

**INSTITUTIONS IN PROPERTY MARKET OPERATION: A CASE STUDY OF THE  
JOHOR BAHRU INDUSTRIAL PROPERTY MARKET**

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## Abstract

The property market is affected by the rules and it forms an important aspect in understanding the operation of the property market. This research investigates the functions of institutions in property markets operations. It examines the operation of the Johor Bahru industrial property markets in determining the organizations, performance and pattern of the property market activities. The philosophy of the research is based on the characteristics of the property market, which is information inefficient, decentralised and subjected to local laws and customs. These are best captured by the institutional economic approach, which defines institutions as 'rules of the game' for agents' network of relationship. Adopting the institutional framework of analysis, the research analyses the evolutionary changes in organizational form, performance and activities that emerged. The effect of institutions on the organizations of the property market is traced through the changing forms of the property market, which changes from an undeveloped market to a developed form to cater for a complex investment and use purposes. The economic and political influences are the main driving force shaping these changes and it forms the environment in which institutions are created. Consequently the changing form of property market organizations has also affected the performance of the industrial property market where the rise and fall of property values are the outcomes of the decisions of agents' interaction from the changing institutional structure. Findings also indicate that economic and policy influences have affected use, investment and development activities of the industrial property market. Changing industrial policy has given rise to small-scale industries, which attracts commercial property developers to construct flexible standard factory buildings. This has also change the market from a purely use market to an emerging investment market. Thus institutions have an important role in understanding how the property market operates as it determines property market behaviour.

## Abstrak

Pasaran harta tanah di pengaruhi oleh peraturan dan ia penting didalam memahami operasi pasaran harta tanah. Penyelidikan ini mengkaji fungsi institusi didalam operasi pasaran harta tanah didalam menentukan pengorganisasian, prestasi dan juga pola aktiviti pasaran harta tanah. Falsafah yang digunakan adalah berasaskan ciri-ciri pasaran harta tanah yang tidak efisien dari segi maklumat, tiada pasaran pusat dan tertakluk kepada perundangan dan adat tempatan. Ini bersesuaian dengan pendekatan ekonomi institusi yang mendefinisikan institusi sebagai 'peraturan dalam permainan' bagi membentuk talian perhubungan antara agen pasaran. Dengan menggunakan rangka kerja analisis institusi, ia telah menganalisis perubahan evolusi terhadap bentuk organisasi, prestasi dan juga aktiviti yang timbul. Pengaruh institusi dalam organisasi pasaran harta tanah di temui melalui pembentukan pasaran harta tanah yang berubah dari pasaran yang tidak membangun kepada pasaran yang kompleks. Pengaruh ekonomi dan politik merupakan kuasa utama dalam membentuk persekitaran bagi kejudahan institusi. Perubahan bentuk pasaran harta tanah telah mempengaruhi prestasi pasaran harta tanah perindustrian melalui perubahan nilai harta tanah perindustrian hasil dari interaksi agen pasaran. Penemuan menunjukkan bahawa pengaruh ekonomi dan polisi telah mempengaruhi pola aktiviti penggunaan, pelaburan dan juga pembangunan. Perubahan dalam polisi industri telah menimbulkan industri kecil yang telah menarik pemaju komersial untuk membina bangunan kilang yang sedia diduduki. Ini telah membawa perubahan dari pasaran untuk kegunaan kepada timbulnya pasaran pelaburan. Ini menunjukkan institusi mempunyai peranan yang penting dalam memahami bagaimana pasaran harta tanah beroperasi kerana ia mempengaruhi tingkah laku pasaran.

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## List of Abbreviations

<b>BCIC</b>	<b>Bumiputra Commercial and Industrial Community</b>
<b>BLR</b>	<b>Base Lending Rate</b>
<b>CPI</b>	<b>Consumer Price Index</b>
<b>FDI</b>	<b>Foreign Driven Industries</b>
<b>FIC</b>	<b>Foreign Investment Committee</b>
<b>FIMA</b>	<b>Federal Industrial Marketing Authority</b>
<b>FTZ</b>	<b>Free Trade Zones</b>
<b>GDP</b>	<b>Gross Domestic Product</b>
<b>GNP</b>	<b>Gross National Product</b>
<b>ICA</b>	<b>Industrial Coordination Act</b>
<b>IMP</b>	<b>Industrial Malaysia Plan</b>
<b>JSEDC</b>	<b>Johor State Economic Development Corporation</b>
<b>KWSP</b>	<b>Employees Provident Fund</b>

LUTH	Pilgrimage Fund
MARA	People's Trust Council
MIDA	Malaysian Industrial Development Authority
MIEL	Malaysian Industrial Estates Limited
MITI	Ministry of Trade and Industries
MNC	Multi National Companies
NAPIC	National Property Information Centre
NDP	New Development Policy
NEP	New Economic Policy
NLC	National Land Code
NPL	Non Performing Loans
PNB	National Corporation Board
SEDC	State Economic Development Corporation
SoP	Structures of Provision
TCE	Transaction Cost Economics
UDA	Urban Development Authority

**UNIDO**      **United Nations Industrial Development Organisation**

**VPSD**      **Valuation and Property Services Department**

## **CHAPTER ONE**

### **RESEARCH SCOPE AND PURPOSE**

#### **1.1 Introduction**

This research investigates the mechanism in which the property market operates, in particular the performance of the property market. The performance that takes place in the property market reflects the function of the property market in allocating resources to the different activities. The overall market is seen as an interlinked market between use, investment and development activities (Key *et al.*, 1990; Nabarro, 1990; Key *et al.*, 1994; Keogh, 1994). These interlinked market and its activities are reflected in the performances and the changes that take place in the property market operation.

Efforts to understand how the property market operates have been dominated by the mainstream or the neoclassical economic approach. In this approach, equilibrium models of demand and supply were used to explain why and what causes changes to the property market. Variables are hypothesized and modelled to understand property market behaviour. Although many models are used to explain the behaviours of the property market, there are inherent weaknesses in the models. Ball (1998) argued that most property market models adopting this approach does not incorporate behaviours of relevant actors such as lenders, developers and property advisers in their explanation.

It is argued in this thesis that actors' collective behaviours are essential in explaining the operation of the property market. The institutional approach focuses on the collective behaviours of actors with respect to rules, norms, habits and custom of the society. In the property market context, the need to investigate the property market through the institutional aspect arises from the nature of the property market itself. The property market is multi disciplinary in nature with aspects of law, planning and economics in its content. These have important influences on the collective behaviours of its actors. Thus, the relevant institutions, within the property market, possibly caused changes in the property market. This introductory chapter aims to highlight the scope, purpose and the general approach taken for this research.

## **1.2 Field of Study**

The effects of institutions on the property market operations are examined in this research. It attempts to provide answers as to whether institutions matter in the operation of the property market. The operational aspects of the property market deal with the function of the market in determining demand, supply and changes in prices across time and location (Wheaton and Dipasquale, 1986). For the purpose of this study however, the investigation will be made in the context of the industrial property market. Hence changes in industrial property market performances as described by changes in demand supply and prices are analysed in relation to institutional changes.

Past research, which examined institutions on property, covered a broad scope and has been widely interpreted. Healey and Barrett, (1990), Healey, (1992) described institutions as the 'structure and agency model' to relate the nexus role and agents

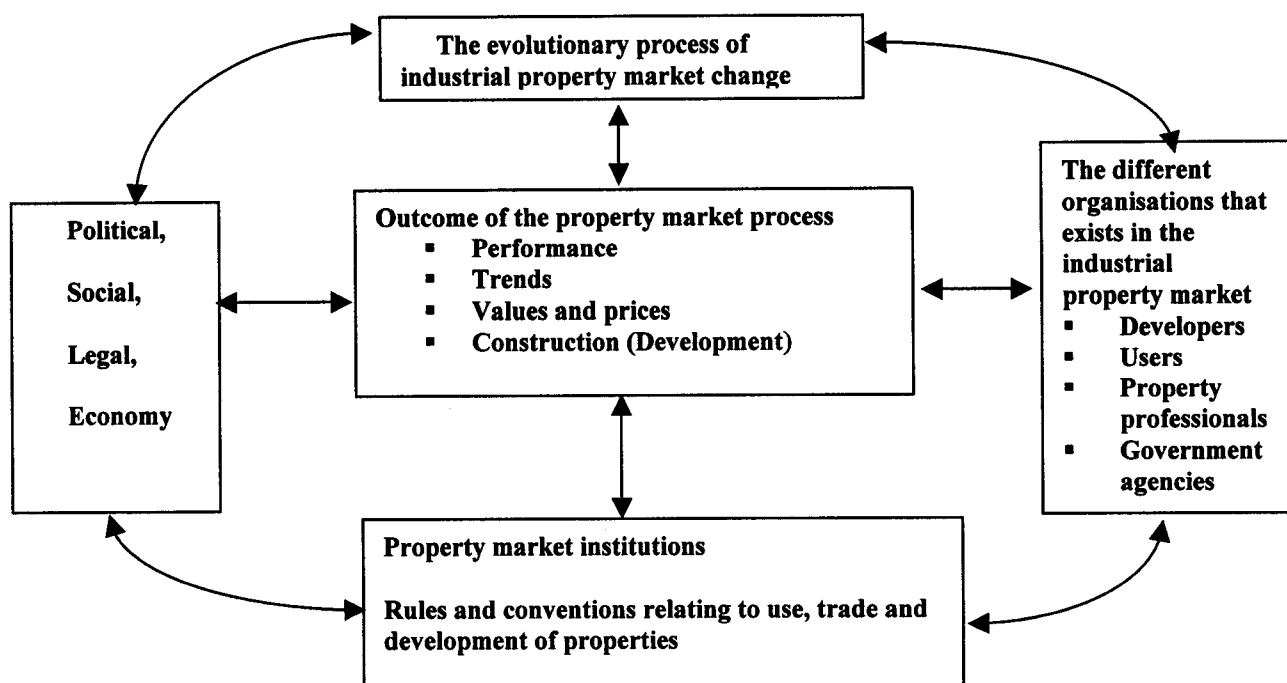
relationship in the property development process. Variations in the agents' relationship lead to temporal and spatial variations in development pattern (Van der Krabben and Lambooy, 1993). Housing development pattern and trends in housing provisions are important consequences of the institutional structure (Ball, 1983; Ball *et al.*, 1990; Van der Krabben, 1995). Similarly urban competition and competitiveness are shaped by the institutional structure (D'Arcy and Keogh, 1998; D'Arcy, 1999) reflecting the built environment of different cities in Europe (D'Arcy and Keogh, 1997).

In investigating the operations of the property markets, the term 'institutions' should reflect the nature of the property markets. The property market is an organised market with specific rules and conventions to determine how property market agents or organisations can interact. The process of agents' interactions will eventually determine the outcome of the property market. As the rules changes, it will eventually affect the interaction of agents operating in the property market and this will alter the outcome of the property market. Considering the process of interactions of agents as a game where changes in the rules will determine the outcome of the property market, then the term institutions can be described as the "rules of the game" (North, 1990).

One role of institutions is to establish the relationship between the property market agents or actors that existed in the property market. Ball (1998) argued that institutions forms important 'network of relationship' the property market provision. Thus the property market operates through the rules created and through this process of 'building the network of relationship, the outcome of the property market are determined. North (1990) suggested that pattern on the economic performance of a nation are shaped by the institutional structure where the government the different rules for the economy to operate. Similarly, changes in the institutions for property market provision are expected to alter property market outcome. These are reflected in the performance of the property

market, which are measured by the different pattern of prices, values and rents and construction.

The overall view on the effect of institutions on the operation of the industrial property market is depicted visually in Figure 1.1. Figure 3.3 in page 86 illustrates detail explanations of the process. The circular lines linking the property market process denote the ongoing process of the operation of the property market. The process involved a network of relations as shown by the arrows linking each stage of the process. Since the process is interactive the effect of change can come from any stage of the process.



**Figure 1.1: Overview of the subject of study**

The four boxes joined by the arrows in Figure 1.1 described the different parts that formed and explained the evolutionary and dynamic changes that took place in the property market. The evolutionary process results from the formation of institutions for operation of the property market. It arises out of the interactions of the institutions with the relevant organisations or agents that exist in the property market. The outcome of the process is described by the trends and performance of the property market. Values, prices and construction levels measure the performances of the property market. These institutions or rules and conventions form the structure and characteristics of the property market. Some of these institutions, which determine how properties are used and developed, are the planning laws, the relevant land laws, the property information system and other practices that are directly or indirectly affecting properties.

The lines connecting the property market institutions with the organisations in the property market describe the linkages between them. The relationships that were built operate under specific social, political, legal and economic conditions. Hence there is another link, which considers these broader effects on the operations of the property market. The arrow, which connects the interactions, denotes the relationships, which resembles the operation of the property market. Detail descriptions of the outcome of the property market processes are assessed by the performance, emerging patterns and trends in price and values patterns. Since the interactions are interactive the force of change can be from either of the boxes as described by the two-sided arrows.

This research attempts to broaden the methodological approach of the role of institutions in property markets. It is expected to answer the questions on the overall role of institutions in property market operations and link property development pattern with the other aspects of use and investment activities.



### **1.3 Research aims and objectives**

The aim of this research is to assess the functions of the institutional mechanisms in operating the property market. This is achieved by investigating into how changes in institutions drive changes in property market performance and activities. It attempts to provide reasoning to questions on why and how the industrial property market changes through different time periods? In doing so, the research investigates the role of institutions in driving the industrial property market performances, assessed through different policy changes. The outcomes on investment, use and development activities of the industrial property are examined in order to assess the functions of institutions in the property market operations.

The industrial property market serves to provide spatial requirements for production activities. Government policy plays an important role in determining the type of property market that exists. Changes in policies are expected to drive different outcomes to the industrial property market. The industrial activities in the more developed nations have moved towards the service sectors while the developing nations are still concentrating on manufacturing sectors for economic growth.

In Malaysia, the industrial sector has been identified as the sector contributing towards economic growth. Hence government incentives are directed towards the industrial sectors through various industrial and economic policies. Since government efforts are being considered in determining the growth of the sector, the government is expected to play a role in shaping the pattern of the industrial property market. Thus, institutions, which form the 'network of relationship's that provides for the property market processes, is important in determining the operation of the industrial property market.

The aim of this research are addressed in the following research objectives:

- To evaluate the theoretical approaches on property market analysis
- To theorise the functions of institutions on property market analysis
- To assess the effect of institutions on the organisation of the industrial property market
- To relate institutional changes with industrial property market performance
- To relate institutional changes with the functions of the property market in determining use, investment and development trends
- To assess the effect of institutions on the variations of industrial property market patterns.

#### **1.4 Research Questions**

The formulation of relevant questions will help to focus the research towards assessing the role of institutions in the functioning of industrial property market. These questions are directed towards achieving the research aims and objectives. The answers to the questions can be obtained in the relevant chapters of the thesis. The main question that the research explores is whether institutions matter in understanding the operations of property market as a whole. The main research questions are further disintegrated into few other questions as follows:

- What are the theoretical approaches that are relevant in understanding the property market?

- Why are institutions relevant in explaining the functioning of the property market?
- How does institutions explain the formation and organisation of the general property market in Malaysia?
- How do institutions explain changes in the industrial property market trends in Malaysia?
- How does the property market process allocate resources between use, investment and development activities in industrial property market?
- Why are institutions appropriate in explaining changes in property market through different time period?

## **1.5 Research approach**

The understanding of the operations of the industrial property market is approached by the institutional economic theory. The institutional structure of the property market determines how markets are organised and operated and in this process, reflects property market outcomes. Hence changes in the institutional structure of the industrial property market are analysed in relations to the property market outcomes through different period.

The research will examine whether institutional changes and the behaviours of actors are reflected in the patterns of the property market outcomes. The actors of the property market are described as the organisations such as users, developers, investors, property professionals, financial service providers, professional bodies, government and

non-governmental agencies (Van der Krabben, 1994; Keogh and D'Arcy, 1998). The historical analysis on institutional changes and industrial property market changes is analysed to determine whether institutions have an effect on the operations of the property market.

## **1.6 Significance of research**

The approach to the property markets has always resorted to the mainstream neo-classical theory, which interprets property market as operating under perfect competition. In the Malaysian context, research in property markets is in its infancy stage where it is commercialised to cater for specific requirements. There were few attempts made to understand the property market in institutional terms (Maziah, 1994; Asiah, 1999). The institutional approach is relevant in addressing property market problems because the property markets operate in an organisational manner involving a network of relationships. Thus, the attainment of this research will widen the avenue to the roles played by institutions, which are important in property market operations.

This research has certain implications for policy makers, property professionals and academics. The implication for policy makers is that the research will provide a deeper understanding on the impact of policies on the industrial property market. This will ease direction for future policy making. For example, the imposition of policy restricting foreign firms is expected to have a certain implication on the property market. Thus, careful consideration will have to be weighted before imposing specific policies.

The implication for property professionals is that the effect of the link between the industrial sector and property would enable property practitioners to anticipate the impact of the industrial sector on property markets. This will assist property professionals in giving advice on the use, trade and development of properties.

Another implication of this research is on the academic field. This research will extend the existing understanding of the effect of institutions to include the industrial property market. Thus, it will provide the general answer as to whether institutions do matter in the overall functioning of the property market.

## **1.7 Research Scope**

The research on the operation of the property market is examined adopting the institutional methodology. The institutional methodology argues on the role of institutions, which provide the network for actors, organisations or agents to interact and, in the process, determines the outcomes of the property market operation. Thus, in this research, the focus is on the broad organisational structure of the property market, collective behaviours of the different actors and the pattern of outcomes. The outcomes of the property market describe the variations on the property market according to different time and space. The variations on the property market are examined in the context of the selected case study, which is the Johor Bahru industrial property market. The analysis focuses on the variations in performances of the industrial property market.

The rationale for selecting the industrial property market is that the emphasis of the institutions is on the power structure, where government influence is an important consideration in the property market operations. Industrial policies are imposed to drive the industrial sector and to bring economic benefits to the nation. Since the industrial

sector is an important economic agenda, it is important to analyse its impacts to the property sector. Ball and Pratt, (1994), Woods and Williams, (1992) suggested that research on industrial development should have an institutional focus, as the industrial sector is the government's economic agenda. Hence, understanding of the industrial sector has an important impact in determining property market patterns. Another important feature about the Johor Bahru industrial property market is on the variations on patterns. This variation in patterns makes it possible for analysing property market performance. Furthermore, there are changes in the industrial policies, which might affect the industrial property market in this area.

Pattern on use, investment and development are analysed to identify the functions of institutions in industrial property markets. Aggregate data on property market indicators such as rents, yield and capital values are utilised to determine industrial property market variations. The variations in property market outcome are analysed through a time span of 16 years, 1984 to 2000 to represent the movement of the property market through two cycles and this is relevant in explaining the different forces that cause market to change. This study is also carried out on the behaviours of prominent property market actors or agents. As it is not possible to observed agents behaviours throughout the whole period of study, interviews on selected market actors or agents are carried out in August and September 1998.

## **1.8 Thesis Structure**

The aims of this research are addressed in nine chapters. This chapter has given some background to the research by introducing the subject area through defining the aim, objectives and the overall structure of the thesis. It briefly summarised the whole

purpose of the research, namely to assess the ability of the institutional mechanisms in operating the property market.

Chapter Two describes the philosophy for determining the methodological approach for the research. This chapter reviews various approaches to explain the functioning of the property market in general. The rationale underpinning three theoretical views are analysed and evaluated in this chapter. The argument of each theory will be compared and contrasted in order to assess its ability in explaining the property market.

Chapter Three develops the research framework based on the institutional economic theory. Although there are various views of institutions relevant to the property market, however the institutional theory based on transaction cost framework(North, 1990) is selected to explain the operation of the property market. North's (1990) theory of institutions is constructed from a theory of human behaviour combined with a theory of the cost of transacting. The main feature of the framework is on the property market process.

Chapter Four describes the method for empirical work to attain the aim of the research explained in Chapter One. The chapter links the philosophical and theoretical aspects to the property market problems in reality. The investigation on the effect of institutions on property market is determined by examining investment, development and use trends and analysing institutional changes that take place following these trends. Data on property market trends, actor's behaviours and social economic data are included in the analysis.

Chapter Five provides the context of the study area. The chapter describes the organisation of the Malaysian property market at the national level. It relates the social, legal, economic and political environment with the property market institutions and the force for the existence of relevant organisations. The evolutions that take place involving both the industrial and property sector are examined to explain the changes that affect the trade and development of the industrial property in Malaysia.

Chapter Six follows the similar outline to examine the industrial property market at the local level. The chapter describes the case study for the research. This chapter presents an overview of the Johor Bahru industrial property market, which encompasses the main industrial areas, the geographical location and the social economic structure.

The institutional organisational structure described in Chapter Six facilitates the analysis on the performance of the industrial property market in Chapter Seven. The chapter analyses the property market process in the performance of the industrial property market. Demand and supply of industrial properties are analysed to assess the performance of the markets.

Chapter Eight evaluates the effect of institutions in allocating resources in different property market activities. The analysis focuses on the institutional changes that take place during the different period of the property cycles and how these are reflected in the use, investment and development activities that shaped the industrial property market.

Chapter Nine concludes the findings of the thesis. This chapter evaluates the attainment of each objective. It answers the research questions specified, reviewed the methodology and evaluates its benefits and limitations. Finally suggestions and recommendations for further research are forwarded.