in order to identify the role played by the institutions, and also the role played by market information in housing development, and to establish whether there is any relation between these and housing abandonment. The causes of abandoned housing projects will be determined through the factor analysis procedures that finally contribute to the factors that could be considered as factors that cause the existence of housing abandonment. The next section will describe or justify the use of factor analysis as the principal quantitative technique in this study. The findings are then followed by an outline of the policy recommendations which have been formulated to avoid the existence of abandoned housing projects. The output of this stage is included in Chapters 5, 6 and 7. The completion of this stage addresses Objectives 3, 4, 5 and 6.

4.3 Data collection method

Before further discussion on the method of data collection, it is useful to outline the types of data collected in this study. Data for this study were collected in Malaysia between May and July 2006. There are two main sources of the data collected in this study: primary data and secondary data.

4.3.1 Secondary Data

Secondary data refer to data that already exist in different forms. For example, secondary data can be found in books and documents such as government documents, official reports, annual reports, economic reports and national statistics.

⁴⁰ Federation of Malaysia Consumer Association (FOMCA) is a non profit organization. It plays a role of gathering all issues and problems that are related to the consumer, including the issues of housing such as housing abandonment.

For the purpose of this study, secondary data have been gathered from both published and unpublished sources. The secondary data collected were used to analyse the existence of abandoned housing projects from various perspectives i.e. the definition, statistics on abandoned projects, actions which have been taken by the government in order to avoid the existence of abandoned projects and to update the current situation of the problems. In addition, the information gathered from the survey questionnaire and interviews was also used to help the researcher understand more about the phenomenon of abandoned housing projects in Malaysia. Instead of gathering secondary data on the abandoned housing projects, the secondary data also provided information about the economics perspective and its relation to housing development.

4.3.2 Primary data

In addition to the collection of secondary data for the purposes of this study, primary data were also collected. Primary data are also known as original data, or data collected at source. Research using such data is known as primary research. For instance, the primary research data, which include survey data, were gleaned for the purposes of this study in an uncontrolled scenario by means of a questionnaire.

The following section contains further discussion on the survey method used in this study. It also describes the advantages and disadvantages of the survey method employed to study the perceptions of private housing developers towards the causes of housing abandonment in Malaysia, based on the perspectives of neo-classical and institutional economics.

4.4 Survey Research Approach

The survey research method was employed in this research to investigate developer behaviour and developer relationships with the various institutions that govern housing provision that might be a contributory factor to the abandoned projects. Specifically, the perceptions of developers about how institutions affect housing development in Malaysia and the role played by market information and interrelationships in project abandonment. It was also used to investigate perceptions about the various factors that might cause the existence of abandoned housing

projects. The respondents in this study were a sample of the population of private housing developers in selected states in the country. The next section will contain further discussion on state selection. Furthermore, the views, opinions and perceptions of private housing developers' toward the issues of housing abandonment in general were considered to be more accurately captured in a survey rather than by other methods. Kerlinger (1986) contends that the sample survey can also identify the interrelations among sociological and psychological variables, such as the opinions and attitudes of the respondents. However, of course the survey research method has its own advantages and disadvantages if it is compared with other methods. In terms of the advantages of the survey method, several authors, such as Kerlinger (1986), Babbie (1990), and McCormack and Hill (1997), have discussed this matter. Tayib (1998) summarises the work done by Kerlinger (1986), Babbie (1990), and McCormack and Hill (1997) on the advantages of the survey method. Some of these advantages are listed below:

1. The scope and coverage are wider. More information can be obtained, compared with other methods. This approach seems to be versatile and can be applied to almost types of research, e.g. market research, political research, psychological and social research.
2. It is useful for finding out about large populations, and it is considered to be a cost-effective approach.
3. In terms of the administration of the fieldwork, the survey method can be administered in different ways, allowing geographically scattered respondents to answer the same questions.
4. It can be constrained in scope to meet budgetary constraints related with the research. Nevertheless, it would not necessarily jeopardise the value of the findings

Tayib (1998) also concluded the work done by Kerlinger (1986), Babbie (1990), and McCormack and Hill (1997), on the disadvantages of the survey method. Some of these disadvantages are highlighted below:

1. The information gathered from the survey does not penetrate very deeply below the surface. In fact, the information obtained also depends on the

number of samples selected from the total population. In other words, if the sample size is reasonably large; more information can be gathered that would allow the researcher to go probe more deeply into the matter.

2. This approach requires large investments of time, energy and money. It can be time consuming before a certain percentage of the respondents can be covered in the survey.
3. There are many ways in which error can creep into the process and undermine the usefulness of the survey method; for example the respondents might not be able to answer questions, either because the questions are unclear or they do not know the answers.

4.4.1 Justification of the Employment the Survey Approach

Even though the survey method has certain disadvantages, this study uses the survey method as it appears to be the most appropriate and suitable method, owing to the quite large sample population of private housing developers comprising successful developers and failure developers. There are about 858 respondents within the sample study area. For the purposes of this study, failure developers are defined as “developers who had failed to complete housing developments, either one off or more, and the government had to intervene for reviving purposes. The particular projects are still abandoned⁴¹ and the government is trying to revive those projects through Syarikat Perumahan Negara Berhad. In addition, the Ministry of Housing and Local Government have categorised these developers as not being capable of continuing the project” (Source: adopted by the definition of abandoned housing projects by the Ministry of Housing and Local Government).

In addition to the survey questionnaire for collecting data, the interviews were conducted in order to gather more information covered in the survey questionnaire. The next section will highlight the reason for conducting interview sessions on top of distributing survey to respondents. At this stage, it is fair to conclude that the

⁴¹ The projects that are still abandoned, according to this definition, do not include the projects which have no chance of being revived. The reason for those projects having no chance of being revived is discussed in Chapter 2.

employment of the surveys research method was an appropriate approach in this study, for the following reasons:-

1. In this study, a large amount of information had to be deduced from the large sample population of the private housing developers within the sample study areas.
2. Statistical tools are necessary to describe the following:
 - variability of the respondents' perceptions of the role played by institutions that affect housing development
 - variability of the respondent's perceptions of the role played by market information and interrelationship to project abandonment
 - variability of the respondent's perceptions of the causes of abandoned housing projects.

In the next section, the researcher will discuss further the technique of the survey method used in this study.

4.4.2 The Technique of Data Collection Using the Survey Method

Data and/or information in this study have been gleaned in different modes by the survey research methods. There are many ways of gathering research data using the survey research methods, such as personal interview, mail questionnaire, panel or telephone (Kerlinger, 1986; Miller, 1991; Nachmias and Nachmias, 1992). In relation to this, Kerlinger (1986) and Miller (1991) suggested that for social scientific survey research, the employment of the personal interview far overshadows the other methods. It is the most powerful and useful tool. Generally, there are direct and indirect methods of gathering information and data from the respondents. In this case, the direct methods are interviews and questionnaires. However, this mode of data collection also has its own strengths and weaknesses (Kellinger, 1986; Babbie, 1990; McCormack and Hill, 1997). If we look at the strengths, we can see that most of the information required can be achieved directly by this method. In contrast, the respondents might be reluctant to assist, and not readily and directly give information

that is necessary for the research objectives. This risk may be reduced if the researcher is highly skilled in conducting interviews.

Miller (1991) gave the most positive ranking to the personal interview against mailed questionnaire and telephone survey methods. This is because the personal interview provides the highest percentage of return, highest accuracy of information, largest sample of coverage, completeness, and generally reliability and validity. Nevertheless, the personal interview technique had a negative impact in terms of cost, and was time consuming.

In terms of the mail questionnaire, Nachmias and Nachmias (1992) highlighted several advantages⁴², viz. low cost, reduction in bias error, greater anonymity, considered answers and consultations and accessibility where this technique allows wide geographic contact at minimal cost. Nevertheless, they also argue that the use of the mail questionnaire has its own disadvantages, i.e. requiring simple questions, no opportunity for probing⁴³, no control over who completes the questionnaire, and low response rate. In this context, Bailey (1982) contends that follow-up letters and telephone calls can reasonably produce an increase in the response rate of mail questionnaires.

It is important to stress here that, following the employment of the mail questionnaire (survey method), the response rates were very encouraging: 555 out of 858 (64.68%) of the questionnaires were returned. The reason for this is that the researcher followed up the questionnaires with telephone calls and letters as suggested by Bailey (1982). In addition, colleagues in local authorities who are attached to the Planning Department and Building Department assisted the researcher with the distribution of

⁴² Refer to Nachmias and Nachmias, (1992) for further information on the advantages of the mail questionnaire.

⁴³ According to Nachmias and Nachmias, (1992, p.230) probing is defined as “*the technique used by the interviewer to stimulate discussion and obtain more information. A question has been asked and answer given. For any number of reasons, the answer may be inadequate and require the interviewer to seek more information to meet the survey objectives. Probing is the act of getting this additional information*”.

questionnaires to developers in their territory. However, only 103 of the total 555 (18.6%) questionnaires were returned with the assistance of colleagues.

At this stage, one might perceive that there is potential for a sample bias to be introduced, because developers feel that not responding would be bad for their relationship with local government. Therefore, it is important for the researcher to outline the assumption for this study that, in their responses, the respondents expressed their true and candid perceptions of their background, experience in housing development and their perception of the factors that might contribute to the existence of abandoned housing projects. This is because even although the researcher's colleagues in the local authority helped encourage the return of the questionnaire, no force mechanism was used on the developers by them; indeed, only 18.6% of the returned questionnaires came as a result of the assistance of colleagues, as highlighted earlier. In relation to this, the researcher followed up with telephone calls to the developers in order to encourage improve the response rate.

Based on the objectives of this research and the theoretical framework formed, two integrated ways of collecting data were employed: mail questionnaires and interviews. Interviews were conducted using two approaches: personal interview (face-to-face) and telephone interview for those respondents unwilling or unable to have a face-to-face interview. With reference to interviews, Nachmias and Nachmias (1992) argue that there are several advantages of this approach, i.e. flexibility, control of the interview situation, high response rate and collection of supplementary information. However, they also contend that there are several disadvantages in using this technique, i.e. higher cost, interview bias and lack of anonymity.

At this stage, it is important to stress that the interviews were based on semi-structured interviews, and were conducted with only those respondents who were willing to participate. Those respondents who were willing to be involved in the interview session had to tick the boxes provided in the questionnaire. In this case, they could choose whether to have a face-to-face interview or telephone interview. These interviews were intended to give more in-depth information about the issues identified in the survey questionnaires. Nachmias and Nachmias (1992) contend that the telephone interview provides advantages in terms of cost and speed, and also results in

a higher response rate than the personal interview. However, they suggested that this technique has its own disadvantages, such as the 'broken-off' point in which respondents terminate the interview before it is completed. Besides that, this technique seems to provide less information and the interviewers cannot describe the respondents' characteristics or their environment in detail.

In addition, Nachmias and Nachmias (1992, p.233) argue that "Surveys in the future may be conducted totally by the telephone; others may combine telephone and personal interviews so that the two can complement each other and provide greater precision and increased response rate". Nevertheless, there remains the undisputed advantage that information collected through the interview approach is more reliable than other data-collecting methods, such as the mail questionnaire (Oppenheim, 1983). Although some interviews might produce a systematic bias, others make random errors which cancel out in the big interview samples. Because of its richness of information, the interview method is highly recommended (Kerlinger, 1986; Oppenheim, 1983, Miller, 1991; Nachmias and Nachmias, 1992).

Following the discussion above, one may conclude that most of the techniques have their own advantages and disadvantages. However, for the purpose of this study, the combination of two types of survey method, such as mail questionnaire and semi-structured interviews, were the most appropriate methods for data collection, for the same reasons and justification discussed earlier in section 4.4.

4.4.3 Follow-up interviews

As highlighted earlier, in addition to the survey questionnaire for collecting data, semi-structured interviews were conducted to collect more information covered in the survey questionnaire. Before further discussion on the follow-up interviews, it is important to inform who was involved in these sessions, how and why they were selected, and how representative they are. Also, most important, how are these interviews used to compensate for the limits of the quantitative technique and the systemic weakness associated with the nature of respondents? In relation to interviews, two types of interviews were used: face-to-face interviews and telephone interviews.

Since the questions highlighted above pertain to the employment of follow-up interviews, it is important to justify the use of these questions. In this context, the follow-up interviews were carried out subject to the willingness of the respondents. The researcher identified the respondents who were willing to participate in follow-up interviews through the returned survey mail questionnaires. They could also select the interview techniques: either face-to-face or telephone interviews. These mean that those who are involved in follow-up interviews are normally those who have already participate in the mail questionnaire. In other words, they are the same respondents. In addition, the interviews were conducted to obtain further information that had been covered in the questionnaire, especially in terms of the causes of abandoned housing projects. If the respondents agreed to participate in the follow-up study, the researcher contacted them personally to arrange a date for interview.

This mechanism was adopted by the researcher in order to control the sample bias; this was achieved by the use of follow-up interviews with those who were willing to participate in this session. In doing so, the researcher could detect whether their answers in the questionnaire were contradictory to the responses in the semi-structured interviews. In fact, the in-depth information gathered via the follow-up interviews was used to compensate for the limits of the quantitative technique and the systemic weakness associated with the nature of respondents. During the interview sessions, it was important that the respondents gave honest answers because if not, they would be contradicting the answers given through the mail questionnaire.

The semi-structured interviews were conducted with 192 respondents, comprising 115 successful respondents and 77 respondents who were categorised as ‘failure developers’. 192 respondents or 35% of 555 respondents who were involved in this study is considered representative owing to the nature of the respondents. In addition, of the 192 respondents who were willing to participate in semi-structured interviews, only 27 (14.06%) responses came from the respondents through the assistance of colleagues. This means that respondents were not forced to participate in this study, and it was their decision to take part by returning the questionnaire or participating in the semi-structured interview or both. For these reasons, sample bias is not a matter of concern in this study. It is vital to note here that the sample population of developers

in the sample study area comprises both successful developers and those who had failed to complete one or more projects. By doing so, this could control the sample bias where the results have been gathered from both categories of developers. The definition of failure developers has been clearly defined in chapter four, section 4.4.

The semi-structured interviews were conducted face to face with 117 respondents who are categorized as successful developers, while, the telephone interviews were conducted with 75 respondents who are labelled as failure developers. The interview sessions each took approximately 30 to 45 minutes. In order to control the sample bias during the semi-structured interviews, the researcher in the first instance built up a rapport with the respondent by informing him about the result from the questionnaire. Then the researcher explored and focused on the specific issues (Naoum, 2006). In addition, all of the respondents have been involved in housing development, and this type of research has provided an opportunity to reveal information on this issue, based on their experience. The advantages and disadvantages of telephone interviewing were discussed earlier in section 4.4.2. The interviews with developers were designed as a set of questions. Details of this interview are presented in Appendix 3b. The interview sessions were conducted informally through semi-structured interviews. The interview schedule was designed based on the semi-structured interview. This interview schedule dealt with the questions on the causes of abandoned housing projects. It was divided thematically: the seriousness of abandoned housing projects in respect of national house building, whether the financial factor contributes to the abandoned projects, whether the restrictive rules and regulations in housing developments contribute to housing abandonment, the role of market information and its relation to housing abandonment, the remedial policies of the government, and finally participant opinion on how to avoid the existence of abandoned housing projects. The interviews took approximately 30 to 45 minutes for both face-to-face and telephone interviews, as emphasized earlier.

Although the interviews were conducted with the developers, the interviews were also conducted with an elite group. The purpose of undertaking this interview was to counter-check the results from the survey questionnaires and semi-structured interviews conducted with the developers. It is important to reveal who the elite groups interviewees in this study are and how they were selected. The elite groups

came from the government and private agencies. For instance, the Ministry of Housing and Local Government (MHLG) was represented by the Chief of Assistant Director; Syarikat Perumahan Negara Berhad (SPNB) was represented by the Senior Manager. Both agencies are government agencies. The reason for the selection these two agencies is their significant involvement in the housing industry. For instance, MHLG is a ministry that is fully responsible for the housing industry in Malaysia and for issuing licences to developers. In fact, this ministry is also responsible for enforcing and monitoring housing abandonment, while, the SPNB is an agency that has been given responsibility by the government for reviving the programme of abandoned projects.

As for the private agencies, four agencies have been selected for this study. There is the Association of Banks in Malaysia that is represented by the Senior Manager of Rules and Compliance Department. This representative is well informed about the rules and regulations imposed by financial institutions in terms of end-financing and bridging loans provided to homebuyers and developers. The Real Estate and Housing Development Authority (REHDA), which is an organization responsible for the developers in Malaysia, was represented by their Vice-President. The two other private agencies are the Home Buyers Association (HBA) and Federation of Malaysia Consumer Association (FOMCA). These two agencies were represented by their President and Vice-President respectively. Both agencies are involved in dealing with the complaints and reports lodged by the homebuyers that are related to property and housing developments in Malaysia. Their duties were to bring those matters to the attention of the government via discussion, publications and seminars. In relation to this, one can conclude that the selection of elite groups is appropriate because of their scope of work and experience related to the housing industry in Malaysia.

Owing to the reputation and the capabilities of the representatives of elite groups, the results obtained are very important for this research because the researcher could compare the answers from developers and other agencies that are directly involved in the housing industry in Malaysia, specifically in terms of the issue of housing abandonment.

Following the interviews with the elite groups, a set of interview questions has been designed. Details of this interview are presented in Appendix 3c. These interviews were intended to provide more in-depth information about the issues of abandoned housing projects that were covered in the survey questionnaire. Interviews were conducted in a semi-structured format. For the purposes of this interview, the researcher personally called the interviewees or their personal assistants ahead of time to make appointments. The interviews lasted from 30 to 45 minutes. The information gathered from the elite groups' interviews was used to support the argument on the causes of abandoned housing projects. In addition, these elite groups have wide experience in the housing industry.

It is also important to note that interviews with the elite group were carried out after analysing data from the questionnaire. This means that the researcher was dependent on the earlier responses from the developers, before analysing the data to determine the major issues revealed from the questionnaires. By doing this, in-depth information from the elite groups was gathered during the interview sessions. In general, the researcher was able to create a good environment and elicit comprehensive responses from the elite group during the interview sessions. During the interview sessions, whether with the elite group or with the private developers, a tape recorder was used when possible. Overall, although the above procedures were time consuming and also costly, the response rate was considered to be quite high, with 555 respondents or 64.7% of 858 questionnaires posted.

4.4.4 Sample size population

For the purpose of this study, the sample population of private housing developers was selected as the main respondents within the sample study areas. Therefore, it is useful at this stage to define the sample population precisely. According to Rossi *et al.* (1983, 23), population can be defined 'as a set of elements; an element is defined as the basic unit that comprises the population'. This means that 'population' refers to those people who have the characteristics of interest, and in this research, it refers to the private housing developers in the sample study areas, as highlighted earlier. These developers were involved in housing development within the same framework in

terms of legal procedures, regulations, planning approval and so on. In other words, all of them are governed by the same housing systems in Malaysia.

Another element is that these developers are licensed by the Ministry of Housing and Local Government to carry out the housing projects. These developers are also registered with the Real Estate and Housing Development Association⁴⁴ (Othman, 1999). A case study approach is not suitable for gathering the data because of the large number of private developers. Furthermore, this research is quantitative. Thus, a survey method using mail survey questionnaires was used to glean data; these were supported with the semi-structured interviews with those developers willing to participate in interviews. However, it is impossible, given the constraints of cost and time, to gather data for all 13 states of Malaysia. Therefore, for data-gathering purposes, sample study areas were chosen within six states, namely Perlis, Kedah, Penang, Perak, Kuala Lumpur and Selangor. Figure 4.1 shows the six states.

⁴⁴ REHDA was previously known as the Housing Developers Association.

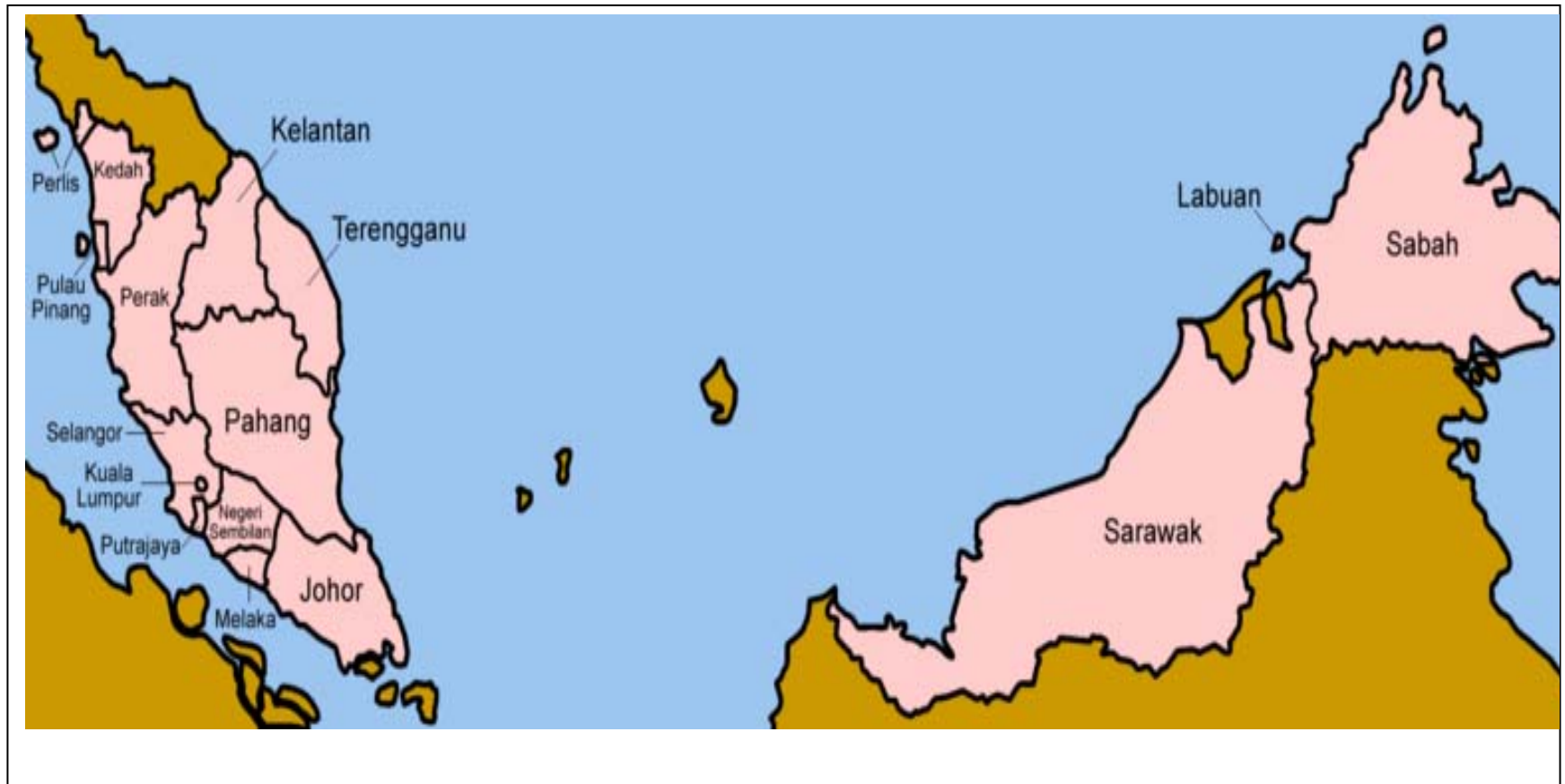


Figure 4.1: The selection of sample states

Source: http://en.wikipedia.org/wiki/Image:Malaysia_states_named

The data in this research were gathered from a sample of the population of private developers in the sample study areas. The main objective of selecting a sample of six states⁴⁵ was to allow data collection from the private developers who represent a sample of the population of private developers in Malaysia. The main characteristics for the selection of sample states were that the population of private housing developers in the sample study areas were representative, and the information obtained could be generalised. The total number of housing developers in Malaysia was 1029. The sample population selected in the sample study areas numbered 858.

4.5 Organisation of the Questionnaire

In order to obtain the necessary data to answer the research questions outlined earlier, a set of questionnaires was carefully designed. The questionnaire was designed for the respondents or private housing developers in the sample study areas. All information pertaining to respondents' perceptions toward the institutions that affect housing development, as well as their perceptions towards the role played by market information and interrelationship to project abandonment, was captured by means of the questionnaire. Furthermore, the information of the respondents regarding their perceptions towards the causes of abandoned housing projects in Malaysia, based on the neo-classical and institutional perspectives, i.e. the formal and informal part of institutionalism, was also gathered through the questionnaire. It is important to stress here that this questionnaire was newly constructed for the purposes of this study, based on the theoretical framework of neo-classical and institutional perspectives in order to achieve the objectives outlined earlier. The researcher provided a cover letter explaining to the respondents the purpose and the nature of the research. A brief description of the application of neo-classical and the institutional economics theories in the study of the causes of abandoned housing projects was provided.

⁴⁵ The sample states selected were the following six states: Perlis, Kedah, Penang, Perak, Kuala Lumpur and Selangor. During this three –month period the researcher travelled from his main base, i.e Universiti Utara Malaysia (UUM) to the States of Perlis, Kedah, Penang, Perak, Kuala Lumpur and Selangor..

The cover letter also contained an assurance that all responses would be kept in strict confidence, because the questionnaires were administered personally by the researcher. It is important to ensure that the respondents have more confidence in order to elicit their unbiased responses.

The questionnaire was divided into five sections: A, B, C, D and E. Section A was further broken down into two subsections: Sections A(a) and A(b). This section contained questions about the respondent's demographic background. The questions asked in Section A(a) were about the firms, such as date of establishment, number of branches, number of employees, firm ownership, average annual turnover and completed housing projects, either landed or high rise buildings. According to Othman (1999), firm size is very important to identify because it has a strong influence on the modes of operation and the structure of the organisation. She further contends that the classification of size of firms in Malaysia can be based on the average annual turnover, the number of employees and firm ownership.

Section A(b) contained questions concerning the developers' experience in housing development. Specifically, the questions asked in this section were about the respondent's experience in dealing with the time taken for completing housing projects and the problems of completing housing projects within a specific timeframe⁴⁶. The questions also asked about the respondent's experience pertaining to the factor that might be related to a delay in completing housing projects within a specific time period, as stated in the Sale and Purchase Agreement between the developers and house buyers. The next part of this section included questions regarding the importance of selling a percentage of new housing developments and the minimum selling percentage required before starting construction. The developers were asked whether they had abandoned any projects; they were also asked for their opinions on the effect of housing abandonment on the house building industry. Finally, the last part of Section A(b) contained questions about the sale percentage of housing units. This question was designed to identify the respondents' perception concerning whether the sale percentage was related to the housing abandonment.

⁴⁶ According to the Sales and Purchase Agreement, the developers are required to complete landed property within 2 years, and high-rise property within 3 years

Some of the questions asked in Section A(a) were taken from other studies, such as that of Othman (1999). Some of the information obtained in Section A was useful for understanding the issues of abandoned housing projects in Malaysia, which is the second objective of this study. Details of this questionnaire are presented in Appendix 3.

Section B was divided into three subsections. The objective of Section B was to gather information about the respondents' perceptions towards the institutions affecting housing development in Malaysia. It is vital to stress here that all of the questions in this section were designed to determine the perceptions of the respondents, whether they perceived that the formal written rules or institutions related to land development, financial institution and government housing policy were barrier institutions affecting housing development in Malaysia. The information obtained was used to achieve the third objective of this study, as outlined earlier. In addition, all the questions in this section were used directly in testing the hypotheses developed in Chapter three.

Section B (a) contained questions pertaining to the respondents' perceptions towards the formal written rules or institutions that govern land development affecting the development of the housing sector. The Likert scale was extensively used in the various sections. The scale employed was from "1": Strongly not serious, "2": Not serious, "3": Uncertain, "4": Serious, and "5": "Very serious". However, some sections used the scale from "1": Strongly disagree, "2": Disagree, "3": Uncertain, "4": Agree, and "5": "Strongly agree". Since the three main sections of the questionnaire contained several items on the respondents' perceptions on the institutions that affect housing development and the role played by market information and the causes of abandoned housing projects, the Likert scale is the most appropriate method for this study (Alreck and Settle, 1995; Miller, 1991; Sekaran, 2003). Miller (1991) argues that the Likert type scale is most reliable when it comes to a rough ordering of people with regard to a particular attitude or attitude complex. The score also includes a measure of intensity, as expressed in each statement.

With reference to the discussion of the questionnaire, in Section B (a), six questions were asked. Questions 17 to 22 were based on a five-point Likert scale which had the

following options, ranked 1 to 5 respectively: “Strongly not serious,” “Not serious,” “Uncertain,” “Serious,” and “Very serious”.

Respondents were asked to circle the response that reflected their expectations. These questions dealt with the respondents’ perceptions of the formal written rules or institutions that govern land development as a barrier or as a negative institutional influence affecting housing development.

In Section B (b), the questions asked pertained to the developers’ perceptions towards the formal written rules governing the financial institutions. Those questions were designed to obtain information concerning whether the respondents perceived the formal written rules or institutions that are related to financial institutions as a barrier affecting housing development. In this subsection, Questions 23 to 29 were based on a five-point Likert scale which had the following options, ranked 1 to 5, respectively: “Strongly not serious,” “Not serious,” “Uncertain,” “Serious,” “Strongly not serious”. This question concentrated on the problems of applying for bridging loans from banking institutions, and was also intended to determine whether the formal written rules or institutions relating to financial institutions affect housing development. As highlighted earlier in section 2.3.1, developers require 30% for a bridging loan to initiate the housing projects or to complete the projects. Respondents were asked to circle the choice that best reflected their perceptions and expectations.

Four questions in Section B (c) elicited the respondents’ perception towards government housing policy in housing development. All of these questions were close-ended, and questions 30 to 33 were based on the five-point Likert scale from the scale of 1 to 5 respectively: “Strongly not serious,” “Not serious,” “Uncertain,” “Serious,” “Strongly not serious”. The four questions asked were designed to gather information about the respondents’ perceptions regarding whether they perceived the government housing policy introduced as a negative institutional influence affecting housing development or not.

The third section in the questionnaire was Section C. This section dealt with respondents’ perceptions towards the role played by market information in housing development. Five questions were designed in this section to assess the respondents’

perceptions of the role played by market information in terms of responding to the market signals affecting housing development.

All of these questions were closed-ended and were based on the five-point Likert scale. The concept of the importance of market information was based on the model of non-residential housing, introduced by Keogh (1994). In relation to the market information concept, the researcher introduced several questions, and these items were associated with housing development. Those questions pertaining to the market information were designed to obtain information concerning whether the respondents perceived the role played by market information in terms of the market signals affecting housing development. The information obtained from this section also indicated the failure of developers to respond appropriately to the market signals. In relation to this, Adams *et al.* (2005) argue that an important element in the recently devised neo-classical economics theory is the role played by market information in the land and property market.

Section D contained questions concerning the cause(s) of abandoned housing projects. All of the questions in this section were based on the perspectives of neo-classical and institutional economics theories. In this section, most of the questions were also closed-ended and based on the five-point Likert scale. The scale was used was “1”: Strongly Disagree, “2”: Disagree, “3”: Uncertain, “4”: Agree, and “5”: “Strongly Agree”. 30 questions or variables pertaining to the causes of abandoned housing projects were designed in the questionnaire. However, after the pilot test, the number of variables or factors that were the causes of abandoned housing projects was reduced to 16 following the pilot study, which determined that there were overlapping questions in this section. Section 4.6.2 contains the discussion on the pilot study which was conducted by the researcher for the purpose of the study.

Finally, the last section, Section E, contained questions concerning the effectiveness of the policy remedies taken by the government in order to prevent the situation of housing projects being abandoned. Questions 55 to 58 were based on a five-point Likert scale which had the following options, ranked 1 to 5, respectively: “Strongly Disagree,” “Disagree,” “Uncertain,” “Agree,” and “Strongly Agree”.

Respondents were asked to circle the response that reflected their expectations. The four questions asked were designed to gather information about the respondents' perceptions regarding whether they perceived the policy remedies taken by the government to be an effective approach for preventing housing abandonment.

4.6 Administration of Fieldwork

The fieldwork for data collection in this study was carried out in Malaysia between May and July 2006. During this three-month period, the researcher travelled from his main base, i.e. Universiti Utara Malaysia (UUM), to the States of Perlis, Kedah, Penang, Perak, Selangor and Kuala Lumpur. The researcher also visited the Division of Local Government of the Ministry of Housing and Local Government in order to collect secondary data. In general, the fieldwork in this study involved a number of phases. These are elaborated in the following sections.

4.6.1 Writing of the Questionnaire

The process of developing and writing the questionnaire took several months to complete. During the process of writing the questionnaire, several references were made to the work of other researchers, i.e. Kerlinger (1973), Miller (1991), Oppenheim (1992), Nachmias and Nachmias (1992) and Sekaran (2003). Input given by the researcher's supervisors and colleagues was very useful and helpful in the process of developing the questionnaire. Several drafts had to be made before finalising the questionnaire for the purpose of this study. The understanding and relevance of the questions in the questionnaire were further tested on 10 developers in Malaysia through the pilot test. The questionnaire was sent by email.

4.6.2 Pilot test

A pilot test was conducted to improve the design of the questionnaire and to ensure that all information associated with the issue was fully covered. The advantage of carrying out the pilot test study was to glean comments, and the pilot test can be considered as a mechanism for identifying any weaknesses and discrepancies in the design of the questionnaire. The questionnaire had been tested by the researcher via

email on ten developers within and outside the sample states. Only 5 out of 10 questionnaires were returned. For the actual study, the researcher employed another person to post all the questionnaires in advance in order to ensure that they could be returned within three months⁴⁷. This is because the researcher was permitted by the Malaysian government (as stated in the agreement between the researcher and the government of Malaysia) to carry out the fieldwork over a maximum period of only three months. Participants in the pilot test were asked to suggest means of improving the questionnaire in order to increase understanding.

The responses were then checked and analysed. The pilot test identified a few weaknesses which required amendment in the questionnaire. Attention to the analysis thus became more focused on the reliability and the validity of the questionnaire. Reliability means freedom from systematic errors. Therefore, the most fundamental test of reliability is replication, that is the ability to obtain the same data values from several measurements made in the same way (Alreck and Settle, 1995; Nachmias and Nachmias, 1992; Sekaran, 2003). In statistical terms, the concept of reliability refers to the degree of accuracy of the estimate of the true score in the population of the object to be measured.

The reliability coefficient used in this study is Cronbach's alpha. Cronbach's alpha is a reliability coefficient that reflects how well the items in a set are positively correlated to one another. Relative to other measures, such as the split-half, Cronbach's coefficient alpha is by far the most popular and superior technique for estimating internal consistency (Sekaran, 2003). Internal consistency, also known as the estimate of homogeneity, is a measure that assesses the degree to which the item used is internally consistent with other items comprising the scale. According to Sekaran (2003), if the coefficient alpha is too low, either the scale has too few items measuring the same construct or there are too few items in the scale. Thus, the term reliability coefficient used in this section refers to the inter-correlation of items within a scale using the coefficient alpha technique.

⁴⁷ All of the questionnaires were posted on 20th April 2006.

After having completed the pilot test, various statistical analyses were undertaken. Attention was focused more on the reliability and the validity of the questionnaire. The various sections were found to be reliable and valid after certain questions were eliminated. Based on Cronbach's alpha, the overall reliability of the scores obtained was 0.7. The various sections of the questionnaire had reliability coefficient scores as follows:

The formal written rules or institutions affecting housing development.....	0.65
The role played market information and interrelationship to project abandonment.....	0.66
The causes of abandoned housing projects.....	0.68

Generally, the reliability coefficients of 0.70 and above are considered more than acceptable for most behavioural science applications (Nunnally, 1978). However, even if the Cronbach's alpha value is between 0.4 and 0.6, which is considered low in practice, these values are nevertheless acceptable for research purposes (Hinkin, 1995). Because of this, the above reliability coefficients of 0.7 indicate that there is an acceptable consistency in the responses given by the respondents, even though the questions asked in the questionnaire had been newly constructed.

Concerning validity, only those who are licensed by the Ministry of Housing and Local Government to undertake the housing developments were selected as respondents. In this study, both categories of developers - whether successful developers or failed developers - within the sample study areas were considered as respondents in order to control bias, because the main respondents were the private housing developers, as discussed in chapter one. Even though no previous research is reported in the methodology section with regard to the moderately reliability of the questionnaire used, which was based on the perspectives of the neo-classical and institutional economics theories, the results of reliability test of the questionnaires used, were moderately acceptable in terms of reliability. In addition, concerning validity, i.e. the ability to measure accurately what is supposed to be measured, several efforts were taken into account during the process of constructing the questionnaire.

The pilot test was also concerned with the terminology used, such as “causes” or “problems” of abandoned housing projects. According to the participants in the pilot study, the use of both words was confusing. Thus, the researcher decided to use the word ‘causes’ rather than ‘problems’ of abandoned housing projects. The comments from the participation in the pilot study also focused on the structure of the questionnaire: too many questions were asked. Therefore, the researcher reduced the number of questions from 71 to 58. This comment was very useful when identifying and culling redundant questions.

Based on the comments from the participants in the pilot study, the researcher revised and amended the questionnaire to achieve the research objectives. The final version was sent by post on 20th April 2006 to all private developers in the sample areas. Successful and failed developers were involved in this study, in order to control bias. Both categories of developers had the opportunity to reveal information through the survey questionnaire, based on their experience, perceptions and attitude towards the issue of housing abandonment. However, the researcher anticipated the problem of getting feedback from the failure group. Follow-up interviews were also conducted with those respondents who indicated that they were willing to take part by ticking the boxes provided in the questionnaire.

4.7 Data analysis

The third stage of the research procedure in this study is concerned with the statistical analysis and the discussion of the result of the analysis. For the purpose of data analysis, standard statistical techniques were used. The data gathered from the survey were analysed using The Statistical Package for the Social Science (SPSS) for Windows. SPSS was used because of the applicability of this package as a tool for quantitative analysis. The following sections describe the statistical analysis techniques employed in this study.

4.7.1 Descriptive data analysis

The descriptive statistics term was used for the purposes of this study instead of the exploratory statistics. The purpose of descriptive analysis is to describe and

summarise data, and the data will be presented in various forms such as tables, charts, graphs and other diagrammatic forms. According to Hussey and Hussey (1997), the employment of descriptive data analysis is useful for discerning the patterns or relationships which are not apparent in raw data. These include the analysis of the results disclosed by the tables of frequency distribution, measuring central tendency as mean scores of variables and measuring dispersion, i.e. standard deviations.

4.7.2 Statistical Procedures

Two statistical procedures were used in this study based on the data obtained from the survey questionnaire, and the use of these two statistical procedures enabled the achievement of the research objectives.

4.7.3 A Two Independent-Sample t-Test

The first procedure, a two independent-sample t-test, was conducted to estimate whether there is a statistically significant difference in the mean between failed and successful developers across the variables of interest. In other words, this procedure was used for investigating significant differences between the mean scores of the above items within a group. This statistical procedure was conducted to test the hypotheses developed, as outlined in chapter three.

4.7.4 Factor Analysis

The second statistical procedure used in this study was factor analysis. The selection of this procedure was based on one of the objectives of the study, i.e. to determine the respondents' perception of the causes of abandoned housing projects. In addition, the data were obtained from the survey questionnaire which had been newly constructed. In relation to this, other analytical techniques, i.e. econometric, regression or binomial regression were not appropriate for this study. It is inappropriate to employ the econometric technique, because this study is not based on secondary data. Furthermore, aim of this thesis is to determine the perception, opinion and attitude of respondents towards the institutions that govern housing provision and the causes of abandoned housing projects. Besides the regression or binomial regression, analytical

techniques were also not suitable, because this study consists of the binary variables of dependent variables (such as successful developer and failure developers).

Following the explanation given above, the employment of factor analysis, in particular the Exploratory Factor Analysis (EFA) technique, was the appropriate statistical procedure for this research. Indeed, the use of the factor analysis based on the EFA technique was appropriate, because this technique is capable of identifying a set of dimensions that are latent in a large set of variables, since the study involved 16 variables, as highlighted earlier. In this case, Gorsuch (1983, p.2) contends that the purpose of factor analysis “is to summarize the interrelationship among variables in a concise but accurate manner as an aid in conceptualization”. Therefore, at this stage it is important to establish the adequacy of the employment of the factor analysis, since it is the main analytical technique used in this study.

Factor analysis is one of the multivariate statistical methods used, and its main purpose is to reduce and summarize data. According to Hair *et al.* (p. 225, 1992), factor analysis “addresses itself to the problem of analyzing the interrelationships among a large number of variables (e.g. test scores, test items, questionnaire responses) and then explain these variables in terms of their common underlying dimensions (factors)”.

Hair *et al.* (1992) also contend that there are four (4) specific functions of factor analysis techniques, as follows:

1. *Identify a set of dimensions that are latent (not easily observed) in a large set of variables; this is referred to as R factor analysis.*
2. *Devise a method of combining or condensing large numbers of people into distinctly different groups within a larger population; this is referred to as Q factor analysis. Also look for other possible combinations of groups and variable types.*
3. *Identify appropriate variables for subsequent regression, correlation, or discriminant analysis from a much larger set of variables (see the section: “How to Select Surrogate Variables for Subsequent Analysis”).*
4. *Create an entirely new set of a smaller number of variables to replace partially or completely the original set of variables for inclusion in subsequent*

regression, correlation, or discriminant analysis (see the section: “How to Use Factor Scores”) (Op. Cit, p.225).

For this research, the first function is related to this study, because the purpose of this study is to identify the factors that contribute to the existence of abandoned housing projects based on 16 observed variables, and the factor analysis technique takes the identification of the underlying dimensions or factors as an end in itself. In other words, the factor analysis techniques will reduce and summarize these large variables and identify the underlying dimensions or factors.

Generally, there are two categories of factor analysis techniques. These are Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). The principle of the employment of the EFA is to identify factors that underlie the variable in question. This can be considered by the patterns in the interrelationships between variables observed in their correlation or covariance matrices. The next step is to group the observed variables together, based on their correlated patterns, into what are the so-called factors. By exercising the EFA, the number of variables will be reduced and the structure of variables will be detected.

According to Stevens (1996, p.38), “The purpose of exploratory factor analysis is to identify the factor structure or model for a set of variables. This often involves determining how many factors exist, as well as the pattern of the factor loadings. EFA is generally considered to be more of a theory-generating than a theory-testing procedure. In contrast, confirmatory factor analysis (CFA) is generally based on a strong theoretical and/or empirical foundation that allows the researcher to specify an extract factor model in advance. This model usually specifies which variables will load on which factors, as well as such things as which factors are correlated. It is more of a theory-testing procedure than is EFA”.

In other words, the EFA is applicable to determine the number of factors, whether the factors are correlated or uncorrelated. In this context, surely correlation can exist between variables within a factor but not between factors. The use of the EFA is appropriate for this research, because the questionnaire distributed has been newly constructed. Indeed, all observed variables for this research were developed based on

the perspectives of neo-classical and institutional economics. Therefore, in respect of this study, the employment of EFA is the right method by which to explore which factors might contribute to the housing abandonment problems in Malaysia. In contrast, CFA (Joreskog and Sorbom, 1993) is used to confirm that the data collected correspond to an existing espoused theory (Fox, 1997).

If one considers the importance of factor analysis, one can see that the purpose of factor analysis is to determine the existence of multicollinearity (Ibrahim and Wee, 2002) which might threaten interpretations made from correlational studies. Hanke and Reitsch (1994) contend that the existence of multicollinearity occurs when the independent variables observed in study or subscales in a measure are too highly correlated among themselves. In this context, Nunnally (1978) argues that correlations of more than 0.8 are considered as the threshold for multicollinearity and are observed from the zero-order correlations among variables.

Factor analysis involves placing all variables in a correlation matrix. From the correlation matrix, the amount of variance in the observed variables accounted for by the factors can be viewed from the communality values. The extracted communality of variable is the percent of variance in a variable described by the extracted factors. This study employed the factor analytic approach of component analysis. This is because component analysis or the principal component is used to summarize most of the original information (variance) in a minimum number of factors (Hair *et al.*, 1992). This is related to the objective of this study, which is to summarize the original information of 16 observed variables to the minimum number of factors for identifying the factors that cause the existence of abandoned housing projects. In relation to this, this study also employed the orthogonal solution⁴⁸ for extracting factors. However, the VARIMAX⁴⁹ method was used for this study, because it has proved to be very successful as an analytic approach to achieving an orthogonal

⁴⁸ In an orthogonal solution, the factors are extracted in such a way that factor axes are maintained at 90 degrees, meaning that each factor is independent of all other factors. Therefore, the correlation between factors is arbitrarily determined to be zero (Hair *et al.*, p.228, 1992).

⁴⁹ Refer to Hair *et al.* (1992) for further explanation of the method of rotation of factors.

rotational technique for the rotating of factors in factor analysis. The next step in the process of factor analysis is to interpret the factors.

At this stage, Kim and Meuller (1978, p.56) noted that:

“It is important to emphasize that factor analysis does not tell the researcher what substantive labels or meaning to attach to the factors. This decision must be made by the researcher. Factor analysis is purely a statistical technique indicating which, and to what degree, variables relate to an underlying and undefined factor. The substantive meaning given to a factor is typically based on the researcher’s careful examination of the high loading variables measure. Put another way, the researcher must ask what these variables have in common”.

According to the statement above, the researcher has to name the factors produced from the employment of exploratory factor analysis in order to achieve the research objectives. In this context, one can see that the exploratory factor analysis is useful when presenting the information of observed scores from the raw data which have been collected in the data matrices form; it then correlates variables and finally identifies the factors underlying the variables.

Another important aspect in factor analysis is the appropriateness of the dataset collected. Two tests can be used to examine the appropriateness of a dataset for factor analysis. According to Kline (1994), Barlett’s test of sphericity and the Kaiser-Meyer-Olkin (KMO) test are both capable of measuring the appropriateness of the dataset. These two tests have their specific functions. Barlett’s test of sphericity can be used to measure the probability of obtaining an identity matrix. This can be looked at from the perspective of the correlation matrix. In terms of probability, in order to consider its significant sphericity for the test, the probability must be less than 0.5.

In contrast, the Kaiser-Meyer-Olkin test has a different function in that it is used to test for sampling adequacy. However, there are different opinions among the authors concerning the value of KMO that can be accepted for the tests of sampling adequacy. In this context, De Vaus (1996) considered that a KMO value exceeding 0.5 is an adequate criterion for proceeding with factor analysis, while Garson (2001) puts the

cut-off slightly higher, at 0.6, as a sufficient criterion for proceeding with factor analysis. Field (2005) categorises the value of KMO for factor analysis into four groups: values between 0.5 and 0.7 are mediocre, values between 0.7 and 0.8 are good, values between 0.8 and 0.9 are excellent and values above 0.9 are superb⁵⁰.

Since the aim of this study is to identify the factors that contribute to the housing abandonment based on 16 observed variables, the employment of the factor analysis techniques will reduce and summarize these large variables and identify the underlying dimensions or factors. Therefore, to achieve the objective of this study on the identification of the causes of abandoned housing projects, the use of the Exploratory Factor Analysis (EFA) is more appropriate and suitable because, by exercising the EFA, the number of variables may be reduced and the structure of variables will be detected. Chapter six will discuss the respondent's perceptions of the causes of abandoned housing projects.

4.8 Assumption of the Study

In order to achieve the research objectives by carrying out the data analysis, it is useful to outline the assumptions that can be used as guidance in interpreting the results obtained in this study. Some of the assumptions in this study are described below:

- 1) The sample population of the private housing developers selected within the sample study areas was designed to be representative of all the private housing developers in Malaysia as well as the number of experienced developers' abandoned projects. It was also assumed that the sample population within the sample study areas in this study was adequate in identifying the perceptions of private housing developers in Malaysia with regard to the institutions affecting housing development, as well the role played by market information and interrelationship to project abandonment, resulting from their experience in housing development. This can be justified based on the firm establishment results. Also, the sample population selected was adequate for identifying the

⁵⁰ See Hutcheson and Sofroniou, 1999, p.224-225.

perceptions of private housing developers in Malaysia pertaining to the causes of housing abandonment

- 2) The survey research approach and interviews used in this study were assumed to be an effective measurement tool for collecting the data needed, based on the justification discussed earlier.
- 3) The responses of the respondents who participated in this study were assumed to be expressions of their true and candid perceptions towards the items included in the questionnaire, which aimed to achieve the research objectives. This can be justified based on the results obtained, as there is no contradiction between the survey results and interviews.

4.9 Conclusion

This chapter has provided an explanation and justification of the research design and the methodology employed for this research. The research used a descriptive research design in data collection and analysis. The purpose is to describe the characteristics of the population regarding the issue of housing abandonment. This includes the description of the sample population's perceptions and opinions on the issues related to institutions that affect housing development, as well as the role played by market information, and also on the causes of abandoned housing projects. For the purpose of the study, the field survey method was used, as it was considered the most appropriate method owing to the nature of this study. This enabled the researcher to gather information from many respondents within a relatively short period of time.

This chapter also provided the explanation and justification of the employment of semi-structured interviews for gathering further information covered in the survey questionnaire. The results obtained from the interviews were used as backup information for discussing the issues of housing abandonment. The chapter also contained a discussion on the selection of the sample population chosen for this study and the selection of the sample study areas. The purpose of the pilot test based on the survey questionnaire was also highlighted.

Another important aspect which has been discussed in this chapter was the employment in this study of factor analysis as the main analytical technique. The researcher has explained this in detail in terms of the concept and theoretical aspects of the factor analysis, and finally established the adequacy of the factor analysis as the main analytical technique employed in this research.

The following chapter will discuss on the data analysis of this study.

CHAPTER 5

DATA ANALYSIS

5.1 Introduction

This chapter, together with Chapter Six, focuses on the analysis of empirical data gathered from the survey questionnaire and the interviews. The results from the semi-structured interviews were used as backup information to support the arguments for the purposes of this research. The analysis of empirical data begins with a descriptive analysis. The results of the analysis are disclosed in different forms, i.e. frequency distribution, measurements of central tendency, and dispersion. In relation to this, Sekaran (2003) argues that the researcher can acquire a ‘feel’ for data by checking the central tendency and dispersion. Then the statistical test procedures are described to answer all the research questions and hypotheses highlighted earlier.

This chapter is divided into six sections. Section 5.2 reveals the general background of the developers who come under this study, giving the date of establishment of firm, the number of branches of respondents, number of employees, firm ownership and turnover and the approximate number of projects completed by the respondents. Section 5.3 illustrates the developers’ experience in housing development. It reveals the developers’ experience in terms of failure to deliver vacant possession of housing units, the effects of sale percentage of dwellings for new housing schemes and finally the respondents’ experience in the percentage of new housing units to be sold before starting construction work. The analysis on the respondent’s perception about the institutions affecting housing development in Malaysia is discussed in Section 5.4. This section indicates how the respondents perceive the institutions or formal written rules with respect to financial institutions, land development and the housing policy as a barrier that affect housing development. Section 5.5 contains a discussion on the respondents’ perception of the role played by the market signals in the housing building industry. Finally, Section 5.6 indicates the importance of institutions or formal written rules that affect housing development, as well as the importance of housing market signals in the housing industry in Malaysia.

5.2 Data Analysis

The Statistical Package for Social Science (SPSS) for Windows software was used because of its appropriateness to the analysis needed in this research. Moreover, this research involved a large sample of 555 respondents, and SPSS offered the most suitable tool for quantitative analysis, as required for this research. The quantitative analysis comprises the following four main areas:

1. The background information of the respondents, which then provides the context of the research.
2. The respondents' experience in housing development
3. The respondents' perceptions about the role played by the institutions in the housing development
4. The respondents' perceptions about the interrelationship between market and project abandonment.

As described earlier, the respondents comprise the developers in the sample study area: Perlis, Kedah, Pulau Pinang, Perak, Kuala Lumpur and Selangor. For the purposes of analysis, details of the 58 questions are provided in Appendix 3. However, as mentioned earlier, 16 questions were designed for determining the causes of abandoned housing projects, as shown in section D of the questionnaires. Besides naming the variables, these data are given values accordingly.

5.2.1 *The Background of the Respondents*

The sample population of survey questionnaires involved 858 developers in the sample study area. These were developers that had been approved for a housing licence by the Ministry of Housing and Local Government for developing housing projects. The respondents comprise 733 successful developers and 125 failure developers. Table 5.1 provides details of the response rate of the survey questionnaires.

It is important to note here that the list of successful developers was based on the REHDA Directory 2004/2005⁵¹, and the list of failure developers was issued by the Ministry of Housing and Local Government.

Table 5.1: Response rate of the survey questionnaires

Category of Respondents	No. of Questionnaires Sent Out	No. of Questionnaires Returned
Successful Developers	733	478 (65.2%)
Failure Developers	125	77 (61.6%)
Total	858	555 (64.7%)

Source: The researcher's fieldwork (2006)

From table 5.1 above, it may be seen that 555 or 64.7% respondents returned the questionnaire out of the total population of 858 developers in the sample study area. There were 478 (65.2%) respondents who come under the category of successful developers and 77 (61.6%) respondents from failure developers. The response rate was quite encouraging and useful for data analysis, especially for quantitative analysis with the large sample response. Normally, survey results are between 20 and 30 per cent (Moser and Kalton, 1971). Instead of the effort of the researcher with follow-up telephone calls and letters as highlighted earlier, the assistance of colleagues in several local authorities resulted in achieving quite a good response rate. The researcher took necessary follow-up action by telephoning another 303 respondents who had not returned the questionnaires. The main reasons for not completing the questionnaires included: "busy, so no time to look at the questionnaire", "too big a workload", and "the company is not interested in participating". Generally, the information revealed about the respondents' background provides an insight into the structure of the housing development industry in Malaysia.

⁵¹ The Real Estate and Housing Development Association of Malaysia is the principal association which controls all developers in Malaysia.

5.2.2 *Date of Establishment of Firm*

The information of the dates of establishment of the developers' firms reveals the involvement of the respondents in the housing industry in Malaysia. The results demonstrate in other ways the experience of private developers in the housing industry, and they also reveal the pattern of development in terms of the age of the firm in the housing industry.

The findings revealed in table 5.2 (p.167) show the date of establishment of the respondents' firms that come under this study. In addition, table 5.2 also shows the age of developers in terms of the successful developers and failure developers. The result shown in table 5.2 created four categories of the date of developers' establishment in Malaysia: 5-10 years, 11-15 years, 16-20 years and more than 20 years. 244 or 44% of respondents firms that come under the study had been established between 5 and 10 years. Approximately 311 or 56% of respondents' firms that come under the study had been established for more than 11 years. Specifically, about 158 or 28.5% out of 311 respondents that come under this study had been established for a period lasting between 11 and 15 years. Approximately 81 or 14.5% out of 311 of respondents' firms had been established for more than 20 years. In terms of successful developers, 218 respondents (89.34%) out of 244 had been established for a period of between 5 and 10 years. Meanwhile, about 26 respondents (10.64%) out of 244 or who come under the category of failure developers had been established for a period of 5 to 10 years. In relation to the age of developers, approximately 260 respondents (84%) out of 311 successful developers had been established for more than 11 years in the housing industry. About 51 respondents (16%) out of 311, who were categorised as failure developers, had been established for more than 11 years in the housing industry. From the findings from the survey, it can be concluded that the majority of the developers under study come from firms that had been established for more than 11 years in the housing industry.

In relation to the date of establishment of developers' firms, Abdul Aziz and Yi (2006, p.1), in their research on the analysis of competitiveness of housing developers in Malaysia, found that "The youngest firm among the participating companies was established in 2000 whereas the oldest was established in the 1940s; their full-time

employees ranged from none to over 200, and turnover for 2003 was from less than RM 1 million to RM 600 million”. This study was conducted to identify the resources required by the developers’ firms in order for them to be competitive in the speculative housing development sector in Malaysia. In terms of methodology, this study was also based on a sample population; the questionnaires were sent to developers throughout Malaysia (1,677 questionnaires in total). Unfortunately, only 40 questionnaires were returned. Thus, a generalisation was made, based on the results from 40 respondents in the sample population. Othman (1999), from the findings from his research done into the effect of planning controls on the developers, created four categories of the date of developers’ establishment in Malaysia: less than 2 years, 2-5 years, 6-10 years and more than 10 years. This research was based on case studies in Kuala Lumpur and Johor Baharu. In terms of methodology, the survey questionnaire method was applied, and approximately 140 questionnaires were sent to developers within the case study area and 53 questionnaires were returned by respondents.

Table 5.2: Cross tabulation between age of successful developers and failure developers

		The age of successful developers and failure developers in house building industry				Total
Age Respondent		5-10 years	11-15 years	16-20 years	> 20 years	
Successful developers		218 (45.6%)	120 (25.1%)	65 (13.6%)	75 (15.7%)	478 (86.1%)
Failure developers		26 (33.8%)	38 (49.4%)	7 (9.0%)	6 (7.8%)	77 (13.9%)
Total		244 (44.0%)	158 (28.5%)	72 (13.0%)	81 (14.5%)	555 (100%)

Source: The researcher's fieldwork (2006)

5.2.3 The Number of Branches of Respondents

Along with the discussion of the date of establishment of firm, the result also revealed the number of branches of respondents who are involved in this study. Figure 5.1 shows the details of the number of branches of respondents.

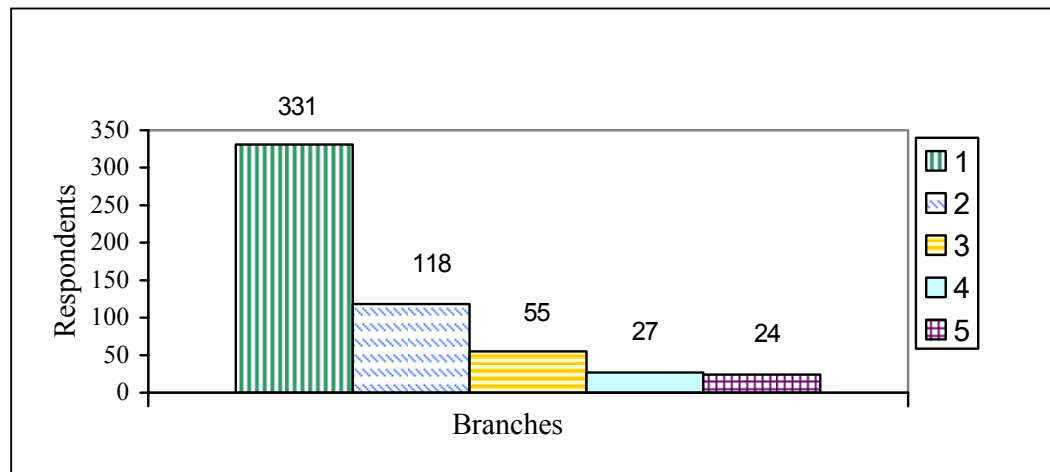


Figure 5.1: The number of branches of respondents

Sources: The researcher's fieldwork (2006)

The results revealed in figure 5.1 show that the number of branches of respondents who come under this study was between 1 and 5 branches. From figure 5.1, one can see that the majority (331 or 59.6%) of the respondents under this study have only one office for running their business, while there are 118 respondents (21.3%) who have two branches for their business. The number of respondents who have three or more branches is 106. In relation to this, the majority of respondents (95%, N=192) mentioned⁵² in the interview that most of the construction activities have been outsourced to consultants, and the developers will appoint a representative of the firm who will be responsible for monitoring the particular project until completion. In addition, having one branch is easier in terms of management, and could reduce the operating cost. However, those developers who have more than one branch claimed that⁵³ it is necessary to have more branches because of the multiple projects that have

⁵² Interviews with the developers in May to July, 2006.

⁵³ Interviews with the developers in May to July, 2006

been carried out within the same timeframe but in different states. These firms were also found to be firms with large capital and manpower.

Table 5.3: Cross tabulation between number of branches and types of developers

		Number of branches (unit)					Total
		1	2	3	4	5	
Respondent	success developer	263 (79.46%)	114 (96.6%)	51 (92.7%)	27 (100%)	23 (95.8%)	478
	failure developer	68 (20.54%)	4 (3.4%)	4 (7.3%)	0	1 (4.2%)	77
Total		331	118	55	27	24	555

Source: The researcher's fieldwork (2006)

In addition, the results in table 5.3 revealed that about 331 respondents or 59.64% out of 555 - whether successful developers or failure developers who come under this study - are running their business with one branch only. About 224 respondents or 40.36% out of 555 are running their business with more than one branch. Therefore, from the result in the table 5.3, one can see that a much higher percentage of the developers under study are single branch operations.

5.2.4 Number of Employees

Table 5.4 shows the actual number of employees in the firms in the sample. Table 5.4 reveals that most of the respondents have only a small number of employees: about 10. The small number of employees is not an issue, because almost all construction activities have been outsourced by appointing consultants to take care of the progress of particular projects from the beginning until completion. However, the result also shows that many of the respondents' firms have more than 10 employees. These firms have more than one branch, and carry out multiple projects in different states.

In relation to this, Abdul Aziz and Yi (2006), in their study of competitiveness of housing developers in Malaysia, found that the number of full-time employees ranged from none to over 200, based on a response rate of 3%. In this context, the finding by the researcher was more reliable because the results were based on a bigger sample

population. In addition, this statement was endorsed by majority of the respondents (97%, N=192) in the interviews. They asserted that⁵⁴ the size of firm in terms of number of branches and employees depends on the mission and vision of the particular firms. This means that nation-wide orientation firms normally have more branches and employees because they are established with large capital.

Table 5.4 also shows the number of employees by type of firm ownership. One can see that the different types of ownership have different numbers of employees. If one looks at the type of firms that come under this study, the table shows that, before that, about 48 respondents (8.65%) were sole proprietorship companies, 25 (4.5%) were partnership companies, 473 (85.23%) were shareholder companies, 6 (1.08%) come under the category of family company and about 0.54% were the public listed companies.

In terms of the numbers of employees by the firms' ownership, the majority of the sole proprietorship firms have a small number of employees - from 9 to 32. For the partnership firms, the numbers of employees ranged from 8 to 22, while there are variances among the number of employees for shareholder firms, from the small numbers of employees to the biggest numbers. The family firms have about 20 - 42 employees and the public listed companies have quite large numbers of employees - more than 45. From the results in table 5.4, one can see that a much higher percentage of respondents under the study are from shareholder companies.

⁵⁴ Interviews with the developers in May to July, 2006

Table: 5.4 Cross tabulation between type of ownership and the number of employees

		Type of Ownership					Total
		Sole proprietorship	Partnership	Shareholders	Family company	Public listed company	
Number of employees	8.00	0	1	1	0	0	2
	9.00	1	1	7	0	0	9
	10.00	13	11	93	0	0	117
	11.00	0	0	2	0	0	2
	12.00	0	1	10	0	0	11
	13.00	0	0	3	0	0	3
	15.00	1	0	39	0	0	40
	18.00	1	0	13	0	0	14
	20.00	5	1	56	1	0	63
	21.00	1	2	11	1	0	15
	22.00	1	1	8	0	0	10
	24.00	2	0	0	0	0	2
	25.00	7	1	31	1	0	40
	27.00	0	0	2	0	0	2
	28.00	2	0	5	0	0	7
	30.00	4	1	23	0	0	28
	32.00	1	0	11	0	0	12
	33.00	0	0	1	0	0	1
	34.00	0	0	2	0	0	2
	35.00	0	0	21	1	0	22
	36.00	0	0	1	0	0	1
	38.00	0	0	2	0	0	2
	40.00	1	2	23	1	0	27
	41.00	0	0	1	0	0	1
	42.00	2	1	27	1	0	31
	43.00	0	0	1	0	0	1
	44.00	0	0	11	0	0	11
	45.00	2	2	26	0	1	31
	46.00	0	0	2	0	0	2
	47.00	0	0	1	0	0	1
	48.00	1	0	6	0	0	7
	50.00	2	0	19	0	2	23
	52.00	0	0	1	0	0	1
	55.00	1	0	9	0	0	10
	57.00	0	0	1	0	0	1
	60.00	0	0	2	0	0	2
	65.00	0	0	1	0	0	1
Total		48	25	473	6	3	555

The researcher's fieldwork (2006)

5.2.5 *The Firm Ownership and Turnover*

The background of the respondents should be considered in terms of the type of ownership and the average turnover of the firms. In relation to this, table 5.5 shows the tabulation of firm ownership and average turnover of the firm. This result was similar to the findings of Othman (1999) in her studies on the developers' behaviour towards the planning system in Malaysia, where these types of ownership are mutually exclusive⁵⁵, as stated in section 14 of Company Act 1965 (Act 125). Before further explanation, it is important to stress here that only 398 (71.71%) out of 555 respondents answered this question, because this question required respondents to reveal their firm's turnover for the past three years; however, some respondents refused to share this information, considering it to be a sensitive issue⁵⁶. Therefore, not all respondents were willing to respond to this question. Nevertheless, the number of respondents willing to respond to this question is considered to be high.

Table 5.5 shows that the majority of the developers (about 348 respondents) come under the category of shareholders' company. In terms of average turnover, the majority of this group (268 or 77.01%) have had, on average, turnover of less than RM5 million for the past three years. 80 respondents (23.0%) have an average turnover of between RM6 million and RM12. If one looks at other companies, such as sole proprietorships, partnerships and family companies, one can see that they have an average turnover of between RM1 million and RM6 million. For a public listed company, the average turnover is normally higher than that of other companies.

⁵⁵Section 14 of Company Act 1965 (Act 125) explains the procedures which must be followed to set up a company and the categories of company. The company can be a limited company based on shares, a limited company based on guarantee, a company with share and guarantee, or an unlimited company. The difference between categories of company can also be considered from the number of shareholders allowed by the company laws.

⁵⁶ The researcher carried out follow-up tasks with the majority of the respondents who did not respond to the question.

Table 5.5: Cross tabulation of firm ownership and average turnover

Turnover Type of Ownership	Average turnover (RM-Million)												Tota l	%
	RM 1	RM 2	RM 3	RM 4	RM 5	RM 6	RM 7	RM 8	RM 10	RM 12	RM 15			
1)Sole pro -prietorship	12	2	4	0	6	1	0	0	0	0	0	0	25	6.28
2)Partnership	5	0	4	0	6	1	0	0	0	0	0	0	16	4.02
3)Share -holders	52	25	24	23	144	50	23	3	3	1	0	0	348	87.4
4)Family Company	1	0	0	2	2	1	0	0	0	0	0	0	6	1.52
5)Public listed company	0	0	0	0	1	1	0	0	0	0	0	1	3	0.75
Total	70	27	32	25	159	54	23	3	3	1	1	0	398	100

Source: The researcher's fieldwork (2006)

From table 5.5, one can see that the average turnover for the three public listed companies that come under this study is between RM5 million and RM15 million. This result is not surprising, because public listed companies normally go for high profile projects with high profit margins. Nevertheless, the turnover of most of the firms for the past three years seems to have been less than RM5 million.

The bigger companies with large capital will normally undertake high profile projects with more profits and high profit margins. However, it is not easy for them to acquire high profile projects all the time, and the most important factor for them is that they should have a good rapport with the government. In relation to this, the findings by Abdul Aziz and Yi (2006) revealed that several factors were considered important for the developers to be competitive in the housing market in Malaysia.

These factors were prime location of land, cash flow, understanding market potential, relationship with local authorities, management expertise and experience, organisation and service reputation, ability to manage change and the relationship with competent support service providers. Nevertheless, the high profile projects and high profit margins are not an incentive for the firms in Malaysia to expand if they do not have a good contact and relationship with the government. This statement was endorsed by all of the elite group interviewees⁵⁷ (100%, N=6), who mentioned that the developers who tend to become involved with the high profile projects and high profit margins must have a good relationship with the government. This means that the findings are in line with the theoretical basis of analysis that is based on the institutional economics theory, in which the institutional factors are important and have a great influence in land and property market. In relation to this, the results also show that the private developers in Malaysia operate within these institutional constraints.

With reference to the discussion of the results in table 5.5, most of the respondents (97%, N=192) in the interview remarked that⁵⁸ big companies, such as public listed companies, will pursue high profile projects because they are financially strong; they are also very stable companies with in-house project teams, and, compared with other companies, they can more easily access banking institutions for loans. Another factor is that they have good contact with the government. However, small companies that are well managed with small capital but have a good reputation can also make a profit, if the particular project is developed at the right time and in the right place.

⁵⁷ Interview with the elite group in May to July, 2006

⁵⁸ Interviews with the developers in May to July, 2006

5.2.6 Approximate Number of Projects Completed by Respondents

Information was gathered concerning the respondents' experience in completing a type of housing development. This is intended to address the pattern of housing development adopted by the respondents under this study in terms of landed and high-rise housing projects⁵⁹.

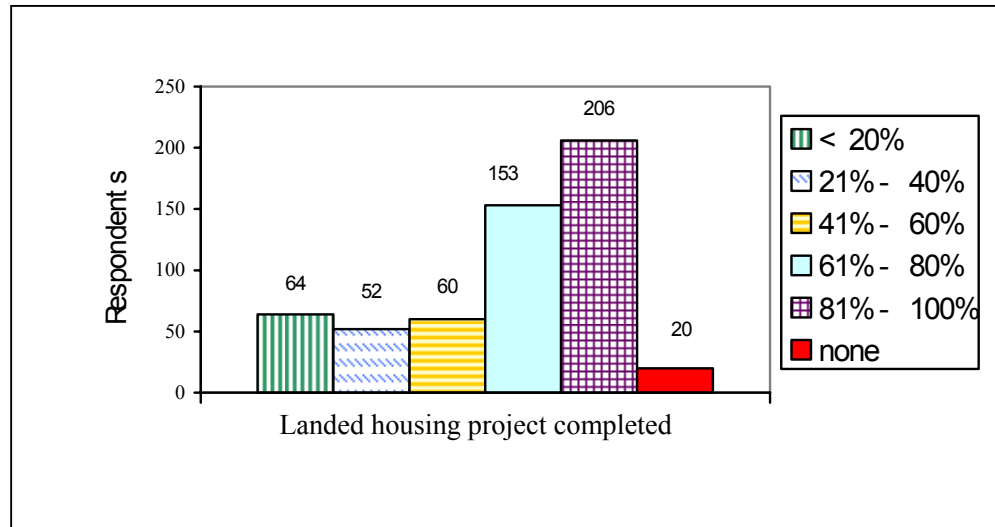


Figure 5.2(a):Landed housing projects completed by respondents

⁵⁹ The term 'Landed housing projects' refers to the housing units which have been constructed with not more than 2.5 storeys per unit. 'High-rise building' are houses which have been constructed and then sub-divided into small parcels for selling purposes; that requires application for the Strata Title. For further information, refer to the Strata Title Act 1985.

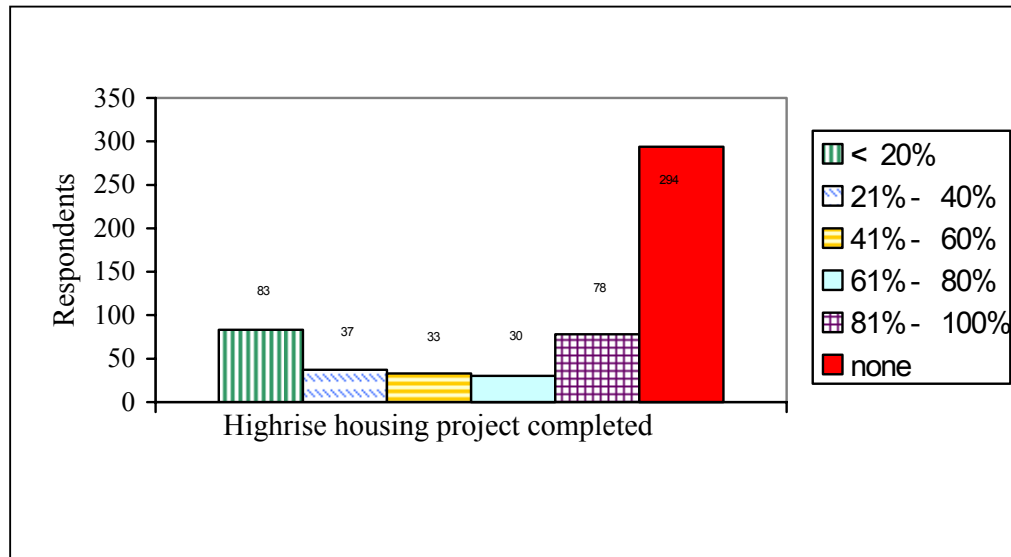


Figure 5.2 (b): High-rise housing projects completed by respondents

The results from figures 5.2(a) and 5.2(b) show that the number of respondents involved in constructing landed housing projects is higher than that for constructing high-rise projects. The construction of high-rise housing projects is concentrated in urban areas because of the limitation of land resources. Therefore, the government has imposed a high density planning system to encourage developers to become involved in developing high-rise projects. The density for high-rise housing development is normally between 15 and 20 storeys⁶⁰, depending on the development area. However, different densities are imposed by different local authorities. Nevertheless, not all developers like to be involved in constructing the high rise buildings, because of the difficulties concerning the legal aspects.

As highlighted in chapter three, the legal aspects governing the construction of high-rise buildings are complicated. This problem arises from the application for the strata title, setting up the management corporation⁶¹ and transferring the strata title to purchasers (Khalid, 1999; Ismail and Khalid, 2001).

⁶⁰ 15 to 20 storey density imposed by Penang City Council

⁶¹ "Management corporation", in relation to any subdivided building shown in an approved strata plan, means the management corporation established under section 39, 64 or 64A; section 4 in Strata Title Act 1985 (ACT 318).

Khalid (1999), in his study on the problems of transferring the strata title to purchasers, found that most house purchasers of high-rise buildings are not willing to accept the strata title. This is because they realise that if 1/3 of the strata title is transferred, they have to form a management corporation and take over the responsibility from the developers to manage the occupied building. In this context, if the management corporation is not yet established, according to section 63 (1) of Strata Title Act 1985, “The original proprietor shall establish and maintain a management fund for the control, management and administration of the common property, payment of any rent, rates, premiums of insurance and the discharge of any other obligations”.

That is why most of the purchasers have refused to accept the transfer, and the developers need to manage the building until the strata title is fully transferred. It has become worse, especially for low-cost high-rise buildings where most of the purchasers have refused to pay monthly building maintenance fees, and as a result those buildings cannot be managed properly owing to lack of funds. This is why the majority of those developers are not interested in becoming involved in developing high-rise housing projects.

Nevertheless, the high-rise housing projects that are categorised under high-price projects are easier to manage because the majority of the purchasers have understood the concept of living under one roof. They have also understood the purposes of paying monthly maintenance fees and have accepted the transfer of the strata title. In relation to this, they have appointed a Registered Property Valuer to manage particular high-rise buildings (Ismail and Khalid, 2001).

One can conclude from the above discussion that the main factor that might be considered by private developers before becoming involved in the construction of high-rise housing projects is the legal aspects, especially those rules that are related to the responsibility of the developer to manage the particular project until the management corporation has been set up.

Therefore, the information in figures 5.2(a) and 5.2(b), which revealed that the majority of the respondents coming under this study are developers involved in the

construction of landed housing projects, is not surprising, because only developers that meet the criteria discussed earlier are capable of becoming involved in the construction of high-rise housing projects.

This view was strengthened by the result of the interviews, in which most of the respondents (97%, N=192) said that⁶² only those developers with large capital who are financially strong, who have a good reputation and are willing to take the responsibilities of managing the high-rise buildings which have been sold, are keen to become involved in the construction of high-rise housing. Average developers prefer to be involved in the construction of landed housing projects, because they are not too complicated in terms of legal procedures, and developers are not required to manage the particular projects after completion. Their responsibility is to rectify any complaints by homebuyers within the Defect Liability Period only⁶³.

5.3 The Experience of the Developers in Housing Development

Questions 7 to 15 in the questionnaires were designed to gather information about the experience of respondents that come under this study. Details of the questionnaire can be found in Appendix 3. The results from the questionnaire revealed the information of the respondents' experience in terms of housing project completion, the problems occurring prior to the completion of a project and the role of sale percentage of dwellings for new housing schemes. The following sections contain a discussion of the details of the respondents' experience in housing development in Malaysia.

5.3.1 Failure to Deliver Vacant Possession of Housing Projects

Question 7 was designed to gather information on the experience of respondents coming under this study on the failure to deliver vacant possession of housing projects. About 75 respondents failed to complete the housing development on time, or failed to deliver vacant possession to the house buyers within a specific period.

⁶² Interviews with the developers in May to July, 2006.

⁶³ The Defect Liability Period (DLP) is 12 months after completion of the project.

According to Act 118, Schedule (G), Clause 23(2):

“If the Vendor fails to deliver vacant possession of the said Building in the manner stipulated in clause 24 herein within the time stipulated in sub-clause (1), the Vendor shall be liable to pay the Purchaser liquidated damages calculated from day to day at the rate of ten per centum (10%) per annum of the purchase price from the expiry date of the delivery of vacant possession in sub-clause (1) until the date the Purchaser takes vacant possession of the said Building. Such liquidated damages shall be paid by the Vendor to the Purchaser immediately upon the date the Purchaser takes vacant possession of the said Building”.

Furthermore, Schedule (H) of Act 118, Clause 26(2) directed that:

“If the Vendor fails to deliver vacant possession of the said Building in the manner stipulated in clause 27 herein within the time stipulated in sub-clause (1), the Vendor shall be liable to pay the Purchaser liquidated damages calculated from day to day at the rate of ten per centum (10%) per annum of the purchase price from the expiry date of the delivery of vacant possession in sub-clause (1) until the date the Purchaser takes vacant possession of the said Parcel. Such liquidated damages shall be paid by the Vendor to the Purchaser immediately upon the date the Purchaser takes vacant possession of the said Parcel”.

Questions 8-12 were designed to gather information on the factors that contributed to the problems of failure to deliver vacant possession, as noted in the S&P agreement. Unfortunately, only 26 out of 75 respondents responded. 23 respondents were failure developers and 3 respondents were successful developers. It is surprising to have this result where none of the factors listed in the questionnaire were factors that caused a project to be delayed, according to the responses by the respondents. In other words, the respondents who did respond to this question believe that none of the factors as shown in table 5.6 causes a project to be delayed. This finding is in contrast with the finding by Kok (1997) who argues that there are various issues relating to the production and delivery of residential properties (i.e. lack of manpower and labour, contractor issue, unavailability of material and difficult public sector coordination) that contribute to the delay in project completion.

Table 5.6: The factors that caused the respondents to fail to deliver vacant possession according to the Sale and Purchase Agreement

Factors	Mean	Standard deviation	Min*	Max*
Inexperienced contractor	3.52	0.86	2	4
Lack of manpower	2.77	0.99	2	4
Difficult public sector coordination	2.65	1.13	2	5
Unavailability of material and equipment	2.35	0.69	2	4
Poor timing of procurement of equipment	2.23	0.65	2	4

Source: The researcher's fieldwork (2006)

Note: * 1- strongly disagree, 2-disagree, 3-uncertain, 4-agree, 5-strongly agree

Nevertheless, one can deduce from the behaviour of those respondents who answered this question, that there was a tendency among them to agree that the factor of an inexperienced contractor contributed to the delay in completing a housing development within a specific period (mean=3.52). This result is not surprising, because if the developers make a mistake by appointing an inexperienced contractor to carry out the housing projects, the whole project will be jeopardised. This is because the contractors have been given the responsibility to carry out the construction work, but they are not bound by the S&P agreement signed between the developers and house buyers. The contractors have a separate agreement with the developers. That is why, in the housing abandonment context, the developers are fully responsible and not the contractors, even though the developers claim that project delay is the result of the problem occurring between them (Laporan projek terbengkalai, 2005).

When considering this issue in terms of the institutional property market hierarchy, Keogh and D'Arcy (1999a) divided the institutional property market hierarchy into three levels: the institutional environment, the property market as an institution and property market organisations. This hierarchy indicates the way the property market

operates within a defined structure. Indeed, it shows how the structure and the process can be seen as the interaction of agents within the structure. In the case of the contractor, it is at the third level of the hierarchy where the contractor is one of the actors or agents who are seeking interest in the property market. There are users, developers, financiers, contractors, government bodies and other property service providers. Each of the actors or agents has an influence on the other. For instance, developers are dependent on contractors to transform their needs to reality in terms of the final product. This final product must suit the users' needs, because users are going to utilise the final product.

Therefore, in terms of the institutional property market hierarchy, specifically on property market organisations, contractors play a very important institutional role in ensuring the success of all the housing projects undertaken by the developers. Nevertheless, the developers are given full responsibility for the success of the particular housing development projects by appointing capable contractors and monitoring the construction activities done by the contractors. Again, it is important to note here that the contractors are not legally bound by the agreement signed between the developers and the house buyers. Therefore, this study focuses on the issue of the existence of housing projects abandoned by the private developers, not the contractors.

From the above discussion, one may conclude that the role of contractor is very important in the building process. Inexperienced contractors will cause problems for the developer and the projects as a whole. Therefore, the developer is highly responsible for appointing the right contractors, based on their past experience in terms of manpower, reputation, financial stability and so on. It is also vital to stress here that a delay in the completion of housing projects will result in abandoned projects. Most of the interviewees (95%, N=192) remarked⁶⁴ that projects delayed can lead to abandoned housing projects if the developer involved is not keen to overcome the problem in the early stages. They further contend that project delay is normally a result of lack monitoring the progress of work by the developers. Indeed, failure to select the right contractors in terms of establishing management expertise and

⁶⁴ Interviews with the developers in May to July, 2005

experience, good reputation and financial strength would jeopardise the whole project planning. However, one should consider whether the delay has been caused by weather conditions.

One can see from the above discussion that the factors highlighted in the questionnaire were rejected by the developers as factors that may cause the delay of a housing project. Nevertheless, the factor of inexperienced contractor seems to be one that is accepted by the respondents as causing the delay of projects. In this situation, the developer has to ensure that the contractors who have been appointed for undertaking construction activities for the particular housing project must be competent and highly capable in terms of finance and experience. It is important to remember here that the delay of a project will lead to its being abandoned if the developers do not make a positive move at the early stages, as discussed above. Therefore, the developers are responsible for assuring the contractor's performance and for ensuring that the housing projects can be handed over to purchasers, as stated in the S&P agreement.

5.3.2 The Effects of Sale Percentage of Dwellings for New Housing Schemes

Another aspect of the respondent's experience in housing development is the role or the importance of sale percentage of dwellings for a new housing scheme, indicating the completion of the housing project undertaken by the developers. Question 13 was designed to gather information on this matter. The findings in table 5.7 revealed that most of the respondents, (504 or 90.81%), strongly believe that the sale of dwellings for a new housing scheme affects the completion of the projects. There are about 429 (89.75%) respondents under the category of successful developers, and 75 (97.4%) or almost all of the respondents come into the failure developers group.

The reason for this is the concept of 'Sell then Build' that applies in the housing system in Malaysia. This concept makes the developers totally dependent on the progress payment to complete the projects, and allows the developers to collect progress payments based on the construction stages, as stated in the S&P agreement. In this context, the collection of progress payments will be made prior to the completion of the project.

Table 5.7: Cross-tabulation of respondents and the sale percentage of dwellings for new housing scheme indicate the completion of the housing project

Respondents	Sale percentage indicates the completion of the housing projects		Total
	Yes	No	
Successful developer	429 (89.75%)	49 (10.25%)	478
Failure developer	75 (97.4%)	2 (2.59%)	77
Total	504	51	555

Source: The researcher's fieldwork (2006)

However, the claims must be in accordance with the progress certification made by a registered architect. This process has been clearly stated in the Housing Development (Control and Licensing) Act 1966 (Act 118) and Regulations.

Therefore, the developers will begin to promote the new housing schemes and initiate sales of the housing units as soon as possible after obtaining the developer's licence. By doing so, the developers are allowed to enter the S&P agreement with the homebuyers. Hence, the developers strive to sell as many units of houses as they can before commencing construction.

However, 51 respondents (9.2%) think the sale percentage does not indicate the completion of housing projects. 49 respondents (10.25%) come under the category of successful developers and 2 (2.59%) are in the failure developer group. This is because they do not deny that the importance of sale percentage has a significant influence on the project cash flow linked to the completion of housing projects. However, the completion of housing projects is subject to other important factors, such as appropriateness of managing the project fund of the particular project being undertaken. This statement was strengthened by the result of interviews, in which most of the interviewees (95%, N=192) remarked⁶⁵ that those developer firms which

⁶⁵ Interviews with the developers in May to July 2005

have a good reputation and are financially strong are not totally dependent on the progressive claims to complete the housing projects. These types of developers have easy access to financial institutions if they require bridging loans for completing housing development projects. They further contend that the most important aspect that contributes to the completion of housing projects is the requirement that the fund or cash flow of the particular projects is properly managed by the developers.

Following the above discussion, one can say that developers are positively dependent on the progressive claims for completing the housing projects under the concept of ‘Sell then Build’. In this context, the sale percentage of new housing units indicates the survival / likelihood of completing the housing projects, which is why developers strive to sell as many of their new housing units as they can in order to strengthen the project cash flow, based on the progress payment claims from the house buyers. Instead of increasing the sale percentage of the project, the developers also have to manage the project funds appropriately in order to avoid any unforeseen circumstances that might jeopardise the completion of housing project, if the developers have financial problems as a result of the inappropriate mismanagement of project funds. This statement was strengthened by the result of interviews in which most of the interviewees (93%, N=192) agreed that inappropriate mismanagement of project funds would jeopardise the completion of housing project, even though the sale percentage of the project is high.

In general, the ‘Sell then Build’ concept has given the developers opportunity to make a profit by using house buyers’ money via progress payments. The worst aspect of this concept is that the house buyers have to pay for their housing units which have not yet been constructed by the developers, upon signing the S&P agreement. The house buyers are required to pay at least 10% as a deposit, which is why the house buyers become the victims of the situation, and are badly affected if the project has been left abandoned for whatever reasons.

5.3.3 The Experience of Respondents on the Percentage of New Housing Units to be Sold Before Starting Construction Work

While the role of percentage of dwellings sold for new housing schemes is an indicator of successful completion, another interesting question to be answered is: what proportion of new housing units must be sold before starting construction? There is no specific written report or statistic that can be used to answer this question. Question 14 was constructed in the questionnaire to gather information on this issue.

The findings in table 5.8 reveal the variety of information of the percentage of housing units that must be sold by developers before commencing the construction work. The lowest percentage of the housing units that must be sold among respondents coming under this study is 20%, whereas the highest is more than 80%.

Table 5.8: Cross-tabulation of respondents and the percentage of housing units that must be sold by developers before starting construction work

Respondent	The percentage of housing units sold					Total
	<20%	21-40%	41-60%	61-80%	>80%	
Successful Developer	111 (23.22%)	188 (39.33%)	136 (28.45%)	36 (7.53%)	7 (1.46%)	478
Failure Developer	0	24 (31.16%)	28 (36.36%)	25 (32.47%)	0	77
Total	111	212	164	61	7	555

Source: The researcher's fieldwork (2006)

About 111 respondents (23.22%) under the category of successful developer believe that the percentage of housing units that must be sold before the construction works is <20%. No respondents who come under the category of failure developers believe that construction works can be started whenever <20% of the housing units have been sold. However, 212 respondents (38.20%) believe that between 21% and 40% of the housing units must be sold before the construction work begins. 188 respondents (88.62%) came under the category of successful developer and 24 or 13.32%

respondents were categorised as failure developers. 164 respondents (29.55%) believe that between 41% and 60% of the housing units must be sold before undertaking any construction work. 136 respondents (82.93%) were categorised as successful developers and 28 (17.07%) as failure developers. These firms believe that if 60% of housing units are sold, this already represents a break-even situation for the firms and they will not face any losses at all. This statement was endorsed by most interviewees (95%, N=192), who mentioned that if the developers' firms managed to sell about 60%, it is already a break-even project. That is why these firms are ready to become involved with construction work whenever 60% of sales of housing units have been achieved.

Table 5.8 above also shows that about 61 respondents (11.0%) coming under this study believe that developers will start with construction work when between 61% and 80% of the housing units have been sold. This is because a sale percentage that has achieved 80% is already a profit for the investment. In fact, it is easy for the respondents to obtain bridging loans as a result of the financial procedures set up by the financial institutions; these required that 80% of the housing units must be sold for bridging loan approval. In the other words, those developers who have managed to sell about 80% of the housing units will not face any losses if they proceed with construction work. According to most of the interviewees⁶⁶ (97%, N=192), the developers will make a profit from the investment if they manage to sell about 80% of the total housing units for particular projects. Therefore, most of the developer firms will decide to start the construction work whenever the sale percentage reaches 80%.

The findings also show that 7 respondents (1.26%) who come under this study believe that more than 80% of the dwellings for new housing schemes must be sold before the construction work can be started. By doing so, these firms will have more funds to start the construction work, by utilising the deposit fund collected from the house buyers. At the same time, this can reduce the need to use the firm's own funds. In terms of bridging loan approval, these respondents believe that they can easily obtain the bridging loans. Indeed, they also can reduce the amount for bridging loans in order to increase the profit margin, because the progressive payments from more than 80%

⁶⁶ Interviews with the developers in May to July, 2006

house buyers are considered enough to complete the undertaking of housing projects. Most of the interviewees remarked⁶⁷ (97%, N=192) that those firms that managed to sell more than 80% of the housing units will commence construction work with no risk to loss in the investment, because they have already made a profit by selling more than 80% of the units of houses for a particular project.

From the above results, one can see that there is a variety of percentages of housing units which must be sold before commencing construction work. Again, it is important to stress at this stage that housing developers are not put under pressure concerning when they should undertake construction activities. Nevertheless, from the interviews with the housing developers and the elite group that come under this study, the researcher found that there are several reasons that bound the decision of the developers concerning when they should commence construction work. The first is regarding the approval of planning permission by the particular local authority, as discussed in chapter two, whereas the planning permission granted by the local authority would be invalid after 12 months after the date of approval if no development work has been undertaken at the site.

In this context, housing developers are required to develop the particular site or land for which planning permission has been granted within a year from the date of approval. Even though no development work has been undertaken during the first 12 months, and before the time expires, the developers can appeal for an extension of time. Another 12 months of time can be granted. If the extension of time is given for another 12 months but still that particular site or land has not been developed, the approval will be invalid. In this situation, the housing developers have to go through the normal procedures from the beginning for applying for planning permission for the same particular site or land. If this happens, money and time will be wasted for the developers, and the physical development within the local authority territory jeopardised. Therefore, housing developers have to consider the institutional factors or formal written rules that govern planning permission approval before making the decision to commence construction work. In other words, institutional factors are important in this context.

⁶⁷ Interview with the developers in May to July 2005

Secondly, the private developers will also strive to reduce the holding cost for the particular site or land for which planning permission has been granted. This is because most developers purchase land for development, and purchasing is done through loans granted by financial institutions, so-called “term loans”. It is very rare for developers to develop their own land and purchase it with their own funds. Therefore, the housing developers will strive to sell the housing units at the highest possible percentage and then proceed with the construction work as soon as possible. In doing so, the developers will have a fund from the deposit collected from the house buyers and also from the claims of the progressive payment based on the construction stages. In this context, the housing developers will use the fund to pay back the terms loan as quickly as possible to avoid any interest charges caused by late payment.

Thirdly, the developers who are planning to apply for bridging loans must strive in terms of selling housing units, because the financial institution has imposed the regulation that the bridging loans will be approved subject to the percentage - at least 80% - of housing units sold. Thus, it is very important for developers to consider when to start the construction work, owing to the institutional constraint (formal rule) in the form of a financial rule. Those firms that are absolutely dependent on the progressive claims to complete the undertaking projects will ensure that the firms have succeeded in selling a high proportion - at least 80% - of the housing units. By doing so, the firms also have easier access to credit in terms of bridging loans from the financiers. In addition, most of the interviewees (95%, N=192) declared that⁶⁸ the decision on when to start with construction work depends on the company’s financial status and business plan. If the company decides to complete the projects by utilising the bridging loans, at least 80% of the housing units must be sold. Without that, the company can carry out construction activities, and aggressively promote and market the projects during the construction work. However, the company must monitor the cash flow of that particular project in order to avoid any unforeseen circumstances. The company should also have contingency plans in place if the project is not sufficiently attractive to the house buyers. Failure to monitor project cash flows can cause various problems; for example, it can lead to abandoned projects.

⁶⁸ Interview with the developers in May to July, 2005

Theoretically, the management of project cash flow is a very important aspect during construction activities (Bernard, 1987; Mohamed and Ahmad, 1995; Andrew Tan, 2004) because time, cost and schedule are interrelated factors. This means that the cash flow for a particular project must be properly used for the construction activities, as scheduled with the estimated cost and within the specific period. Failure to coordinate all the items will jeopardise the whole project, and when the project runs out of budget, and there is no contingency plan for survival, this will lead to a problem such as abandonment of the project.

The above discussion suggests that there are no specific rules that require housing developers to specify when to commence the construction work at the site. However, the developers have to consider some factors, such as the validity of planning permission, to reduce the holding cost of the approved land and to obtain easier access to the financial institutions for bridging loans. In addition, the decision concerning when to start the construction work is also influenced by the percentage of housing units sold, as discussed earlier. However, there is no standard acceptance on the percentage which must be sold before the developers commence construction work, because, based on the results revealed in table 6.8, there are 5 categories of sale percentage of housing units that must be sold by developers before starting construction work (i.e. <20%; 21-40%; 41-60%; 61-80% and >80%). Thus it is not surprising there is such a range of opinion as shown in table 5.8.

Another question arising here is whether developers have experienced any abandoned projects based on the percentage of housing units sold, as discussed earlier. In this regard, Question 15 was designed to gather information about the experience of abandoned housing projects by the respondents, based on the sale percentage of housing units sold before starting the construction work.

Before further explanation of this issue, it is important to describe the difference between table 5.9 and table 5.8. Table 5.8 reveals information of respondents' experience concerning the percentage of housing units to be sold before starting the construction work, while table 5.9 reveals specific information about the respondents' experience of abandoned projects based on the percentage of housing units sold, as discussed in table 5.9. In other words, the information revealed in both tables is

interrelated. The information revealed in table 5.9 above shows that no abandoned projects existed when the construction work was being carried out, if less than 20% and more than 80% of the housing units had been sold. Conversely, there are abandoned projects which existed when the developers started the construction work when between 21% and 80% of the housing units had been sold.

Table 5.9: Cross-tabulation of percentage of housing units sold and experience of abandoned housing projects

Percentage of housing units sold	Experience of abandoned housing projects		Total
	Yes	No	
<20%	0	111 (100%)	111
21-40%	31 (14.62%)	181 (85.38%)	212
41-60%	36 (21.95%)	128 (78.05%)	164
61-80%	25 (40.98%)	36 (59.02%)	61
>80%	0	7 (100%)	7
Total	92	463	555

Source: The researcher's fieldwork (2006)

From this information, one can see that there are two extreme cases whereby those developers who had begun the construction work when 20% of housing units had been sold had experienced success in completing the housing project. Another case concerns those respondents who had commenced construction work when >80% of the housing units had been sold and who had also successfully completed the housing projects. However, respondents who had begun the construction activities when they had managed to sell between 21-80% of the housing units had experienced abandoned projects, while some of them had experienced success in completing housing projects. In addition, only 92 respondents (16.58%) had experienced abandoned housing projects based on the percentage of specific housing units sold, whereas 463 or 83.42% had completed the housing projects. From the result shown in table 5.9, one can conclude that abandonment and percentage sold are not strongly related. Nevertheless, the result from the interview conducted with the interviewees who are

willing to participate in this study further explored the issue of abandonment and percentage sold of housing units, revealing that these are strongly related, since all of the interviewees remarked⁶⁹ that the percentage sold is highly influential on the completion of housing projects. They further explain that failure to achieve at least 80% of sale percentage would place them in financial difficulties. This is because the financial institutions will approve the bridging loans only if about 80% the housing units have been sold, and this significantly influences project cash flow. In other words, the low percentage sold led to financial problems for the developers, if the developers had no way of finding other sources for completing the particular projects. The next section contains further discussion about whether financial problems were a factor that caused the abandoned housing projects.

From Question 16, which is the last question in the section of developers' experience in housing development, the finding in table 5.10 shows that 501 respondents (90.27%) from both groups - successful developers and failure developers - believe that the existence of abandoned housing projects has had a negative effect on the house building industry in Malaysia. This agreement was supported by the statistics provided by the MHLG, which show the number of housing projects that had been abandoned since 1986, as discussed before. According to the results of the interviews, most of the interviewees (95%, N=192) mentioned⁷⁰ that the negative effect on the housing sector resulting from the existence of abandoned housing projects is related to a rise in fear among house buyers towards housing provision in Malaysia. They further argue that, owing to the failure of developers to complete the housing projects as stated in the S&P agreement, and since many projects have been abandoned, house buyers have lost trust in private developers and the housing system as whole. Therefore, it not surprising when house purchasers via the House Buyers Association (NGO) are urging the government to change the current housing provision from the Sell then Build to Build then Sell concept.

As reported in New Strait Time (2006), the government basically agreed to introduce the Build then Sell concept in the housing delivery system in Malaysia, based on the

⁶⁹ Interview with the elite group and the developers in May to July, 2006

⁷⁰ Interviews with the elite group and the developers in May to July, 2006.

ratio of 10:90⁷¹; however, it is not compulsory. This means that the developer has been given a chance to choose either the Sell then Build or Build then Sell concept for housing provision (New Strait Time, 2006). This is because the current concept of housing provision has been implemented since independence, and the government has no intention of drastically changing the concept because it is involved with other parties, such as financial institutions. The financial institutions will play a very significant role in the concept of Build then Sell because they have to finance 90% of the total project cost. Therefore, the implementation of the concept of Build then Sell in housing provision in Malaysia will be implemented step by step.

Table 5.10: Cross-tabulation of respondents and the perception of how housing abandonment has had a negative effect on house building industry in Malaysia

Respondent	Housing abandonment has had a negative effect on house building industry					Total
	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree	
Success developer	161 (33.7%)	273 (57.11%)	13 (2.72%)	19 (3.97%)	12 (2.51%)	478
Failure developer	11 (14.29%)	56 (72.73%)	6 (7.8%)	4 (5.2%)	0	77
Total	172	329	19	23	12	555

Source: The researcher's fieldwork (2006)

In addition, the effect of this situation is that the government has been forced to take mandatory action towards failure developers, such as putting them in prison, like other criminal offenders. Furthermore, the government has had to spend a large amount of money to carry out the rehabilitation programme, as discussed in chapter five. From the tax payers' point of view, such amounts allocated for the rehabilitation programme could be utilised by the government for other development projects that could enhance

⁷¹ The 10:90 ratio refers to the 10% deposit by the house purchasers and 90% fund from the developers until completion of the project undertaken.

the growth of the economy as a whole. However, from the point of view of the economy, Adams *et al.* (2005, p. 31) argue that:

“According to neo-classical theory, a perfectly competitive market that experiences no external distortions will achieve a resource-efficient allocation without any need for state intervention. In this context, efficiency in resource allocation can be defined by reference to the concept of Pareto optimality, in which it is impossible to make one person better off without making someone else worse off. This concept provides an important theoretical benchmark within welfare economics since it suggests that, where markets depart from the conditions of perfect competition or face external distortions, state intervention may be able to help to improve the welfare of both consumers and producer”.

Meanwhile, 19 respondents (3.42%) were uncertain about whether the existence of abandoned housing projects had a negative effect on the house building industry. The reason behind that is that no legal provision has been made for failure developers since this problem was first identified in 1986. In addition, the government has allocated a large amount of money to rehabilitate abandoned projects. This mechanism seems to encourage irresponsible developers to abandon more housing projects because they realize that the government will save the abandoned projects via rehabilitation programmes.

Based on the above statement, the decision of the government to become involved in housing abandonment via the rehabilitation programme is concerned with providing welfare to both consumer and producer. However, there is no intention in this study to discuss details in the theory of welfare economics.

Instead of becoming involved in housing abandonment via the rehabilitation programme, the government has also taken several policy remedies to prevent the abandonment of projects. In relation to this, Questions 55 to 58 in Section E in the questionnaire were designed to seek information about the effectiveness of the policy remedies to avoid abandoned projects.

The results in table 5.11 indicate that the majority of the respondents were uncertain whether policy remedies, such as submitting progress reports and opening up housing development accounts implemented by the government in order to avoid the abandonment of housing projects, were sufficient. In relation to this, the result of interviews with developers (95%, N=192) who suggested⁷² that the lack of enforcement and monitoring of the government from the beginning has made the above-mentioned remedies insufficient to avoid housing abandonment. They further contend that, if the government closely monitors and enforces all remedies, such as monitoring the financial reports and progress reports at the early stages of construction, it is impossible for developers to leave the projects abandoned.

Table 5.11: The policy remedies to avoid abandoned projects

Policy remedies	Minimum	Maximum	Mean	Std. Deviation
Increase of deposit	1.00	5.00	2.6378	1.14807
Submit progress report	1.00	5.00	3.0541	1.12598
Open up housing development account	1.00	5.00	3.4757	1.04105

Source: The researcher's fieldwork, 2006

Note: N=555 (1=strongly disagree, 2=not agree, 3=uncertain, 4=agree, 5=strongly agree)

In addition, the majority of the respondents (95%) who come under the study believe that the increase in the deposit of the developer housing licence was not a sufficiently effective mechanism to prevent housing abandonment. This statement was endorsed by the result of interviews with developers who remarked that the government simply granted licences to new developers without taking into account the developers' experience in housing development, and the financial aspect of this. This is because the deposit of RM200,000 for obtaining the developer's licence is an affordable amount to all developers. Thus one can say that the factor of lack of enforcement and monitoring by the government is a very important factor which might be related to the existence of abandoned housing projects.

⁷² Interview with developers in May to July 2006

Based on the above discussion, it is fair to say that most of the respondents coming under this study agree that the existence of abandoned housing projects has had a negative effect on the house building industry. In relation to this, the Prime Minister of Malaysia, as reported by the Utusan Malaysia (2004) and highlighted in chapter one, contends that abandoned housing projects are a major problem in the national housing industry. Therefore, it is important to identify the causes of abandoned housing projects in order to avoid the problem totally. The following sections contain a discussion on the inferential analysis in order to test the research hypotheses and to achieve research objectives.

5.4 Analysis on the Respondent's Perceptions about the Institutions Affecting Housing Development in Malaysia

In this section, research objectives 3 and 4 which were emphasized earlier will be achieved. Indeed, the hypotheses outlined in this research will also be tested. First, this section explores the respondents' perceptions concerning whether the role played by the institutions or formal written rules that are related to financial institutions, land development and housing policy affects housing development in Malaysia. Secondly, this section also focuses on the respondents' perceptions about the interrelationship between markets (in terms of the role played by the market signals in housing development) and project abandonment.

5.4.1 The Analysis of the Institutions that Affect Housing Development in Malaysia

The discussion on the institutions that affect housing development in Malaysia is related to the three major institutions that govern housing development: the financial institutions, land development regulations and housing policy (Mohamad and Ahmad 1995; Salleh and Khalid, 2002). They further contend that the rules and regulations associated with these three institutions play important roles that affect housing development. From the institutional point of view, Eggersston (1990) and North (1996) contend that, in terms of land development process, the institutionalists perceived that there are rules or 'institutions' which underlie these socio-political and economic forces to govern human activity. This institution refers to the formal written rules that might limit agency co-ordination and integration, and as a result it has

become a barrier to the supply of land development. Adams *et al.* (2005) contend that one of the main institutional features of the land and property market is the formal written rules which may be directly or indirectly determined by the processes of governance.

From the discussion, one can understand that the land and property markets are governed by specific institutions or formal written rules. It is in line with the context of housing development in Malaysia, as contended by Mohamed and Ahmad (1995); Salleh and Khalid (2002). Therefore, for the purposes of this study, the analysis of institutions that affect the housing development in Malaysia refers to the formal written rules that are related to the financial institutions, land development and housing policy.

As highlighted earlier, housing provision is governed by the formal written rules that are related to the financial institutions, the land development and housing policy (Ahmad, 2003; Harvey, 1996; Balchin *et al.*, 1995 and Endan, 1984). In other words, it demonstrates how the formal written rules or institutions play important roles in housing development. Therefore, for the purposes of this research, it is important to identify the developers' perceptions on the importance of these three major institutions and how they affect the housing development process. This result can be used to support the discussion on the causes of abandoned housing projects from the institutional perspectives. Again, it is important at this stage to define the institutions or formal written rules that affect the housing development in this research, and to consider whether these institutions are perceived as a barrier institutions for developing housing projects in Malaysia.

Therefore, the questions that have been designed specifically for the questionnaire covered these three major institutions, as shown in Appendix 3. There were three sections (i.e. section B(a): formal written rules that related to land development, section B(b): formal written rules that governed financial institutions and section B(c): formal written rules that related to housing policy). At this stage, it is important to stress that the housing policy specifically refers to the requirement imposed by the government that requires housing developers to develop 30% of the approved housing schemes with low-cost housing units. Indeed, the government has also fixed the price

of low cost units, as emphasized earlier in chapter two, in order to ensure that the lower income group is given priority in the housing provision, despite houses being constructed for other groups.

With reference to the discussion on the three dimensions designed in the questionnaire, each section has various items, as explained in detail in the research methodology chapter. For instance, there are six items that tap in to section B(a), while there were seven items for section B(b) and four items for section B(c). All items in each section have been computed in order to obtain the weighted mean⁷³ for each dimension; these have been divided into three groups: the role played by the formal written rules that are related to land development for section B(a); the role played by the formal written rules that are related to financial institutions for section B(b); and section B(c); the role played by the formal written rules that are related to the housing policy. The researcher used a 5-point Likert Scale (1 = strongly not serious, 2 = not serious, 3 = uncertain, 4 = serious, 5 = very serious) to reflect these dimensions. Those items which have been computed produced a total score for each dimension and then were divided by the items in each dimension to obtain the weighted mean, as shown in table 5.12 (p.198).

The information revealed in table 5.12 shows the perceptions of respondents on the role played by the institutions or formal written rules affecting housing development. From table 5.12, one can see that the respondents who come under this study were uncertain about whether the role played by these three institutions was affecting housing development in Malaysia, with a score of the weighted mean of 3.51 (the role played by formal written rules related to the financial institution); 3.49 (the role played by the formal written rules related to land development). However, the result in table 5.12 shows that the respondents perceived that the role played by the formal written rules relating to housing policy was not seriously affecting housing development, with a weighted mean of 1.98. Nevertheless, these results should be considered together with the results from the semi-structured interviews.

⁷³ 'Weighted mean' refers to the items which have been computed and divided by the number of items for each dimension.

Table 5.12: The respondents' perceptions about the institutions affecting housing development

Dimensions	Minimum	Maximum	Weighted Mean	Standard Deviation
The role played by the formal written rules that are related to financial institutions	2.00	4.43	3.51	0.52325
The role played by the formal written rules that are related to land development	2.17	4.83	3.50	0.39834
The role played by formal written rules that are related to housing policy	1.00	3.75	1.98	0.49970

Source: The researcher's fieldwork (2006)

Note: N=555 for land and government policy & N = 203 for financial (1 = strongly not serious, 2 = not serious, 3 = uncertain, 4 = serious, 5 = very serious)

The following sections contain further discussion on the respondents' perception on the role played by these three institutions affecting housing development in Malaysia.

5.4.2 The Institution or Formal Written Rules that Are Related to the Financial Institutions

From the result shown in table 5.12, one can see that the respondents were uncertain concerning whether the role played by the formal written rules related to the financial institutions was seriously affecting housing development. However, the results demonstrate the tendency of the respondents to believe that the formal written rules that govern the financial institutions were seriously affecting housing development, with a weighted mean of 3.51.

In this context, the formal written rules that were perceived to be affecting housing development from the financial institution dimension refer to the approval of bridging loans. This finding was supported by the results from the interviews, in which most interviewees (95%, N=192) claimed that the procedures imposed by the financial institutions for approving the bridging loans were very strict. For instance, the bridging loans can be approved subject to 80% of the housing units being sold. This means that if the developers fail to achieve 80% of sales of the housing units, they have to complete the particular project with their own funding. They further remarked that bridging loans represented about 30 per cent of total development cost, and it was very important for the developers to initiate the housing project. However, some of the developers require the bridging loans for completing the project. In this case, if the cash flow of the project falls short and there are no contingency plans to overcome the problem, the project will be abandoned.

Nevertheless, some of the interviewees (5%, N=192) from both categories, i.e. successful and failed developers, remarked that the financial institutions were supportive in enhancing the house building industry by providing financial support to the developers. They further contend that this does not mean that the financial institutions should relax loans procedures and simply approve all the applications from the developers. In relation to this, the financial institutions have set up clear criteria for loan approval, as highlighted in chapter two. The rules and procedures set up by the financial institutions, including the interest rate charge on any loans provided by the financial institutions, will be monitored by the National Bank of Malaysia. In this context, the housing developers and house buyers can lodge a report to the National Bank of Malaysia if they think the loans procedures set out by the financial institutions are too strict. In other words, the financial institutions also have a right to ensure that their investments will be secured and that the borrowers are capable of paying back the loans.

As well as exploring the role played by the formal written rules that are related to the financial institutions, and that affect housing development, the interviews also explored the perceptions of respondents concerning whether they perceived that the role of the financial institutions contributes to the existence of abandoned housing projects.

In response to this, the interviewees (95%, N=192) remarked⁷⁴ that the existence of abandoned housing projects is not related to the failure of the financial institutions. The financial institutions have played a very important role and have accepted their responsibilities in supporting the house building industry. They further claim that the financial problems faced by developers are a result of both the mismanagement of the finance that has been allocated for a specific project, and poor management by the developers. This statement was in line with the report by the MHLG, which asserted⁷⁵ that poor management by developers led to the mismanagement of funds, and finally the abandonment of projects.

In order to answer research hypothesis 1, a two independent-sample t-test was conducted to estimate whether there is a significant statistical difference in the mean of the role played by the formal written rules that are related to financial institutions affecting housing development in Malaysia between successful developers and failure developers, as shown in table 5.13 (p.203). This finding will answer the first hypothesis of this research:

H1: There is a significant statistical difference between successful developers and failure developers in the role played by the formal written rules that are related to financial institutions affecting housing development in Malaysia.

The findings in table 5.13 (p.203) show that there is a significant difference between the mean of the role played by formal written rules that are related to the financial institutions affecting the housing development in Malaysia between successful developers and failure developers, ($p = 0.000$) $t(13.03) = 81.21$, $p < 0.05$, two tailed. The result shows that there is a significantly different mean between the successful developers and failure developers in terms of the role played by the financial institutions, which is affecting housing development. The failure developers perceived that there were very strict procedures for approving bridging loans, and they see this as a barrier to completion whereby the developers have to make sure that at least 80% of the new housing units will be sold.

⁷⁴ Interviews with the elite group and the developers in May to July, 2006

⁷⁵ Laporan projek terbengkalai by the Ministry of Housing and Local Government, 2005.

As discussed earlier, the project cash flow will be jeopardised if the bridging loan approval is rejected as a result of the failure to achieve the sale percentage of 80%, which in turn will lead to failure to obtain approval for bridging loans from the financial institutions. If this happens, the housing developers will face financial problems which will affect project completion.

However, the successful developers believe that the financial institutions have played important roles which affect housing development in Malaysia. However, the role played by the formal written rules of the financial institutions is not a barrier to housing development, specifically the existence of abandoned housing projects. In addition, the successful developers perceive that there is no significant relationship between abandoned housing projects and financial institution procedures. This is because financial institutions have guidelines and criteria, the terms of which are not impossible for the developers or borrowers to meet. Indeed, all the procedures imposed were designed to ensure a win-win situation between financiers and developers. In other words, financial institutions have to ensure the security of their investment, and at the same time, they help the developers to complete particular projects by supporting them with bridging loans. In this context, Harvey (1996, p.107) contends that “ A developer needs short-term finance for the development period in order to purchase land, meet ripening and waiting costs and pay the building contractor and professional consultants”.

From the above discussion, the result from the independent t-test has rejected the null hypothesis where there is no significant statistical difference in the mean of the role played by formal written rules that are related to the financial institutions that affect housing development in Malaysia between successful developers and failure developers.

5.4.3 The Relationship Between the Formal Written Rules that Are Related to the Land Development

Land and housing development are strongly related because land is the basic feature for housing development and it is also regarded as one of the production factors (Balchin *et al.*, 1995). They further contend that land is characterised by the following

characteristics⁷⁶: the relative fixity of supply, no cost of creation and heterogeneity. Indeed, land for housing development is limited in supply, and since it is in high demand and greatly utilised in developments, it will become scarce. In this context, land prices in urban areas will, inevitably, continue to rise compared with land prices in rural areas. The effect of the land prices on the developers is that the more expensive the land is, the more the developer will have to bear the costs of holding charges and interest. In the Malaysia context, the government plays an important role in regulating the use of land, where land is a State matter, as discussed earlier in chapter two. Public policy can affect land and property development, for example, through intervention in the development process (Healey *et al.*, 1995) in various ways. The most popular intervention mechanism is that of planning control, and state intervention has a significant influence on housing development (Othman, 1999).

In addition, intervention by the government has regulated the housing provision and indeed managed to control the price of land and new housing through land use planning (Barlow, 1995). This statement was supported by Othman (1999, p.20) who contends that “This is made possible as planning system and building controls restrict the quantity, quality, location and price of housing”.

In this context, neo-classical economists perceive that public policy has a significant influence on land and property markets. Adams *et al.* (2005, p. 63) argue that

“Several studies have developed typologies to classify and organise the relationship between planning tools and land and property markets (see, for example, Lichfield and Darin-Drabkin 1980; Healy *et al.*, 1988; Vigar *et al.*, 2000)”. In addition, Adams *et al.* further contend that there are four basic types of planning tools which are related to the land and property market: market shaping, market regulation, market stimulation and capacity building⁷⁷. In this context, institutional economic analysts perceive the importance of institutions that govern the land and property market structure and their significant relationships; however, neo-classical economists might not always agree with this (Adams *et al.*, 2005).

⁷⁶ Refer to Balchin *et al.*(1995) for further explanation

⁷⁷ Refer to Adams *et al.* (2005) for further explanation.

Table 5.13: Independent sample T-test of the financial dimension affecting housing development in Malaysia between successful developers and failure developers

Financial Dimension		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
	Equal variances assumed	10.24	.002	15.01	201	.000	5.8793	.39175	5.1068	6.6518
	Equal variances not assumed			13.03	81.213	.000	5.8793	.45124	4.9815	6.7771

Source: The researcher's fieldwork (2006)

In the Malaysian context, public intervention on land is carried out through the formal written rules that are stated in the National Land Code (NLC)⁷⁸ 1960, and the Town and Country Planning (TCPA)⁷⁹ Act 1976. Both acts are directly related to property land development in Malaysia. The National Land Code 1960⁸⁰ introduced the land administration in Malaysia, and includes land use, land ownership, subdivision and so on. For instance, Section 124 of NLC mentioned the category of land use, and divided it into 3 categories (i.e. industrial, building and agriculture).

The purpose of categorising the land use was to ensure that there would be no overlap of development within the same area. However, any development must be referred to the planning system imposed by the government through TCPA. This is because planning systems detail the types of development, and have a very significant relationship with the land and property market. Therefore, this study focuses solely on the respondents' perception on the role played by the formal written rules on land development that affect housing development.

From the result in table 5.12 (p.198), one can see that the respondents who come under this study seem between uncertain to serious about whether the role played by the formal written rules on land development is perceived as a barrier that affects housing development. However, the results demonstrate the tendency of respondents to believe that the formal written rules that govern the land development seriously affect housing development, with a weighted mean of 3.50. The respondents believe that the purpose of the land institution that is governed by the NLC and TCPA is to ensure that land can be developed with the highest and best use objective without neglecting other aspects, such as environment and social concerns. This means that any development is not solely profit-oriented but must take into account other aspects for the good of the next generation, especially in terms of the environment. This statement was endorsed by the remarks⁸¹ by interviewees who agree that the

⁷⁸ National Land Code, 1960 hereafter referred to as NLC

⁷⁹ Town and Country Planning Act hereafter referred to as TCPA

⁸⁰ Refer to National Land Code, 1960 for further explanation

⁸¹ Interviews with the developers in May to July, 2006

objectives of implementing the planning system and the implementation of NLC in the housing development are to control development in both environmental and social terms. However, they also accepted that introducing the planning systems and land laws in the housing development will have a negative effect on them; for example, the amount of land allocated for housing development is always insufficient and potential land is located within areas of high demand. Nevertheless, there is no pressure on them to undertake housing development if they are not capable of doing so. The choice and decision to become involved is dependent on their capability and their response to market information or signals. In other words, housing development can be carried out at any place as long as the demand is there. That is why the developers perceive that the role of market information is another important factor in the land and property market (Adams *et al.*, 2005).

However, the weighted mean score of 3.50, shown in table 5.12 (p.198), indicates that the respondents who come under this study tend to agree that the role played by the formal written rules on land development is a barrier that affects housing development. In relation to this, the result from the interviews which explored this in more detail indicated that most respondents (95%, N=192) thought that the restrictiveness of rules on land development, especially the regulation pertaining to planning permission, contributes a negative effect to housing development, as discussed in chapter two. They further explained that the condition under section 24(1) in TCPA which requires developers who were granted planning permission approval to proceed with the construction activities within 12 months makes them strive to commit to the construction activities, and at the same time endeavour to sell the housing units at the highest possible percentage. If they are committed to the construction activities, and at the same time the percentage of units sold is not encouraging, the developers will face financial problems. As discussed earlier, if there is a low percentage of sold units, it is difficult for the developers to obtain bridging loans from the financial institutions, and, as a result, this could jeopardize the cash flow of the particular project. Finally, the projects can be abandoned if the developers fail to overcome these financial problems.

Because of this, it is important to determine whether there is a significant statistical difference in the mean of the role played by the institutions or formal written rules on

land development affecting the housing development in Malaysia between successful developers and failure developers. For this reason, two independent-sample t-tests were conducted to estimate the significant statistical difference in the mean of the role played by the land institution affecting housing development between successful developers and failure developers. This finding will establish the second hypothesis of this research:

H1: There is a significant statistical difference between successful developers and failure developers in the role played by the institutions or formal written rules on land development affecting housing development

As can be seen from the result in table 5.14 (p.207), there is no significant difference between the mean of the role played by the institution or formal written rules on land development affecting the housing development in Malaysia between successful developers and failure developers, ($p=0.059$) $t(-1.895)= 553$, $p>0.05$, two tailed. In other words, statistically there seems to be no different mean between successful developers and failure developers on the role played by the institutions or formal written rules on land development that affects housing development in Malaysia. This result demonstrates that the behaviour of both groups in believing that the role played by the institutions or formal written rules was perceived as a barrier to housing development in Malaysia in terms of the restrictiveness or rules that require developers to commit to construction work within 12 months after the planning permission has been approved. This result was in line with the interview result in which most of the interviewees (95%, N=192) believe the restrictiveness of rules in terms of the requirement to develop the approved site within 12 months was perceived as an obstacle in housing development. From this, one can conclude that the result from the independent t-test has accepted the null hypothesis in which there is no significant statistical difference in the mean of the role played by institutions or formal written rules on land development affecting housing development in Malaysia between successful developers and failure developers. In this context, both groups believe that the strictness of the rules and regulations that govern land development act as a barrier that affects housing development in Malaysia.

Table 5.14: Independent sample T-test of land dimension affecting housing development in Malaysia that is related to housing abandonment between successful developers and failure developers

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Land Dimension	Equal variances assumed	.583	.445	-1.895	553	.059	-.5549	.29281	-1.13004	.02027
	Equal variances not assumed			-1.754	96.789	.083	-.5549	.31637	-1.18280	.07303

Source: The researcher's fieldwork (2006)

5.4.4 The Role Played by the Institutions or Formal Written Rules on Housing Policy

As discussed earlier in chapter two, the planning for housing provision in Malaysia was based on the five-year plan. Through this plan, the government has been planning to construct housing units based on the national needs for every plan. The attempt by the government in terms of housing provision had been taking place before independence (Endan, 1988, p.87). Endan further contends that “The federal government allocated RM10 million to establish the Housing Trust, although the Draft Development Plan of the Federation of Malaya (Federation of Malaya, 1950, 44) indicated that RM150 million was needed for housing. The trust began building houses for sale. The houses were sold at cost price, including the cost of all infrastructures”.

After independence, the First Development Plan for Malaya (1956-1960) was introduced; it focused on providing housing for citizens. Then it was followed by the Second Five Year Plan (1961-1965) until the latest Ninth Malaysia Plan (2006-2010), which was launched last year (2006). However, the involvement by the private developers started in the Fourth Malaysia Plan (1981-1985), as emphasized earlier. Since then, the private sector has played a very important role in housing provision in Malaysia in terms of providing low-cost housing, with low medium cost, medium-cost and high-cost projects. Nevertheless, the government is still playing an important role in providing housing units for hardcore poverty groups, as discussed earlier.

Instead of housing policy in terms of producing housing based on the five year plan, the most important aspect is the imposition by the government of a housing policy that requires private developers to construct 30% of the total housing units with low-cost housing units. Indeed, the government has stipulated that the price of low-cost units should not exceed RM25,000.00 per unit (Salleh and Meng, 1996; Othman, 1999). Planning permission will not be given if the private developers fail to comply with these terms.

Nevertheless, there have been many complaints by private developers concerning the price for low-cost houses, and as a result the government has increased the selling price to more than RM25,000.00 (Othman, 1999). Again, it is important to stress here that the government is very concerned about the development of low-cost housing projects. This is because the construction of low-cost units is focusing on providing housing units to cater for the lower income groups, and it is directly controlled by the State Government. Therefore, it is important in this study to identify whether the developers perceive that the role played by the institutions or formal written rules on housing policy, specifically in terms of the requirement to construct 30% of low cost housing with fixed prices, is affecting housing development in Malaysia.

From the above discussion, the researcher has designed questions that relate to the housing policy, as shown in the questionnaire in Appendix 3. The questionnaire focused on the issue of the imposition of 30% of low-cost units that need to be constructed by private developers in every project. This is important when determining whether the respondents believe that the housing policy introduced by the government is affecting housing development in Malaysia. Therefore, the follow-up interview conducted with the developers who are willing to participate focused on the issue concerning whether this policy is related to housing abandonment.

The results in table 5.12 (p.198) show that the respondents who come under this study believe that the housing policy introduced by the government is not an obstacle / obstructive institution affecting housing development, with a weighted mean score of 1.98. This result was supported by a few of the interviewees (10%, N=192) who mentioned⁸² that the government housing policy is a very important aspect in enhancing the national housing industry. They further remarked that, without the housing policy that required private developers to construct 30% of the total housing units with low-cost houses, lower income groups would never have a chance to have adequate housing, because private developers focus more on constructing medium- and high-cost housing units that give them higher profit margins.

⁸² Interviews with the developers in May to July, 2006

However, further information, gathered from the interviews concerning whether the employment of the requirement for developing 30% of housing units with low cost houses is related to abandonment problems, indicates different views. This is because most of the interviewees (90%, N=192) claimed that the housing policy that required them to develop 30% of low-cost housing units is related to housing abandonment, especially when undertaking small size projects, whereas smaller size projects were less flexible in terms of cross subsidy from non low-cost to low-cost housing units.

For that reason, it is important to determine whether there is any significant statistical difference in the mean of the role played by the formal written rules on the housing policy affecting housing development in Malaysia between successful developers and failure developers through the analysis of two independent-sample t-tests. The finding will answer the third hypothesis of this research:

H1: There is a significant statistical difference between successful developers and failure developers in the role played by the institutions or formal written rules on housing policy affecting housing development in Malaysia

Table 5.15 (p.212) showed the results of the t-test of the role played by the institutions or formal written rules on the housing policy affecting housing development in Malaysia between successful and failure developers. The findings revealed that there is a significant difference between the mean of the housing policy dimension affecting the housing development in Malaysia that is related to housing abandonment between successful developers and failure developers, ($p=0.000$) $t(4.66)= 100.172$, $p<0.05$, two tailed.

From the results, one can see the different perceptions of the respondents, between the successful developers group and the failure developers group. The results indicated that successful developers perceived that the role played by housing policy has not contributed to a problem or a barrier to housing development in Malaysia. This is because they see the role of the housing policy as enhancing the house building industry in Malaysia. In fact, through the housing policy implemented by the government, the lower income group has a bright future in respect of owning their housing units. Indeed, this requirement should be regarded as a social obligation by the developers to work and support the

government mission in providing housing units for lower income groups, rather than concentrating on making a profit *per se*. Conversely, the failure developers seem to believe that the role of the housing policy in terms of the requirement of 30% low cost is a barrier in housing development; specifically, it can lead to housing projects being abandoned. This problem occurs when there is a mismatch of supply and demand, where the low-cost houses had to be constructed even though the supply for the low-cost houses is more than demand. This is because only certain people who have been categorised as lower income groups are eligible to purchase the low-cost houses. This statement was endorsed by most of interviewees (95%, N=192), who claimed that developers will abandon the low-cost projects if the number of purchasers is low, rather than complete the housing projects; finally they have to struggle to find the purchasers. This statement was in line with the findings of a case study by Siong (1994) on the evaluation of housing estate development in relation to housing supply in Malaysia, which found that abandoned housing projects are related to the institutional factor caused by the imposition of the 30 per cent rule.

From the above discussion, one can see that there is a significant statistical mean difference between the successful developers and the failure group of developers on the role played by the institutions or formal written rules on the housing policy in terms of the requirement to construct 30% of low-cost houses. In relation to this, the result from the independent t-test has rejected the null hypothesis in which there is no significant statistical difference in the mean of the role played by the institutions or formal written rules on the housing policy that affects housing development in Malaysia between successful developers and failure developers. Successful developers seem to agree that the role played by the housing policy in terms of the imposition of 30% requirement to construct low-cost houses is not a barrier to housing development, whereas the failure developers believe that the strictness of the rules which require developers to develop the approved housing projects with 30% of low-cost houses can be linked to the housing abandonment.

Table 5.15: Independent sample T-test of the role played by the housing policy affecting housing development in Malaysia between successful developers and failure developers

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Housing policy dimension	Equal variances assumed	.506	.477	4.775	553	.000	1.1497	.24075	.67677	1.62258
	Equal variances not assumed			4.655	100.172	.000	1.1497	.24698	.65969	1.63966

Source: The researcher's fieldwork (2006)

The findings from the above discussion show the role played by the institutions or formal written rules of financial institutions, land development and housing policy affecting the housing development in Malaysia, while the results from interviewees supported the argument that the strictness of the institutions or formal written rules that are related to financial institutions, land development and housing policy can be linked in the discussion of the existence of abandoned housing projects. The findings, as discussed above, achieve the third objective of this research: “*to identify the institutions affecting housing development in Malaysia*”. T-test results answer the hypotheses 1, 2 and 3 of this research. The following sections contain a discussion of the respondents’ perceptions about the interrelationship between market and project abandonment.

5.5 The Respondents’ Perception About the Role Played by Market Signals in Housing Development

In addition to the discussion of the respondents’ perceptions on the institutions or formal written rules affecting housing provision in Malaysia, concerning whether they were perceived as obstacles to housing development, this study also reveals the information about the respondents’ perceptions about the interrelationship between market information and project abandonment, specifically, in terms of the roles played by market signals in the housing development, and whether ignoring or not understanding this role could lead to project abandonment.

Section C in the questionnaire focused on this matter. There were five items designed in the questionnaire relating to the role of market signals in housing development. All the items in this section have been computed in order to obtain the weighted mean. The researcher used a 5-point Likert Scale (1 = strongly not important, 2 = not important, 3 = uncertain, 4 = important, 5 = very important) to reflect this dimension. Those items which have been computed produced a total score for this dimension; then they were divided by the number of items to obtain the weighted mean, as shown in table 5.16 (p.214).

Table 5.16: The respondents' perceptions about the role played by market signals in housing development and failure to respond appropriately to them could lead to project abandonment

Dimensions	Minimum	Maximum	Weighted Mean	Standard Deviation
The role played by the market signals	1.20	5.00	3.81	.55216

Source: The researcher's fieldwork (2006)

Note: N=555 (1 = strongly not important, 2 = not important, 3 = uncertain, 4 = important, 5 = very important)

From the result in table 5.16, one can see that the respondents who come under this study seem between uncertain to serious about whether the market signals play an important role in housing development, and failure to respond appropriately to them could lead to project abandonment. However, the result demonstrated the tendency of respondents to believe that failure to respond correctly to the role of market signals in housing development could lead to project abandonment, with a score mean of 3.81. This statement was endorsed by the result of the interviews, in which most of the respondents (95%, N=192) recognised the importance of responding to the market information, specifically to market signals before entering the housing market, and failure to respond correctly to market signals contributes to project abandonment. In other words, the results show that respondents' who come under the study believe that there is an interrelationship between the market and project abandonment. In addition, two independent-sample t-tests were conducted to estimate whether there is a significant statistical difference between successful developers and failure developers in the mean of the role of the market signals dimension in housing development, and failure to respond appropriately to them contributes to housing abandonment. This finding will answer the fourth hypothesis of this research:

H1: There is a significant statistical difference between successful developers and failure developers in the mean of the role of the market signals dimension in housing development.

The findings in table 5.17 (p.216) show that there is no significant difference between successful developers and failure developers between the mean of the market signals dimension in housing development, ($p=0.011$) $t(2.60)= 87.30$, $p>0.05$, two tailed. The findings are not surprising, because both groups recognise the role of market signals in the housing market, and the importance of responding to them appropriately. They believe that the developers have to gather as much information about the supply and demand of the housing market, for example in terms of the types of houses with high demand. The developers also require to respond to the housing stock before entering the housing market to determine the preferred types of houses; and the developers also need to respond to household income affordability. This information is useful for developers before entering the market. In addition, they also agree about the interrelationship between market and project abandonment, where failure to respond to market signals correctly leads to problems related to housing abandonment.

Nevertheless, most interviewees (95%, $N=192$) claimed that most of the developers in Malaysia acknowledge the importance of the role played by market signals. However, most of the developers seem not to respond appropriately towards market signals. This is because they believe that, if the potential land is prime land and strategic in terms of location, they would not have any problem in selling the housing units. The reason for this is that their target customers are not first-time purchasers who require houses for occupation, but rather purchasers who buy the housing units for investment and/or use. However, their concern before entering the market is to make sure the price is competitive and the design of the houses is up to date. They further remarked that the housing delivery system in Malaysia, which has been practised based on the “Sell then Build” concept, has given them an opportunity to determine whether the projects are in demand or not.

Table 5.17: Independent sample t-test of the importance of the role of market signals to be responded to appropriately in housing development and interrelationship to project abandonment between successful developers and failure developers

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
The role of market signal	Equal variances assumed	14.073	.000	3.453	553	.001	1.1593	.33572	.49990	1.81880
	Equal variances not assumed			2.602	87.301	.011	1.1593	.44562	.27368	2.04502

Source: The researcher's fieldwork (2006)

This is because when the projects were launched, potential house buyers made a booking based on the layout plans approved by the local authority. From that, the developers would decide whether to continue working on the projects or to withdraw. This means that the number of house buyers who made a booking in the first place would be the indicator for the survival of the projects. Once the S&P agreement has been signed between the developers and the purchaser, the developers will decide when to start the construction work, based on the percentage of housing units sold, as discussed earlier. Concerning housing abandonment, they mentioned that abandoned housing projects might be related to the failure of developers to respond correctly to the market signals. However, this matter will be discussed in the next section, which identifies the causes of abandoned housing projects in Malaysia.

They further claim that there seems to be a trend among developers in Malaysia to undertake new housing projects without properly responding to market signals. The developers will become involved in the housing development when they have money and can find suitable land on which to build. Following the discussion, one can see that most of the developers behave as predicted by neo-classical economic theory: they believe in the theoretical approach concerning the market signals, but in practice, they might not apply the theory. That is why the discussion in the next section will establish whether failure to respond correctly to the market signals will lead to the problem of housing abandonment.

The above discussion indicates that the result has rejected the alternative hypothesis that there is a significant statistical difference between successful developers and failure developers in the mean of the important role played by the market signals in housing development. This is because both successful developers and failure developers acknowledge the importance of market signals before entering the housing market, and that failure to respond to them could lead to project abandonment. In other words, the results indicate the interrelationship between market and project abandonment.

These results answered the fourth research hypothesis and also managed to achieve the fourth research objective, which was “*to examine the roles played by market signals in housing abandonment*”. The next chapter contains a discussion of the causes of abandoned housing projects in Malaysia.

5.6 Conclusion

This chapter presented background information about the respondents who come under this study. It revealed the various perspectives of the respondents, and it can be concluded that most respondents have experience in housing development in Malaysia based on the information of the firm establishment. Pertaining to the analysis of the questionnaires, developers generally had more or less the same perceptions with regard to the role played by the institutions or the formal written rules that affect housing development. The results revealed that the developers believe that the formal written rules that are related to financial institutions, land development and housing policy were perceived as a barrier in housing development. This is supported by the result from interviews which looked at this issue in more detail, indicating clearly their perception about the role played by these formal written rules affecting housing development. In addition, respondents believe that the strict rules and regulations that govern financial institutions, land development and housing policy are perceived as obstacles in housing development.

The results also confirm the important role played by the market signals in housing development. However, the results from the interviews indicated that most of the developers did not behave as predicted by neo-classical economic theory: they did not respond appropriately to market signals. They further contend that failure to respond correctly to the markets signals will lead to the sale percentage of housing units constructed. As a result, the developers face a financial problem when the percentage of new housing units sold is low, and this will jeopardise the cash flow of particular projects. As discussed earlier, failure by the developers to overcome financial problems immediately could lead to problems such as abandoned projects. Indeed, failure to respond appropriately towards market signals that affect the sale percentage of housing units will be a constraint for developers to obtain the bridging loans if the sale percentage of 80% is not achieved.

Therefore, even though the developers realise and understand the important role played by the market signals in housing development, failure to respond correctly towards the market signals will cause financial problems, and finally could contribute to housing abandonment if no action is taken to overcome the problem in the early stages.

One can conclude from the above statement that the institutions or formal written rules, as predicted by institutional economic theory that govern the financial institutions, land development and housing policy, as well as the role played by the market signals, are significant elements affecting housing development in Malaysia. The following chapter will describe the causes of abandoned projects.

CHAPTER 6

THE CAUSES OF ABANDONED HOUSING PROJECTS

6.1 Introduction

The previous chapter contained a discussion of the results of the analysis of the data gathered pertaining to the background of the respondents who come under this study. It covered various perspectives, such as the establishment of the respondents' firms, number of branches and employees in their organizations, the firms' ownership and turnover and also the respondents' experience in housing development. The previous chapter also revealed the results of the respondents' perceptions on the institutions or formal written rules that were perceived as a barrier affecting housing development in Malaysia. The previous chapter also revealed the results of the respondents' perceptions about the interrelationship between the market and project abandonment. In general, the discussion in the previous chapter shows that Objectives 3 and 4 of the study have been achieved, and it also revealed the results from testing the hypotheses.

From the results revealed in previous chapter, one can see that housing provision is highly regulated, especially in terms of the formal rules or institutions which have been seen as barrier towards the housing development. This is owing to the strictness of regulations in terms of planning procedures, housing policy, land policy and also the loan approvals of the financial institutions. This barrier could contribute to the existence of housing abandonment. Besides that, the respondents also believe that it is very important to react correctly to market signals in housing provision, and failure to do so could also contribute to housing abandonment. Therefore, it is important to determine the perceptions, opinions and attitudes of respondents on the causes of abandoned projects.

Following the above explanation, this chapter focuses solely on the respondents' perceptions of the causes of abandoned housing projects. As highlighted earlier in the

research methodology chapters, this research attempts to identify the factors that contribute to the existence of abandoned housing projects in Malaysia.

For this purpose, the researcher employed the factor analysis technique that has been justified as the main analytical technique used in this study, as described in section 4.7.4. Factor analysis is a reliable technique which may be used to identify a set of dimensions that are latent in a large set of variables. As highlighted earlier in Chapter Four, 16 variables have been observed, and these are based on the perspectives of neo-classical and institutional economics perspectives.

This chapter is divided into three sections. Section 6.2 contains an explanation of the cause of abandoned housing projects, comprising five factors as a result of the factor analysis interpretation. This section reveals the factors that contribute to housing abandonment in Malaysia. In Section 6.3 the achievement of the chapter is summarized.

6.2 Analysis of the Causes of Abandoned Housing Projects

One of the objectives to be achieved in this study is to identify the causes or factors that contribute to the existence of abandoned housing projects in Malaysia. In order to achieve this objective, Section D in the questionnaire, as shown in detail in appendix 3a, was designed to identify the causes related to housing abandonment. At this stage, it is important to note that this questionnaire was newly constructed in order to achieve the research objective. That is why factor analysis using the model of principal component analysis is suitable for the nature of this study, for which a newly constructed questionnaire has been developed.

The researcher generated 16 questions pertaining to the causes of abandoned housing projects, based on the perspectives of neo-classical and institutional economics. Each question was a statement followed by a five-point Likert scale, expressed thus: 1 = Strongly Disagree, 2 = Disagree, 3 = Uncertain, 4 = Agree, 5 = Strongly Agree. The questionnaire was designed to predict the factors that are linked to the abandoned housing projects from the perception of the respondents who come under this study

(i.e. successful developers and failure developers). It is important to gather from both these groups information on the factors outlined that contribute to the causes of abandoned housing projects. Before entering into further discussion on the interpretation of data based on the factor analysis, it is useful to highlight the observed variables which have been designed, from the perspectives of neo-classical and institutional economics, as shown in Table 6.1.

Table 6.1: List of the original observed variables

No.	Name of Variable	Description
1	Rules and regulations	Influence of restrictive rules and regulations on housing abandonment
2	Legal requirement	Specific time required to complete housing projects
3	Time to complete	Specific time to complete housing projects
4	Weak enforcement	Weak enforcement contributes to abandoned projects
5	Weak monitoring	Weak monitoring contributes to abandoned projects
6	Mismanagement	Financial problems caused by mismanagement
7	Misuse	Financial problems caused by misuse of project fund
8	Fraud	Fraudulency claims exist owing to weak monitoring and enforcement
9	Profit motive	Developer focused solely on making profit
10	Social obligation	A negative sign on social obligation
11	Loss aversion	Developers unwilling to accept total loss
12	Profit orientation	Maximise profit margin by undertaking multiple projects
13	Financial gain	Interested in financial gain as opposed to social obligation
14	Mortgage	Failure to respond to mortgage procedures and interest rate(s)
15	Demand	Failure to respond to demand for particular types of houses
16	Supply	Failure to respond correctly to supply of houses

Source: The researcher's fieldwork (2006)

Note: N = 555 (1 = strongly disagree, 2 = disagree, 3 = uncertain, 4 = agree, 5 = strongly agree)

From table 6.1, one can see that 16 original observed variables were designed based on the perspectives of neo-classical and institutional economics in order to identify the factors that contribute to the existence of abandoned housing projects. Owing to the

large number of observed variables, the employment of factor analysis using the model of principal component analysis seems appropriate, because this method is capable of reducing and summarising the large set of variables into a minimum number of factors for prediction purposes. Nevertheless, it is important to test the reliability of the sample of this study before conducting the factor analysis.

This is because the reliability of factor analysis is also dependent on sample size (Field, 2005). Statistically, the concept of reliability refers to the degree of accuracy of estimate of the true score in the population of the object to be measured. In this study, the reliability coefficient used is Cronbach's alpha. Cronbach's alpha is a reliability coefficient which reflects how well the items in a questionnaire are positively correlated to one another (Sekaran, 2003). Cronbach's alpha is used in a reliability test for estimating internal consistency. Internal consistency is a measure that assesses the degree to which the item employed is internally consistent with other items comprising the scale. This means that if the coefficient alpha is very low, then the scale has too few items measuring the same construct, or that there are very few items in the scale.

For that reason, the term 'reliability coefficient' used in this study refers to the inter-correlation of items within a scale, based on the coefficient alpha technique. From table 6.2, one can see that the Cronbach's alpha value, which is the overall reliability of the scale, is 0.7. This value is acceptable according to Field (2005), since the acceptable values for the Cronbach's alpha is in the magnitude / range of 0.7 to 0.8. Nevertheless, even if the Cronbach's alpha value is between 0.4 and 0.6, which is considered low in practice, these values are nevertheless acceptable for research purposes (Hinkin, 1995). Therefore, for the purposes of running the factor analysis, it is worth noting which items need to be removed. The following section will discuss the factor analysis, using SPSS for identifying the factors that contribute to the existence of abandoned housing projects.

Table 6.2: Reliability coefficients of observed variables (Reliability Analysis – Scale Alpha)

No.	Name of Variable	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
1	Rules and regulations	49.8198	36.967	.099	.136	.682
2	Legal requirements	49.6703	38.698	-.097	.174	.709
3	Time to complete	49.7964	37.610	.007	.161	.695
4	Weak enforcement	48.1820	36.081	.156	.338	.678
5	Weak monitoring	48.1658	36.009	.173	.348	.676
6	Mismanagement	48.1766	34.626	.296	.446	.662
7	Misuse	48.1171	34.335	.318	.459	.660
8	Fraud	48.3117	34.778	.277	.157	.664
9	Profit motive	49.2450	31.258	.501	.429	.632
10	Social obligation	49.3550	31.811	.452	.376	.639
11	Loss aversion	48.2126	34.864	.313	.205	.661
12	Profit orientation	48.3477	33.303	.377	.247	.651
13	Financial gain	49.0180	32.155	.408	.369	.645
14	Mortgage	48.9676	34.205	.242	.159	.670
15	Demand	48.6865	32.385	.461	.374	.640
16	Supply	48.3063	33.238	.451	.360	.644

Source: The researcher' fieldwork (2006)

Note: No of Cases N=555; Reliability Coefficients = 16 items;

Alpha = .7; Standardized item alpha = .7

6.3 Interpreting Output of Factor Analysis from SPSS

Based on the reliability analysis, as discussed above, and the reliability coefficient, Cronbach's alpha for the overall scale of 16 items of observed variables is almost 0.7. Therefore, there is no need for any deletion of these items, and this result may be

considered appropriate for proceeding with factor analysis in order to identify the causes of abandoned housing projects.

Further analysis using the principal component analysis was employed to condense the information contained in a number of original variables into a smaller set of new composite dimensions or factors with a minimum loss of information. In other words, the factor analysis approach, based on the principal component analysis technique, was used to minimise the factors from the original variables of 16 to the smaller number, which is easy to interpret for achieving the research objective of identifying the causes of abandoned housing projects. Table 6.3 shows an abridged version of the R-matrix⁸³. The table has been divided into two levels. The top half of the table shows the Pearson correlation coefficient between all pairs of questions or variables. The bottom half of the table shows the one-tailed significance of these coefficients. It is important to note here that the correlation matrix is useful for checking the pattern of relationship. At this stage, it is important to check whether multicollinearity is a problem for these data or not. Based on the result shown in table 6.3, the determinant values of the correlation matrix is 0.036, which is greater than the necessary value of 0.00001 (Field, 2005). This means that all questions or variables in the questionnaire correlate fairly well, and none of the correlation coefficients is particularly large. For that reason, one can see that there is no need to consider eliminating any variables at this stage.

Another important aspect of factor analysis, as emphasized earlier, is the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity. According to Field (2005, p.6), "The KMO statistic varies between 0 and 1. A value of 0 indicates that the sum of partial correlations is large relative to the sum of correlations, indicating diffusion in the pattern of correlations (hence, factor analysis is likely to be inappropriate). A value close to 1 indicates that patterns of correlations are relatively compact and so factor analysis should yield distinct and reliable

⁸³ *If the objective of the research is to summarize the characteristics, the factor analysis would be applied to a correlation matrix of the variables. This is the most common type of factor analysis and is referred to as R factor analysis (Hair et al., 1992, p. 228).*

factors”. He further suggests that the value of KMO that can be accepted for factor analysis must be values greater than 0.5. The values of KMO can be divided into four groups. Values between 0.5 and 0.7 are mediocre, values between 0.7 and 0.8 are good, values between 0.8 and 0.9 are excellent and values above 0.9 are superb. For these data, as shown in table 8.4, the value of KMO is equal to 0.7, which falls into the lower boundary of mediocre and within the range of being good. However, the most important issue here is the set of values which are greater than 0.5. Therefore, it is fair to say that the employment of factor analysis is appropriate for these data.

Table 6.4: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.700
Bartlett's Test of Sphericity	Approx. Chi-Square	1817.253
	Df	120
	Sig.	.000

Source: The researcher's fieldwork (2006)

In relation to Bartlett's test of sphericity, Field (2005, p.5) states that “Bartlett's measure tests the null hypothesis that the original correlation matrix is an identity matrix. For factor analysis to work we need some relationship between variables, and if the R-matrix were an identity matrix then all correlation coefficients would be zero. Therefore, we want this test to be significant (i.e. have a significance value less than 0.05). A significant test tells us that the R-matrix is not an identity matrix; therefore, there are some relationships between the variables we hope to include in the analysis”.

The result revealed in table 6.4 above shows that Bartlett's test is highly significant ($p < 0.001$), and for that reason factor analysis is appropriate. From the discussion above, one can see that the data for this study is suitable and appropriate for analysis with the factor analysis technique. Despite checking the correlation matrix, KMO and Bartlett's test of sphericity, factor extraction of the original variables is another important aspect in factor analysis.

Correlation	Legtime	1.000	.259	.180	.038	.017	-.092	-.111	.037	.124	.030	.013	-.021	.085	.101	.058	-.097
	legeconrl	.259	1.000	.236	-.064	-.012	-.133	-.111	-.107	-.092	-.158	-.012	-.169	-.006	.022	-.006	-.180
	legtenur	.180	.236	1.000	-.096	-.096	-.023	-.026	.029	.082	.065	-.088	-.077	-.103	.070	-.094	-.013
	weakfoce	.038	-.064	-.096	1.000	.561	-.031	-.066	.135	.112	.051	.002	.052	.029	.128	.145	.039
	weakmoni	.017	-.012	-.096	.561	1.000	.025	-.080	.170	.130	.055	.023	.074	-.015	.116	.098	.060
	fimismgt	-.092	-.133	-.023	-.031	.025	1.000	.638	.249	.055	.211	.101	.140	.097	.130	.161	.296
	fimisuse	-.111	-.111	-.026	-.066	-.080	.638	1.000	.216	.127	.245	.092	.168	.159	.179	.180	.296
	Dweak	.037	-.107	.029	.135	.170	.249	.216	1.000	.195	.187	.016	.102	.038	.100	.124	.238
	Dfocus	.124	-.092	.082	.112	.130	.055	.127	.195	1.000	.500	.270	.498	.155	.293	.214	.250
	Dsocial	.030	-.158	.065	.051	.055	.211	.245	.187	.500	1.000	.278	.443	.080	.143	.251	.279
	dtotcos	.013	-.012	-.088	.002	.023	.101	.092	.016	.270	.278	1.000	.184	.191	.259	.321	.199
	finccgain	-.021	-.169	-.077	.052	.074	.140	.168	.102	.498	.443	.184	1.000	.171	.186	.296	.314
	fresmogz	.085	-.006	-.103	.029	-.015	.097	.159	.038	.155	.080	.191	.171	1.000	.322	.209	.093
	fresdman	.101	.022	.070	.128	.116	.130	.179	.100	.293	.143	.259	.186	.322	1.000	.501	.242
	fresmkt	.058	-.006	-.094	.145	.098	.161	.180	.124	.214	.251	.321	.296	.209	.501	1.000	.233
	Dprofit	-.097	-.180	-.013	.039	.060	.296	.296	.238	.250	.279	.199	.314	.093	.242	.233	1.000
Sig. (1-tailed)	Legtime		.000	.000	.184	.343	.015	.004	.193	.002	.239	.380	.308	.023	.008	.085	.011
	legeconrl	.000		.000	.065	.388	.001	.004	.006	.015	.000	.388	.000	.445	.302	.446	.000
	legtenur	.000	.000		.012	.012	.294	.269	.249	.026	.063	.019	.035	.007	.050	.013	.381
	weakfoce	.184	.065	.012		.000	.230	.061	.001	.004	.115	.483	.108	.248	.001	.000	.181
	weakmoni	.343	.388	.012	.000		.278	.030	.000	.001	.099	.298	.042	.363	.003	.011	.080
	fimismgt	.015	.001	.294	.230	.278		.000	.000	.100	.000	.009	.011	.000	.001	.000	.000
	fimisuse	.004	.004	.269	.061	.030	.000		.000	.001	.000	.015	.000	.000	.000	.000	.000
	dweak	.193	.006	.249	.001	.000	.000	.000		.000	.000	.355	.008	.186	.009	.002	.000
	dfocus	.002	.015	.026	.004	.001	.100	.001	.000		.000	.000	.000	.000	.000	.000	.000
	dsocial	.239	.000	.063	.115	.099	.000	.000	.000	.000		.000	.000	.030	.000	.000	.000
	dtotcos	.380	.388	.019	.483	.298	.009	.015	.355	.000	.000		.000	.000	.000	.000	.000
	finccgain	.308	.000	.035	.108	.042	.000	.000	.008	.000	.000	.000		.000	.000	.000	.000
	fresmogz	.023	.445	.007	.248	.363	.011	.000	.186	.000	.030	.000	.000		.000	.000	.014
	fresdman	.008	.302	.050	.001	.003	.001	.000	.009	.000	.000	.000	.000	.000		.000	.000
	fresmkt	.085	.446	.013	.000	.011	.000	.000	.002	.000	.000	.000	.000	.000	.000		.000
	dprofit	.011	.000	.381	.181	.080	.000	.000	.000	.000	.000	.000	.000	.014	.000	.000	

Table 6.3: Correlation Matrix(a)/a Determinant = .36

The table 6.5 revealed that there are 3 lists of eigenvalues⁸⁴ associated with each linear component. These are before extraction, after extraction and after rotation. One can see that before extraction, SPSS determined 16 linear components within the data set. The eigenvalues related with each factor represent the variance explained by that specific linear component. The result also demonstrates the eigenvalues from the percentage of variance explained. For instance, factor 1 explains 20.957% of total variance. The result in table 6.5 revealed that the first few factors explain relatively large amounts of variance (i.e. factor 1), whereas subsequent factors explain only small amounts of variance. From table 6.5, one can see that if five factors were extracted, then 58.433% of the variance would be explained. In terms of the percentage of variance criterion⁸⁵, Hair *et al.* (1992, p.104) contend that “in the natural sciences the factoring procedure usually should not be stopped until the extracted factors account for at least 95 percent of variance or until the last factor accounts for only a small portion (less than 5 percent). In contrast, in the social sciences, where information is often less precise, it is not uncommon to consider a solution that accounts for 60 percent of the total variance (and in some instances even less) as satisfactory”.

SPSS then extracts all factors with eigenvalues greater than 1. Therefore, one can see that in the columns labelled *Extraction Sums of Squared Loadings* there are only five factors left after the extraction. The eigenvalues related with these factors again demonstrate the percentage of variance explained. In terms of the values, one can see that the values in this part of the table 6.5 are the same as the values before extraction, except that the values for the discarded factors are ignored.

⁸⁴ The term ‘Eigenvalues’ refers to latent root criterion. In component analysis, only the factors having latent roots (eigenvalues) greater than 1 are considered significant; all factors with latent roots less than 1 are considered insignificant and disregarded (Hair *et al.*, 1992, p.237).

⁸⁴ “The percentage of variance is an approach based on achieving a specified cumulative percentage of total variance extracted by successive factors. The purpose is to ensure practical significance for the derived factors by ensuring that they explain at least a specified amount of variance” (Hair *et al.*, 1992, p.104).

⁸⁵ “The percentage of variance is an approach based on achieving a specified cumulative percentage of total variance extracted by successive factors. The purpose is to ensure practical significance for the derived factors by ensuring that they explain at least a specified amount of variance” (Hair *et al.*, 1992, p.104).

Table 6.5: Total variance explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.353	20.957	20.957	3.353	20.957	20.957	2.199	13.742	13.742
2	1.767	11.044	32.001	1.767	11.044	32.001	1.981	12.380	26.122
3	1.594	9.963	41.964	1.594	9.963	41.964	1.959	12.242	38.364
4	1.326	8.286	50.250	1.326	8.286	50.250	1.691	10.566	48.930
5	1.309	8.183	58.433	1.309	8.183	58.433	1.520	9.503	58.433
6	.890	5.560	63.994						
7	.825	5.153	69.147						
8	.785	4.909	74.056						
9	.718	4.490	78.547						
10	.681	4.257	82.804						
11	.654	4.085	86.889						
12	.522	3.261	90.151						
13	.471	2.943	93.094						
14	.433	2.709	95.802						
15	.346	2.164	97.967						
16	.325	2.033	100.00uu						

Source: The researcher's fieldwork (2006)

Note: Extraction Method: Principal Component Analysis.

Thus, one can see from table 6.5 that the table is blank after the fifth factor. In the third column of the table, labelled *Rotation Sums of Squared Loadings*, the eigenvalues of the factors after rotation are presented. It is important to stress here that rotation is the cause of optimizing the structure of the factors, and one consequence for these data is that the relative importance of the six factors is equalized. The results revealed from table 6.5 demonstrate that before rotation, factor 1 accounted for considerably more variance than the remaining four (20.957% compared with 11.044, 9.963, 8.286, and 8.183%). Nevertheless, the result after extraction is different compared with that before extraction. From table 6.5, one can see that after extraction it accounts for only 13.742% of variance, compared with 12.380, 12.242, 10.566 and 9.503% respectively. Another important result from the factor analysis technique is the communalities table.

Table 6.6 shows the table of communalities before and after extraction. Principal component analysis works on the initial assumption that all variance is common; that is why before extraction the communalities are all 1 (Hair *et al.*, 1992 and Field, 2005). From table 6.6, one can see that the communalities in the column labelled *Extraction* reflect the common variance in the data structure. Thus, for instance, one can say that 48.8% of the variance associated with variable 1 is common, or shared, variance. These communalities can also be considered in terms of the proportion of variance described by the underlying factors. This means that after extraction some of the factors are discarded. In this situation, some information is lost. The amount of variance in each variable that can be explained by the retained factors is represented by the communalities after extraction.

Table 6.6: Communalities

	Initial	Extraction
Rules and regulations	1.000	.488
Legal requirements	1.000	.538
Time to complete	1.000	.606
Weak enforcement	1.000	.732
Weak monitoring	1.000	.734
Mismanagement	1.000	.733
Misuse	1.000	.727
Fraud	1.000	.453
Profit motive	1.000	.692
Social obligation	1.000	.637
Loss aversion	1.000	.412
Profit orientation	1.000	.404
Financial gain	1.000	.598
Mortgage	1.000	.427
Demand	1.000	.610
Supply	1.000	.558

Source: The researcher's fieldwork (2006)

Extraction Method: Principal Component Analysis.

The factor analysis technique also reveals the component matrix table before rotation, as shown in table 6.7. This matrix includes the loadings of each variable onto each factor. By default, SPSS demonstrates all loadings; nevertheless for this study, the researcher requested that all loadings less than 0.4 be suppressed in the output, as suggested by Field (2005). Therefore, there are blank spaces for many of the loadings. This means that this matrix is not specifically vital for interpretation.

Table 6.7: Component Matrix (a)

	Component				
	1	2	3	4	5
Social obligation	.638				.437
Profit motive	.630				.414
Financial gain	.627				
Supply	.594				
Profit orientation	.589				
Demand	.555				
Loss aversion	.467				
Misuse	.517	-.560			
Mismanagement	.485	-.538		.436	
Rules and regulations		.451	.420		
Weak monitoring		.522	-.601		
Weak enforcement		.546	-.592		
Legal requirements			.472		
Time to complete			.462	.418	.450
Fraud				.435	-.478
Mortgage					

Source: The researcher's fieldwork (2006)

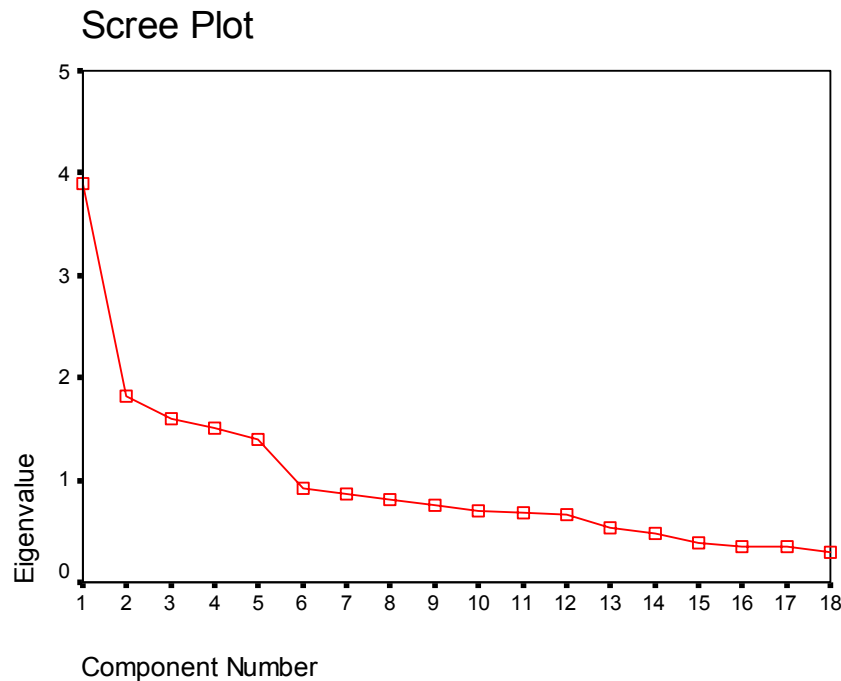
Extraction Method: Principal Component Analysis.

a 5 components extracted.

From the result shown in table 6.7, the SPSS has extracted five factors at this moment. It is useful to note here that one of the important decisions to be made at this stage concerns how many factors should be extracted. In this context, Field (2005) contends that, based on the Kaiser's criterion, if the variables are less than 30, the communalities are greater than 0.7. However, if the sample size exceeds 250, the average communality⁸⁶ is greater than 0.6. The average communality for this study is 0.58. Nevertheless, the results from table 6.7 do not fit both ground rules set by Kaiser. This is because this study has large samples (N=555), whereas Kaiser's rules and criteria are recommended for much smaller samples (Field, 2005). For this reason,

⁸⁶ The average of communalities can be found by adding them up and dividing them by the number of communalities (9.349/16=0.58)

the scree plot⁸⁷ produced by the SPSS should be taken into account for the decision concerning how many factors to extract.



One point of interest in the above scree plot is where the curve starts to flatten, which in this case is after 6. However, factor 6 has an eigenvalue of less than 1. Therefore, only five factors have been retained.

Another result of the factor analysis using the SPSS is the rotated component (factor matrix). In factor analysis, the rotated component matrix is also called the rotated factor matrix, which is a matrix of the factor loadings for each variable onto each factor. In other words, the purpose of rotation is to reduce the number factors on which the variables under examination have high loadings. At this stage, the rotation does not actually change anything, but it will make the interpretation of the analysis easier. It may be recalled that the matrix contains the same information as the component matrix before rotation, as discussed earlier in table 6.7.

⁸⁷ A Scree plot is a graph of eigenvalues against all the factors. The graph is useful for determining how many factors should be retained.

Table 6.8: Rotated Component Matrix (a)

	Component				
	1	2	3	4	5
Profit motive	.792				
Social obligation	.769				
Financial gain	.729				
Mismanagement		.843			
Misuse		.814			
Fraud		.519			
Profit orientation		.445			
Demand			.715		
Supply			.692		
Mortgage			.648		
Loss aversion			.544		
Weak monitoring				.855	
Weak enforcement				.849	
Time to complete					.712
Rules and regulations					.666
Legal requirement					.654

Source: The researcher's fieldwork (2006)

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

A rotation converged in 6 iterations.

Before entering further discussion on the result in table 6.8, it is useful to note here that the factor analysis in this study was run using the orthogonal rotation⁸⁸. Some points pertaining to the format of this matrix should be explained. First, the selection of factor loading to be suppressed must be made. For this study, factor loadings less than 0.4 have not been displayed. For the purposes of this study, the selection of factor loadings less than 0.4 follows the recommendation by Field (2005). The result produced fits with the research objectives. Second, the variables are listed in the order of size of their factor loadings, because the researcher requested that the output be sorted by size, which means that the result will appear to be different if this option is not selected.

⁸⁸ Refer to Hair *et al.* (1992) for further explanation of the concept of orthogonal rotation.

From table 6.8, one can see that there are five factors and variables loaded very highly onto each factor. The suppression of loadings less than 0.4 and ordering variables by loading size make interpretation considerably easier.

6.4 The Factors that Contribute to the Existence of Abandoned Housing Projects

The result of the factor analysis shows that there are five factors to be considered for identifying the causes of abandoned housing projects. Before further interpretation of the factors that contribute to housing abandonment, it is important to name these five factors at this stage. The naming of factors is derived from the very subjective opinion of the researcher. According to Hair *et al.* (1992, p.250) “Different analysts will no doubt assign different names to the same results because of the difference in their background and training. For this reason, the process of labeling factors is subject to considerable criticism. But if a logical name can be assigned that represents the underlying nature of the factors, it usually facilitates the presentation and understanding of the factor solution and therefore is a justifiable procedure”. In other words, there is no specific scientific procedure for naming the factors. However, the researcher must justify the names given to new factors.

Based on the results in table 6.8, the following sections contain a discussion about the new factors which have been named as factors that cause abandoned housing projects, from the perceptions of the respondents who come under this study. The five factors revealed from the factor analysis are as follows:

1. Profit maximization
2. Poor management
3. Response to market signals
4. Enforcement and monitoring
5. Strictness of rules and regulations

However, for the purpose of the discussions on these factors, the researcher will effectively use the follow-up interviews to establish the evidence base for the conclusions drawn.

6.4.1 *Profit Maximisation*

Factor 1 contains 3 variables. These are profit motive, social obligation and financial gain. The profit motive variable is related to the developer's aim of making as much profit as possible by undertaking multiple projects within a specific period. The social obligation variable is associated with the behaviour of developers who have a negative sign on social obligation even though the developers have entered the S&P agreement with the house buyers which requires them to complete the housing units within a specific period. Indeed, a 10 per cent deposit will have been collected from the house buyers upon signing the S&P. The third variable is financial gain, which refers to the developer's interest in financial gain as opposed to social obligation. From the discussion on profit maximisation, one can see that developers are focusing on maximising the profit and so there should be a negative sign on social obligation.

From the discussion above, one can see that these three variables demonstrate the informal rules that affect the decisions and actions of the private developers as profit-oriented organisations which are concerned with making a high profit from the particular development housing project, and show a negative sign on the social obligation to complete the undertaking projects. Therefore, for the purposes of this study, these variables were named "*profit maximisation*" factors by the researcher. In relation to profit maximisation, it is in the nature of private developers to strive for maximizing profit from their investment through the development of housing projects. In this case, the agents' behaviour which focuses on maximising the profit behaves as predicted by neo-classical economy theory. Therefore, the developers have responded negatively to the social obligation for completing the projects being undertaken, even though they were bound by the S&P agreement signed between developers and the purchasers. In this sense, the decision to abandon the projects undertaken can also be influenced by the informal institutions that affect market agents' decisions and actions (North, 1990; Adams *et al.*, 2005). As discussed in the literature review chapter, the

institutional economics perceived that the market agents are governed by formal and informal rules that affect their decisions and actions, which in turn will affect the property outcomes. In the case of abandoned housing projects, the developers who were bound by the S&P agreement were willing to abandon the projects undertaken because of the profit maximisation factor.

The discussion above was strengthened by the result of the interviews, in which all of the interviewees in the development sector said that the maximising behaviour of striving for making profit and financial gain or minimising losses led to projects being abandoned. They further contend that the profit maximisation factor made the developers ignore the obligation to complete the housing projects, even though the S&P agreement had been signed between developers and house purchasers. In other words, it is a negative sign on the social obligation shown by private housing developers. They also explain that the developers involved in housing abandonment always claim that they have to abandon the project because of financial problems owing to the low number of house purchasers. Therefore, the completion of projects would not guarantee that they would make a profit as a result of low demand. In other words, the developers will face financial problems. In relation to this, all interviewees will consider abandoning the projects if there is no profit obtained upon completion of the projects. This statement was strengthened by the report by the MHLG which stresses that the abandonment of housing projects exists as a result of the financial problems faced by the developers. This statement is related to the discussion of the formal institution which governs the bridging loans procedures that contributed to the financial problems faced by developers, and led to projects being abandoned. In addition, the Sell then Build systems in housing provision also made developers depend heavily on the progressive claims to complete housing projects. In other words, developers will face financial problems if there is a problem or delay in progressive claims from the financial institutions.

From the discussion on profit maximisation leading to the housing abandonment, most of the interviewees (95%, N192) remarked⁸⁹ that the willingness of the government to

⁸⁹ Interview with developers and elite group in May to July, 2006.

undertake rehabilitation programmes in order to complete the projects which have been abandoned by private developers made them feel not guilty. This is because the developers believe that, for the sake of protecting house buyers who are involved in the abandoned projects, the government is willing to allocate funding for reviving programmes, as discussed earlier. In other words, this institutional arrangement means developers face no penalty if they fail to complete projects.

6.4.2 *Poor Management*

As can be seen in table 6.8, factor 2 includes four variables. These are mismanagement of finances, misuse of finances, fraudulent claims and poor management by developers as a result of multiple projects having been undertaken within the same period. All of these variables were concerned with poor management by developers in managing the housing projects undertaken. Poor management by developers in managing the housing projects involved contributing to the internal financial problems. Therefore, the researcher has named this second component the “*poor management*” factor. This factor is concerned with the instability of the financial situation of the developers as a result of their inappropriate management of funds for particular projects, and, as a result, the project cash flow being jeopardized. This problem can be seen clearly in those projects which have been abandoned, and where the housing units for the particular projects have been sold. However, the developers still had the problem of completing the project, and again claimed that they faced financial problems concerning the project funding coming from the progressive payments and the support from bridging loans from financial institutions. This statement was strengthened by the remarks⁹⁰ made by all the interviewees in this study, which suggested that the abandoned housing projects were caused by the failure of the developers to manage the project funds, which finally affected the project cash flow. They further assert that there is nothing wrong in the developers being involved in multiple projects within the same period, but poor management by the developers - especially in terms of misuse and mismanagement of project funds - contributes to the instability of the projects cash flow, and as a result the projects undertaken have been

⁹⁰ Interview with developers and elite group in May to July, 2006.

abandoned as a result of financial problems. The problems become worse where fraudulent claims exist, and such problems fail to be detected by the developers because of lack of monitoring of the existing projects. In this context, fraudulent claims from contractors also affected the internal financial situation of developers. Nevertheless, it is not easy to prove any of this. In terms of the existence of fraudulent claims, the interview with elite groups (Senior Manager of the SPNB) stated that they have a problem when undertaking a rehabilitation programme for those projects which have been paid for by the financial institutions, but the work done on the site does not match with the progressive payments. This means that fraudulent claims existed and payment has been made for nothing. However, there are no reports and statistics available on this issue. Consequently, the developers declare that the particular projects have been abandoned because of financial problems. This statement was strengthened by the remarks⁹¹ made by all the elite group interviewees in this study: that most of abandoned projects were the result of financial problems and poor management.

From the discussion above, one can deduce that the factor of poor management in developers' firms does contribute to internal financial problems, and that this finally affected the project cash flow. In addition, this factor can also be viewed from the perspective of institutional economics. The reason for this is that the institutional economic methodology perceived the market actor or agents as playing an important role in determining property market outcomes within the institutional property market hierarchy (Keogh and D'Arcy, 1999a). Indeed, their being involved in making decisions and their collective decision led to specific outcomes (Ball *et al.*, 1998). In the context of housing abandonment, wrong actions and decisions were made by the developers; these include misuse and mismanagement of project funds as well as decisions to become involved in multiple housing projects without proper management of the projects; if this is not resolved immediately it will lead to the problem of abandonment. For this reason, it is fair to say that the factor concerning the poor management in developers' firms is perceived as one of the causes of the existence of abandoned housing projects.

⁹¹ Interview with developers and elite group in May to July, 2006.

6.4.3 *Response to Market Signals*

The result of factor analysis that revealed the rotated component matrix table, as can be seen in table 6.8, demonstrates that factor 3 comprises four variables that are related to the cause of housing abandonment; these are demand for housing, supply for housing, mortgage procedures and loss aversion. All of these variables are related to the failure of developers to respond correctly to the market signals, leading to housing abandonment. In this context, these four factors have significant influence on the decision by the developers to enter the market. Without proper analysis of these factors, housing development might be affected. This means that the developers believe in the importance of market signals as indicators to be considered before entering the housing market. In other words, the concept of market signals from the perspective of neo-classical economics refers to the role played by market information, which is perceived as an important factor that needs to be considered by the developers before entering the housing market. In this context, Keogh (1994)⁹² established a model of a non-residential property market that contains use, investment and development components. The model demonstrates how change in one sector of the market affects the other sectors, based on efficient information that needs to be responded to by each of the market components. For instance, the relationship of use and investment is related to the supply decision in the development sector. In this context, the developers may follow the signals of rental and capital value before entering the market. In housing development, the developers should respond to the information or market signals, such as housing stock, housing demand and mortgage loans procedures, before entering the market. This is because failure to respond correctly to the market signals could affect the sale of the housing units that have been constructed. Indeed, inappropriate response to market signals might also affect the number of units built. As a result, this will lead to financial problems, and it is likely that the developer will abandon the project.

This statement was strengthened by all interviewees who remarked that the developers involved in abandoned housing projects have less concern about the role played by

⁹² Refer to Keogh (1994, p.59) for further explanation.

market signals, even though they realize the importance of market information in property market operation. As a result, the effect of failure to respond to market signal affects the sale percentage. As discussed earlier, the sale percentage indicates the completion of the housing projects.

Most interviewees (95%, N=192) strongly believe that sale percentage is a very important indicator for completing housing projects, especially since the housing provision in Malaysia is based on the Sell then Build concept. In this context, sale percentage will affect the cash flow of the project undertaken. As discussed earlier, developers were dependent on the progressive payments from the house buyers to complete particular projects. This means that developers will face a financial problem if the sale percentage of the housing units is low. Instead of being dependent on progressive payments for completing the housing projects, developers also face a problem in obtaining bridging loans from the financial institutions if the sale percentage is less than 80%, as emphasized before. As a result, the project will be left abandoned if developers fail to obtain funding for that project.

This result is also in line with the report by the MHLG⁹³ in 2005 on the abandoned projects associated with the problem of selling and marketing of new housing units by the developers. This factor led to financial problems for the developers. For that reason, the factor of failure to respond appropriately to market signals is considered to be a factor which contributes to the existence of abandoned housing projects, and also affects the selling and marketing of the project. As a result, it affects the project cash flow and, specifically, the developer's financial stability. As discussed earlier, without proper funding the developer will abandon the particular project to avoid total loss. Therefore, the researcher has named factor 3, which comprises 4 variables, "*response to market signals*" that causes housing abandonment.

⁹³ Refer to Laporan Projek Terbengkalai prepared by the Ministry of Housing and Local Government (2005)

6.4.4 Enforcement and Monitoring

Table 6.8 also shows that two variables were combined in component 4 of the factor analysis. These two variables (i.e. weak enforcement and weak monitoring by the government) are related to the government's ability and credibility in handling abandoned housing projects. Therefore, this factor was named "*enforcement and monitoring factor*". The government agency in this context is the Ministry of Housing and Local Government, which is directly involved with the problems of housing abandonment. The MHLG is responsible for monitoring all the projects that have been abandoned in Malaysia. However, it is limited in terms of staff and expertise. In terms of institutional economics, the MHLG as an 'institution' exists to monitor the processes of housing development. In this context, the existence of MHLG as an 'institution' can also be seen as an enforcement body in housing development. However, poor enforcement and monitoring mechanism on the part of the organisation could lead to the existence of abandoned housing projects.

The results discussed earlier in table 5.11 (p.194) indicate that the government has taken some remedial action to avoid the situation of housing projects being abandoned. The first remedial action was the increase of a deposit from RM100,000 to RM200,000 for obtaining a housing developer's licence. Second, the developers need to provide a progress report every 6 months in order to verify that the progress of the work at the site is following the project's schedules. The final remedial action introduced by the government required the developer to open up a Housing Development Account for a particular project in order to control the funding of that project. Its purpose is to prevent the misuse of the funding for other purposes. This means that every licensed housing developer shall open and maintain a Housing Development Account with a bank or finance company for each housing development undertaken by the licensed housing developer⁹⁴. As stated in section 7(e) of Housing Development (Control and Licensing) Act 1966 (Act 118) and Regulations:

⁹⁴ Section 7A(1) Housing Development (Control and Licensing) Act 1966 (Act 118) and Regulations.

“within six months after the close of financial year of the licensed housing developer in question send to the Controller⁹⁵ and also publish the Gazette a copy of the report of the auditor prepared under section 9 together with a copy of his balance sheet and profit and loss account”.

These remedies involved the amendment of the Housing Development (Control and Licensing) Act 1966 (Act 118) and Regulations. The question here is why the number of abandoned housing projects is still increasing after all these remedies were put in place in 1992.

The answer to that particular question may be found in the remarks by most of the interviewees (92%, N=192) who mentioned⁹⁶ that all remedial actions introduced by the government were designed to prevent in practice the existence of abandoned housing projects. For instance, the MHLG has the power to monitor the work progress at site. Through this mechanism the MHLG can determine whether the work progress at site is in line with the report submitted every six months by the developers. In doing so, the government can detect the status of the project earlier, and can determine whether a particular project is on schedule or not. In addition, the MHLG also has the power to monitor and check the cash flow of a particular project through the financial report submitted by the developers.

However, in practice this is not happening, because the MHLG has failed to exercise the enforcement and monitoring mechanisms owing to lack of manpower. Indeed, this department also has to be responsible for all issues related to housing problems, such as housing tribunal issues, late issuing of CFO, project delays and so forth. For those reasons, the increase in the number of abandoned housing projects is not surprising, because this problem has not been properly handled from the beginning, owing to the

⁹⁵ Section 4 (1) of Housing Development (Control and Licensing) Act 1966 (Act 118) and Regulations stated that *“For the purpose of this Act, the Minister may appoint a Controller of Housing and such number of Deputy Controllers of Housing, Inspectors of Housing and other officers and servants as the Minister may deem fit from amongst members of the public service”.*

⁹⁶ Interviews with the developers and elite group in May to July, 2006

lack of enforcement and monitoring by the government. In terms of the introduction of the Housing Development Account, Siong (1994) argues that if the account is not properly monitored by the government, it is relatively easy for the developers to misuse a ready source of finance for projects from the purchaser's deposits and banks used. For instance, they may use the funds for their private business investments, instead of the housing project.

In line with this, the discussion earlier indicated that the respondents believe that the policy remedies taken by the government in order to avoid abandoned project were insufficient, owing to the lack of enforcement and monitoring by the government, as highlighted in table 5.11 (p.194). Results from interviews also show that most of interviewees (92%, N=192) perceived that the lack of enforcement and monitoring of the government contributes to abandoned housing projects. They also remarked upon the easy procedures for granting the developers' licences, where a deposit of RM200,000 for obtaining the developer's licence is an affordable amount to all developers. The government has not properly investigated the capability and credibility of the developers who have been granted a developer's licence. Also, there has been no effort by the government to check whether the developers have had experience of abandoned housing projects before granting the developer's licence. Therefore, further investigation on the application of developer's licence must be carried out by the government, and it is not enough just to consider the application based on the documents submitted during the application, such as such company profile, financial report, etc.

Other evidence supporting the belief that the lack of enforcement and monitoring by the government contributes to the abandonment of housing projects is the existence of fraudulent claims, as noted by the SPNB and discussed in chapter two. The SPNB faced the problem when undertaking the rehabilitation programme, in which the fund from the Housing Development Account had been released to developers, even though the work had not been done at the site. If the government properly monitors both the progress report submitted by the developers every 6 months and the Housing Development Account to ensure that the funding has been used for the particular

project, the fraudulent claims could be avoided. This means that the amount of money which has been released should equate with the progress of work at the site.

From the discussion above, it is fair to say that as an enforcement authority, the government should enforce all the policy remedies introduced and monitor the projects from the beginning after granting the licences to developers for undertaking housing development projects. In other words, this statement indicates that the factor of lack of monitoring and enforcement by the government as an institution in institutional economics can be one of the causes of housing abandonment.

Following the discussion above, one can see that the weaknesses of the government agency, in terms of lack of enforcement and monitoring, contribute to housing abandonment even though, as discussed earlier, the remedial actions introduced play a role in ensuring that the projects undertaken by the developers can be completed within an agreed period. For that reason, it is fair to believe that one of the factors contributing to the abandonment of housing projects is the lack of enforcement and monitoring by the government.

6.4.5 Strictness of Rules and Regulations

The rotated component matrix in table 6.8 reveals that factor 5 comprises 3 variables, known as restrictive rules and regulations, legal requirements and time to complete housing developments. These 3 variables are connected to rules and regulations. That is why the researcher named the factor of “*strict rules and regulations*” in housing development as one of the factors contributing to abandoned housing projects. This factor needs to be clearly discussed, because it concerns three major perspectives of rules and regulations. In general, the strict rules and regulations, as a factor that contributes to the existence of abandoned housing projects, can be looked at from 3 dimensions.

First, it is concerned with the requirement by the Planning and Country Act (1976) under section 24(1), as discussed earlier, that developers who have been granted planning permission should develop a particular land or site within 12 months after

approval, or 24 months after obtaining an extension of time from the local authority. From the point of view of the local authority, this regulation is very important for ensuring that the development can be carried out according to the plan, and this development will boost that particular area. This is because, when developers develop the area, they will provide other facilities, as stated in the planning permission approval.

However, from the perspective of the developers, this rule creates a negative effect on the housing development. This statement was supported by the remarks made by most of the interviewees (95%, N=192), as discussed earlier, who believe the role played by the land institution was not a barrier in housing development, although the imposition of the requirement to undertake the construction work within 12 months after planning approval granted is related to abandoned housing projects. This is because, after obtaining the planning permission, the developers must immediately launch the projects and strive to sell the housing units. If the project is developed at the right time and the right place, the sale might succeed. If not, the developers might face a problem of low demand. At this point, even if the project is not in high demand, the developers will still proceed with the construction work in the hope that the sales of housing units will increase. During the construction period, if the developers realise that there will be no increase in sales, the best solution is to abandon the projects. Doing so will help prevent the developers from suffering total loss. This statement was strengthened by the result of the interviews with the developers in which most of the interviewees (95%, N=192) mentioned⁹⁷ that the developers have no choice but to delay the housing development project after obtaining planning permission from the local authority. Therefore, after starting the construction work and at the same time striving to sell the housing units, if the developers fail to sell more than 80% of the housing units, and fail to get other sources to fund that particular project at that time, the project will be left abandoned. As discussed earlier, the MHLG has reported that, in 2005, the abandoned housing projects were involved with the projects with low demand, and the developers had difficulty in marketing and selling the housing projects. In relation to this, two of the elite group interviewees (the Vice President of

⁹⁷ Interviews with the developers in May to July, 2006

REHDA and Senior Manager of the SPNB) mentioned that the reasons for low demand of the housing units might not be attractive from the perspective of the house buyers, and the housing units constructed do not fulfill the house buyers' wishes. They further remarked that is important to developers that they respond to market signals before entering the market.

Second are the rules and regulations that are related to the procedures of financial institutions. As emphasized before, in order to obtain approval for bridging loans, the developers have to prove that 80% of the total number of housing units which have been constructed or are under construction must be sold. Without that, there is no chance for them to obtain the bridging loans to complete the projects. One of the elite group interviewees (the Vice President of REHDA) remarked⁹⁸ that the financial institutions realise the importance of bridging loans for developers for completing the projects, but this rule cannot be avoided because the financial institutions are not willing to lose their investment by funding uncertain projects with low demand. However, most of the interviewees (95%, N=192) among the developers mentioned⁹⁹ that the financial institutions should be supportive at this stage, since their support by approving the bridging loans will aid the developers to complete the project. The strictness of the financial institutions in terms of bridging loans approval makes no choice for developers other than to abandon the particular projects if they fail to obtain other funding for completing the project. This is in line with the result discussed earlier, in which the respondents who come under this study believe that the role played by the financial institutions was not a problem affecting housing development, except for the restrictiveness of procedures for approving bridging loans which was perceived to contribute to the problem of housing abandonment.

Another aspect of the strict rules and regulations that are perceived to be a factor that contributes to the housing abandonment is the requirement of 30% low cost housing to be constructed by the developers of approved housing projects. As discussed earlier, the respondents in this study believe that the role played by housing policy was not a

⁹⁸ Interview with the elite group in May to July, 2006

⁹⁹ Interview with developers in May to July, 2006

problem affecting housing development. However, the results from the majority of interviews (95%, N=192) indicate that the respondents perceived that the employment of the regulations that require developers to develop 30% of low cost housing projects contributes to the existence of abandoned housing projects. They claimed that, owing to a mismatch of supply and demand, the low-cost houses had to be constructed even though the supply for the low-cost houses is more than the demand. In this situation, the developers face a problem in selling the housing units, and finally abandon the projects because of the low-income purchasers, since those purchasers who are categorised under lower income groups qualify for purchasing the low-cost houses only. Indeed, the developers depend on the information of potential purchasers for low-cost houses from the housing department at state level.

From the discussion above, one can see that the factors of restrictiveness of rules and regulations in housing developments, - specifically, in terms of the specific timeframe for carrying out housing development, the restrictiveness of financial institutions to approve the bridging loans, and the requirement of 30% low-cost houses to be developed of approved projects, - are considered to be among the factors that contribute to the existence of abandoned housing projects. This factor can be viewed from the perspective of institutional economics which perceived that the institutions or formal written rules play an important role and have a significant influence in land and property market operations. Therefore, in the case of housing abandonment, the institutions or formal written rules, as discussed earlier, contribute to the existence of abandoned housing projects.

From the discussion of the five factors contributing to the housing abandonment, it is important to emphasize the relative importance of each of the factors. First, with reference to the factor of profit maximisation, one can see that, whatever circumstances, the developers as entrepreneurs will strive to maximise their profits rather than lose their investment. The behaviour of private housing developers as entrepreneurs who are profit oriented, shows a negative sign on social obligation to complete the undertaking project, even though they were bound by the S&P agreement signed between developers and house buyers. Indeed, the house buyers have paid a 10 per cent deposit, and will start paying the progressive payments

through the financial institutions which provided the house buyers with mortgage loans based on the Sell then Build concept. In other words, the private developers made a profit through the progressive claims, even though the housing units are not yet completed. Therefore, this factor is relatively important when stressing that the private housing developers will protect their interests rather than thinking of people's hopes and interest. It is not surprising if developers are willing to abandon housing projects, even though they realise that the government is depending on their effort to provide housing for Malaysians. This factor is important to the government when they reconsider the housing provision that is based on the Sell then Build concept. Perhaps, this is the right time to change the housing provision concept from Sell then Build to Build then Sell.

Second, it is relatively important for the government to look at the factor of poor management of developers to ensure the enhancement of housing sector in Malaysia. This is because the existence of poor management that may be related to fraudulent aspect, misuse and mismanagement of project fund by developers must be tackled immediately. This factor could jeopardise the housing sector. For instance, the existence of abandoned housing projects is related to the poor management of developers, and it becomes worse when it is associated with fraud. Therefore, it is highly important to have credible and capable housing developers in the housing market. In other words, it is important to avoid the existence of immoral behaviour among the developers in the housing market. The finding is useful to assist the government to remind and to educate the developers to be more professional and fully responsible whenever they become involved in housing development.

Third, response to market signal. This factor is very important in housing development. The results discussed earlier showed that the majority of the respondents, including the interviewees, believe in the importance of market information in housing market. They also agree that failure to respond correctly to market signals is one of the causes of abandoned projects. This factor is of relative importance to assist the government to produce a mechanism to ensure that developers respond appropriately to market signals before entering the market. This finding also

reveals how the private developers in Malaysia reacted against the theory that require developers to respond correctly to market signals before entering the housing market.

The fourth factor of the causes of abandoned projects is lack of enforcement and monitoring by the government agency. This factor is of relative importance to be acknowledged immediately by the government. This is because the government as an institution must be responsible as the enforcement body, and must take the action necessary to monitor the progress of housing development by developers. Therefore, this factor is a signal of the weaknesses of the government. Without serious enforcement and proper monitoring by the government, it is not surprising if developers abandon the housing projects undertaken. It may be deduced from this discussion that this factor is relatively important for the government, to overcome all weaknesses related to lack of enforcement and monitoring.

The final factor that contributes to the existence of abandoned projects is the strictness of rules and regulations. This is related to the regulations for obtaining planning permission, approval of bridging loans and housing policy associated with 30 per cent of housing units to be constructed with low cost houses. The strictness of rules and regulations that govern housing provision has led to the abandoned projects. Therefore, this finding is a signal to the government to reconsider reviewing the strictness of rules and regulations that govern housing development in Malaysia.

6.5 Conclusion

This chapter elaborated the issues of the causes of abandoned housing projects in Malaysia as related to Objective 5 of the research. It started with the explanation of the employment of factor analysis as the appropriate statistical test for analysing the data in order to achieve the research objective. From the statistical procedures discussed earlier, it is proved that the factor analysis using the principal component analysis was an appropriate technique based on the data gathered from the survey questionnaire. It is useful for data reduction and summarization of the large set of observed variables which contained 16 variables for identifying the causes of

abandoned housing projects in this study. These 16 variables were derived from the perspectives of neo-classical and institutional economic theories.

From the discussion on the causes of housing being abandoned, one can see that the respondents had the same perception about what causes the abandonment of housing. As can be deduced from the factor analysis results, there are 5 factors that contribute to the existence of abandoned projects (i.e. profit maximisation, poor management, response to market signals, enforcement and monitoring and strictness of rules and regulations). In relation to this, the results from the follow-up interviews and with the elite groups have been used in the discussion to establish the evidence base for the conclusions drawn. For those reasons, one can conclude that study of the abandoned housing projects from the perspectives of neo-classical and institutional economics demonstrates the actual factors that contribute to existence of abandoned housing projects. Specifically, this study tries to determine the perception, opinion and attitude of developers towards the causes of abandoned projects. Any attempts to look at this problem separately, either from neo-classical perspectives or institutional economics perspectives *per se*, would not be able to identify the factors that could be considered as the causes of housing abandonment, because both perspectives play an important role in the land and property market, specifically in terms of the problem of housing abandonment.

Finally, this chapter has provided the answers to the research questions concerning the developers' perceptions of the causes of abandoned housing projects. Indeed, this chapter also indicates that research Objective 5 has been achieved.

CHAPTER 7

SUMMARY AND CONCLUSION

7.1 Introduction

This study has ascertained that neo-classical and institutional economic theories can be used together in property research, specifically in the study of housing abandonment. Following the adoption of both these theories, this study finally provides a link to the analytical framework which can ultimately feed through the research design. Therefore, it is not necessary to examine both these theories separately in the property research, as discussed previously by many authors. This is because the growth of the institutional approach across the social sciences, especially the use of this approach in land and property market analyses, should be regarded as an extension of, rather than a challenge to, mainstream economics (Adams *et al.*, 2005). Samuels (1995) argues that mainstream economics and the political economy of institutionalism should be seen as supplementary to each other. In this context, the combination of neo-classical and institutional economic theories for this study acknowledges the value of theoretical pluralism proposed by Hodgson (1993), in which he argues that theoretical pluralism embraces both neoclassical and non-neoclassical approaches.

Even though, there is a distinction between the atomism of neo-classical theory that allows a focus on outcomes (that can be analyzed quantitatively) and the social ontology of other theories which puts the focus on the complex processes that underpin outcomes (and cannot as readily be measured); this study provides a clearer link between this meta position and the analytical framework to be used. In relation to this, this study establishes how the development process model of both these theories can be linked to the incidence of abandoned housing projects. In this context, the study is actually about developers' perceptions about the causes of abandoned projects, such as developer relationships with financial institutions, housing policy, land policy, the state etc., the sort of factors which might be expected to cause projects to be abandoned. Therefore, the operational framework for analysis, based on these

factors that contribute from the development process can be easily quantified. At this stage, one can see that these approaches can be combined and set as the framework against which the causes of housing abandonment can be understood.

The results of the study of the existence of abandoned housing projects in Malaysia indicate that they can be understood better from the perspectives of both neo-classical and institutional economics. This is because the land and property market is responding to price signals, but only inefficiently, and thus institutions have evolved to enable a more efficient market operation. Therefore, any attempt to study separately the issue of the causes of abandoned housing projects, by using either the neo-classical economic approach or institutional economics, would provide only an incomplete methodological framework.

From the analysis of the responses of 555 participants to the survey questionnaire which was based on the perspectives of neo-classical and institutional theories, this study has established that both these theories can be used together in property research, especially in the study of abandoned housing projects. The results revealed that the existence of abandoned housing projects is related to neo-classical and institutional perspectives. In this context, the factor of profit maximization, which has contributed to the causes of housing abandonment, proved the theory of neo-classical economics: that market agent behaviour strives to maximise the profits. In addition, the institutional economics perspectives, in terms of informal conventions or the unwritten rules of the game that are determined by the processes of governance, have also influenced the behaviour of the developers towards focusing solely on profit maximization. Therefore, one can see that there is a negative sign to social obligation for completing the housing projects undertaken. Another perspective of neo-classical economics that contributes to the causes of abandoned housing projects is failing to respond correctly to market signals. Neo-classical economics analysis has proved that market information plays an important role in the land and property market. Therefore, those who insist on entering the housing market must respond correctly to market signals. In relation to this, Old Institutionalists recognize the importance of price/market signals; however, they would argue that the impact on behaviour is socially and culturally mediated rather than atomistic and rational.

In terms of the institutional economics approach, the results also suggested that the weaknesses of government agency as an institution in charge of and controlling the housing development provision are also a factor which causes housing abandonment. This is related to the lack of monitoring and enforcement by the institution on private housing developers. Poor management is another factor that contributes to the existence of housing abandonment. Developers acting as players in the institutional framework for land and property market operations must behave professionally. The results of this study suggest that poor management by developers in terms of the misuse and mismanagement of project funds, and also their being involved in fraudulent claims, create financial problems for the developers' organisation, which as a result contribute to project abandonment. Finally, the results also suggested that the strictness of the rules and regulations that govern housing development also contributes to housing abandonment. The results have endorsed the institutional economics approach which suggests that the property market might be influenced by the institutions or formal written rules that affect the actions, behaviour and attitude of market agents. In this case, private developers are willing to abandon the housing projects as a result of the strictness of the rules that govern their activities in housing development.

From the discussion, one can see that the study of housing abandonment in Malaysia, based on the perspectives of neo-classical and institutional economics theories, is an effective approach for determining the causes of abandoned housing projects.

The results obtained from analysing the responses of the 555 participants to the survey questionnaire also revealed that, statistically, the formal written rules or institutions that govern land development and financial institutions are affecting housing development. The results obtained show that the government's housing policy in terms of the requirement to construct 30% of housing policy has not affected housing development. However, the results from the interviews suggested that most of the interviewees (95%; N=192) strongly believe that the government requirement for private housing developers to build 30% of low cost housing units is affecting housing development. The reason behind that is that the developers will abandon the low-cost projects if the number of purchasers is low, rather than complete the housing projects;

finally they have to struggle to find purchasers. This is because only certain purchasers are eligible to purchase that type of house, as discussed earlier. Therefore, this situation would contribute to the mismatch of housing demand and supply if the developers do not take necessary action before constructing the low-cost houses. The results were supported by the findings of Siong (1994) in his case study on the evaluation of housing estate development, in which he suggested that abandoned housing projects should be viewed as a symptom of the mismatch of the housing demand and supply, particularly for low-cost housing only. For this reason, it is fair to consider that the housing policy which requires private housing developers to construct 30% of the total houses with low-cost housing is a barrier or obstacle to housing development in Malaysia. In addition, the results obtained also showed the interrelationship between market information and project abandonment. In this case, most of interviewees (95%; N=192) agree that failure to respond correctly to market signals might contribute to project abandonment. The results of the factor analysis prove that response to market signals is one of the factors which contribute to the existence of housing abandonment.

This chapter summarises the research findings according to the three research stages - theoretical, empirical, and analytical - as outlined in Section 7.2. This is followed in Section 7.3 by a discussion on the strengths of the research. Section 7.4 highlights a number of limitations of the research, leading to potential areas for future research. Section 7.5 speculates on the direction of future research. Section 7.6 highlights a number of policy recommendations for avoiding housing abandonment issues. Section 7.7 ends the chapter with some closing statements highlighting the contribution the research has made to existing knowledge.

7.2 Summary of the Research and Its Findings

The aim of this research was **to address the issue of abandoned housing projects with particular reference to Malaysia from the perspectives of neo-classical and institutional economics, especially in terms of identifying the cause of abandoned projects.** Three main stages have been involved in order to accomplish the research aim; these stages are theoretical, empirical and analytical. The theoretical stage

comprised Objectives 1 and 2. The empirical stage comprised the research methodology for the study. The analysis stage comprised Objectives 3, 4 and 5. The following sections summarise the research and its findings.

7.2.1 Theoretical Stage

The first stage involved a theoretical overview and a literature review consistent with Objectives 1 and 2. It provides the foundation to the research. The expected outcomes are an identified gap in land and property market research, and possible ways to address the issue for studying the causes of abandoned housing projects, based on the perspectives of neo-classical and institutional economics. Chapter 3 contains most of the theoretical aspects of this research. Other chapters make reference to these in supporting the discussion. At this stage, a literature overview on the subject of housing development in Malaysia was also undertaken. It was concerned with the historical background of governance and housing provision in Malaysia, comprising housing policy, housing performance based on the five-year plan, and the rules and regulations that governed housing development, as discussed in Chapter 2. The most important factor is that in chapter two, the researcher analysed the issue of housing abandonment, based on the secondary data.

Pertaining to the issue of property research, two of the main issues in property research that are related to the theoretical approaches to land and property market were emphasised in Chapter 3. Both issues arise from the researcher's attempt to develop the most effective theoretical framework based on the perspectives of neo-classical and institutional economic theories for analysing the issue of housing abandonment. The first issue focused on the applicability of neo-classical economics in land and property market research. The second issue dealt with the appropriateness of the institutional economic theory for analysing land and property markets. The purpose of evaluating both these theoretical approaches is to identify the basis for developing the theoretical framework of the study, based on the perspectives of both theories for accomplishing the aims of the research. Therefore, it is important to note here that the purpose of evaluating both theories was not to identify which theory is the best theory in land and property market research; rather, it attempts to provide an

effective theoretical framework for the study, based on the perspectives of neo-classical and institutional economics.

In dealing with the theoretical approaches to the land and property market, the researcher has critically analysed the neo-classical economic theory as well as institutional economics, both of which are broadly used in property research. Chapter 3 contains the theoretical aspects of this research, in which the main argument put forward was how both these theories have been applied in the research into the land and property market. As a result, the theoretical framework for the study has been developed from the model of the development process from both theories which can be a linked to the incidence of housing abandonment.

The review of the neo-classical economics theory focused on market signals. This is because failure to respond appropriately to the market signals could be a contributing factor to abandoned housing projects.

The review on the institutional economics theory also found that the formal written rules or the institution and informal written rules or the unwritten rules were related to the study of housing abandonment. This is because the formal rules or institutions which govern the decisions and actions of agents, determined by the processes of governance, have influenced the market agents in their decisions which led to housing abandonment. For example, the strictness of rules and regulations that are concerned with the planning permission, housing policy and financial procedures on bridging loans led to the housing projects being abandoned. In fact, the respondents also agree that these variables were a barrier that affects housing development as a whole. In relation to this, the informal conventions or unwritten “rules of the game” that are determined by the processes of governance also influenced the developers’ decisions to abandon the projects as a result of the profit maximisation factor, even though they were bound by the S&P agreement, signed by both developers and house purchasers, to complete the housing projects. In this context, Adams *et al.* (2005, p.38) argue that “the formal rules within which a transaction occurs, (which) may be directly or indirectly determined by the processes of governance. The second is informal

conventions or unwritten ‘rules of the game’ which may also be affected by policy decision”.

Another important aspect from the theoretical stage is the different methodologies of both theories. The literature reviews revealed that neo-classical economic theory viewed the methodology for explaining the land and property market as being conducted / operated through various approaches, such as the use of mathematical models. They could be theoretical, but they could also be testable. In the case of mathematical models, the models are used to explain the reality of the land and property market operations. In other words, the neo-classical economics perspective adopts a positivist epistemology. Concerning institutional economic theory, the methodology, characterised by the holistic, systematic and evolutionary process of changes, describes the dynamics of the market. The evolutionary methodology arises from the belief that the economics system is seen as a process of change inherent in a set of social institutions. In relation to this, Samuels (1988) argues that the process of change is not mechanical but determined by human action and shaped by society. In other words, institutionalism perceives policy implementation and its implications for agents’ collective decisions and actions in a holistic and integrated approach to the way agents behave and perform their economic activity. The epistemological view of institutional economics is based on the belief that changes in society will lead to economic and market changes (Miller and Mair, 1991; Samuels, 1988). The process of change is driven by society. In relation to this, Omar (1999, p.49) argues that “since economies evolve through time, the dynamics of an economy depend on the institutional framework and the interaction between institutions. As a result, an effective and informative institutional interaction was responsible for the shaping of the direction of institutional change”. Therefore, the changing balance between formal and informal rules determines the direction and dynamics of institutional changes in society. Since the dynamics of the market are influenced by the structure of institutions, the approach to understanding the land and property market is taken through qualitative evaluations of institutional change.

It seems therefore to be impossible to develop the theoretical framework for the study based on the perspectives of neo-classical and institutional economics, because of

these differences. However, the methodology of the study, which is based on the perspectives of development process models of both theories in developing the theoretical framework as emphasized earlier, has made it possible to study the causes of abandoned housing projects. In this context, it provides the starting point for an adapted, operational framework for analysis. Therefore, in order to develop a sound theoretical approach to the study of the causes of abandoned housing projects, it is imperative to elaborate on the conceptualisation and operationalisation of the conceptual framework, as outlined in Chapter 3. Because of the conceptualisation and the operationalisation of the conceptual framework, the employment of the survey method comprising the survey questionnaire and follow-up interviews was the appropriate method for data collection in line with the quantitative approach for the study. The findings based on statistical analysis will be generalised. The study has contributed to the methodology of combining the theoretical framework that is based on the perspectives of neo-classical and institutional economics in property research, specifically on the study of the causes of abandoned housing projects. In conclusion, from the theoretical review stage, one can see that the applicability of the theoretical framework that is based on neo-classical and institutional economics was appropriate and reliable for analysing the causes of housing abandonment in Malaysia. It also revealed a pluralistic theoretical approach to understanding the land and property markets.

7.2.2 Empirical Stage

The empirical work was carried out based on the foundation of the research provided from the theoretical stage. This stage dealt with the research methodology. As highlighted earlier, the research methodology is a research tool that describes the whole process of the research. In addition, this tool is useful for identifying the appropriate method or instrument to be used and which population and sample is to be chosen. Chapter 4 contains details of the data collection and methods for this study.

This study was based on the quantitative approach which requires quantitative data for generalisation of people's behaviour, attitudes, opinions and perceptions. It is in line with this study, which requires gathering information from the respondents about their

perceptions towards the institutions affecting housing abandonment, the interrelationship between market and project abandonment and the respondents' perceptions on the causes of housing abandonment. Therefore, in terms of data collection, the research employed the survey method which is believed to be the correct or most appropriate method for the purpose of this study, after taking into consideration its advantages and disadvantages. Several authors, such as Kerlinger (1986), Babbie (1997), and McCormack and Hill (1997), have discussed the issues of the advantages and disadvantages of the employment of the survey method.

In terms of the techniques of data collection based on the survey method, there are various techniques which can be considered; these include personal interview, mail, telephone interview and questionnaire (Kerlinger, 1986; Miller, 1991; Nachmias and Nachmias, 1992). All of these authors have discussed the advantages and disadvantages of these techniques. Based on the nature of this study, the best techniques for data collection have been selected after evaluating the advantages and disadvantages of the techniques; the techniques used for this study were mail questionnaire and interview, which was based on face-to-face interviews and telephone interviews.

The interviews were conducted with those developers who were willing to participate, and they had to choose the method of interviews by ticking the boxes provided in the questionnaire. The interview was based on the semi-structured interview which was considered as a quantitative method of data collection (Creswell, 2003). In addition, the interviews conducted were designed to obtain information further to that covered in the survey questionnaire.

In order to accomplish the empirical work for the purposes of this study, the respondents of the study had to be identified. Because of the nature of this study, which is an attempt to address the issues of housing abandonment by the private developers in Malaysia, specifically to identify the cause of abandoned projects, the appropriate respondents for the study were the private housing developers. The private housing developers in this study are those who have been licensed by the Ministry of Housing and Local Government to carry out housing developments in Malaysia. The

next step was to select the sample study areas, because it was impossible for the researcher to carry out empirical work throughout Malaysia - which has 13 states - within 3 months, as allowed by the researcher's sponsor. The selection of sample study areas was made based on the same characteristics of the respondents, since they work under the same rules and regulations of the housing development system. In addition, the sample study areas selected were representative of the population of private housing developers, and were also representative of the projects which had been abandoned. For the purpose of this study, 6 states were selected: Perlis, Kedah, Penang, Perak, Selangor and Kuala Lumpur.

The survey questionnaires were distributed by mail to the population of private housing developers within sample study areas; there were 858 respondents. 555 questionnaires were returned. Concerning the survey questionnaire, four main components were designed in the questionnaire: the demographic background of the respondents, the formal written rules or institutions affecting housing development, the role played by market information and interrelationship to project abandonment, and the causes of abandoned housing projects. In addition, the semi-structured interviews conducted revealed more information than could be covered in the questionnaire.

In addition to the primary data gathered from the survey method, the secondary data were also very important in this study. The secondary data or information were gathered from various sources, i.e. published and unpublished reports, books and journals and so on. The secondary data revealed information about the abandoned projects, such as the definition of abandoned projects, categories and classification of abandoned projects, the statistics of abandoned projects and procedures of rehabilitation programmes. The information from the secondary data together with the results from the survey questionnaires enabled the researcher to have a better understanding of the issues of abandoned housing projects in Malaysia.

7.2.3 Analytical Stage

All the information gleaned from the survey questionnaire was analysed at the analytical stage. The employment of the statistical procedures was based on the data obtained and also depended on the research objectives to be achieved. Concerning this research, the exploratory data analysis or descriptive analysis was used in the first place for describing, summarising and presenting data in tables, charts, graphs and other diagrammatic forms, which allows patterns or relationships which are not apparent in the raw data to be discerned. In terms of statistical procedures, two statistical procedures were used: two-sample t-tests for testing hypotheses and factor analysis, in order to identify the cause of housing abandonment. Objectives 3, 4 and 5 of the research have been achieved through the analysis stage. The undertaking of the relevant tasks is described in Chapter 5 and Chapter 6.

7.4 Objective 1

Objective 1 is **to understand the abandoned housing projects in Malaysia**. In order to identify the cause of abandoned housing projects, it is useful to understand the issues of abandoned housing projects as a whole. The literature review on housing abandonment revealed that little research has focused on the legal perspectives of housing abandonment, specifically in terms of the definition of abandoned projects that were introduced by the government before and after 1990 (Rahmat, 1990; Md.Dahlan, 2001; Siong, 1994).

Nevertheless, for the purposes of this study, the definition which was introduced by the Ministry of Housing and Local Government after 1990 was more appropriate; here, the term ‘abandoned projects’ was used to refer **to housing projects which have not been completed by the private developers and the house buyers have lodged a report with the Ministry of Housing and Local Government**. On the other hand, the government has had to intervene and revive the projects which have been abandoned by the private developers.

The literature also revealed the historical background of abandoned projects; this was first determined in 1983 and the number of abandoned projects increased in 1986. Since 1986, the government has monitored the increases in the number of abandoned projects, and remedial policies were implemented in 1992 in order to prevent the existence of abandoned projects. Several remedial policies have been introduced by the government, as discussed before. Instead of monitoring the abandoned projects, the government has also become involved in reviving the abandoned projects. The issues of housing abandonment have become a major problem to the Malaysian house building industry, as claimed by the Prime Minister in 2004. Therefore, the Prime Minister has urged the private housing developers to be more responsible and to give full commitment to completing the approved projects, as stated in the S&P agreement between developers and house purchasers, because the victims of the abandoned projects were members of the public.

In order to protect the public interest, for instance, the government has allocated about 4.13 per cent of government expenditure in 2004 for rehabilitation programmes. In this sense, the government has had to use the taxpayers' funds for rehabilitation programmes through Syarikat Perumahan Negara Berhad (SPNB). However, not all of the abandoned projects can be revived; indeed, some of them have no chance of being revived. In addition, the process of rehabilitation is not a clear-cut process owing to some difficulties faced by the government, such as non-cooperation from the developers, fraudulent claims and so on. This information was obtained during the interviews with the elite group.

The results revealed from the survey questionnaire pertaining to the issues of housing abandonment indicate that most of the respondents (95%, N=192) who come under this study believe that the existence of abandoned housing projects is jeopardising the national housing industry. The respondents believe that the allocation of huge amounts of taxpayers' funds for rehabilitation programmes should be used for other development programmes. The results obtained also revealed that the respondents agree that the remedial actions taken by the government were insufficient owing to lack of enforcement and monitoring. Therefore, the statistics show that there has still

been an increase in the number of abandoned projects since the introduction of remedial action by the government in 1992.

From the above discussion, one can see that the data gathered from secondary sources and primary data based on the survey method provided information that was useful in providing the researcher with more understanding of the problems of abandoned housing projects. Therefore, the nature of the study, which was designed to identify the cause of abandoned housing projects, is useful because, in order to prevent the existence of abandoned projects, it was necessary first to identify the cause. Then, the policy recommendations can be proposed in order to prevent the existence of housing abandonment. Objective 1 of the research has been achieved, as discussed in detail in Chapter 2.

7.5 Objective 2

As discussed earlier, Objective 2 of this research was achieved at the theoretical stage. In this stage, the researcher carried out the theoretical overview and literature review in order to identify whether it is appropriate to combine neo classical and institutional economics theories for this study. This stage is very important, because the theoretical framework should be proposed based on the perspectives of both theories. In relation to this, it is very important to provide a clearer link between this meta position and the analytical framework to be used, as highlighted earlier. Based on the literature reviews, the link to the study of abandoned housing projects should start from the land-development process. This is because several conceptual models of land-developments process have been produced. However, for the study, the land-development models produced by Healey (1992) on structure-agency and the work of Ball (1988) on structures of provision have provided a starting point for an adapted, operational framework for analysis, as discussed in Chapter 3. From the analytical framework designed, one can see that the analytical framework highlighted the sorts of factors that might be expected to contribute to the causes of housing abandonment. This is in line with the Malaysian context, since housing provision in Malaysia was regulated by various institutions, which might have contributed to projects being abandoned. In this context, the combined contribution of chapters 2 and 3 was helpful

in developing a general theoretical position and detailed analytical framework that highlights the sort of factors which, from the stylised account of the workings of the market, might be expected to cause projects to be abandoned. As a result, the link provided an analytical framework which can ultimately feed through to the research design, as discussed in Chapter 4. Therefore, it can be concluded that Objective 2 of the research has been achieved, as discussed in detail in Chapter 3.

7.6 Objective 3

Objective 3 is to identify the institutions affecting housing development in Malaysia. The list of relevant tasks undertaken is included in Chapter 5.

The formal written rules or institutions or formalised rules designated and established by the government are among the theoretical perspectives of the institutional economics theory in this study. The existence of formalised rules or institutions enables and/or constrains human decisions and actions in a society (Hodgson, 1988; North, 1996; Omar, 1999). According to Adams *et al.* (2005), the formal rules and regulations were among the features of the institutional economics framework for land and property market operations. Thus, for the purpose of this study, it is important to identify whether the formal written rules or institutions are perceived as a constraint by the private housing developers. For this reason, Objective 3 was formulated to identify the institutions affecting housing development in Malaysia. The results obtained were useful in supporting the discussion on the issues of housing abandonment.

In order to achieve Objective 3, the theoretical framework of the study outlined the formal rules and regulations as one of the features of the institutional economics perspective. Based on the literature review, the formal rules and regulations have a significant influence on land development, financial institutions and government housing policy (Wahab, 1991; Bramley, 1996; Bramley 1998; Othman, 1999; Zainol, 2000; Salleh and Khalid, 2002; Henneberry *et al.*, 2003; White and Allmendinger, 2003; Adams *et al.*, 2005).

7.6.1 The Role Played by the Institutions that is Affecting Housing Development

As highlighted earlier, the third objective of this study is to identify the institutions which affect housing development in Malaysia. To achieve this objective, the study formulated several relevant questions that help to focus the research towards assessing the role played by the institutions that affect housing development, and the results obtained were useful in supporting the discussion on housing abandonment. The role played by the institutions in housing development was studied in the light of the hypotheses established in Chapter 3. A summary of the results is presented here according to the stated hypotheses.

7.6.2 The Role Played by the Formal Written Rules that Are Related to Financial Institutions in Housing Development

H₁: There is a significant statistical difference between successful developers and failure developers in the role played by the formal written rules that are related to the financial institutions affecting housing development in Malaysia. (Hypothesis 1)

The results obtained from the survey questionnaire showed the tendency of respondents to believe that the formal written rules that were related to financial institutions were perceived as a barrier institution that affected housing development, as shown in table 5.12. This is because of the requirement of the financial institutions which stipulate that 80% of housing units must be sold in order for the bridging loans to be approved, whereas the loans are very important to the developers for completing the particular housing projects, as discussed earlier. This result supports the results obtained from the interviews, in which most of the developers (95%, N=192) remarked that the rules and regulations imposed on the approval of bridging loans by the financial institutions were very strict.

For the purposes of the study, the researcher has hypothesized that there is a significant statistical difference in the mean of the role played by the financial institutions affecting housing development in Malaysia between successful developers and failure developers who are directly involved in the empirical work carried out.

From the results of testing the hypotheses in Chapter 5 as shown in table 5.13 there is a significant difference between the mean of the financial institutions that play an important role affecting housing development in Malaysia between successful developers and failure developers. This result indicates that the respondents who come under this study and who are categorised as failure developers believe that the restrictiveness of the rules and regulations - specifically the regulation that requires that 80% housing units must be sold for approving the bridging loans - was perceived as a barrier institution affecting housing development in Malaysia, and this could lead to projects being abandoned. For instance, failure to obtain the loans would jeopardize the project cash flow of the developers, and this could lead to housing projects being abandoned if there is no alternative form of finance for the project undertaken. However, the successful developers believe that the financial institutions have played their roles in supporting the house-building industry by providing various packages of loans to developers and house buyers. In terms of the rules and regulations formulated by the financial institutions, they believe that they were fair enough in order to secure the interest of the financial institutions.

In fact, as highlighted earlier, the National Bank (Bank Negara of Malaysia) plays an important role in ensuring that the regulations formulated by the financial institutions bring a win-win situation between financier and borrower. However, the results shown in table 5.12 provide statistical evidence that the respondents believe that the formal rules and regulation related to financial institutions were a barrier institution affecting housing development.

7.6.3 The Role Played by the Formal Written Rules Related to Land Development Are Affecting the Housing Development

H1: There is a significant statistical difference between successful developers and failure developers in the role played by the institutions or formal written rules on land development affecting the housing development (Hypothesis 2)

The findings obtained, as discussed in table 5.12, indicate that the respondents who come under this study believe that the formal written rules that govern the land development are obstacles to housing development in Malaysia. The findings obtained from the interviews also support this argument, since most of the interviewees believe that the restrictiveness of rules and regulations in land institutions, - especially on the requirement that stipulates that developers must carry out the construction work within 12 months after planning permission has been granted, as requested in TCPA - was considered as a barrier institution in housing development. As highlighted earlier, if the construction work was carried out in order to fulfil the requirement, although at that time the developers were financially not stable because of the low sale percentage of housing units, the project will certainly be in trouble and the situation will worsen if the developers fail to obtain the bridging loans from the financial institutions. This situation could lead to housing projects being abandoned if there is no immediate action taken by the developers to overcome the problem. Therefore, it is not surprising that the respondents perceived the land institution to be a barrier institution affecting housing development.

Nevertheless, it is important to identify whether there is an agreement between the successful developers and failure developers on the matter. Therefore, the study has hypothesized that there is a significant statistical difference in the mean of the role played by the land institution affecting housing development in Malaysia between successful developers and failure developers.

The results obtained from the hypotheses tested in Chapter 5, as shown in table 5.14 demonstrate that there is no significant difference between the mean of the role played by the formal written rules on land development affecting housing development in Malaysia between successful developers and failure developers. This result indicates that the respondents from both categories, such as the successful developers and failure developers who come under this study, perceived that the formal rules and regulations that governed land development were barriers to housing development.

7.6.4 *The Role Played by the Housing Policy in Housing Development*

H1: There is a significant statistical difference between successful developers and failure developers in the role played by the institutions or formal written rules on housing policy affecting housing development in Malaysia (Hypothesis 3)

Table 5.12 in Chapter 5 showed that the formal written rules that are related to housing policy are another institution which plays an important role in housing development. As emphasized earlier, the term ‘housing policy’ in this study refers to the requirement of constructing 30% of the approved project with low-cost housing units. The results obtained from the questionnaire revealed that the respondents who come under this study perceived that the housing policy introduced by the government was not an obstacle institution in housing development. However, the results from the interviews show that most of the interviewees (95%, N=192) remarked that the housing policy which requires developers to construct 30% low cost housing units was a barrier in housing development, especially when they are involved with developing smaller size projects. They also claimed that mismatch of supply and demand for this type of housing could lead to housing projects being abandoned. This is because only a certain group of people who have been categorised as a lower income group are qualified to purchase such housing, and if the developers cannot find that category of buyers in a particular area, they would rather abandon the projects.

According to the results above, the study has hypothesized that there is a significant statistical difference between successful developers and failure developers in the role played by the institutions or formal written rules on housing policy affecting housing development in Malaysia

The results of testing hypothesis three, as revealed in Chapter 5 in table 5.15 indicate that there is a significant difference between the mean of the role played by the housing policy that is affecting housing development in Malaysia between successful developers and failure developers. The finding shows that the successful developers believe that the housing policy introduced by the government that requires private developers to develop 30% of low-cost units was not a barrier in housing

development. Nevertheless, the failure developers who come under this study perceived that the housing policy of constructing 30% of housing projects with low-cost houses was a barrier institution in housing development. This policy could lead to housing projects being abandoned if the mismatch of supply and demand occurs as a result of the difficulties in identifying the house buyers who are categorised as being in the lower income group. As highlighted earlier, only those house buyers categorised under the lower income group can purchase the low-cost houses. Therefore, if the number of house buyers is low, the private developers might abandon the projects in order to reduce the potential loss.

7.7 Objective 4

Objective 4 is **to examine the roles played by market signals in housing development**. The list of the relevant tasks undertaken is included in Chapter 6.

7.7.1 The Role Played by the Market Signals in Housing Development

H1: There is a significant statistical difference between successful developers and failure developers in the mean of the role of market signal that needs to be responded to by the respondents before entering the housing market (Hypothesis 4)

The fourth objective of this study is to examine the interrelationship between market information and project abandonment in terms of the role played by the market signals in housing development. The concept of the market signals in property research was analyzed by Keogh (1994).

Therefore, for the purpose of the study, the concept of market signals has been operationalised, whereby several relevant questions have been asked in order to achieve objective 4. The findings obtained reveal the importance of the role played by the market signals in housing development. Table 5.16 in the previous chapter shows that the respondents who come under this study seem to agree that it is important that the developers respond to the market signals in housing development, and they also agree that failure to respond correctly to market signals could lead to project

abandonment. Furthermore, the results obtained from the interviews revealed that most of the respondents (95%, N=192) recognise the importance of responding to the market signals before entering the housing market, and they did not deny the interrelationship with failure to respond appropriately to market signals could lead to housing abandonment.

In relation to this, it is important to identify whether both parties, such as the successful developers and failure developers who come under this study, agree in this matter. Thus, this study has hypothesized that there is a significant statistical difference between successful developers and failure developers in the mean of the role played by the market signals dimension that needs to be responded to by the respondents before entering the housing market.

From the results of testing the hypotheses in Chapter 5, as shown in table 5.17 to by the respondents before entering the housing market. This result indicates that the respondents who come under this study believe that the market signals play an important role in housing development, and the developers must respond correctly to these signals before entering the housing market. In other words, the results also suggested that there is an interrelationship between market information and project abandonment. This is because the results obtained from the interviews revealed that most of the developers agree that failure to respond appropriately to market signals leads to housing abandonment, as emphasized earlier in Chapter 5.

7.8 Objective 5

Objective 5 is to **identify the causes of housing abandonment**. The list of relevant tasks undertaken is contained in Chapter 6.

7.8.1 The Results of the Causes of Abandoned Housing Projects

The fifth objective that needs to be achieved in this study is identification of the causes of abandoned housing projects. In order to achieve this objective, the questionnaire which was newly constructed generated 16 questions relating to the

causes of housing abandonment from the perspectives of neo-classical and institutional economics. Factor analysis using the principal component analysis approach was employed to identify the factors that contribute to housing projects being abandoned. The principal component analysis has been used because of the nature of the study which comprises a large number of variables or factors that need to be reduced to a smaller number of variables, and which must determine the underlying dimensions or factors. Through the statistical procedures of factor analysis, as outlined in Chapter 6, the set of data for this study is sufficiently appropriate to be analysed using the factor analysis. This can be seen from the results shown in table 6.2 concerning the reliability coefficient of observed variables, while the results shown in table 6.4 revealed the results of the KMO and Bartlett's Test. Finally, after a few steps of the statistical processes involved (i.e. extraction method, communalities and rotated component matrix), the factor analysis produced the five factors to be taken into account as being the factors that contribute to the housing projects being abandoned. In addition, the scree plot produced by the SPSS also shows five factors to be extracted. The next step is to name the latent variable or factor within the research structure. As discussed earlier, naming the new factors is very subjective but it must be accomplished within the research structure.

From the results obtained, five variables or factors were perceived as factors contributing to the causes of housing abandonment (i.e. profit maximisation, poor management, response to market signals, enforcement and monitoring, and the restrictiveness of the rules and regulations in housing development).

7.9 Strength and Limitations of the Research

The study has strength in providing detailed information about the developers' perceptions on the issue of housing abandonment. The strength of this research was that it studied the way in which the developers expressed their understanding of the situation, and their feelings and worries about the roles of the institutions and market signals in housing development that are related to the abandoned housing projects. This effort has illustrated the reality that exists amongst the developers in the sample study area. The richness in the detailed insights of the research allows the study to

explore the perceptions of the developers through the information revealed from the questionnaires and the results from the follow-up interviews. Moreover, the interviews for the detailed insights were conducted with developers who are representative of the population. The developers are categorised as being successful developers and failure developers. Indeed, interviews were also conducted with the elite group. Doing so eliminated one source of bias in the research. Therefore, this particular research was designed to gather information from developers who are actively involved in the housing industry and with the elite group who participate directly in housing development.

The results from the questionnaire provide the context of the study. In other words, the findings from the questionnaire provided the major areas of concern, which then needed to be tackled in greater detail through the follow-up interviews. The quantitative analysis results revealed the background of the developers who come under this study and their perceptions on the role played by the institutions and the interrelationship between market (specifically market signals) and project abandonment, as well as their perceptions about the causes of abandoned housing projects. The analysis finally concludes that the developers perceived that the behaviour of profit maximisation, poor management, response to market signals, enforcement and monitoring and the strictness of rules and regulations all contribute to the causes of abandoned housing projects. Indeed, these findings have emphasized the applicability of the theoretical framework which is based on the perspectives of neo-classical and institutional economic theories in the study of housing abandonment.

Nevertheless, this study also recognised some limitations: for example, it is not easy to achieve a high response rate from the failure developers, compared with that from successful developers. However, the response rate from this group is considered significant for the purposes of this study. Despite that, it was not easy to prove such findings, which are related to fraudulent claims and the weaknesses of government agencies, although these findings disclosed the reality of the problems related to housing abandonment. It should also be acknowledged that, although the findings of this research are remarkable and useful towards the understanding of the perceptions

of the developers on the issues of housing abandonment, they are based on the study of a relatively small number of failure developers compared with the number of successful developers.

Because of these limitations, it should be noted that the study has successfully determined the central problems amongst housing developers in terms of the issue of housing abandonment. Without doubt, one can see that the findings can be used to enlighten other research in similar areas, such as studies by the cooperative bodies on the existence of abandoned housing projects. Despite that, there are some other areas for further research, and this will be discussed in the next section.

7.10 Areas for Further Research

This research on the abandoned housing development in Malaysia has provided a detailed explanation of the factors that contribute to the existence of housing abandonment from the perspectives of neo-classical and institutional economics within the sample study areas. The problems and issues that have been raised should be considered and further research should be carried out. As highlighted earlier, this research concentrates only on the role played by institutions in housing development and its relation to housing abandonment; it also focuses on the factors that contribute to the existence of abandoned projects. However, it is not the concern of this research to look into the factors of housing abandonment in terms of type of houses and the size of housing projects. Therefore, future research should attempt to identify the factors that contribute to abandoned housing projects in terms of type of houses and project size.

Furthermore, this research does not focus on the impact of abandoned housing projects on housing prices. Future research should link the effect of housing abandonment on the housing market, allowing another agenda for research. In other words, future research should attempt to link the changes in house prices to the developers' strategies whenever new developers take over the responsibility to proceed with the construction works under the rehabilitation programmes. Provided

the data are available, such studies will be able to indicate empirically the impact of the rehabilitation programme of abandoned housing projects on housing prices.

Another issue revealed in this research, which should also provide a basis for further research, concerns the house buyers who have become the victims in the housing abandonment. Future research should focus on their rights in terms of the legal implications if they want to proceed with the construction work after the project has been abandoned. In other words, are there any rules that grant the right for them to continue the project without having to wait for assistance from the government to revive the projects, because the implementation of rehabilitation programmes involves long procedures before any decision can be made by the government? At the same time, the house buyers involved need to pay for the mortgage approved by the financial institutions, pay the council taxes and quit rent although there is no construction activity at the site. Thus, another associated area of concern is to determine whether the house buyers who are involved in abandoned housing projects have a legal right to continue with the abandoned housing projects in their own way, rather than wait for rehabilitation programmes to be provided by the government.

7.11 Recommend Policies to Avoid the Problems of Abandoned Housing Projects

The final objective of the research is to suggest policy recommendations to avoid the problems of abandoned housing projects. As a result of the findings revealed in the previous chapter, this section will discuss further the policy recommendation(s) that might be considered by the policy maker in order to avoid housing abandonment. As discussed earlier, the findings show that there are five factors that contribute to the existence of abandoned housing projects from the perspectives of neo-classical and institutional economics (i.e. profit maximisation, poor management, response to market signals, enforcement and monitoring and strictness of rules and regulations). Based on the factors outlined, the following sections discuss further the policy recommendations for preventing housing projects from being abandoned.

7.11.1 To Change the Concept of Housing Provision from the Concept of Sell then Build to the Concept of Build then Sell

As highlighted earlier, housing provision in Malaysia since independence has been based on the “sell then build” concept. This application requires house buyers to pay a 10% deposit upon the S&P agreement signed between the house buyers and the developers who are responsible for completing the particular project within a specific period. Those house buyers who are not able to pay cash are required to obtain a bank loan or mortgage from the financial institutions; this is known as an end finance. The balance of the total housing price will be paid through the progressive payments based on the construction stages, as highlighted in Schedules G and H, shown in detail in Appendices 1 and 2. In other words, the developers who employ the concept of “sell then build” depend totally on the progressive payments to complete the particular project. This means that the private developers contribute a small percentage of the total cost of the projects with their funds for completing that particular project, because they will use the deposit collected from the house buyers and the funds collected from the progressive claims. Therefore, if the projects were abandoned, whatever the circumstances, the house buyers will incur considerable loss compared with that of the developers, because the house buyers still have to pay the bank loans to the financial institutions, even though the buildings purchased have not been completed.

For that reason, it is fair to recommend the new policy of housing production, although the developers must complete the construction works before the CFO has been obtained from the local authority; then the units can be sold to those house buyers through the concept of “build then sell”. This mechanism will protect the house buyers from being victims of abandoned projects, because the developers will bear all the project costs from the beginning until completion. In other words, through this concept, the developers will be more responsible for ensuring that the projects undertaken can be completed within the period in order to avoid any loss if the projects are abandoned. This also helps developers to improve their financial management. In fact, the application of the “build then sell” concept in housing

production has been successfully implemented in developed countries such as the UK.

7.11.2 Local Authorities Play More Important Roles

Currently, the local authorities just play a role in processing the application for planning permission and issuing the CFO after the completion of the projects. They do not become involved during the construction works. Therefore, it is fair to recommend that local authorities be given power to monitor the work progress. In doing so, they could identify problems early, and appropriate action could be taken immediately to solve it. In addition, local authorities should also be given power to evaluate a financial report in order to counter check the stability of developers' cash flow on the particular projects. In order to avoid fraudulent claims by developers, local authorities could collaborate with financial institutions before any approval is given for releasing the progressive payment by the institutions to the developers.

7.11.3 Government Should Revise Their Current Policies to Suit the Current Market Demand

In order to avoid the problems of housing abandonment, the government should be ready to revise any policies related to housing development that cause the housing projects to be abandoned. For example, the housing policy that requires 30% of housing units to be constructed with low-cost houses should be implemented if necessary. This means that if the proposed housing scheme is located within the area of lower income groups, it is fair for the developers to provide 30% of the project with low-cost houses. However, if the proposed housing project is located within middle and higher income groups, this policy should not be implemented in order to ensure there is no mismatch of supply and demand for low-cost houses. This is because the low-cost houses can be sold to certain groups of household income groups, as discussed earlier. Thus, the mismatch of demand and supply for low-cost housing units could lead to the abandonment of housing projects, because the developer is willing to abandon the low-cost houses if it is difficult for them to

find a lower income group for the particular projects. The results revealed in Chapter 6 discuss this issue in detail.

Furthermore, the government should also revise the policy that requires the developers to proceed with construction work within 12 months after the planning permission has been approved by the local authority. This policy is applicable if the developers involved are capable in financial terms and there is market demand for the particular project at the time it was approved. However, if the developers are not ready owing to financial problems, or they realise the market demand is not so encouraging after obtaining planning approval, the government should not call off the approval given to the developer and force the developers to carry out the projects at that time. In doing so, it is helpful to avoid abandoned housing projects if the developers are forced to carry out housing development, even if they are not financially capable.

Another aspect is that the government should also encourage the financial institutions to revise their rules and procedures relating to the approval of bridging loans. The restrictiveness of the regulations that require 80% of the housing units to be sold before the bridging loans can be approved is a burden to developers who are reliant on the loans for completing the particular projects, especially if 80% of the project has not yet been sold during the construction work. Therefore, the approval of bridging loans should be based on the feasibility study reports, and the loans can be released to the developers based on the construction work stages.

7.11.4 To Consider the Abandoned Housing Developer as a Criminal

Another recommendation which could be implemented as a measure to avoid the existence of abandoned housing projects is through legal action against the private developers. This means that the government must revise the Housing Development (Control And Licensing) Act 1966 (Act 118) and Regulations and add a clause that considers the abandonment of housing projects to be a criminal offence, and those developers who have abandoned the projects without any concrete or reasonable reasons can be charged with a criminal offence. However,

the most important factor is the enforcement by the government to take those failure developers to the courts for justice and to protect the interests of the house buyers. In doing so, the deterrence sentence from the court might change the attitude of developers towards being more professional and highly responsible in completing the housing development undertaken within the period, and this could help in preventing the problems of housing abandonment.

7.12 Conclusion

This thesis has demonstrated the application of the perspectives of neo-classical and institutional economic theories in examining the factors that contribute to the existence of housing abandonment in Malaysia. The researcher was also able to explain the role played by the institutions on housing development and its relation to housing abandonment. The research also revealed the role played by the market signals and their relation to the issue of abandoned housing projects. In other words, the attempts of the research to study the issue of housing abandonment from the perspectives of neo-classical and institutional economics in the sample study area have enabled the researcher to examine in some depth the developers' problems that finally contribute to the factor of housing abandonment.

To summarise, the research suggests that the housing abandonment issues should be examined based on the theoretical framework of neo-classical and institutional economic theories. This is because the developers perceived that the formal written rules or institutions, such as the strictness of rules and procedures created by the institutions related to housing development, contribute to the factors causing the housing projects to be abandoned. In terms of the informal rules, the findings have proved that the developers have been affected by the processes of governance in housing development, and this has made them focus solely on profit maximisation, and show a negative sign to social obligation for completing the projects undertaken, which finally contributes to the problem of housing abandonment. In addition, the poor management of developers' organisations as a player in the institutional framework for land and property market operations, and the lack enforcement and monitoring by the government agency as an institution,

also contribute to the problem of housing abandonment. Despite that, the developers also perceived that it is very important to respond appropriately to market signals in housing development, since failure to respond correctly to the market signals will cause projects to be abandoned. For these reasons, it is fair to conclude that the theoretical pluralism in property research is useful for contributing new methodology for analysing the land and property market. The employment of the perspectives of neo-classical and institutional economics makes it possible to examine the issue of abandoned housing development, especially in terms of the causes of abandoned housing projects in Malaysia.

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Appendix 1: Third Schedule (Clause 4(1) – Schedule of payment of purchase price (Landed Property) – Housing Development (Control And Licensing) Act 1966 (Act 18) & Regulations

Instalment Payable	%	Amount
1. Immediately upon the signing of this Agreement	10	RM
2. Within twenty-one (21) working days after receipt by the Purchaser of the Vendor's written notice of the completion of		
a. the foundation and footing works of the said Building;	10	RM
b. the reinforced concrete framework of the said Building	15	RM
c. the walls of the said Building with door and window frames placed in position	10	RM
d. the roofing, electrical wiring, plumbing (without fittings), gas piping (if any) and internal telephone trunking and cabling to the said Building	10	RM
e. the internal and external plastering of the said Building	10	RM
f. the sewerage works serving the said Building	10	RM
g. the drains serving the said Building	5	RM
h. the roads serving the said Building	5	RM
3. On the date the Purchaser takes vacant possession of the said Building, with water and electricity supply ready for connection	12.5	RM
4. Within twenty-one (21) working days after receipt by the Purchaser's or the Purchaser's solicitors of the separate document of title to the said Lot together with a valid and registrable Memorandum of Transfer to the Purchaser duly executed by the Vendor or on the date Purchaser takes vacant possession of the said Building, whichever is later	2.5	RM
5. On the date the Purchaser takes vacant possession of the said Building as in item 3 and to be held by the Vendor's solicitor as stakeholder for payment to the Vendor as follows:	5	RM
a. two point five per centum (2.5%) at the expiry of six (6) months after the date Purchaser takes vacant possession of said Building;	2.5	RM
b. two point five per centum (2.5%) at the expiry of six (6) months after the date Purchaser takes vacant possession of said Building;	2.5	RM
TOTAL	100	RM

Appendix 2: Third Schedule (Clause 4(1) – Schedule of payment of purchase price (High-Rise Building) – Housing Development (Control And Licensing) Act 1966 (Act 18) & Regulations

Instalment Payable	%	Amount
1. Immediately upon the signing of this Agreement	10	RM
2. Within twenty-one (21) working days after receipt by the Purchaser of the Vendor's written notice of the completion of		
a. the work below ground level including piling and foundation of the said Building comprising the said Parcel	10	RM
b. the reinforced concrete framework of the said Building	15	RM
c. the walls of the said Parcel with door and window frames placed in position	10	RM
d. the roofing/ceiling, electrical wiring, plumbing (without fittings), gas piping (if any) and internal telephone trunking and cabling to the said Parcel	10	RM
e. the internal and external plastering of the said Parcel	10	5
f. the sewerage works serving the said Building	5	RM
g. the drains serving the said Building	5	RM
h. the roads serving the said Building		
3. On the date the Purchaser takes vacant possession of the said Parcel, with water and electricity supply ready for connection	12.5	RM
4. Within twenty-one (21) working days after receipt by the Purchaser's or the Purchaser's of written confirmation of the Vendor's submission to and acceptance by the Appropriate Authority of the application for subdivision of the said Building	2.5	RM
5. On the date the Purchaser takes vacant possession of the said Parcel as in item 3 and to be held by the Vendor's solicitor as stakeholder for payment to the Vendor as follows:	5	RM
a. two point five per centum (2.5%) at the expiry of six (6) months after the date Purchaser takes vacant possession of said Building;	2.5	RM
b. two point five per centum (2.5%) at the expiry of six (6) months after the date Purchaser takes vacant possession of said Building;	2.5	RM
TOTAL	100	RM

Appendix 3

QUESTIONNAIRE TO DEVELOPERS

Dear Sir,

I am pleased to inform you that I am a doctoral student in the Department of Property at Aberdeen University, Scotland, United Kingdom. I would really appreciate it if you would complete the enclosed questionnaire.

This survey is part of my doctoral research which focuses on the existence of abandoned housing projects in Malaysia. The questions in the survey are designed to gather information about the causes of abandoned housing projects, based on the framework of neo-classical economics and the approach of institutional economics.

I would be most grateful if you would help with this research by providing me with some information. Please complete the questionnaire and send it back using the self-addressed envelope provided, as soon as possible.

All your responses will be kept **STRICTLY CONFIDENTIAL**. Only I will have access to your individual survey responses.

If you have any inquiries, please do not hesitate to contact me or my supervisor, Dr. Michael White, Senior Lecturer, Department of Property, Edward Wright Building, Business School, University of Aberdeen, Scotland, United Kingdom. Email address m.white@abdn.ac.uk. Phone +441224272763.

Successful completion of this study depends on your assistance. Thank you for taking the time to assist me in this research.

Yours sincerely,

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QUESTIONNAIRE TO DEVELOPERS

SECTION A(a)

Questions 1 to 6 below are designed to identify the organisational background.

Please tick the appropriate box

a. General information about the firm

1. Date of establishment of firm.
- | | | | |
|-------------|--------------------------|-------------|--------------------------|
| 5-10 years | <input type="checkbox"/> | 11-15 years | <input type="checkbox"/> |
| 16-20 years | <input type="checkbox"/> | > 20 years | <input type="checkbox"/> |
2. Approximate number of branches including head office.
3. Approximate number of employees in the firm.
4. Firm ownership.
- | | |
|------------------------|--------------------------|
| 1. Sole proprietorship | <input type="checkbox"/> |
| 2. Partnership | <input type="checkbox"/> |
| 3. Shareholder | <input type="checkbox"/> |
| 4. Family Company | <input type="checkbox"/> |
| 5. Others | <input type="checkbox"/> |
5. The firm's average annual turnover (for the last three years)
- | | | | |
|----------------------|--------------------------|--------------------------|--------------------------|
| 1. Below RM1 million | <input type="checkbox"/> | 3. RM5 million and above | <input type="checkbox"/> |
| 2. RM1– RM5 million | <input type="checkbox"/> | 4. Don't know | <input type="checkbox"/> |

6. What approximate percentage of projects have been completed?

Landed property		High rise property	
a. < 20%	<input type="checkbox"/>	< 20%	<input type="checkbox"/>
b. 21-40%	<input type="checkbox"/>	21-40%	<input type="checkbox"/>
c. 41-60%	<input type="checkbox"/>	41-60%	<input type="checkbox"/>
d. 61-81%	<input type="checkbox"/>	61-81%	<input type="checkbox"/>
e. 81-100%	<input type="checkbox"/>	81-100%	<input type="checkbox"/>

SECTION A(b)

b. Developers' experience in housing development

Questions 7 to 16 are about the developers' experience in housing development.

Please tick the appropriate box and also circle the number you believe best reflects your agreement or disagreement with the given statement.

7. Do you have experience of failure to deliver vacant possession of housing projects?

1. Yes 2. No

In your experience, what are the factors that can be associated with the problems of project delay?

8. Lack of manpower.

9. Unavailability of material and equipment.

10. Inexperienced or limited numbers of contractors.

11. Poor timing of procurement of equipment.

12. Difficult public sector coordination.

	<i>Strongly agree</i>	<i>Agree</i>	<i>Uncertain</i>	<i>Disagree</i>	<i>Strongly Disagree</i>
8. Lack of manpower.	1	2	3	4	5
9. Unavailability of material and equipment.	1	2	3	4	5
10. Inexperienced or limited numbers of contractors.	1	2	3	4	5
11. Poor timing of procurement of equipment.	1	2	3	4	5
12. Difficult public sector coordination.	1	2	3	4	5

13. Do you agree that the sale percentage of dwelling for new housing scheme indicates the survival of completing the projects?

1. Yes 2. No

14. What percentage must be sold before starting construction?

1. < 20% 3. 41-60%
 2. 21-40% 4. 61-80%
 5. > 80%

15. Given the choice in 13, have you ever abandoned such projects? If yes, why?

1. Yes (specify) 2. No

16. Do you agree that the existence of abandoned housing projects in Malaysia has had a negative effect on the house building industry?

<i>Strongly Agree</i>	<i>Agree</i>	<i>Uncertain</i>	<i>Disagree</i>	<i>Strongly Disagree</i>
1	2	3	4	5

SECTION B(a)

a. Developers' perceptions towards land institutions.

Questions 17 to 22 are designed to identify the experience of developers towards land matters.

Please tick the appropriate box and circle the number you believe best reflects your agreement or disagreement with the given statement.

<i>Strongly</i>	<i>Not</i>	<i>Uncertain</i>	<i>Serious</i>	<i>Very</i>
<i>Not</i>	<i>Serious</i>			<i>Serious</i>
<i>Serious</i>				

17. The amount of land allocated for housing development is always insufficient.

- 1 2 3 4 5

18. The land made available is located within areas of high demand.

- 1 2 3 4 5

- | | | | | | |
|--|---|---|---|---|---|
| 19. The failure by developers to find the land available in planning terms, high demand and best location for developing new housing scheme might have a significant influence on the sale percentage of the projects. | 1 | 2 | 3 | 4 | 5 |
| 20. Is it fair to say that land availability could be considered as a factor that may cause the existence of abandoned housing projects? | 1 | 2 | 3 | 4 | 5 |
| 21. In terms of land tenure, developers prefer to develop housing projects on freehold land title rather than leasehold. | 1 | 2 | 3 | 4 | 5 |
| 22. The consumers prefer to purchase new housing units with freehold land titles rather than leasehold land titles. | 1 | 2 | 3 | 4 | 5 |

SECTION B(b)

b. Developers' perceptions towards financial institutions.

Questions 23 to 29 are designed to identify the experience of developers towards financial institutions in housing development.

Please tick the appropriate box and circle the number you believe best reflects your agreement or disagreement with the given statement.

<i>Strongly Not Serious</i>	<i>Not Serious</i>	<i>Uncertain</i>	<i>Serious</i>	<i>Very Serious</i>
-------------------------------------	------------------------	------------------	----------------	-------------------------

In your experience, what factors can be associated with the problems of getting bridging finance approval?

23. The restrictiveness in regulations and procedures for approval. 1 2 3 4 5

24. Delay in loan approval. 1 2 3 4 5

25. Amount approved by financial institutions is small. 1 2 3 4 5

26. High interest rate for the approved loans. 1 2 3 4 5

e. Others (please specify) 1 2 3 4 5

27. Do you agree that all problems stated in Question 26 are not related to the abandoned housing projects in Malaysia? 1 2 3 4 5

28. Overall, the financial institutions in Malaysia have accepted their responsibilities to support the housing industry, and the existence of abandoned housing projects is not associated with them? 1 2 3 4 5

29. Is it fair to say that the housing abandonment issue is not related to the financial institutions problems but is the 1 2 3 4 5

result of the mismanagement of finance that has been allocated for a specific project?

SECTION B(C)

c. Developers' perceptions towards government policy in housing development.

Questions 30 to 33 identify the developers' experience towards government policies.

Please tick the appropriate box and circle the number you believe best reflects your agreement or disagreement with the given statement.

	<i>Strongly Not Important</i>	<i>Not Important</i>	<i>Uncertain</i>	<i>Important</i>	<i>Very Important</i>
30 Do you agree that government policy towards housing development is a very important aspect to enhance the national housing industry?	1	2	3	4	5
31 Without government policy on the national housing industry, lower income groups will never have a chance to have adequate housing, because private developers focus more on constructing medium and high cost housing units.	1	2	3	4	5
32 Do you agree that the private developers will not construct low-cost housing if there is no requirement from the government?	1	2	3	4	5
33 The imposition of housing policy					

- | | | | | | |
|---|---|---|---|---|---|
| . that requires private developers to construct 30% of housing projects with low-cost housing units is not associated with the existence of abandoned housing projects. | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|

SECTION C

Developers’ perceptions about the interrelationship between market and project abandonment.



Questions 34-38 are designed to identify the perception of developers towards the role of market information in terms of responding to market signal in the housing development

Please circle the number you believe best reflects your agreement or disagreement with the given statement.

The following aspects are relevant factors for developers when responding to the market signal before entering the housing market.

<i>Strongly agree</i>	<i>Agree</i>	<i>Uncertain</i>	<i>Disagree</i>	<i>Strongly Disagree</i>
-----------------------	--------------	------------------	-----------------	--------------------------

- | | | | | | |
|---|---|---|---|---|---|
| 34. Developers will respond to high housing prices for entering the market. | 1 | 2 | 3 | 4 | 5 |
| 35. Developers will respond to the housing market when there is a reduction of interest rate by the financial institutions. | 1 | 2 | 3 | 4 | 5 |

- | | | | | | |
|--|---|---|---|---|---|
| 36. Developers will respond to the types of houses with high demand. | 1 | 2 | 3 | 4 | 5 |
| 37. Instead of planning terms, the developers will respond to household income level for selecting land for developing housing scheme. | 1 | 2 | 3 | 4 | 5 |
| 38. Developers will respond to housing stock before entering the housing market to determine the preferred types of houses. | 1 | 2 | 3 | 4 | 5 |

SECTION D

The developers' behaviour towards housing abandonment

The purposes of the questions 39 to 54 in this section are to identify the opinion and attitude of developers toward the causes of housing abandonment in Malaysia.

The following are statements about the causes of abandoned housing projects. Please circle the number you believe best reflects your agreement or disagreement with the given statement.

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Uncertain</i>	<i>Agree</i>	<i>Strongly Agree</i>
39. Projects may be abandoned by developers as a result of legal requirements to complete the	1	2	3	4	5

housing projects within a specific time frame.

- | | | | | | | |
|-----|---|---|---|---|---|---|
| 40. | Another contribution to the problem of abandoned housing projects is the planning system which controls and allocates land availability that is not in accordance with developer's preferences. | 1 | 2 | 3 | 4 | 5 |
| 41. | The land tenure aspects which contributed to the under-performance of selling new housing units could lead to housing abandonment. | 1 | 2 | 3 | 4 | 5 |
| 42. | The weak enforcement of suitable monitoring by the Local | 1 | 2 | 3 | 4 | 5 |

Government and Housing Ministry is another cause for abandoned housing projects.

43. Despite amendments to the Housing Act, abandoned projects still exist as a result of weak monitoring by the Local Government and Housing Ministry.

1 2 3 4 5

44. Developers encounter financial problems owing to mismanagement of finance in their respective firms.

1 2 3 4 5

45. Misuse of finance allocated for specific projects causes financial

1 2 3 4 5

problems for
developers.

46. Private developers undertake multiple projects with the aim of profit gain despite their financial capability being weak.

1	2	3	4	5
---	---	---	---	---

47. Weak monitoring and enforcement by the developers regarding the project management give cause for fraudulent claims by contractors, leading to financial instability for developers.

1	2	3	4	5
---	---	---	---	---

48. Private developers who are focused solely on making a profit are willing

1	2	3	4	5
---	---	---	---	---

	to abandon projects, as this is more profitable than completing the projects					
49.	Negative sign on social obligation may consequently abandon projects	1	2	3	4	5
50.	Developers unwilling to accept total loss, as a consequence of low demand in sale, are willing to abandon projects.	1	2	3	4	5
51.	In general, developers interested in financial gain are more willing to abandon projects.	1	2	3	4	5
52	Developers' failure to respond to the regulations concerning mortgage procedures and	1	2	3	4	5

interest rates leads to the reduction in homebuyers' purchasing power, and is another cause of abandoned housing projects.

53 The failure of developers to respond to the demand for particular types of houses, leading to the construction of housing units, is a cause of abandoned housing projects. 1 2 3 4 5

54 Developers failing to respond correctly to marketing the supply of housing units leads to the problem of abandoned housing projects 1 2 3 4 5

SECTION E

Policy remedies to prevent abandoned projects.

The purposes of the questions 55 to 58 in this section are to identify the opinion of developers toward the remedial policies of the government toward housing abandonment.

The following are statements about the policy remedies implemented by the government aimed at avoiding abandoned projects. Please circle the number you believe best reflects your agreement or disagreement with the given statement.

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Uncertain</i>	<i>Agree</i>	<i>Strongly agree</i>
55 The increase of a deposit for obtaining a housing developer's licence from RM100,000 to RM200,000 is an effective remedy for preventing housing abandonment.	1	2	3	4	5
56 The requirement for developers to provide a progress report every 6 months is an effective remedy for preventing housing abandonment.	1	2	3	4	5
57 The requirement for developers to open a housing account for a particular project is an effective remedy for preventing housing abandonment.	1	2	3	4	5

58 Overall, the policy remedies 1 2 3 4 5
are sufficient and effective in
avoiding the existence of
abandoned housing projects.

Others (please specify) 1 2 3 4 5

Lastly, could you please tick the box below if you are willing to participate in a follow-up

interview in relation to this study. Face to face By telephone Not interested

Many thanks for your kind assistance.

Appendix 4

INTERVIEW SCHEDULE (DEVELOPERS)

Dear Sir,

I am pleased to inform you that I am a doctoral student in the Department of Property at Aberdeen University, Scotland, United Kingdom. I would really appreciate it if you would complete the enclosed interview schedule.

This interview is part of my doctoral research which focuses on the existence of abandoned housing projects in Malaysia. The interview schedule is designed to gather information about the causes of abandoned housing projects based on the framework of neo-classical economics and the approach of institutional economics.

I would be most grateful if you would help with this research by providing me with some information. Please feel free to answer as appropriate to your circumstances.

Successful completion of this study depends on your assistance. Thank you for taking the time to assist me in this research.

Thank you very much.

Mohamad Sukeri Khalid

Ph.D. Candidate

Department of Property, Business School

Edward Wright Building

University of Aberdeen

Scotland, United Kingdom

E-Mail: m.s.khalid@abdn.ac.uk

INTERVIEW SCHEDULE

A. General information

1. Name of organizations (please specify) : _____
2. Your position title : _____
3. Years of service
 < 5 years 10 – 15 years
 5 – 10 years 15 – 20 years

B. An overview of the abandoned housing projects in Malaysia

4. There are many arguments about the existence of abandoned housing projects in Malaysia. Do you think that their existence is a serious problem for the national housing industry?

{ } yes, please describe

{ } no, give reasons

5. There are many comments that link the cause of abandoned housing projects to financial problems.

{ } financial institutions problem

{ } internal financial problem

{ } both

Give reasons

6. Restrictive rules and regulation in housing development have a strong influence on housing abandonment and could lead to projects being abandoned

{ } yes, please describe

{ } no, give reasons

Give reasons

7. Do you think that the existence of abandoned housing projects is the result of an excess supply of housing units?

{ } yes, please describe

{ } no, give reasons

8. Market signals such as household income level, supply and demand of housing, housing stock and financial accessibility are important aspects to be responded to by developers in the housing market. Do you think that the failure to respond correctly towards market signals is significant to the existence of abandoned housing projects?

{ } yes, please describe

{ } no, give reasons

9. In your experience, is there any interrelationship between the markets, specifically market information role and project abandonment? Give your comments.

{ } yes, please describe

{ } no, give reasons

10. In your opinion, could the attitude of the developers lead to problems such as abandoned housing projects?

{ } yes, please describe

{ } no, give reasons

11. How effective are the remedial policies of the government aimed at avoiding housing abandonment?

{ } yes, please describe

{ } no, give reasons

Appendix 5

INTERVIEW SCHEDULE (ELITE GROUPS)

Dear Sir,

I am pleased to inform you that I am a doctoral student in the Department of Property at Aberdeen University, Scotland, United Kingdom. I would really appreciate it if you would complete the enclosed interview schedule.

This interview is part of my doctoral research which focuses on the existence of abandoned housing projects in Malaysia. The interview schedule is designed to gather information about the causes of abandoned housing projects based on the framework of neo-classical economics and the approach of institutional economics.

I would be most grateful if you would help with this research by providing me with some information. Please feel free to answer as appropriate to your circumstances.

Successful completion of this study depends on your assistance. Thank you for taking the time to assist me in this research.

Thank you very much.

Mohamad Sukeri Khalid

Ph.D. Candidate

Department of Property, Business School

Edward Wright Building

University of Aberdeen

Scotland, United Kingdom

E-Mail: m.s.khalid@abdn.ac.uk

INTERVIEW SCHEDULE

A. General information

1. Name of organizations (please specify) : _____
2. Your position title : _____
3. Years of service
 < 5 years 10 – 15 years
 5 – 10 years 15 – 20 years

B. An overview of the abandoned housing projects in Malaysia

4. There are many arguments about the existence of abandoned housing projects in Malaysia. Do you think that their existence is a serious problem for the national housing industry?

{ } yes, please describe

{ } no, give reasons

5. There are many comments that link the cause of abandoned housing projects to financial problems.

{ } financial institutions problem

{ } internal financial problem

{ } both

Give reasons

6. Restrictive rules and regulation in housing development have a strong influence on housing abandonment and could lead to projects being abandoned

{ } yes, please describe

{ } no, give reasons

Give reasons

7. Do you think that the existence of abandoned housing projects is the result of an excess supply of housing units?

{ } yes, please describe

{ } no, give reasons

8. Market signals such as household income level, supply and demand of housing, housing stock and financial accessibility are important aspects to be responded to by developers in the housing market. Do you think that the failure to respond correctly towards market signals is significant to the existence of abandoned housing projects?

{ } yes, please describe

{ } no, give reasons

9. In your experience, is there any interrelationship between the markets, specifically market information role and project abandonment? Give your comments.

{ } yes, please describe

{ } no, give reasons

10. In your opinion, could the attitude of the developers lead to problems such as abandoned housing projects?

{ } yes, please describe

{ } no, give reasons

11. How effective are the remedial policies of the government aimed at avoiding housing abandonment?

{ } yes, please describe

{ } no, give reasons

Appendix 6: Photos of abandoned housing projects in Malaysia







Appendix 7: Variables name in the SPSS

	Variables name in the questionnaire	Variable in the SPSS
	<u>General information</u>	
1	date of establishment	date
2	number of branch	branch
3	number of employees	employee
4	ownership	ownship
5	average turnover	turnover
	<u>Project have been completed</u>	
6	landed property	landed
7	high rise property	highrise
8	<u>Developers experience in housing development</u> project completed according to the SNP	complete
	<u>Project delay</u>	
9	lack of manpower	delay1
10	unavailability of material and equipment	delay2
11	inexperienced or limited numbers of contractors	delay3
12	poor timing of procurement of equipment	delay4
13	difficult public sector coordination	delay5
14	sale percentage of dwelling	salepctg
15	percentage must be sold	soldpctg
16	experience of abandoned project	abandone
17	negative effect on housing industry	negative
18	percentage of sales causes abandoned projects	pctgcoz
	<u>Developers perception towards land institutions</u>	
19	source of land	getland
20	source of finance for purchasing land	sosland
21	Amount of land not available	lanamoun
22	site located in high demand areas	lanhigh
23	site not available in planning terms	influnce
24	land availability cause abandoned projects	lanavble
25	land tenure	lantenur
26	consumer preference of land tenure	preferbi
27	abandoned projects on leased land	abanles
	<u>Developers perception towards financial institutions</u>	
28	source for financing projects	sospjct
29	difficulties in getting bridging finance	difbrige
30	restrictiveness in regulations and procedures	difstria
31	delay in loan approval	difdelay
32	amount approved is small	difsmall
33	high interest rate	difintrs
35	bridging finance cause abandoned projects	notrelat
36	financial institution is not causing abandoned projects	fisuport
37	Abandoned projects is caused by mismanagement of finance	misuse
	<u>Developers perception towards government policy</u>	
38	government policy enhance housing industry	hspolicy
39	role of government policy on national housing policy	hsfocus
40	requirement to construct low cost housing	hsbuild
41	no relation between housing policy and abandoned project	abanply
42	types of houses will be constructed first	tpybuild
	<u>Developers perception towards the housing market</u>	
43	respond to high housing price	rsprice
44	respond to reduction of interest rate	rsintrst
45	respond to types of houses with high demand	rsdemand
46	respond to household income level	rsincome

47	respond to housing stock	rshstock
48	<u>Developers behaviour towards the housing development</u> <u>Legal aspects</u> developers are not associated directly on the existence of abandoned projects	blmdevpr
49	restrictive rules and regulations related to housing abandonment	legstric
50	requirement to complete the housing projects within specific timeframe	legtime
51	planning system contributed to abandoned projects	legconrl
52	the land tenure contributed to abandoned projects	legtenur
53	the weak enforcement by MHLG contribute to abandoned projects	weakfoce
54	the weak monitoring by MHLG contribute to abandoned projects	weakmoni
55	housing abandonment is important to the national housing industry when public interest is involved	abnpoten
56	planning approval contribute to abandonment	abnplnig
57	<u>Financial aspects</u> financial problems facing developers cause housing abandonment	fidvlper
58	financial problems due to mismanagement	fimismgt
59	financial problems due to misuse of finance	fimisuse
60	the presence of claims of fraud lead to financial problems	fraud
61	undertaking multiple projects in the same time lead to financial problems	multiple
62	Internal financial problem is not related to abandonment	internal
63	<u>Developers attitude</u> aim of profit by undertaking multiple projects	dprofit
64	fraudulency claims exist due to weak monitoring and enforcement	dweak
65	focused solely on making profit	dfocus
66	private developers have no social obligation	dsocial
67	unwilling to accept total loss	dtotlcos
68	maximise profit margin by undertaking multiple projects	dmiximiz
69	belief that government will take over	govotake
70	interested in financial gain as opposed to social obligation are more willing to abandon projects	fincgain
71	<u>Failure to respond to market signal</u> failure to respond house price	frespriz
72	failure to respond household income level	fresicom
73	failure to respond to regulations concerning mortgage procedures and interest rate	fresmogz
74	failure to respond to demand for particular types of houses	fresdman
75	excess supply is not cause of housing abandonment	esesuply
76	failing to respond positively to market signal leads to cause of housing abandonment	fresmkt
77	failure to respond to market signal indicators affects the decision to undertake housing projects	fresabdn
78	<u>Policy remedies to avoid abandoned projects</u> increase deposit for obtaining a housing developers licence	remedyok
79	to provide a progress report every 6 months	reportok
80	to open a housing account for particular projects	acountok
81	Policy remedies are sufficient and effective to avoid housing abandonment	remedall
82	location of abandoned projects	location