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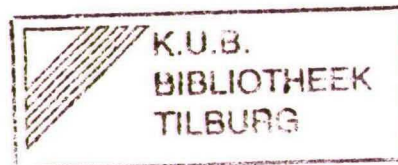
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**AN INSTITUTIONAL ECONOMIC
APPROACH TO LAND AND PROPERTY
MARKETS - urban dynamics and
institutional change**

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AN INSTITUTIONAL ECONOMIC APPROACH TO LAND AND PROPERTY MARKETS

urban dynamics and institutional change

DISCUSSION PAPER

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Preface

This paper analyses property development processes, the organisation of the property development industry, the driving forces behind property development, and the effects of market imperfections and market failures on urban property markets. The analysis is placed in the context of Dutch cities.

The greater part of this study concerns the development of an *institutional economic theory of urban property market functioning*. Theoretical approaches to property development processes have not yet been developed on a very large scale, although the recent literature shows a growing interest in these processes. The building and rebuilding of cities is now frequently under investigation; the present study intends to join with this newly developed field of interest. Nevertheless, it is believed that a solid theoretical concept is still missing. We try to fill this gap by reverting to literature in the field of *new institutional economics*. This theoretical concept is operationalised in such a way that the strategies of the actors in the development process can be explained. Several studies have shown the importance of institutional relations in the property development industry; an institutional theory of development processes seems to us, therefore, an almost self-evident choice. Special attention is given to imperfect market conditions and market failures and the way they structure property development, since it is believed that urban property markets are *imperfect by nature* and that market failures are a common characteristic of these markets.

The study is explicitly presented as a *discussion paper*, since we are well aware of the fact that many issues that are discussed in this paper are not yet sufficiently dealt with. It is our intention to develop the ideas expressed in the paper in subsequent work; comments and suggestions for improvements are therefore welcome.

Finally, a large part of this paper has been written during a stay that one of us (Erwin van der Krabben) made at the Centre for Research in European Urban Environments at the University of Newcastle-upon-Tyne, Great Britain. Many thanks to Professor Patsy Healey and other members of CREUE for their hospitality and stimulating discussions!

1. INTRODUCTION

Cities are characterised by a continually changing spatial-economic structure; new developments taking place on the edges of towns, redevelopments of inner-city areas, renovations or demolishments of obsolete buildings, etc. In an international context we can easily observe substantial differences in the way these developments take place. The following examples confirm our thesis. First, the spatial dispersal of the retail trade in the Netherlands is remarkably different from, for instance, that in Great Britain, France, Belgium and Germany. In the Netherlands, retail trade is almost completely concentrated in inner-city areas and, in addition to this, in some sub-shopping centres in the neighbourhoods. Shopping centres in peripheral locations on the edges of towns, which are characteristic of the retail structure in other West-European countries, are not to be found.

Second, both the price-setting processes and the locational structure on the office market varies considerably among West-European countries. Confining ourselves again to the situation in the Netherlands, we note relatively low office rents in Dutch cities – even on top locations in the four large cities of Amsterdam, Rotterdam, The Hague and Utrecht. Moreover, there are only small variations in office rents between top locations and peripheral locations, a relatively low quality of office buildings and a spreading of office buildings over many locations within cities, instead of a concentration on a few locations, as is characteristic of most West-European countries. In the Netherlands, international top locations, measured from the level of office rents, are missing.

Third, in contrast with the situation in Great Britain, the property development industry in the Netherlands shows no interest in investing in new buildings for the manufacturing industry, let alone that they should build speculatively on this market. As a result, in the Netherlands the industrial building stock is entirely 'produced' by industrial companies, financing for themselves the building for their own use. Besides, and perhaps in certain respects in contrast to the former, the industrial building stock in the Netherlands is far less obsolete compared to the building stock in Great Britain. Studies in Great Britain have shown that the obsolete industrial building stock acts as a constraint to economic growth.

Fourth, it is remarkable that in the Dutch housing market new houses are usually developed as large tracts by property developers, while in other countries – Germany and Belgium are the extreme examples in this respect – owners build their own houses on more or less isolated locations. The consequences for urban spatial structures may be far more drastic than generally seems to be assumed – at least when we review the lack of attention for this

phenomenon in the international literature on urban dynamics. Dutch cities are characterised by large, monotonous, but high-quality new expansions; in Germany and Belgium these seem to be absent.

It is not coincidentally that we mention here examples of international differences in all sectors of the urban property market. By doing this, we intend to show that these variations are not exceptions, but rather *a sine qua non* to urban development processes. It is not difficult at all to find more striking dissimilarities in urban property market functioning in West-European countries and, even to a larger extent, between West- and East-European and Third World countries (of which we know much less). It is hard to believe that these variations in the outcome of development processes can fully be understood with help of the concept of optimal allocation that is central to standard neo-classical models of urban development. This concept implies that the demand of firms, institutions and households for buildings is met by supply and that market mechanisms lead to an equilibrium in which all these firms, institutions and households, given their budgets and their preferences, find themselves in optimal locations in a building of their choice. For this would mean that the above-listed international variations in urban development processes are the result of differences in budget constraints and preferences of the actors looking for new locations and new buildings. Perhaps, in some cases budgets and preferences *are* different, but we cannot think of any reason why they would be different on such a large scale as is shown in the above examples. The fact that the spatial dispersal of the retail trade in the Netherlands is so different from the structure in the other above-mentioned countries is, much more likely, due to the more influential municipal power in the Netherlands. Dutch municipalities do not allow new retail developments on peripheral locations, because they want to protect the economic continuity of the inner-city shopping areas. Perhaps municipalities in other countries would like to do the same, but they do not have at their disposal the same influential set of instruments. Besides, the argument that price-making processes on urban property markets should only be a matter of demand and supply is hard to defend; an unjustifiable oversimplification of reality. The development of office rents, for instance, is a much more complicated process than it is assumed to be in neo-classical models. Low office rents in Dutch cities are closely related to the lack of scarcity that is characteristic of urban land markets. Municipalities supply almost all building land and consider it as their task to care for an invariably sufficient amount of available building plots. The result of all this is that property developers and financial institutions are now complaining that development gains on office markets are too small (as a consequence of the lack of

scarcity). At the same time, the central government complains that urban redevelopment plans can only be carried out heavily subsidized, because the revenues from land sales by municipalities are not high enough. Both market parties and the central government believe that the problems can be solved by creating an artificial scarcity on urban land markets – although they seem to differ in their view if the government is indeed able to create this scarcity.

This is an outstanding example of a situation in which market parties try to influence demand and supply without making use of market processes: they try to change *the rules* that are part of the institutional structure. It must be noted that, in this case, they lobbied successfully. The content of the national planning report (the VINEX report) has been changed according to their wishes: the creation of a few international top locations for office developments is now the official government policy.

This short introduction shows that we need a much more sophisticated theoretical concept of urban development processes. Of course, theoretical models may be a simplification of reality, but it is essential that they still keep their connection to reality. We will argue in this paper that this connection is missing in neo-classical urban models. Consequently, we will develop an alternative theoretical model of urban dynamics, based on institutional economic theory. We believe that this model offers more realistic explanations for urban development processes. After a further examination of our problem area in Section Two, we will define the objectives of this paper more precisely.

2. THE PROVISION OF THE BUILT ENVIRONMENT

The field of urban studies comprises much more than just the neo-classical models that are mentioned in the introductory section. These studies have in common that they analyze the urban spatial structure and the way this structure is shaped by economic processes. The urban spatial structure is, logically, the outcome of processes taking place on the urban land and property market, where demand for land and property by firms, households and institutions meets with the supply of land and property by actors operating on the supply-side of this market – the development industry. However – and this has been brought to light in particular by Ball (1986) and Healey and Barrett (1990) – the processes through which these changes in urban spatial structures have been accomplished have been almost completely neglected in the international literature on urbanisation and urban development. Ball has argued that 'the built environment in urban theories is generally treated as a passive backdrop to other social processes' (Ball, 1986, p. 447). According to Ball, the neglect of the *provision of the built environment*¹ has arisen because in urban theories the built environment is usually seen in functionalist terms, with emphasis placed on the *uses* to which built structures are put. He considers this not only as a shortcoming in empirical urban studies, but as a fundamental theoretical weakness as well. In his view, any urban theory in which the production of the built environment is ignored, is not able to explain urban development properly. To fill this gap in urban theory in general, and in Marxist urban theory in particular, Ball suggests identifying different *structures of building provision* and focusing on the social relations within these structures.² Empirical research should be directed to the analysis of these structures of building provision.

Healey and Barrett observe the same shortcoming in urban theory.

'The role of landownership, the organisation of the construction industry, the nature of the finance invested in urban development and the significance of intermediaries, from developers to property consultants, lie hidden or are given little more than a passing reference in many historical accounts of urban development (...)' (Healey and Barrett, 1990, p. 89).

¹ Ball has defined the provision of the built environment as 'the production, exchange, distribution and use of a built structure. The actors involved may be landowners, developers, building firms, building workers, financiers, building owners and final users (Ball, 1986, p. 455).

² Ball defines these structures of building provision as follows: 'the concept highlights the existence of specific sets of historically specific and country-specific social relations involved in the creation and use of particular types of buildings' (Ball, 1986: p. 448).

In another article we have argued that in traditional urban economic theory³ – characterised by a search for explanations for urban dynamics – only a one-way relationship between economic and spatial structures is recognised; urban spatial structures are explained with economic arguments (Van der Krabben and Lambooy, 1993). The attention that is given in urban economic literature to the impact of economic processes on the spatial structure has resulted in an overemphasis on the demand side of the urban system: the locational preferences of firms, institutions and households are held responsible for urban development. It seems to be commonly assumed that the supply of land and property adjusts to the demand side and that the urban property market – on which the provision of the built environment takes place – functions perfectly as a go-between. Consequently, the property development process is not considered to be a theoretical problem area.

The starting point for this article is our strong belief that in many different cases demand and supply relations on urban land and property markets are indeed problematic. Similar to both Ball's and Healey and Barrett's lines of argument, we therefore intend to focus on the property development process, and, more explicitly, on the relations between the groups of actors that are involved in this process.

Especially Healey and Barrett's article has been followed by a remarkable and still growing amount of contributions to this field of research (see Section Three). This may be true, however, only in the British context, for in an international context the property development process still remains an almost unexplored field of research.⁴

These contributions can all more or less be classified as *institutional approaches* to land and property development. They have certainly produced a much better understanding of the meaning of institutional relations on land and property markets. However, we believe that in institutional analyses a convincing and powerful theoretical concept is still missing, resulting in rather a *description* of property development processes than an *explanation* of these processes. This is partly due to the fact that institutional economic theory still lacks a rigorous theoretical structure.

Neo-classical theory, on the contrary, *does* provide such a structure. In models based on

³ We distinguish three mainstreams in urban economic theory: neo-classical theory, Marxist approaches and institutional theory; see also Bassett and Short (1980), Lake (1983), Healey and Barrett (1990), Bovaird (1993).

⁴ A major research project by Dieterich, Williams and Wood (eds.) (1993) that is now under way and that describes the functioning of land and property markets in six West-European countries tries to fill this gap in research.

neo-classical concepts, land markets have primarily an *allocative* function, structured by demand and the price mechanism, in a sense that it will be used for its most profitable purpose.⁵ However, most authors in this field of research do not address the processes underlying the development of land and buildings. To these processes much less attention has been paid.

A more fundamental shortcoming of these models – we mentioned this already in Section One – is that in neo-classical theory only one function of the market is emphasized: allocation; the focusing on decisions of consumers and producers within a given context. Each person will seek an optimum situation to satisfy his needs, given a certain budget. Markets will clear until an equilibrium is settled.

Next to many other theoretical problems, neo-classical economic models lack a good approach to dynamism: how the budgets, the preferences and the context have evolved is no theoretical problem! In a perfect market, allocation through the market mechanism is sufficient to achieve an optimal solution. In markets that do not meet this condition, a different mechanism is necessary. Recent developments in micro-economic theory accept that more realistic approaches are needed – in particular about the problem of coordination outside the market as well as through the market. We have to find an answer to the question whether economic theory has developed a body of knowledge related to the coordination of decisions in markets that are not perfect; in other words, a theoretical model shaped for a heterogeneous market that does not function perfectly at all should not only focus on *problems of allocation*, but also on *problems of coordination*. These are precisely the fields of interest in both new institutional economics (Coase, 1937; Williamson, 1975, 1985) and neo institutional economics (Hodgson, 1988, 1992; Etzioni, 1988).⁶

This article will argue that urban land and property markets are an outstanding example of

⁵ See for example Alonso (1964), Wingo (1961), Muth (1969), Mills (1972), Richardson (1977), Harrison (1977), Needham (1981), Evans (1985), Wiltshaw (1985).

⁶ It is not very clear what should be understood by 'institutional economic theory.' In this article we focus almost exclusively on *new institutional economics*. New institutional economic theory is primarily based on Coase's Noble Prize Winning article 'The Nature of the Firm' (Coase, 1937) and, much later, further elaborated by Williamson in his *transaction cost approach* (Williamson, 1975, 1985). Besides, the concept of *neo institutional economics* which is introduced and described by, in particular, Hodgson (1988) gets much attention in economic literature. This concept may be considered as a more radical version of new institutional economics. However, to make things even more confusing, Eggertsson (1990) and North (1990) have both developed a concept based on institutional theory which they also indicate as 'neo institutional economic theory'. Nevertheless we consider their work more as belonging to the field of 'new institutional economics' – we will explain this in Section 4.

Finally, in this article we leave aside three other approaches in institutional theory: traditional institutional economics (see Nagelkerke, 1992), new institutional sociology (Granovetter, 1985; see also Amin and Thrift, 1993), and economic sociology (Zukin and DiMaggio, 19..).

markets that do not operate smoothly, having resulted in, among other things, a wide range of institutional arrangements. We believe that the often very complicated relationships between actors operating on either the demand side or the supply side and the significant influence by intermediaries on urban property markets cannot be explained properly by a model focusing mainly on the user demand for land and buildings – neglecting, for one thing, the investment demand for property – as neo-classical models do. Besides, there is a growing amount of literature investigating supply-side constraints on land and property markets;⁷ the neo-classical concept of market imperfections is too limited in its approach to these constraints. Therefore, a model that emphasizes market imperfections ("urban property markets are imperfect by nature") and that recognises the problem of coordination should lead to better results in explaining the functioning of urban land and property markets.

The two thoughts that underlie this paper can now be summarized as follows. First, international differences in property market functioning make it clear that if we want to understand the way these markets function, we need an approach that not only explains supply/demand relations, but that also puts the institutional context at the centre of its analysis. Second, the fact that the literature in the field of urban economics has shown a remarkable lack of interest in the processes that are responsible for the provision of the built environment, seems to point to the assumption that these processes are mostly unproblematic. The objective of this article is to investigate the possibility of building up a conceptual framework based on the ideas of new institutional economics, which is meant to bring us a better understanding of land and property development processes. Special attention will be paid to situations in which these processes do not go smoothly and hinder economic growth. We will develop a concept of market imperfections and market failure on urban real estate markets. To be able to do so, we must first turn to fundamental economic theory – with this term we refer to non-urban economic theory –, because a better understanding is needed of what should be the essential elements of such a framework. As an example of the usefulness of this framework, we will use the model to interpret some special characteristics of the way Dutch urban land and property markets function.

To prevent misunderstandings as to the intentions of this paper, we stress that the objective of this paper is not in the first place to falsify the concept of new institutional economics when applied to urban land and property markets or to prove that neo-classical theory is wrong in

⁷ See MacGregor *et al.* (1985), Evans (1985), Perry (1986), Fothergill *et al.* (1987), Adams *et al.* (1988, 1991, 1992, 1993a,b,c), Henneberry (1988), Howes (1989), and Van der Krabben and Boekema (1993). Adams *et al.* (1993c) offers a good overview of these contributions.

its assumptions about human behaviour. We are primarily concerned with achieving a better understanding of land and property development processes. The use of 'institutional economics' in the context of this paper must be seen as a tool and not as a goal in itself. We expect that this theory can provide us with a 'vocabulary' that enables to address the mechanisms that underlie land and property development processes and the interrelationships between agents who operate on the urban property market.

The next section will discuss the way in which urban economic theory in general has dealt with the property development process. It is argued that urban research in general falls short on three different points. First, often the provision of the built environment is totally neglected; second, mainstream urban economics fails to provide a proper explanation with respect to the imperfections that are characteristic to urban land and property markets; and third, many institutional approaches get stuck in a description of urban development without answering the question of why developments take place in the way they do, in different periods of time and in different locations. In Section Four the fundamental differences between neo-classical and institutional economics and the basic premises of the latter will be discussed. This will be the basis of Section Five, in which the concept of institutional economics will be applied to the functioning of urban land and property markets. In Section Six the concepts of market imperfections and market failure are discussed. Situations are investigated in which supply/demand relations are problematic (and result in market failure). Some special characteristics of Dutch urban land and property markets will be examined with the help of the conceptual framework (particular attention will be given to the choice of policy instruments to improve the functioning of the market). Finally, in Section Seven we comment on the usefulness of this methodology.

3. URBAN ECONOMIC THEORY AND THE PROPERTY DEVELOPMENT PROCESS: A GAP IN URBAN RESEARCH

As was argued in the previous section, urban economic theory can be divided into three mainstreams: neo-classical theory, Marxist approaches and institutional analyses. It is not our attention to give a full description of the premises and the structure of the conceptual models based on these theories (Section Four will deal with the fundamental differences between neo-classical and institutional theory). What is emphasized here is that in urban economic theory – and with this term we refer especially to mainstream urban economics – the provision of the built environment is not, in general, a part of the theories' study objective and, consequently, is not treated as a problem area. Elsewhere we have mentioned – partly following Healey and Barrett's article – several reasons why more attention should be paid to land and property development processes (Van der Krabben and Lambooy, 1993). Among other things, the way in which land and property are themselves 'produced' and 'consumed' enters into the processes of economic production and consumption, the *problem of locational inertia* – and supply constraints in general – impedes urban economic growth, and there will always be allocation problems of space, time and factor costs. As a result, in the Netherlands little attempt is made to conceptualise the results of empirical property research – to a large extent carried out by municipalities, consultancies and academics.⁸ It is in the first place the task of academics to provide a theoretical framework to interpret these results. However, until recently, there has been a striking lack of academic attention given to the processes underlying the production of land and buildings. Property researchers, for their part, have only marginally been interested in theoretical approaches, while the debate in urban economic theory has mainly been focused on explanations of changes in locational choices by firms and of differences in economic growth between urban regions. The provision of the built environment has never been integrated in these theories.⁹

Although the implications of the processes underlying the provision of the built environment for the functioning of urban economies are highly underestimated, in each of the disciplines nevertheless examples of attempts to develop theories on the property development process

⁸ See Healey and Barrett (1990) on this point. They use a similar line of argument reflecting the situation in Great Britain.

⁹ In the Netherlands, only from the mid-1980s the study of property markets has acquired an formal status in academic research, by the establishment of the Stichting voor Beleggings- en Vastgoedkunde (University of Amsterdam).

are on hand. However, these theoretical contributions must clearly be distinguished from the more general approaches in both neo-classical and Marxist tradition in which, respectively, the demand for land (neo-classical models) and the struggle between landowners and other capital owners (Marxist models) are considered to be the explaining variables with respect to urban development. It is true that the literature in this field addresses the functioning of land markets, but it does not deal with the processes underlying the *provision of land and property*.[?] Ball and Harloe (1993) use a similar argument. According to these authors, 'such approaches (neo-classical Alonso-style models and Marxist-style urban rent theory – EvdK/JL) tried to embrace within a simple set of land rent postulates many aspects of property development and urban structure' (Ball and Harloe, 1993: p. 9).

Healey and Barrett (1990), regarding neo-classical models, indicate that there have been some attempts to analyze land and property development processes using neo-classical concepts.¹⁰ In Section Two, Ball's argument against the fundamental theoretical weakness in Marxist approaches has already been quoted (Ball, 1986). Authors who *do* pay attention to property development processes from a Marxist point of view include Ball (1983) and Harvey (1982, 1985).¹¹ Especially Harvey's work on the meaning of finance capital for the built environment and on the circuits of capital and the role of the production of the built environment within them has received much attention.¹² Harvey provides a framework for analysis and, as Healey and Barrett note, 'a way of identifying how the dynamics of the mode of production *drive* the processes through which the built environment is produced, while at the same time recognising the spatial and temporal specificities of these processes' (Healey and Barrett, 1990: p. 93). Ball's critique of Harvey's work is in this respect worth mentioning. He argues that 'in his work (Harvey's, EvdK/JL) an overwhelming capital logic appears,' and 'the capital logic of Harvey's work is continually expressed in the functionalism assigned to the built environment' (Ball, 1986: p. 452).¹³

¹⁰ Notably, Brown *et al.* (1981), Dowall (1984) and Lin Leung (1987).7). Besides, Cheshire *et al.* (1985) have tried to assess the economic costs of the British planning system (all mentioned in Healey and Barrett, 1990). However, the most complete neo-classical explanation for property market functioning can be found in Harvey (1992).

¹¹ Ball's Structures of Housing Provision – concept is not necessarily an inherently neo-Marxist approach – as the author argues himself in Ball and Harloe (1992) – with the implication that it is useless outside this theoretical corpus. However, it can be used in combination with Marxist theory, as has been done in Ball (1983).

¹² Again, to mention only a few contributions in the neo-Marxist tradition: Ball *et al.* (1985), Fine (1986), Haila (1988), King (1989a,b,c), Berry and Huxley (1992), Houghton (1993).

¹³ See also Haila (1992) for a critique on Harvey's work.

In the tradition of institutional approaches, attempts to analyze the property development process are all of a very recent date, most of them more or less following Healey and Barrett's article 'Structure and Agency in Land and Property Development Processes: Some Ideas for Research.'¹⁴ This literature already begins to produce a much better understanding of the property development process. However, until now all these studies focus exclusively on the British context. Outside Britain, much less is known about the meaning of institutional relations in property development processes. Moreover, in institutional analyses a convincing and powerful theoretical concept is still missing, resulting in rather *descriptions* of property development processes than in *explanations* of these processes.¹⁵ For one thing, in many studies it remains unclear what is meant with terms like *institutions*, *institutional context*, and *institutional relations*. In Section 4.3 we will provide some definitions.

One might argue that with help of institutional analysis – in the way it is described above – we are perfectly able to describe the different situations that may occur with respect to the organisation of the property development industry and supply/demand relations. However, without explicit assumptions with respect to human behaviour and the meaning of the institutional context, these descriptions will never possess the status of a theory (and that is what we are looking for). In this respect we refer to a recent discussion of the concept of **Structures of Housing Provision** by the authors who introduced this concept (Ball and Harloe). We consider the SHP–concept as an example of the type of institutional analysis that we discussed above. Their argument is as follows:

"What is the theoretical status of the concept of SHP? It is obviously theoretical in nature as it is derived in thought. It is abstract for that reason and because it tries to encompass the principal features observed into a relatively simple organising framework. It does not of itself 'explain' any housing issue but is instead claimed to be a useful theoretical tool. To be useful however it must be combined with wider social theories, methodologies of empirical investigation and where necessary statistical analysis. As such the concept can be seen as an intermediate or operational one that has no useful life of its own but that can powerfully reveal causalities when used in the appropriate combinations" (Ball and Harloe, 1993: p. 4).

New Institutional Economics must be considered as just one of the wider social theories that

¹⁴ Notably, Davoudi and Usher (1990), Healey and Nabarro (eds.) (1990), Healey (1991, 1992, 1993a,b), Healey, Davoudi, O'Toole, Tavsanoğlu and Usher (eds.) (1992). See also Adams *et al.* (1993).

¹⁵ Hooper (1992), in a comment on Healey's paper 'Models of the development process: a review', holds the same argument.

can be combined with the operational concepts by Healey or Ball.

What the result of omitting this might be is shown in Gore and Nicholson (1991). They describe different models of the development process that do not seem to have any theoretical background at all (except one neo-classical model). Moreover, it is difficult to find any method in their approach – the main differences between the models seem to be that the one model is more detailed than the other –, and it is not very clear what might be the use of such a description. These models may be helpful in analyzing property development processes, but they are certainly not of much help in explaining why or why not developments take place on certain locations and what the impact is of the strategies of the different participants in the development process.

As is clear from the above, there is thus far little agreement on the theoretical concept that should be used and what the necessary elements of such a concept should be. What is needed now, as Healey argues, is a theoretical model of the property development process

'which would enable the detail of agency relationships in the negotiation of development projects to be captured while at the same time allowing generalisation about how these relationships might vary under different conditions. However, the traditional approaches are only able to deal with market conditions, while only in some of these conditions market conditions might prevail. Nor do these models adequately address the way the interest and strategies of actors are actively constituted as circumstances change and how this relates to broader structural shifts' (Healey, 1991: p. 236).

A model should be developed that helps to explain why a certain development takes place on a particular location at a particular time and how this is structured by changes in the economic system and the institutional context.¹⁶

In this paper, we concentrate on the development of a model based on institutional economic theory, partly because in this field of economic theory, especially, approaches to property development are lacking and partly just because institutional theory can contribute to a better

¹⁶ Haila has also offered an approach to theorize property development processes (Haila, 1992). She has similarly developed different models of the development process. The main difference with the present approach is that these are not in the same way based on the traditions in urban economic theory. Haila argues in favour of a special *real estate theory*, because the special characteristics of land and property markets make it impossible to compare supply/demand relations with respect to the production and consumption of land and buildings with supply/demand relations in other markets. We do not deny that such an approach might lead to interesting results, but we think it better to connect with the richness of information about urban development processes that urban theory has brought forward. Besides, we believe that institutional economic theory is able to incorporate in its conceptual scheme the special characteristics of property markets.

understanding of the functioning of property markets.¹⁷ As announced, for this purpose we first turn to the fundamentals of economic theory.

¹⁷ In another paper, models of the development process based on neo-classical and Marxist theory will be developed. See also Healey (1991b).

4. ALLOCATION AND COORDINATION; THE DEFINITION OF ECONOMICS

Economists are continuously confronted with new problems. With respect to urban property markets, the current international crisis in property development and the often problematic succession of booms and slumps following each other in increasingly shorter periods of time is exemplary. Economics is, therefore, necessarily a dynamic science. The impact of the present growing complexity of markets on economic theory is possibly of such importance that the definition of economics has to be reconsidered.

The definition of economics has implications for the kind of questions economists perceive and for the choice of instruments devised to resolve the (perceived) problems. There is nothing against retaining the classical definition of Robbins, based on scarcity, preferences and limited means. It is a clear conception, and it offered a sound basis for analysis. Economics was considered to be a science, in which the emphasis was on the decision-making process taking place under well-defined conditions. Robbins defined economics as follows:

'the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses. (...) When the time and the means for achieving ends are limited and capable of alternative application, and the ends are capable of being distinguished in order of importance, then behaviour necessarily takes the form of choice (...) It has an economic aspect' (Robbins, 1935: p. 14–16).

The Dutch economist Hennipman (1945) also stressed this approach towards a closed definition, setting apart economics as a separate science, based on a formal approach and not on the base of a certain sector of social life. Hennipman (1945: p.5) emphasizes that economics is a science of man and of human behaviour. The Austrian School similarly stresses human behaviour as the focus of economic theory, but differs in its definition of economics. This School emphasizes that humans not only choose between given ends but that human behaviour is 'purposeful.' Kirzner, for instance, criticises Robbins' definition:

'Robbins' structure of ends and means (...) ignores the fact that ends are never presented to the actor coincidentally with the means (...) Ends can be conceived as observable states of affairs only after their achievement. At the time of the contemplation of action, ends are to the actor only anticipations of future hoped-for states of affairs' (Kirzner, 1976: p. 125).

His second critique is related to the fact that 'ends' are not objective, but subjective. Kirzner

adds a third point, namely that the ends–means dichotomy is an oversimplification: 'Ends may be considered as means to further ends, and (...) means may be equally well considered as the ends of earlier actions' (ibid.: p. 125). He identifies instead two insights as basic to economics: 'First there is the insight that *human action is purposeful*, and second that there is *an indeterminacy and unpredictability* inherent in human preferences, human expectationism, and human knowledge' (ibid.: p. 42,43).

The conclusion is that Robbins' definition can only be considered as a special case within a broader framework, valid *only when ends and means are given beforehand*. Most so-called 'general theories' are in fact very special cases and not general at all.

4.1 Allocation and Coordination

Neo-classical theory emphasizes one function of the market: allocation. Decisions are taken within a set of limiting conditions, such as given preferences, given budgets, and a given period of time. For individual producers and consumers, the efficient allocation of given means, of production and of income over given goals depends on relative prices and the relative positions of the demand and supply curves. This relates to the character of a theory as a framework for decision–making, under severe restrictions. In a perfect market, allocation through the market mechanism is sufficient to achieve an optimal solution of the coordination problem. In markets that do not meet this condition, a different mechanism is necessary. In a 'pure market,' coordination between individual decision–makers is smooth, because of the basic assumptions of full information, full mobility, full divisibility and correct prices. As soon as these assumptions are not accepted as real, we have to find an answer to the question whether economic theory has developed a body of knowledge related to the coordination of decisions in markets that are not perfect.

The debate between the Austrians and the Anglo–Saxon neo–classical and Keynesian theorists already focused on this problem, but it was distorted by the fact that it was restricted to the distinction between central planning and the perfect market. In a later approach – the one by Keynes – the need for government guidelines was accepted, and even the need for active government participation in investment and consumption. Keynes accepted the need for institutional arrangements (as we now call them), to compensate for 'market failures,' in order to acquire a socially optimal allocation and distribution. Neo-classical theory does not offer a good solution to the coordination problem, because this theory has no satisfactory solution of 'collective action.' Collectivities are assumed to be a mere identity of the

'representative person,' without differences of interest, information and power.

In institutional economics, the basic premises of neo-classical theory have come under severe attack. Hodgson, for instance, criticises neo-classical theory on three main points. First, the assumption of maximising rationality is no longer tenable. In neo-classical theory the agent is not endowed with choice. The capacity to change both behaviour and goals without an external stimulus means that humans have a will. Second, the neo-classical conceptions of time and equilibrium are incorrect. Economic phenomena are increasingly being seen as both evolutionary and dynamic. Neo-classical theory has failed to make any significant advance in understanding long-run technological progress and transformation. Third, neo-classical theory does not pay attention to the growing recognition of the conceptual significance of institutions in economic life (Hodgson, 1988: p. 5). Alternatively, Eggertsson argues that three areas of inquiry have been largely neglected by economists of the neo-classical school:

- (1) How do alternative sets of social rules (property rights) and economic organisations affect behaviour, allocation of resources and equilibrium outcomes? *by getting institutions*
- (2) Why does the form of economic organisations differ from one type of economic activity to another, even within the same legal framework? In general, what is the economic logic of various contractual agreements, such as the firm, that are used for organising production and exchange?
- (3) What is the economic logic behind the fundamental social and political rules that govern production and exchange, and how do these rules change? (Eggertsson, 1990: p. 4,5).

Institutional economics itself has investigated the problem of coordination more realistically. According to institutional economists this problem of coordination has to be considered in two different ways. First, organisations are created to improve the smooth functioning of the market, the theory often being based on the ideology of (methodological) individualism; and second, organisations (and/or institutions) are created to encompass 'non-monetary values,' such as moral values, trust and emotions, which in neoclassical theory are assumed to be part of the utility function.¹⁸ Both organisations and institutions are needed to take up the

¹⁸ The distinction between institutions and organizations is crucial in institutional economic theory. North argues that 'like institutions, organizations provide a structure to human interaction. Indeed when we examine the costs that arise as a consequence of the institutional framework we see they are a result not only of that framework, but also of the organizations that have developed in consequence of that framework. Conceptually, what must be clearly differentiated are the rules from the players. The purpose of the rules is to define the way the game is played. But the objective of the team within that set of rules is to win that

coordination of market decisions. They can be seen as mechanisms to solve the problem of transaction costs, as an improvement of the imperfect markets, or as a means to improve the social effects of the market, for instance to achieve a just distribution of income.

Coordination of economic actions, thus, can occur via two mechanisms: that of *markets* and that of *organisations*. With respect to the latter, two dimensions must be considered. First, the dimension of society-wide coordination, through institutional structures like laws, regulations, fiscal policy and by structured bargaining, and second, the dimension of coordination between private parties, or between the government and (parts of) the market parties. The theories of Coase and Williamson deal with coordination between private parties; neo-institutional theories and theories in the field of social economics deal with the first problem.

Theories and instruments

Theories cover only part of 'reality,' and therefore instruments devised on the basis of these theories reflect the assumptions and conditions of these theories. For instance, the Pareto norm in welfare theory is defined within a very strict set of conditions. The 'real world' is much more complicated than this theory assumes. Can we implement such a norm in practical policy, even when we know that the 'real world' does not comply with the 'constructed world' of welfare theory? Does the decision-rule: 'nobody gets a worse situation, and at least one person improves,' need to be based in welfare theory? Or, is it just a good rule based on 'common sense' or a feeling of 'just distribution'? It could have been based on political science or philosophy as well.

Neo-classical economics *does* recognise the need for public policy in a market that is, temporarily, not perfect. In the case of externalities or lack of information, public policies are implemented to deal with this. For instance, building land in the Netherlands is seen as a public good and land development is considered to be a local government task. This is because land development costs in the Netherlands are high and private developers are therefore not interested in developing it. Here the choice of an instrument is very appropriately based on the traditional theory of the behaviour of individual market participants. This instrument can be applied in situations with a clearly defined market structure and with opportunities for measurement of the effects of the policy. In many cases, however, the relations of cause-effect and the responsibilities of parties are not clearly defined. In such cases instruments like zoning, or bargaining and institutional arrangements, are used.

game (...) (North, 1990: p. 5).

The choice of these kinds of instruments can be defended as being based on the principle of coordination in new economic theories. An essential element of institutional theory is that implementing these instruments is not costless – both information and transaction costs are involved. These information and transaction costs enter into production processes and supply/demand relations. Neo-classical economics clearly fails to incorporate other costs than production costs in its conceptual scheme. The question is whether we can make a better formulation of cases that can be dealt with on the basis of neo-classical theory and those on the basis of those theories that stress coordination in an environment which is dynamic and complex, lacking perfect knowledge, mobility and with transaction and information costs, and not allocation within a given set of conditions. The market can not fulfil all the necessary functions, if this concept is restricted to perfect markets. We need to add coordination as an economic problem, apart from allocation.

4.2 Markets and Coordination

A central focus in economics is the market and the functioning of markets. In the neo-classical approach the emphasis is on *decisions* and *allocation*. The market is a useful device for not only allocation, but also for coordination, but then it has to be complemented with organisation. This aspect has been receiving attention by various sides, more specifically in macro-economics, industrial organisation and (new) institutional economics. Coordination relates to 'purposeful action,' because decisions of economic agents are not only taken in 'closed environments,' but more often than not in dynamic social systems such as markets. Not only for individuals but for governments as well, this different emphasis on economics can lead to new viewpoints on choices and strategies.

To work under the aegis of the emphasis on (optimal) allocation requires the knowledge of explicit preferences and of the available means. For many situations these requirements can be met, even when the goals and the means are not fully 'given.' More difficulties arise in situations where the conditions cannot be met. This especially holds true when real time is decisive. For example, property development may be problematic because of the relatively long period of time between the start and the completion of a development project. Information constitutes another problem. Think only of the very considerable uncertainty in assessing future gain in developing a new building, due to the limited number of transactions in land and property markets and the fact that there are only a few demanders. Information can be very

complex for those involved in decision-making. Consequently, decision-makers can adjust their goals depending on the available means in different situations or time-paths. Besides, in real life the choice of the goals is interrelated with the availability of means. In conventional theories it is assumed that these two variables are independent of each other. In fact the variables are often interrelated. Hence, the mathematical optimum of a choice is difficult to find in a dynamic context.

Moreover, theories and theoretical constructs are being used as normative devices (the concept of the Pareto-optimum!). In a complex world with incomplete knowledge, there is no such thing as one Pareto-optimum; there are many of them. Of course, if loosely defined, one could use that concept as a norm for acquiring a 'better' situation for the majority concerned, but in that case mathematical precision is lacking. The use of such a concept in choosing policy instruments for any problem including issues related to property market functioning could be misleading if it were to be used as an exact standard.

Markets are necessary to coordinate individual decisions. Two other possibilities – apart from markets – for meeting this goal are (central) planning and cooperation, although it would also be possible to define these alternatives as quasi-markets. To perform this coordination function, markets need some additional attributes. First, a set of rules with which market parties should comply, in order to smooth the bargaining and to further the conclusion of contracts and the transfer of property or user rights; and, second, information about the nature of the property rights, the quality of the goods or services and the possibility of delivering within a certain time.

The institutional setting of markets is very important. Markets are structures for exchanging products and services, or for transferring property or user rights. At the same time, a market is an information-transmitting structure, relating persons and firms. Property and user rights are defined socially and their transfer is a social act. Institutions, or systems of rules, relate the structures of the determination of rights and those of the transfer. In other words, the institution and the market function inseparably together. There is no strict boundary-line between markets and the institutional framework.

A theoretical problem is, however, how institutions come about. There are two options: first, institutions are designed consciously by the participants in the market, or, second, institutions are inherited from the past. The theory of Williamson focuses on the first one, and emphasizes the possibility of acquiring an appropriate organisation for a firm in a given market. Many institutions and organisations are inherited, however, and are imposing conditions on the

behaviour of men.¹⁹

The fact that economies function within a set of inherited institutions and are strongly influenced by past decisions on infrastructure, built environment, technologies, education, etc., results in many irreversibilities and in the so-called 'path-dependency': the economic system is affected by the path it has taken in the past. The automatically developing equilibria of neo-classical theory are 'disturbed' by this phenomenon and by various 'feedback mechanisms.' Two of the more important feedback relations are those of technology and organisation within the economy. Heertje (1973) has shown that technology cannot be taken as 'given' for the functioning of the economic system, but is inherently part of it, as has been recognised more recently by the new growth theory (M.Scott, 1991).²⁰ The same goes for organisation. Economic development affects organisation, but organisation has an impact on economics, as well.²¹ Equilibria are disturbed by many kinds of feedback, the price-mechanism is thus not the only mechanism affecting the functioning of the markets. This conclusion is important when considering, for instance, the international differences between property market functioning and differences between sectors of the property market.

An important problem is whether we can, more systematically, investigate the structure of markets and the need for certain forms of organisation as an alternative mechanism of coordination, as is developed in the theories of Coase and Williamson. One main problem with their approach is that they assume a stable environment as given, whereas we would emphasize the possibilities of unstable, dynamic environments of firms.

Various forms of external conditions for markets exist, depending on factors like turbulence and dynamism, complexity, feedbacks and stability, the availability of information, the existence of transaction costs, search costs, distribution costs, and the need to innovate. In stable environments with standardised products, neo-classical theories can be used quite effectively. In complex and dynamic environments with highly innovative products, this theory is insufficient because coordination of the actors on the market cannot be carried out by prices alone. In those situations firms need organisation, long-run contracts, trust and other factors

¹⁹ In Section 4.3 North's explanation for institutional change will be discussed (North, 1990).

²⁰ New technologies will lead to innovations that, in turn, lower transaction costs. According to North, these innovations consist of organizational innovations, instruments, and specific techniques and enforcement characteristics. 'These innovations occurred at three cost margins: (1) those that increased the mobility of capital, (2) those that lowered information costs, and (3) those that spread risk' (North, 1990: p. 125).

²¹ North's distinction between institutions (the 'rules') and organizations (the 'players') may be helpful in this respect: the players will try to change the rules (North, 1990; see also Section 4.3).

that are taken as given by conventional theory. In our view, the chosen theory depends on the context in which it is used. Ultimately, an economic theory must be used as a 'tool,' to explain the functioning of markets. There is no sense in developing a theory that explains market functioning in situations that in reality do not exist.

4.3. *The Basic Premises of New Institutional Economics*

New (and neo-) institutional economic theory has arisen from a dissatisfaction with both the fundamental shortcomings in neo-classical theory and the lack of explanatory power in traditional institutional economics. But what then are the basic premises of new institutional economics? The previous two sub-sections should have made this at least partially clear, but we will summarise now the theoretical starting points and point out the main fields of interest in institutional economic theory. At this moment it seems impossible to give a complete outline of institutional economic theory because there is no agreement about what exactly belongs to this theoretical tradition. We confine ourselves to a discussion of new institutional economics, being aware of the fact that there are different versions of new institutional economics. Here, we follow North's interpretation of new institutional economics (North, 1990).²²

Although there is certainly no widespread agreement between institutional economists, all authors have adopted Coase's argument that 'when it is costly to transact, institutions matter' (Coase, 1937). Transaction costs arise because of the complexity and dynamism of environments and the costliness of information. Questions of information and knowledge are vital to institutional economics.

Eggertsson defines transaction costs as 'the costs that arise when individuals exchange ownership rights to economic assets and enforce their exclusive rights' (Eggertsson, 1990: p. 14). The concepts of information costs and transaction costs are not identical. As Eggertsson argues, 'a lonely person on a desert island will encounter information costs as he goes about his "home production," but an isolated individual does not engage in exchange and therefore will have no transaction costs. (...) When information is costly, various activities related to the exchange of property rights between individuals give rise to transaction costs' (Eggertsson,

²² Note that his approach does not necessarily represent the entire field of interest of new institutional economic theory. At this moment, a general theory in institutional economic theory does not exist. What institutional approaches *do* have in common is the rejection of certain assumptions in mainstream neo-classical theory.

1990: p. 14). Transaction costs consist of 'the costs of measuring the valuable attributes of what is being exchanged and the costs of protecting rights and policing and enforcing agreements' (North, 1990: p. 27). This includes the following activities:

- (1) The search for information about the distribution of price and quality of commodities and labour inputs, and the search for potential buyers and sellers and for relevant information about their behaviour and circumstances;
- (2) The bargaining that is needed to find the true position of buyers and sellers when prices are endogenous;
- (3) The making of contracts;
- (4) The monitoring of contractual partners to see whether they abide by the terms of the contract;
- (5) The enforcement of a contract and the collection of damages when partners fail to observe their contractual obligations;
- (6) The protection of property rights against third-party encroachment – for example, protection against pirates or even against the government in the case of illegitimate trade (Eggertsson, 1990, p. 15).

In Williamson's transaction cost approach, the fundamental unit of analysis is the transaction. 'Transactions can take place across markets or within organisations. Whether a particular transaction is allocated to the market or to an organisation is a matter of cost minimization' (Douma and Schreuder, 1992: p. 102). Transaction cost economics is based on two assumptions about human behaviour. First, human beings are boundedly rational; the knowledge of the decision-maker is severely limited. This will pose a problem in an environment that is characterised by uncertainty and complexity. North argues that:

'it (the concepts of bounded rationality – EvdK/JL) brings into play the complexity and incompleteness of our information and the fumbling efforts we make to decipher it. It focuses on the need to develop regularized patterns of human interactions in the face of such complexities and it suggests that these regularized interactions we call institutions may be very inadequate or very far from optimal in any sense of the term' (North, 1990: p. 23).

Second, human beings sometimes display opportunistic behaviour. Not everybody behaves opportunistically, but some people do, and it is difficult or costly to tell ex ante whether they will or not. The following example makes this clear. When someone sells his house to a certain person, he can never be sure ex ante if this person will actually buy the house. For

this reason, he wants him to sign a contract. Contrarily, the person who wants to buy the house doesn't know if the seller tells the truth about the quality of the house. Therefore, he will ask an expert to inspect the house before he decides to buy it. Opportunistic behaviour is problematic only if it occurs in conjunction with small numbers of trading partners. 'If there is only one seller he does not have to worry over his reputation, because you do not have an alternative. In this case you want to have (the product) inspected, so you have to pay transaction costs' (Douma and Schreuder, 1992: p. 106).

These two particular aspects of human behaviour point out the significance of uncertainty in explaining human actions. 'These uncertainties arise as a consequence of both the complexity of the problems to be solved and the problem-solving software (...) possessed by the individual' (North: p. 25). In this context we must consider the role of institutions; they are meant to reduce the uncertainties involved in human interaction.

'Institutions provide the structure for exchange that (together with the technology employed) determines the cost of transacting and the cost of transformation. How well institutions solve the problems of coordination and production is determined by the motivation of the players (their utility function), the complexity of the environment, and the ability of the players to decipher and order the environment (measurement and enforcement)' (North: p. 34).

The latter forms the basis for North's explanation of institutional change and the existence of considerable differences between economies (see below).

The institutions that are necessary to accomplish economic exchange vary in their complexity. North distinguishes informal constraints, formal rules and third-party enforcement. Informal constraints (like taboos, customs, and traditions) are part of the culture that underlies society. They consist of (1) extensions, elaborations, and modifications of formal rules, (2) socially sanctioned norms of behaviour, and (3) internally enforced standards of conduct. Two aspects of informal constraints are particularly noteworthy: they play an important role in the *incremental way* in which institutions evolve (because most cultural changes are typically incremental), and they are culturally derived, they will not change immediately in reaction to changes in the formal rules. They slow down the process of change.

Formal rules include political (and judicial) rules, economic rules, and contracts. Political rules 'define the hierarchical structure of the polity, its basic decision structure, and the explicit characteristics of agenda control' (ibid., p. 47). Economic rules 'define property rights, that is the bundle of rights over the use and the income to be derived from property and the ability

to alienate an asset or a resource.' Contracts 'contain the provisions specific to a particular agreement in exchange' (ibid., p. 47).

Third-party enforcement would involve, in principle, 'a neutral party with the ability, costlessly, to enforce agreements such that the offending party always had to compensate the injured party to a degree that made it costly to violate the contracts' (p. 58). This implies 'the development of the state as a coercive force able to monitor property rights and enforce contracts effectively' (ibid., p. 59).

The above reproduces the basic elements of North's theoretical concept. These elements can be summarized as follows:

- (1) The institutional constraints that define the opportunity set of individuals are a complex of formal and informal constraints. Institutions are stable, because a large number of specific constraints affect a particular choice and institutional changes involve a host of changes in a variety of constraints. At the same time, the complex of informal and formal constraints makes possible continual incremental changes at particular margins.
- (2) The complex of institutional constraints will result in various mixes of formal and informal constraints which, in turn, reflect costliness of measurement and enforcement. Self-enforcing contracts will dominate forms of exchange, although there is the recognition of the limitations that necessarily obtain when third-party enforcement is not possible.
- (3) Transaction costs are the most observable dimension of the institutional framework that underlies the constraints in exchange.
- (4) The institutional framework plays a major role in the performance of an economy. However, some institutional constraints raise transaction costs. Therefore, the market, overall, is a mixed bag of institutions; some increase efficiency and some decrease efficiency (ibid., pp. 67-69).

Institutional change

North intends to develop a theory of institutional change. His primary objective is to achieve an understanding of the differential performances of economies through time. He argues that 'separating the analysis of the underlying rules from the strategy of the players is a necessary prerequisite to building a theory of institutions' (ibid., p. 5). The difference between institutions and organisations and the interaction between them shape the direction of institutional change.

'Institutions, together with the standard constraints of economic theory, determine the opportunities in a society. Organizations are created to take advantage of those opportunities, and, as the organizations evolve, they alter the institutions' (ibid., p. 7).

This institutional change is incremental in form and 'comes from the perceptions of the entrepreneurs in political and economic organizations that they could do better by altering the existing institutional framework at some margin. But the perceptions crucially depend on both the information that the entrepreneurs receive and the way they process that information' (ibid., p. 8). Because to acquire information is not costless, these perceptions do not always result in efficient choices. That is, North does not want to suggest that institutional change will always lead to a more efficiently functioning economy. Certainly, important differences between economies can be noted.

To understand the processes underlying institutional change we must take into account the way institutional constraints shape organisations and their objectives *and* the kinds of knowledge and skills that will be acquired by the organisation to further its objectives – as this plays a major role in the way the stock of knowledge evolves and is used. With respect to the first point, North emphasizes that (1) the institutional framework will shape the direction of the acquisition of knowledge and skills and (2) that direction will be the decisive factor for the long-run development of a society. For example:

'if the basic institutional framework makes income redistribution (...) the preferred (...) economic opportunity, we can expect a very different development of knowledge and skills than a productivity-increasing (...) economic opportunity would entail. (...) The incentives that are built into the institutional framework play the decisive role in shaping the kinds of skills and knowledge that pay off' (ibid., p. 78).

With respect to the second point it is argued by North that maximising behaviour of economic organisations – the main incentive – shapes institutional change in three different ways: (1) the resultant derived demand for investment in knowledge of all kinds; (2) the ongoing interaction between organised economic activity, the stock of knowledge, and the institutional framework; and (3) incremental alteration of the informal constraints as a by-product of maximising activities of organisations.²³

The interaction of organisations and institutions has implications for the performance of

²³ Note that maximizing behaviour is just one of the different types of behaviour that economic organizations show. Other types of behaviour – for instance, doing charitable work – will result in another path of institutional change.

economies over time. In exploring this interaction, North introduces the term *adaptive efficiency* (as opposed to neo-classical *allocative efficiency*):

'Adaptive efficiency (...) is concerned with the kinds of rules that shape the way an economy evolves through time (...). It is also concerned with the willingness of a society to acquire knowledge and learning, to induce innovation, to undertake risk and creative activity of all sorts, as well as to resolve problems and bottlenecks of the society through time' (ibid., p. 80).

Although our knowledge of all the aspects of what makes for adaptive efficiency is still limited, it is clear, according to North, that 'the overall institutional structure plays the key role in the degree that the society and the economy will encourage the trials, experiments, and innovations that we can characterise as adaptively efficient' (ibid., p. 81). Crucial to effective organisation are competition, decentralized decision making, and well-specified contracts of property rights as well as bankruptcy laws. Besides, 'it is essential to have rules that eliminate not only failed economic organization but failed political organization as well' (ibid., p. 81). As was mentioned above, in North's theoretical concept institutional change is believed to take place only incrementally; the institutional framework is stable. This stability is accomplished by a complex set of constraints that include formal rules and informal constraints. The most important sources of institutional change are fundamental changes in relative prices, such as changes in the ratio of factor prices (i.e., changes in the ratio of capital to land), changes in the cost of information (i.e., the process by which the entrepreneur acquires skills and knowledge changes perceived costs of measurement and enforcement), and changes in technology.

We know very little about the sources of changing preferences or tastes. North points out that 'it is obvious that the cultural characteristics of a society change over time and that accidents, learning, and natural selection all play a part' (ibid., p. 87). Nevertheless, essential to North's argument is that these cultural changes take place at a different rate than that characterising the changing of formal rules. '(A) major role of informal constraints is to modify, supplement, or extend formal rules' (ibid., p. 87). Therefore, changes in formal rules will in general be 'weakened' by the norms and values underlying a society. 'Although a wholesale change in the formal rules may take place, at the same time there will be many informal constraints that have great survival tenacity because they still resolve basic exchange problems among the participants, be they social, political, or economic' (ibid., p. 91). As a result, the overall institutional framework is characteristically stable.

Path dependency

Having demonstrated that institutional change takes place incrementally, North then turns to exploring the path dependency of institutional change: history matters! Two forces shape the path of institutional change: increasing returns and imperfect markets characterised by significant transaction costs. Similar to technological change, *increasing returns* as a result of institutional change occur because of four self reinforcing mechanisms:

- (1) there will be large setup costs when the institutions are created, which give the advantage of falling costs once the institutions are functioning smoothly;
- (2) significant learning effects for organisations that arise in consequence of the opportunity set provided by the institutional framework;
- (3) there will be coordination effects directly via contracts with other organisations and indirectly by induced investment through the polity in complementary activities. The formal rules will result in the creation of a variety of informal constraints that modify the formal rules and extend them to a variety of specific applications;
- (4) adaptive expectations occur because increased prevalence of contracting on a specific institution will reduce uncertainties about the permanence of that rule (ibid., p. 95).

Besides, the long-run path of economies is shaped by the fact that markets are imperfect and therefore give rise to significant transaction costs. In an imperfect market the information feedback is fragmentary; 'then the subjective models of actors modified both by very imperfect feedback and by ideology will shape the path' (ibid., p. 95). This allows for an explanation as to why economies have evolved along different lines. The self reinforcing mechanisms make clear why institutions matter. When there are no increasing returns and markets are competitive, institutions do not matter: 'if (...) the actors initially have incorrect models and act upon them, they either will be eliminated or efficient information feedback will induce them to modify their models' (ibid., p. 95). Economic growth depends on the extent to which these mechanisms take place in the institutional context. A fundamental change in relative prices (see above) affects two societies differently, because

'in each society the change will result in adaptations at the margins, and the margins affected will be those where the immediate issues require solution and the solution will be determined by the relative bargaining power of the participants – that is, the organizations that have evolved in the specific overall institutional context. (...) Because the bargaining power of groups in one society will clearly differ from that in

another, the marginal adjustments in each society will typically be different as well. Moreover, with different past histories and incomplete feedback on the consequences, the actors will have different subjective models and therefore make different policy choices' (ibid., p. 101).

Path dependency is, according to North, the key to an analytical understanding of long-run economic change. 'The source of incremental change is the gains to be obtained by organizations and their entrepreneurs from acquiring skills, knowledge, and information that will enhance their objectives. Path dependence comes from the increasing returns mechanisms that reinforce the direction once given a path' (ibid., p. 112).

Fundamental to North's approach is that he stays close to neo-classical theory. He adopts both neo-classical models' focus on microlevel economic activity (methodological individualism), and – according to him – the most constructive building blocks of these models: both the scarcity/competition postulate and incentives as the driving force (wealth maximalization – EvdK/JL). This theory, however, should be modified 'by incorporating incomplete information and subjective models of *reality* and the increasing returns characteristic of institutions. The result is an approach that offers the promise of connecting microlevel economic activity with macrolevel incentives provided by the institutional framework' (ibid., p. 112).

North summarizes the consequences of institutions for contemporary economic analysis as follows:

- (1) Economic models are specific to particular constellations of institutional constraints that vary radically both through time and cross sectionally in different economies. Moreover, the specific institutional constraints dictate the margins at which organisations operate and hence make intelligible the interplay between the rules of the game and the behaviour of the actors.
- (2) An incorporation of institutions will force social scientists in general, and economists in particular, to question the behavioural models that underlie their disciplines and, in consequence, to explore the implications of the costly and imperfect processing of information for the consequent behaviour of the actors.
- (3) Ideas and ideologies matter, and institutions play a major role in determining just how much they matter. Formal institutions affect the price individuals pay for their actions. A key consequence of formal institutions is mechanisms, like voting systems in democracies or organisational structures in hierarchies, that

enable individuals who are agents to express their own views.

- (4) The polity and the economy are inextricably interlinked in any understanding of the performance of an economy. A set of institutional constraints defines the exchange relationships between the two and therefore determines the way a political/economic system works.

In conclusion, North's theoretical framework is built upon the following definition of institutions:

'(they) provide the basic structure by which human beings throughout history have created order and attempted to reduce uncertainty in exchange. Together with the technology employed, they determine transaction and transformation costs and hence the profitability and feasibility of engaging in economic activity. (...) And they are the key to understanding the interrelationship between the polity and the economy and the consequences of that interrelationship for economic growth (or stagnation and decline)' (ibid., p. 118).

We started this section with the statement that North's work belongs to the field of 'new institutional economics' because of its focus on coordination between private parties, or between the government and (parts of) the market parties. From North's point of view, organisations are created to improve the smooth functioning of the market. Nevertheless, North's institutional theory is much more sophisticated than are the classical transaction cost approaches of either Coase or Williamson, because North takes into account, among other things, the important role of technology in an economy and the meaning of institutional change, holding a more dynamic conception of the economy.

In essence, the main difference between Williamson's approach and North's approach is the interpretation of the meaning of institutions in a society. Williamson argues that institutions are created only to reduce transaction costs: a choice between markets and organisations. North nuances this assumption and holds a broader – but still restricted to the economic system – view of the institutional context. He claims, more in accordance with reality, that institutions are created to reduce the uncertainty that is characteristic to human behaviour. The institutional framework is meant to reduce the complexity that surrounds demand/supply relations; sometimes this will reduce transaction costs, sometimes it raises transaction costs.

In most modern neo-classical work the institutional context is indeed recognised, but not *endogenised* in the theoretical concept. However, it is not our intention to demonstrate here the shortcomings of neo-classical theory: we won't fall into the trap of criticizing neo-classical

economics without offering a better approach – a crime of which neo-classical economists often rightly accuse their opponents. On the contrary, we will focus on the "better approach." We will now turn to what is the main objective of this study, namely developing a model of the property development process based on institutional theory.

5. APPLYING INSTITUTIONAL ECONOMIC THEORY TO THE STUDY OF URBAN DEVELOPMENT PROCESSES

The optimal model of the development process should give us answers to questions like: (1) why does a certain development take place on a particular location at a particular time?; (2) why does the number of these developments change over time and how can differences in development between locations be explained?; and (3) who are the actors involved in property development? The urban property market is considered to be a special type of market. This is, among other things, because of the heterogeneity of the groups of actors that are involved in the development process, and because of the special characteristics of land and buildings as a product: it is relatively expensive, durable, localized – and therefore every product is unique, the market is divided in different sub-sectors which are separated from each other, and the markets for new buildings and second-hand buildings are closely interlinked. This section will discuss first the driving forces. What does institutional theory tell us about

- demand/supply relations; how do they vary under different conditions?
- the meaning of the institutional context and institutional differences;
- the meaning of local government policy (i.e., acting as a constraint or stimulating market functions);
- market and social imperfections;
- the element of time; static or dynamic (i.e., institutional change, technological change)?

Second, these driving forces must be translated into hypotheses. The hypotheses should relate to the following questions:

- What structures the development industry?;
- What structures land and property markets?;
- What kind of relations exist between property development and (local) economic development (the demand for buildings)?;
- What is the significance of variations in the organisation of the development industry and the characteristics of land and property markets?;
- What are the consequences of such variations for the production of the built environment and who benefits from this?;
- Which market and social imperfections could possibly constrain property development?

Other questions that should be answered are

- What kind of strategies may be expected of government bodies to improve the functioning of the market and to deal with unwanted effects of the functioning of markets (and what will be the outcome of these strategies?);
- What kind of strategies may be expected of other groups of actors operating on the market to take advantage of the way the market functions and of the way the government structures this (and what will be the outcome of these strategies?);
- What kind of differences may be expected between a well functioning property market and a poorly functioning property market (the amount and type of new developments, property values, agents involved in the development process, kind of institutional relations?); and
- How does the development industry respond to (changes in) economic growth and to restructuring processes taking place on the demand side.

(In the next section we will focus on market imperfections and market failures and see to what extent they occur on urban property markets.)

5.1 Driving Forces

Demand/supply relations

Fundamental to North's approach is that it is built upon the belief that an analysis of markets must focus on micro level economic activity. However, the individual behaviour of agents and the outcome of market mechanisms is influenced by the fact that, on the one hand, agents dispose of both incomplete information and subjective models of reality and, on the other hand, that institutions are characterised by an increasing returns mechanism. The extent to which this increasing returns mechanism takes place defines respectively the constraints and incentives built in the institutional framework for the individual behaviour of agents.

A study of demand/supply relations between actors involved in the property development process should start from the point that the individual agents behave boundedly rational and sometimes display opportunistic behaviour. Because in a complex situation the knowledge of the decision-maker is severely limited and because we can never be sure if a person will actually do what he tells us he will do, demand/supply relations are typically problematic, and

both information and transaction costs are involved. Transaction costs arise in many situations. For instance, an estate agent is called in to search for potential buyers and sellers for a house or an office building, while a surveyor has to assess the value of the property. Because of the possibility of opportunistic behaviour both the buyer and the seller bring in a surveyor. Second, because on a property market characteristically no homogeneous products are sold, bargaining is needed to find the true position of buyers and sellers. Third, although in many cases standard contracts are used when property is sold, considerable costs are involved, for example because a notary must formally draw up the contract (in the Netherlands they charge a standard percentage of the purchase price). Fourth, transaction costs are involved with the enforcement of a contract when partners fail to observe their contractual obligations. Moreover, because of the special characteristics of property – relatively high costs are involved with purchasing a property – other transaction costs will rise as well, rental costs in particular. Information costs are connected with the uncertainty about future gain in property development processes. In fact, this aspect makes the real estate market *imperfect by nature* (see Houghton, 1993): the uncertainty will never disappear.

Perhaps the most striking example of the complexity of property markets is the important role of property developers in this market. The main task of property developers is to 'organise' the development process: to bring buyers and sellers in contact with each other, to find a building plot, to find a financial institution who is willing to invest in the development, etc. There is probably no other market in which intermediaries play such a decisive role in the production process!

By using the term 'problematic' with respect to demand/supply relations, it is not suggested that this will inevitably lead to market failure. After all, institutions and organisations are created to deal with imperfect market conditions. How well institutions and organisations solve the problems of coordination depends, according to North, on the motivation of the players, the complexity of the environment, and the ability of the players to decipher and order the environment.

If we want to understand why demand/supply relations vary under different conditions, the attention should be focused on differences in the institutional context. For instance, informal constraints may vary in different local property markets. The kind of relations that exist between property developers, building companies and a municipality may be responsible for the fact that a public private partnership is established in order to redevelop an inner-city area. Note that we do not suggest that the institutional context defines the level of demand;

rather, it defines only the *relations* between demand-side and supply-side actors. However, when these relations are problematic, this may also affect the level of demand: supply-side constraints appear (this will be discussed below).

The institutional context

The institutional context plays a major role in shaping the outcome of market processes. Institutions are responsible for variations in market functioning and for the problems that sometimes occur with respect to the outcome of market processes (i.e. unwanted side-effects, supply doesn't come forward). In Section Four several aspects of institutional relations that matter in this respect are mentioned. First, the institutions that are necessary to accomplish economic exchange vary in their complexity: informal constraints, formal rules and third-party enforcement. The mix of these institutions is responsible for the functioning of an economy and differences in this mix of institutions explain partially why national economies do not operate similarly. This distinction in institutions' complexity may be helpful in understanding why the outcome of property development processes in different countries is not always similar; however, it is not clear if it will help us to find out why *local property markets* in the same country sometimes operate differently. In general, it may be assumed that the impact of formal rules and third-party enforcement is equal in any location within a national economy.

Second, institutions determine the opportunities in a society; organisations are created to take advantage of those opportunities. Moreover, North argues that the incentives that are built into the institutional framework shape the direction of the acquisition of knowledge and skills by organisations and he maintains that this is the decisive factor for the long-run development of a society. Obviously, this argument is helpful in comparing, for instance, a West-european economy with an East-european or Third-world economy – although one might argue that this is a rather oversimplified pronouncement, since in the world economy power relations play a very significant role – but indirectly it does tell us something about local economies as well. Both formal rules and informal constraints enable, in a way, firms and households to choose for themselves where they want to be situated. As a result, the level of economic growth in urban regions varies considerably (the result would be different if the central government were to decide where new industries must be established). Formal rules also give municipalities the opportunity and the instruments to carry out their own spatial-economic policy. Sometimes, this attracts new firms and sometimes it just holds back firms from establishing themselves in a certain town (i.e., because in zoning plans lucrative locations are reserved for other

purposes). Finally, the way in which the institutional context shapes the direction of the acquisition of knowledge and skills enables the development of new technologies, new methods of measurement, etc. This may influence both the type of demand for new buildings (since the production methods of the users of the buildings are changed) and building construction methods. And because of this, developments in one area may become more profitable than in another area (for instance, when high-tech companies prefer to be located in each other's proximity); relations between developers and construction firms may be changed (in the Netherlands, for example, developers often originate from banks); the period of time that is necessary to complete the construction of a new building may be shortened, and so on (see below, 'institutional and technological change').

Third, institutions are created to reduce the problems of coordination that arise because of the uncertainty and the lack of information inherent to all human behaviour. Not all institutions increase efficiency and reduce transaction costs; some institutional constraints raise transaction costs and decrease efficiency. Examples of the latter include institutions that provide barriers to monopoly production, or the fact that municipalities sometimes prevent developers from building commercial property speculatively (this is often the case in the Netherlands).

Fourth, crucial to North's theoretical concept is the assumption that the constellations of institutional constraints in economies vary radically both through time and cross-sectionally in different economies. He argues that this institutional change is incremental in form and comes from the perceptions of the entrepreneurs in political and economic organisations that they could do better by altering the existing institutional framework at some margin. The entrepreneurs are thus the key players that bring about changes in the institutional framework. Because their perceptions depend on the information they perceive and because this information is not costless, their choices – which are mainly based on a maximising behaviour perception – will not always be efficient ones. On urban property markets, local governments especially and the property development industry itself are responsible for institutional changes. For example, in the Netherlands during the 1980s, bad performances of financial institutions with respect to investments in real estate have brought some of them to the decision to sell their assets to property investment companies and to buy instead shares in these companies. Again in the 1980s, local governments have changed their policies in a more entrepreneurial style, resulting in, among other things, more financially independent

operating municipal departments and public private partnerships with developers, building companies and financial institutions.

The most important source of institutional change is fundamental change in relative prices. North distinguishes changes in the ratio of factor prices (i.e., the ratio of building costs to land development costs), changes in the cost of information (i.e., in a historical context, the fact that office space became a more or less standardised product for office users reduced developers' uncertainty about the demand for office space enormously and cleared the way for the introduction of a market for commercial property), and changes in technology (i.e., in the last fifteen or twenty years the period of time needed for the construction of office buildings has roughly been halved).

When institutional change takes place, self re-inforcing mechanisms will bring forward increasing returns. However, this change is shaped by imperfect market conditions, characterised by significant transaction costs. These imperfect market conditions, in a society as a whole or in a sector of the economy, define how changes in the institutional framework affect a society or a separate sector of the economy.

Local government policy

Local authorities are, as a political organisation, part of the institutional context. In fact they play a double role. On the one hand they act within the margins that formal rules and the polity offer them. In North's concept, they are considered, together with the economic organisations, as "the players" in the economy. On the other hand, they are part of the polity. In this role they protect formal rules. Sometimes they stimulate market functions by reducing uncertainty and by solving the problems that are caused by the uncertainty that defines to a larger or lesser extent the strategies of market parties. An example of the former policy is that local authorities in the Netherlands act as land developers; an example of the latter policy is that they are very active in attracting new firms to their city by, among other things, removing supply-side constraints. Although local authorities in general favour economic development, they sometimes apply constraints to economic developments as well, when, for instance, they allocate land for social housing.

In recent years, the internal organisation of municipalities has changed substantially. Municipal departments operate now as separate *business units* with responsibility for their own budgets. Because of this, financial considerations (budget control) have increasingly been the decisive

factor in local government decisions. This has resulted in some remarkable events within the municipal system. For example, departments become each other's competitors when they try to maximise their yields. The sale of land for free sector houses brings in larger revenues than social housing projects. Therefore, housing corporations, which have traditionally been responsible for social housing production, now prefer to develop projects that are a combination of both social housing and free sector houses. Seeking compensation for the low revenues from social housing development, they negotiate with private developers to carry out such projects jointly. In this way, they poach on the land department's territory, since the land departments have traditionally developed and sold the land for free sector houses. The private developers can play off the land department against the housing corporations, probably resulting in lower land prices. Note that in the context of the Dutch administrative relationships, the political system (i.e. the alderman for housing!) ultimately defines how the competition between the land department and the housing associations evolves, since in the political system the housing contingents are assigned to each of them.

Another example shows, contrarily, that in other situations the competitive position of land departments in relation to private developers improves. Traditionally, in many municipalities land departments usually negotiate with only one private developer about the development of, for instance, a free sector housing scheme. Now, increasingly a competitive element seems to be introduced. Land departments ask several private developers to make a bid for the building land and to calculate the development costs; this may result in higher land prices.

The above is not a blue print of the state of affairs in Dutch municipalities. However, it characterises the changing role of municipalities on urban real estate markets and the way in which this can influence market and price mechanisms.

Market and social imperfections

Market imperfections are the result of both the limited information that is at the market parties' disposal and the complexity of the market itself; this affects demand/supply relations. From North's point of view, it follows that institutions are more or less 'automatically' created to solve the imperfections that are linked to the uncertainty that underlies market processes. However, the individual agents create the institutions and, as we have discussed above, this is based on their perceptions about market functioning and the institutional framework. The perceptions, in turn, depend on the information that they receive and the way they process that information; it may thus be expected that institutions will sometimes evolve that are not perfect, either. In

the new-institutional-economics concept, market imperfections are not considered to be structural. They exist either because the right institutions to deal with them have not yet been created, or because the institutional change was imperfect itself (because of the limited information of the agents who are responsible for this change). In both cases it is assumed that in the end the market imperfection can be solved, although it is not predicted when and under what circumstances this will happen.²⁴ We do not share this opinion. In our view, imperfect market conditions are a common phenomenon to all property markets. However, *imperfect market conditions* must be clearly distinguished from *market failure*. *Imperfect market conditions* do not necessarily result in either a shortage of supply or an oversupply (in these two cases we speak of market failure).

Social imperfections are defined here as *unwanted side-effects of market processes*. For instance, the activities of one social group harm another social group. In new institutional economics, no explicit attention is paid to these kinds of imperfections. However, we will incorporate them in the concept of market failure that is developed in Section 6.

Dynamics related to property development processes

A crucial distinction between North's approach and Williamson's standard new institutional economics is the way they focus on the element of time in economic models. Contrary to Williamson, North places the way economies evolve through time in the centre of his analysis. The dynamics of property development are clearly visible in the massive growth of investment demand for property during the second half of the 1980s. The *property boom* has been facilitated by the availability of finance (especially of influence in the residential sector) and the enormous growth of investments in real estate by financial institutions, such as pension funds, investment and insurance companies (affecting the office and retail sector).

The combined influence of institutional and technological change is held responsible for the dynamics in a society (which explains why institutional and evolutionary theories are strongly related). We have already argued how institutional change takes place; the self re-inforcing mechanisms that are characteristic to the process of institutional change are also valid with respect to technological change.

Examples of institutional change include the changing role of municipalities in property

²⁴ We must make a distinction here between the new-institutional-economics concept and North's theoretical concept. North seems to give a more "structural" meaning to institutional inefficiency than standard new institutional economics does. In North's theory the term 'path dependency' is used to indicate why institutional change does not always contribute to more efficiency. Although he does not call it structural, in a way this path dependency is sort of a structural explanation for inefficient institutions and, as a consequence, possible market imperfections.

development processes, the creation of public private partnerships in urban development projects, the globalisation of finance capital (foreign investors now invest in commercial property in Dutch cities), the evolution of new forms of financing real estate development, the change of government policy with respect to the location of new business sites away from high way locations to the promotion of locations near public transport junctions, the increasing notice that is taken of environmental problems, etc. The latter results in, among other things, stronger environmental demands with respect to building methods, soil conditions, etc. These examples make clear that institutional change does not always favour the smooth functioning of property markets!

Examples of technological change that are relevant to urban property market functioning are new building techniques (the time that is needed for construction of new buildings has decreased, a new type of temporary office buildings are now constructed), innovations with respect to telecommunications, transport and production methods (both are examples of processes that restructure the demand for buildings), new computerised real estate valuation methods (reducing the uncertainty with respect to property values).

These institutional and technological innovations, together with the increased demand for real estate as a result of economic growth, have been responsible for a dramatic change in property development processes and, particularly, in the *outcome* of property development processes. What is perhaps most striking is that cities now seem to be dominated by office developments – near railway stations, in business parks near motorways, in the historic town centres, as a part of redevelopment schemes – while previously the town centres, including the shopping centres, were the dominant part of the cities. At the same moment, one gets the idea that the character and function of these business parks are much more temporarily. In twenty years (or even shorter) they will probably have disappeared and been replaced by new, more modern buildings, probably on other locations as well.

5.2 Shortcomings in North's theory of institutional change

North's institutional framework is useful for the purpose of this paper because it enables us to identify the driving forces behind economic processes, and to explain how the institutional context shapes these processes and the way this institutional context is continually changed. Moreover, we are now able to unravel the relevance of the institutional context for the functioning of urban property markets. It still, however, leaves us with some problems.

Anyhow, we think it is obvious now why, for the case of complicated market relations that are characteristic to urban property markets, North's theoretical concept should be preferred above a neo-classical model and also above a model based on standard new institutional economics. Compared to neo-classical and transaction-cost models, it offers a better framework to analyze market processes, explaining not only supply/demand relations, but also the way the institutional context shapes these relations. Besides, it provides us with a much more detailed explanation for why supply/demand relations are characteristically imperfect – this line of argument will be further developed in Section Six –, and for the way an economy evolves through time. Nevertheless, when we apply North's concept to the functioning of urban property markets we face three major problems.

First, in his approach to institutions North focuses on the functioning of national economies and he explains why national economies evolve along different lines. We are primarily concerned with investigating property development processes taking place within local economies. It might well be that the mixed set of institutions on a national scale and the incentives that are built in this national institutional framework also explain market mechanisms on a local scale, but the link between the national economy and a local economy is not made clear. In this respect two different lines of argument are conceivable. On the one hand, it might be argued that both on a national and on a local scale identical processes *drive* the economy. The strategies of the agents in the market processes, characterised by uncertainty and shaped by the institutional framework, are the driving forces behind development processes. This functions as our guideline to a better understanding of these market processes. Differences between local economies can be understood by focusing on the incentives that are built into the institutional framework and the perceptions of the agents involved in the development process. When we assume that the main incentive is profit maximisation, then developments take place on the location that is most preferred by a firm (or household) given a set of limiting conditions. The institutional framework might slightly vary in local economies, mainly due to differences in *informal constraints* and – as far as local authorities are able to set formal rules – to differences in formal rules as well. However, the question if local economies will evolve along different lines remains unanswered. In fact, according to this line of argument, in a local economy the institutional context is seen as a given structure and not explicitly as part of the analysis.

On the other hand, it might be argued that local institutional relations are much more significant. But then we wonder if North's approach to the problem is sufficiently profound. In this case we need to know more about the nexus of institutional relationships within a local

economy in general, and within the property development industry in particular; these relationships cannot entirely be reduced to *economic* relationships. We do not intend to elaborate on this problem here; elsewhere we will discuss if other theoretical approaches provide us with a method to investigate aspects of local institutional relationships other than purely economic ones.

Second, in North's theory of institutional change the role of local government policy is not mentioned at all. Above, we have seen that the way local governments operate on the market directly influences market conditions. Sometimes the municipality thwarts new development plans; in other situations market processes are encouraged. A close study of local government policy and its effects on urban property markets is necessary in order to find out in which ways municipalities can structure property market functioning.

Note that it is not suggested here that North's theory should not be useful in analyzing development processes in urban property markets; rather, we think that more evidence is needed regarding the meaning of differences in the nexus of local institutional relationships. This brings us to the third problem. North has not developed a method to operationalise his theoretical concept and this is necessary in order to test his theory of institutional change. It proves to be difficult to find empirical evidence for the assumptions that are made in institutional theories, due to the complexity of the markets with which they try to deal. In this study, however, we are not concerned with testing the assumptions; these are taken as a starting point. This paper aims to add to a better understanding of the complexity and dynamics of urban real estate markets. Institutional theory is preferred above neo-classical theory, because it explains these market aspects, while neo-classical theory, on the contrary, abstracts from them.

5.3 Operationalisation of the model

The remaining part of this section is devoted to issues concerning the organisation of the development industry, the way urban property markets function, the relation between urban property market functioning and the local economy, and the consequences of the outcome of property development processes for the urban spatial structure. We intend to operationalise institutional theory into hypotheses about the strategies of market parties and the meaning of institutional relations in the property development industry.

(I) The strategies of the actors that take part in the development industry

The strategies of the actors that take part in the development industry are, in principle, based on maximising behaviour. However, the actors' ability to choose a strategy that will bring them a maximum result is limited because their knowledge of the complex environment is incomplete (they behave boundedly rational). Their strategies are also influenced by the fact that human beings sometimes display opportunistic behaviour.

Several organisations operate on property markets, primarily because of the uncertainty that is characteristic to property development processes. These intermediate agents, like developers and real estate agents, in principle increase efficiency and reduce information costs (if they wouldn't have been active on the market, information costs would have been higher). The intermediate agents display maximising behaviour themselves (and behave boundedly rational as well). As a result, they sometimes try to change the institutional framework in their favour, their activities not always serving to increase efficiency and reduce transaction costs. Property developers, for instance, act boundedly rational: their strategies are out of necessity based on a short-term perception of the economy, in general, and the real estate market, in particular. This may lead to an oversupply of commercial property, since developers do not know how the demand for office buildings will evolve in the long term. In abstract terms, the motivation of the players, the complexity of the environment and the ability of the players to decipher and order their environment structure the outcome of development processes.

We next turn to the strategies of property developers, financial institutions, the final users of the buildings, and the municipalities, which all possess a prominent position in an urban economy.

With respect to commercial property, property developers take a central position in the development process. Their strategies are, of course, based on the principle of profit making; more precisely, making profits by developing buildings and selling them to either the final users or financial institutions. This principle is usually not valid for companies developing a new building for their own use – the general procedure on the industrial property market in the Netherlands. In this case, the building costs are part of the production costs. The driving force behind the strategies of these companies is primarily based on making profits out of the sale of the goods that are produced in the new building. The development of the building itself does not necessarily have to be profitable.

The consequences of these differences can be more drastic than might be expected at first

sight. For it follows from this that property developers are interested only in developing projects that they expect to sell easily. This implies that they prefer to develop standardised buildings – for which there is a large and ready market – on top locations, unless the building is sold before they start developing it. The market behaviour of property developers may cause two different problems. On the one hand, when there is a shortage of high-quality locations in an urban region, new building developments sometimes do not come forward, and, on the other hand, their behaviour can easily lead to an over-supply of office buildings. After all, property developers are primarily interested in selling their own projects. In the short term it does not harm them if this leads to vacancies in the existing building stock – although they will realise that in the long run this will affect property prices. And when they *do* care, they can't do anything about it individually. This is the usual course of events on office markets in Dutch cities, because office rents of new and existing buildings vary only slightly in the Netherlands. In this case, either government intervention or agreements on a central level between market parties and the government are needed, either to restrict the supply or to stimulate the demolition of the vacant building.²⁵

Companies building for their own use make other demands with respect to the type of buildings they prefer. Often, they develop buildings in which specialized production methods must be carried out; the buildings are then purely functional. The location of these buildings is usually not as crucial to the development of the project as is the case in commercial property development. Various motivations may play a role, like the proximity to other companies or to the market, the availability of certain services on industrial estates, a close connection to the transportation network, and even the proximity to the company director's home town. The influence of the location on the resale value will almost never be a decisive factor, as may be the case with respect to commercial property. In other situations, the new building is developed in addition to the company's existing building stock on the same location. In this case, the quality of the location plays practically no role at all (as long as it meets certain basic standards).

The strategies of financial institutions on urban property markets are difficult to comprehend, but a discussion of these strategies is – from a theoretical point of view – interesting, because it brings into focus the concept of uncertainty that is central to any economic theory. In the Netherlands, it is generally assumed that pension funds, insurance companies and other

²⁵ In the Netherlands, the most recent suggestion is to use vacant office buildings for the relief of refugees waiting for an asylum!

investors invest mainly in real estate to spread risk (usually risks are perceived to be relatively low on the commercial property market). They content themselves with relatively low returns, as long as these are higher than the *rekenrente* – this is the minimum return, calculated on an actuarial base, that they must make to cover their obligations (for instance, paying pensions). Real estate is considered to be a safe investment because of government influence on this market; government policy especially reduces the uncertainty with respect to future urban developments.²⁶ The low returns go together with relatively low rents on the Dutch commercial property market.²⁷ This is in sharp contrast with the conditions in other West-European countries, especially in Great Britain and France; here, financial institutions invest in commercial property, because high returns are feasible.

Financial institutions' participation on urban property markets can, de facto, be entirely ascribed to the element of risk that is characteristic to all property development, and the possibility of getting returns on investments, as a result of these risks. A market for investments in real estate would not exist if there were no uncertainty on this market. Investing in real estate is risky because of the uncertainty with respect to future gains.²⁸ Risk is thus linked to uncertainty and incomplete information. As we know, lack of information can, to a large extent, define human behaviour and is, because of this reason, a central element of new institutional economic theory. Crucial to the functioning of modern markets, and certainly also to the functioning of urban property markets, is the market's ability to turn *uncertainty* into *risk*. Risk is a measurable concept – although we realise that this pronouncement is in itself risky – and can therefore be linked to a *rate of return*: financial institutions argue that the higher the risk, the higher the rate of return on investments has to be.²⁹ The optimal investment opportunity shows a minimal risk and a maximum return. The high level of uncertainty on the real estate investment market has both disadvantages and advantages, since imperfect market conditions make it possible to build up an information lead with respect to other investors

²⁶ This seems to be the general opinion; however, there is no convincing empirical evidence with respect to financial institution's investment strategies on urban property markets. Investors are not very open-handed with providing information.

²⁷ See Van der Krabben (1993) on this point.

²⁸ Compared to, for instance, the market for government bonds, real estate investments are more risky, because of the higher uncertainty on real estate markets. This is the result of, among other things, the heterogeneity of real estate, the fact that the real estate market is divided in several submarkets, and, in general, the imperfect market conditions that are characteristic to real estate markets.

²⁹ See Goslings (1990) on this point; he makes a similar distinction between risk and uncertainty. According to Goslings, risk can be defined by a calculation of probability, while uncertainty indicates a series of single events in random succession.

during a longer period than would be possible on perfect markets. Investors can thus realise exceptional returns!

It follows from this that the concept of uncertainty is apparently more complicated than it is assumed to be in new institutional economic theory. For the line of argument in new institutional economic theory is that uncertainty is typical to all human behaviour and that institutions and organisations are created to reduce this uncertainty (in order to create perfect market conditions). In a perfect market there should be optimal information; imperfect markets are, among other things, characterised by non-optimal and/or a-symmetric information. This is all true. We can indeed consider the concept of risk as an *institutional solution* (or a tool for strategic behaviour) for the existence of uncertainty on markets. However, this explanation covers only part of the reality. Financial institutions' strategies are based on the existence of risk in a market and their interests are not in all respects served by absolute risk reduction. Perhaps we should make here a distinction between two types of risk. On the one hand, we can easily assume that all individual actors, including financial institutions, try to reduce their 'individual' risk in order to maximise profits. If financial institutions consider investing in real estate, then they will certainly investigate market conditions to minimise the chance of bad results with respect to their investments. The reduction of *market risk, however*, does not serve their interests because the returns would decline then as well. Actually, all financial institutions strive for a-symmetric risk reduction.

On the other hand, the same financial institutions can freely choose to invest in risky projects, speculating on high returns on their investments. Of course, in these situations they will also gather as much information as possible to reduce their risk, but it is remarkable that in some countries financial institutions are prepared to accept higher risks than are their colleagues in other countries. Risky investment possibilities on a market are a necessary condition for some actors to operate on this market. The latter depends on their motivations to invest in, for instance, real estate: do they show risk-avoiding or risk-seeking behaviour? If real estate investments were risk free, then investors wouldn't have any special reason to invest in real estate.

It should be stressed here that the existence of variations in risk is an essential element in the way modern markets, including urban property markets, function. It is not our intention to discuss in detail here financial institutions' investment strategies. However, we emphasize that (1) financial institutions pursue various investment strategies (which may all be rational) and that (2) we need a more differentiated approach to the meaning of uncertainty in markets – especially in markets where investors play an important role. A-symmetric information will

sometimes lead to market failure, but it is at the same time a necessary market condition for financial institutions to invest in real estate. Risk-seeking investors will judge institutions that mean to reduce uncertainty as inefficient, when this results in lower returns.

Land and property markets are driven by the consumer and producer demand for land and buildings. The degree to which this demand is met by supply is shaped by (1) the institutions that are created to increase efficiency, (2) the institutions that are created for reasons other than efficiency reasons, and which possibly hinder the making of efficient choices by market parties, and (3) the uncertainty that remains and with which the institutional context for some reason is unable to deal.

The *demand for locations and new buildings* continuously changes because of restructuring processes taking place in the economic system. The same processes, as described above with regard to the development industry, take place in other sectors of the economy. Because of this, institutional relations between organisations in all sectors of the economy change as well, and, consequently, this will lead to changing locational preferences and changing preferences with respect to the type of buildings of these organisations.

Local governments act as political organisations on the market and, in a way, also show maximising behaviour (although this is of course not exclusively maximising behaviour in economic terms, but in social terms as well). In this respect local governments do not behave much differently from economic organisations. Besides, they are a part of the polity; in this role they protect formal rules and try to increase efficiency by reducing information and transaction costs.

(II) Relations between property development and the local economy

In another paper we have hypothesised the links between regional economic growth and property development processes (Van der Krabben and Boekema, 1994). These hypotheses are based on a study of economic growth and property development in 'Noordoost Brabant', a region in the south-east of the Netherlands. From this study the following relations between property development processes and the local economy were noted.

The substantial increase in the number of migrations of firms in this region between 1986 and 1991 has brought about an increase in activity on the real estate market: a growth of transactions on the market for *second-hand buildings* and an increase of new building developments (because not all remaining buildings are suitable for renewed occupancy). The latter development is strengthened by the growth of the economy. Several aspects which are related to this

mechanism are of interest. First, the growth of property transactions and the rise in new building investments imply a more prominent role of the intermediary agents on the real estate market, real estate agents and property developers respectively; the organisation of the development industry changes. Second, undesirable side-effects may appear in the form of, for instance, vacated, obsolete buildings in run-down areas and a shortage of locations for less profitable functions (like social housing). Third, positive side-effects as a result of the increased activity on the urban real estate market arise as well. For example, in the city of Den Bosch, the area around the railway station will be redeveloped – a large amount of office space is currently being built – resulting in a necessary, continuous renewal of the built environment.

Fourth, the large number of firms moving to the region of North-east Brabant directly affects the demand for new buildings in this region and has therefore created a scarcity of available business sites. As a consequence, land prices, office rents, and commercial property values have risen, resulting in more expensive business accommodation, on the one hand, and capital and development gains for the present owners and the property developers respectively, on the other hand. Besides, for municipalities it means a considerable growth in revenues from land sales!

Fifth, both the increasing amount of capital that financial institutions poured into the built environment during the 1980s and the changing demands for locations and type of buildings by companies have led to the destruction of capital, since buildings are becoming obsolete sooner in functional terms.

The opposite is also true, that the special characteristics of real estate markets influence regional economic growth in a number of ways. First, the municipality, as a land developer, affects the firms' choice of where to establish themselves in two ways. The municipality decides which locations will be developed for new business sites and, moreover, sets conditions for establishment for certain business parks based on the type and size of the companies. This affects at least the freedom of choice for companies. Second, the study shows that service-sector firms are more mobile than industrial firms; the number of 'movers' in the service sector is larger. We can add to this that commercial property development (office buildings) – driven by both investment demand and productive demand – takes place on a larger scale as well. For property developers, the driving force behind property development is the short-term gain from developing the building and selling it to either the final user or a financial institution. They are not concerned with the existing building stock; the

sooner buildings are written off, thus, the better for them.

Third, the functional ageing of the existing building stock is visible in Den Bosch in the older business parks, resulting in high vacancy rates and the negligence of sites and buildings. While new business parks are continuously developed, it is inevitable that other areas become run-down. A considerable amount of government money is needed to revitalise these areas. Finally, it is characteristic of the production of property for an allocation problem to exist. A property developer's response to a demand for buildings is always delayed, because it takes a relatively long time to develop a new building. To avoid this problem a developer may decide to build speculatively, but then he risks (temporary) vacancy and capital losses. Although, in the case of Den Bosch (we don't have any empirical evidence that supply-side blockages actually constrain the level of demand for new buildings), it can be hypothesised that it is *characteristic* to the functioning of real estate markets that market imperfections (i.e. there is a demand, but the supply does not come forward at the right time and/or at the right place) occur and hinder economic growth.

(III) The significance of variations in the organisation of the development industry and the functioning of land and property markets

Both in an international context, in a national context, in different sectors of the property market and through time, the organisation of the development industry and the functioning of land and property markets vary. On an abstract level, a number of reasons are held responsible for this:

- (1) the degree of complexity of a market defines the mixed bag of institutions on that market and thus the organisation of the development industry;
- (2) the 'price' of obtaining information: the more expensive it is to obtain information, the more problematic relations in the property development industry and the functioning of property markets will be;
- (3) the path dependency of an economy: the functioning of a market is affected by the path that it has taken in the past. The degree of adaptive efficiency (the willingness of a society to acquire knowledge, to induce innovations and to undertake risk) shapes the way the organisation of the development industry evolves through time;
- (4) the increasing returns that occur as a result of technological and institutional change, shaped by the fact that markets are imperfect, influences the degree of growth in a property market.

Evidently, in an international context significant variations in the organisation of the development industry exist. However, the consequences of these variations are unknown. Do they result in different urban spatial patterns, in differences in the type of buildings that are developed and with respect to the quality of the built environment, and do they influence supply/demand relations differently? Do they perhaps even result in different levels of economic growth – as North suggests with his 'path dependency' argument? For example, the fact that in Great Britain risky, speculative developments are common to urban property markets, while in the Netherlands this is a rare phenomenon cannot be explained with help of standard economic arguments. There is no reason to believe that, in the Netherlands, it should not be possible to make profits out of speculative developments. A more plausible – but difficult to prove – explanation for this might be that because Dutch developers do not have any experience with this type of development, they will not easily start with it.

Again, on a theoretical level, it can be argued that the variations in the way the property development industry is organised and in the way in which land and property markets function have at least five implications:

- (1) the degree of adaptive efficiency in a society and the increasing returns as a result of technological and institutional change directly influences economic growth in that society. As a result, the level of new building developments will vary;
- (2) the number of market imperfections that occur in a market is influenced by the way a property market functions; this is related to the degree of efficiency in that market;
- (3) the way the development industry is organised affects what type of organisations – and where their origins are – will develop land and new buildings in a local economy (for example, the more complicated a local market is, the more difficult it is for developers to enter this market, due to insufficient information);
- (4) the costs of property development in a market are influenced by the way the development industry operates in that market, since the level of transaction and information costs depend on this;
- (5) the market value of land and property in a market may be (indirectly) affected as well, because the institutional context structures competition in a market.

Healey has shown that the kind of institutional relations within the development industry in a region do matter (Healey; 1993a, 1993b). She holds that many sources of variation in regional property markets can be found:

'One dimension is clearly the nature of demand in the local economy. However, this itself is multidimensional, with variations not merely between sectors (industrial, commercial, retail) but between segments (small, local firms seeking new premises for expansion; outside companies seeking to locate in the region etc), in interest in land (investors, occupiers), and in scale of comparison (within a neighbourhood, the region, the nation, Europe, the world)' (Healey, 1993a: p. 1).

The nature of demand has consequences for the way land and buildings are treated (for example, an investment orientation to land and property or an interest primarily in the use value of a site).

'A second dimension relates to the supply of sites and properties. This varies with the particular geography and history of places' (ibid.: p. 2).

This refers to the stock of sites and properties in a region – their location, configuration, physical conditions and ownership. Healey concludes from this that 'a critical dimension of regional property market variation is therefore the overall state of the balances between supply and demand in all the different property market segments' (ibid.: p.2). However, she mentions a third dimension of variation, the institutional relations of land and property markets.

'The significance of this institutional dimension is particularly clear in land and property development markets. In markets with weak demand and few transactions, it is these relations which become critical in bringing sites and projects forward. These in turn impact on patterns of value and transaction levels in local markets overall. These institutional relations include the mix and networks of property market interests (landowners, developers, financiers, consultants), the form of public policy towards development promotion (primarily urban policy since the 1960s), and the form of development regulation (ie: planning policy) (ibid.: p. 2).

The relevance of local institutional relations for a local economy is also explained by Amin and Thrift (1993). Resting their argument on empirical evidence of the economic dynamics of regions both in Europe and the US, they hold that localised institutional relations are relevant to local economic success. At the same they argue that this is still an unexplored field of

research; we don't know *what kind* of institutional relations make a region successful.³⁰

Institutional relations in the property development industry in the Netherlands have never been the subject of analysis; the foregoing shows that this is an omission.

(IV) Implications of market imperfections on land and property markets

Most authors seem to agree that land and property markets are characteristically imperfect. However, they hold different views with respect to the seriousness of the imperfections for property market functioning, the explanations for the imperfections, the chance that market imperfections lead to market failure and what should be understood by the term "market failure".

In general, market failure on urban real estate markets is expressed in either an over-supply or an over-demand for land and buildings. Because we hold a broader conception of market failure, and because it seems that market failures are becoming ever more common to urban property markets, we will devote the next section to this subject.

³⁰ See also Piore and Sabel (1984), Cheshire (1990).

6. IMPERFECT MARKET CONDITIONS AND MARKET FAILURE

The introductory section of this paper argued that a theoretical model of the development process should be developed in order to aid in understanding the functioning of the property market. More precisely, a better understanding is needed with respect to supply/demand relations on land and property markets; we expected them to be more complicated than seems to be generally assumed in urban studies. In this section we will elaborate on this assumption and show that indeed many situations can be found in which the supply of land and buildings does not automatically adjust to the demand for land and buildings by firms, institutions and households, sometimes resulting in either an oversupply or a shortage of supply.

Three aspects of this relationship will be examined. First, the imperfect market conditions that are characteristic to real estate markets are examined. We will see then which theoretical explanations are given for these market imperfections. Second, attention is paid to the extent to which supply-side blockages actually play a role on urban property markets. Do supply-side constraints under certain circumstances define the level of economic growth in an urban region? In what other respects do they influence the production of the built environment (location, type of buildings, time)? Besides, we investigate the chances of property-led regeneration policies. Can it be expected that in some situations stimulating the supply of land and buildings will bring forward an extra demand? What are the limits of success of enlarging urban economic growth with help of a policy directed to stimulate land and property development? We intend to explain the complexity of supply/demand relations with the help of our 'institutional model of the development process.' After an analysis of social relations between the groups of actors that take part in the property development process, we will finish this section with a theoretical concept of market failure.

6.1 *A classification of imperfect market conditions*

Traditionally neo-classical economists have extensively studied market imperfections.³¹ Neo-classical economics assumes that the following conditions are necessary for economic efficiency through the market:

³¹ Harvey has expounded neo-classical urban economics; we follow his explanation of economic efficiency and inefficiency in urban economies (Harvey, 1992).

'particularly the existence of perfect competition, the absence of 'spillover' benefits and costs (often referred to as 'externalities'), and the ability of the market mechanism to supply all goods and services provided society is able and willing to pay the necessary costs' (Harvey, 1992: p. 12)

The efficiency of a market depends, according to Harvey, on both technical and economic characteristics. With respect to the technical characteristics of real estate markets, Harvey argues that:

'physical conditions should ensure that price differences for the same commodity within the market are eliminated easily and quickly. This comes about by buyers moving to the cheaper parts and sellers moving to the dearer. This requires that both buyers and sellers must have up-to-date knowledge of price differences and base their actions solely on price. Moreover, dealing costs should be small relative to the value of the transaction' (ibid., p. 22,23).

With the real estate market, it is not only difficult to obtain *perfect knowledge* but dealing costs are relatively high as well. 'Knowledge tends to be obtained infrequently and is limited geographically. Most occupiers (as distinct from investors) move in response to changes in family circumstances, income or business conditions. Only rarely do they move for the sole purpose of making a gain from a price or rent difference' (ibid., p. 23). Valuers and agents play a role in the property market just to provide the lacking knowledge. However, this information can never be perfect, because of the uncertainty about future gain.³²

Apart from these *physical features* that lead to imperfect market conditions, economic characteristics of property markets cause also market imperfections.

'We have to ask: is there freedom of entry into the market? Does the market consist of many buyers and sellers each so small that no one can exert monopoly powers? Generally speaking, there is freedom of entry into real property markets, resulting in many buyers and many sellers. But we must also recognise that certain conditions allow an owner to gain some monopolistic control' (ibid., p. 24).

According to Harvey, such conditions are:

- (1) the geographical divisions of the market lead to imperfect competition between local markets;

³² Other imperfect market conditions that are characteristic to land and property markets are: land and property are not mobile in the same way as workers or machines, land and property are relatively expensive goods, they are durable, and there are financial and institutional constraints on their supply.

- (2) the imperfection of the capital market may prevent some would-be buyers from borrowing the large sums required for certain purchases, e.g. multi-story office-blocks;
- (3) the spatial fixity of real property puts certain site-owners in a strong position relative to a buyer.

Neo-classical economists do not consider these imperfect market conditions as structurally problematic. The following statement is revealing in this respect:

'We must not overemphasise the barriers in the real property market. Better knowledge can result from the increasing mobility of people and funds, and from the more sophisticated methods of calculating values. And, by and large, prices do respond, albeit somewhat sluggishly, to changes in market conditions; given sufficient time, the necessary adjustments to supply and demand do take place. (...) Any institution or government action which serves to make knowledge better or more readily available is likely to be beneficial' (Harvey, 1992: p. 25).

Apart from the fact that this is a rather subjective pronouncement – how do we know that imperfect market conditions are the exception and perfect market conditions the rule? – such an approach to markets is of no help in urban areas that are characterised by problematic supply/demand relations on the property market.

Several studies of property market functioning are available which suggest that property development processes go less smoothly than is assumed in neo-classical theory. Concentrating on contributions in which the complexity of property markets is studied, viz. the occurrence of supply-side blockages, we mention here (in what should not be seen as a complete list) Barrett and Healey (1985), Evans (1985), MacGregor *et al.* (1985), Perry (1986) Fothergill *et al.* (1987), Adams *et al.* (1988), Henneberry (1988), Gloster and Smith (1989), Morgan (1990), Adams and May (1991), Healey (1991), Adams *et al.* (1993), Imrie and Thomas (1993). In Healey *et al.* (1992), an extensive overview of property-led regeneration policies is given. Surprisingly, we don't know of any studies on this subject carried out in the Netherlands.³³ The functioning of the English property market is – probably rightly so – considered as being more problematic, compared to the functioning of the Dutch urban

³³ On the other hand, several studies carried out in European, Asian and American cities suggest that supply-side constraints in different forms do not solely exist in English cities, but are a wide-spread phenomenon existing in most cities. See for example: Fainstein *et al.*, 1983; Feagin, 1987; Molotch and Vicari, 1988; Fainstein, 1990; Vicari and Molotch, 1990; Pryke, 1991; Haila, 1991; Beauregard, 1991; Krätke, 1992; Berry and Huxley (1992), Clark and Gullberg, Sykora (1993).

property market. However, this is not a very convincing reason not to study the influence of supply-side constraints (or the reason why they are absent) on the Dutch urban property market.

In most of the English studies, empirical evidence has been sought with respect to the meaning of supply-side blockages related to urban economic growth. In the present paper, we make use of these studies to provide a general overview of the subject. The greater part of the studies concern the shortage of building land for new developments; the role of land owners has been questioned. In other studies problems regarding the construction of new buildings and the conflicting interests of the development industry and the users of buildings have been analyzed. Before we will turn to this literature, first the concept of *market failure* as distinguished from *market imperfections* must be defined.

Neo-classical economic theory holds that we should speak of market failure when the market is not able to achieve an optimal allocation of goods and services, given the budgets and preferences of the individual actors that are operating on the market. The concept of market failure is referred to as follows. Normally, markets will produce an optimal allocation of resources and an optimal level of production of all outputs. Market failure exists in situations in which the operation of the market does not produce the socially optimal level of output of a particular good or service. In such a situation the level of production is below the social optimum: the *costs* of increased provision would be exceeded by the *value* of that production, but the market fails to bring about the optimal production.

However, we argue here that in many cases this definition is meaningless, since we are not able to define when allocation is optimal. To be able to do this, we need to know every individual's budget and preferences. If we don't know when allocation is optimal, then we don't know when allocation is not optimal, either.

Standard neo-classical economics postulates a relatively unproblematic relationship between demand and supply. If there is a demand for new property, supply more or less automatically keeps step. Price adjustments act as the mediating mechanism. If there is a shortage of buildings, property prices or rent levels will rise. As a result, the provision of buildings becomes more profitable and the development industry will construct new buildings. Contrarily, if there is an oversupply of buildings, property prices and rent levels will decrease. Then, of course, the construction of new buildings becomes less profitable and developers will (partially) withdraw themselves from the market. This mechanism may function smoothly when

the basic assumptions of full information, full mobility, full divisibility and correct prices are fulfilled. It follows from this that market imperfections may occur when these perfect-market conditions are not met. Buyers and sellers may have inadequate information, both land and property as a product are not homogenous (second-hand and new property markets; property is always bound to location), transactions may be few and prices may adjust only slowly to eliminate surpluses or deficits. Besides, there may be supply-side constraints and externalities that undermine the functioning of land and property markets.

From the English literature on this subject we can deduce a variety of causes that are held responsible for market failure, some of them being typical to urban property markets and others being valid for all kind of markets.

Supply-side blockages which are recognised by neo-classical economics are mainly monopoly land ownership and constraints on supply caused by the planning system.³⁴

Externalities can be defined as:

'benefits or costs which accrue to an individual, group, or firm as a direct result of consumption or production by another individual, group, or firm for which no price is paid or no payment is received' (Balchin et al., 1988: p. 141).

Both negative and positive externalities occur on markets, involving respectively non-market costs and non-market benefits between individuals/firms, individuals/individuals, or firms/firms. On every market sometimes the market fails to provide goods or services for which firms/institutions/households are willing to pay a price. This may be due to positive externalities; for example, a city's inhabitants all benefit from an inner-city redevelopment project without directly paying for it (indirectly they do by paying municipal taxes). As a consequence, property developers do not want to develop it, because the revenues are not sufficient. Negative externalities do not lead to supply-side constraints, but may on the other hand force municipalities to intervene; for example, in a situation that a proposed development project will have undesirable side-effects, municipalities may decide not to permit the development.

Several authors have argued that the availability of land for new developments may be problematic (see especially the studies by Adams *et al.* (1988, 1993) and Gloster and Smith

³⁴ See Evans (1987) and Cheshire and Sheppard (1989) on the way the planning system limits supply and Markusen and Scheffman (1978) on monopoly land ownership (all mentioned in Healey (1991); see also Howes (1989).

(1989)) and hinder new development. Adams *et al.* (1993) have made an extensive study of the functioning of the land market in the greater Manchester area. They conclude that the insufficient supply of building land on high-quality locations indeed obstructs industrial growth. Their study is further founded by the work of Fothergill *et al.* (1987) on the functioning of industrial property markets. They provide empirical evidence that not only a shortage in the supply of land influences regional industrial development, but also the way the provision of buildings takes place. Firms building for their own use have different strategies than the property developers which build for the market. The former choose a location that is most profitable from the point of view of production; the latter only want to build on locations on which they are assured of sufficient revenues. Besides, they only build standardised buildings, because there is a larger market for this type of buildings. This means that we must distinguish different kind of producers. It is argued in the Fothergill-study that neo-classical economic theory with its concept of market imperfections fails to explain why industrial property markets do not always function smoothly. The pattern of industrial location is not only determined by the preferences of manufacturing firms but also by the supply of suitable land and buildings. Fothergill *et al.* (1987) argue that market imperfections may result in a rigidity in patterns of industrial location. Locational inertia are often a financial problem, because of the low market value of large, specialised, second-handed buildings and because for most firms buildings are fixed overhead rather than a variable factor of production.

In a study of conflicts in the industrial property market Henneberry (1988) analyses the dichotomy that exists between the aims of the occupiers and of the developers/funders of buildings. In two case studies, again in Great Britain, Henneberry shows that this can lead to conflicting interests between the two groups of actors and possibly the failure of new developments to occur.

In the Netherlands no empirical evidence of market failure on urban real estate markets is available. Nevertheless, several examples are on hand which show that market failure is certainly not an unknown phenomenon to the Dutch real estate market. The two most manifest and classic examples of market failure are:

- (1) the present high vacancy rates on the office market which can cause difficulties for the owners and which is considered to be socially unwanted (it is expected that vacancy rates keep rising in the near future);
- (2) the shortage of building land, for the development of residential property (municipalities do not make use of the available government money to build

houses, because there is not enough land to build on), blocking new developments.

Less noticeable, but not less important examples are:

- (3) the recent failure of the development of the Y-over project in Amsterdam; a large amount of office space and other functions is not developed because the investors have withdrawn from the project. This means, among other things, that government money is wasted during the preparation period and, moreover, that the uncertainty with respect to commercial property investments in general has increased;
- (4) some of the Dutch financial institutions and the real estate investment companies made enormous losses on their real estate assets in recent years. Scandinavian investors who entered the Dutch commercial property market in the late 1980s made even bigger losses. Apparently, it is very difficult to estimate the need for future property development. Again, this may deter other potential investors;
- (5) the property development industry complains that in the four large cities – Amsterdam, Rotterdam, The Hague and Utrecht – office development is much too decentralized on diverse locations. As a result, international top locations are missing and high returns are not feasible: since the returns on property investments are low, land prices stay low as well. Because for local governments land development costs are relatively high, in many cases redevelopment of inner-city areas can only take place subsidized by the central government;
- (6) in the 1980s a large amount of commercial property has been developed near highways. Because of changed government policy with respect to the location of working places, it is no longer allowed to develop commercial property on these locations (instead, the government now encourages commercial property development near public transport junctions). However, the already developed locations will be in use for many years, being jointly responsible for traffic jams, etc., which are currently obstructing economic growth;
- (7) some of the older industrial areas have to struggle with the consequences of technical obsolescence (and sometimes the location is no longer optimal from an economic point of view), becoming less attractive for companies. These

- areas become run-down and either a large amount of government money is needed to revitalise them, or the areas are not improved, thus being responsible for a degradation of the quality of the built environment;
- (8) the special spatial characteristics of the Dutch property market are responsible for the fact that office rents and property values are – in an international context – low and stable. Two different problems are related to this. On the one hand, the price mechanism does not function smoothly: in some cities there is a demand for office space, but new developments do not take place because development costs exceed property values. In this case we would expect a rise in office rents; this, however, does not happen. On the other hand, low property values go hand in hand with (relatively) cheap building construction. Because property values are low and not rising, there is a limit to the building costs. As a result, the quality of the built environment is in danger.
 - (9) the valuation of land and property is often problematic; this may result, for instance, in unnecessary government subsidies, when municipalities charge land prices that do not cover the costs of (re)developing the land.
 - (10) Some of the recently developed business parks in various cities are only partly developed, due to the current economic recession, being responsible for capital losses for municipalities. Besides, these business parks risk to become less attractive, when a considerable part of it is wasteland;
 - (11) Schiphol Airport in Amsterdam has become one of the most attractive locations as a place of business for internationally operating firms. This brings in the possibility of monopoly landownership, as is indeed the case at this moment. Land speculation by a private developer blocks new developments.

In these examples we do not always speak of market failure *in the true sense of the word*. Nevertheless, the problems that are mentioned are certainly characteristic to property development processes. Section 6.4 will elaborate this point; we will speak of *concealed market failure*.

Healey criticises neo-classical models of urban development on a fundamental level. According to her they fail to take account of

- (1) diverse forms of demand, particularly the difference between user and investor demand;

- (2) the non-economic interests of those involved in development (particularly landowners decisions to sell);
- (3) the very considerable uncertainty in assessing future gain, due to the timescale of the development process and the limited number of transactions in land and property markets;
- (4) the distortions produced by the valuation and appraisal methods used to assess risk and reward; for example, the different conclusions of residual and comparative approaches to establishing land prices;
- (5) the complexity of the development process itself. Projects involve the realization of sets of events, over a considerable period of time, with different actors potentially significant in each (Healey, 1991: p. 222, 223).

Although it was not explicitly mentioned by Healey, an addition can easily be made to her argument: because of these reasons, neo-classical models are inadequate not only in explaining urban development, but in explaining market failure as well.

First, market failures can be the result of the bounded rationality that is characteristic of human behaviour. Empirical evidence for this can be found in the above-mentioned studies concerning landowners' behaviour. Adams and May, for instance, have identified different strategies of landowners in development processes, dividing their behaviour into either active or passive (Adams and May, 1991). In line with this argument, it can be held that particularly landowners showing passive behaviour behave boundedly rational.

Second, opportunistic behaviour of actors in the development process may lead to market failure (this relates to Healey's third argument). We have seen that in all kind of markets contracts are introduced to prevent adverse consequences of possible opportunistic behaviour (both transaction and information costs arise because of this). However, in some cases it may prove to be difficult to make a sound contract including all involved actors or to make a contract at all.

Third, we subscribe to the neo-classical viewpoint that a lack of information may cause market failure. However, the neo-classical concept of missing information fails to explain why in some situations a lack of information exists and in other, comparable situations it does not. We know now that this can be explained by the fact that information is not costless. So, we must analyse in which situations the costliness of information impedes the smooth functioning of the market. In order to this, Section Five of this paper will discuss financial institutions' investment strategies. When *uncertainty* can be translated into *measurable risk*, then the

smooth functioning of the market doesn't have to be constrained, because the level of risk manifests itself in the rate of return on investments that can be obtained. In this case it is likely that an investment market comes into existence. Goods can be produced, because financial institutions show an interest in them. In other circumstances, when risk is either not measurable or too high, investors won't be prepared to invest and production may not come forward: there is a discrepancy between user and investor demand.

Fourth, the concept of uncertainty must be further developed. Neo-classical economic theory does not take into account the possibility and consequences of *a-symmetric information*. Often a dissimilarity with respect to the knowledge different groups of actors dispose of can be observed. In other words, the extent to which uncertainty exists may vary for different groups of actors. For example, the person who sells his house knows more about its quality than do interested buyers. As a result, information costs arise, as the potential buyer has to hire an expert who can provide the necessary information. This argument is relevant to our discussion of market failure, because it may lead to situations in which supply is not able to meet demand. Because of the special characteristics of real estate – every plot of land or building is unique, so the person who sells will almost always possess more information than the one who buys – we may expect that on urban property markets *a-symmetric information* often results in considerable information costs. Because of these information costs, total costs rise and sometimes production does not take place, because the extra costs are not reflected in the price that the consumer is willing to pay. It may also occur that the *a-symmetry* of the information cannot be removed, because the involved actors do not want it to. In this case, it may also occur that supply does not come forward. To make this even more complicated, it can be added that on the real estate *investment market*, the possibility of obtaining more information than other market parties is one of the prime conditions for real estate investment.

In this case, it can be argued that market parties' strategies are directed to creating situations characterised by *a-symmetric information*.

Finally, neo-classical economics does not explicitly take account of the meaning of the institutional context. As a result, in the neo-classical tradition the institutional context is never considered to be responsible for market imperfections. Inefficient institutions – sometimes inherited from the past (institutional inertia), sometimes deliberately created (because of non-market reasons) – exist on all kind of markets. Institutional inefficiency may also result in market failure. For example, several authors have shown that the planning system impedes optimal allocation by market forces; i.e. in situations in which non-market functions, like social housing, are favoured and commercial projects cannot be developed on the optimal location.

It follows from this that differences in the institutional context sometimes explain why developments do or do not take place.

6.2 Urban Policy Instruments

The above-mentioned arguments suggest that urban policy, when based on the neo-classical assumptions about imperfect market conditions and market failure, will not always successfully deal with (the consequences of) market imperfections, since such a policy, possibly, uses the wrong causes as a starting point.

In this respect we refer to a discussion of the limits of property-led regeneration by Imrie and Thomas (1993). In Great Britain, property-led regeneration is a widely tested policy to stimulate economic growth in urban regions, especially in regions with a weak economy. In the Netherlands, urban regeneration plans are not exclusively developed to stimulate economic growth, but rather to improve the quality of the urban environment (with economic growth considerations coming in second place). Imrie and Thomas argue that a policy aimed at promoting property development is doomed to fail when certain supply-side blockages are not recognised and removed – assumed that there is an existing demand for property. They hold that the success of this type of public policy depends particularly on the organisational structure of the development industry and the linkages between the development industry and the public sector.

The *optimal organisational structure* of the development industry is admittedly a vague concept – and we do not attempt to define what should be the optimal organisational structure – but it is a clear indication that variations in the organisational structure may lead to different outcomes of the development process and that institutional relations matter. Imrie and Thomas have provided empirical evidence in a case study of property-led regeneration policy in Cardiff that changes in institutional relations are necessary for a successful execution of this policy.³⁵ Besides, significant inputs of public investments in basic infrastructure and the existence of long-term strategic planning of the built environment are strongly needed to win property developers and investors over to invest in new developments. The latter underlines how crucial it is to a successful urban policy to create situations in which financial institutions are willing to invest: low risks and high returns.

³⁵ Healey's study of the organization of the development industry in the Tyne and Wear region endorses this point (Healey, 1993a and b).

6.3 *Social Relations in the Property Development Process*

Market failure is in many cases caused by problematic institutional relations between the actors that are involved in the property development process. Earlier we referred to studies by Imrie and Thomas (1993) and Healey (1993 a and b), showing the negative consequences of imperfect institutional relations in the property development industry in Great Britain.

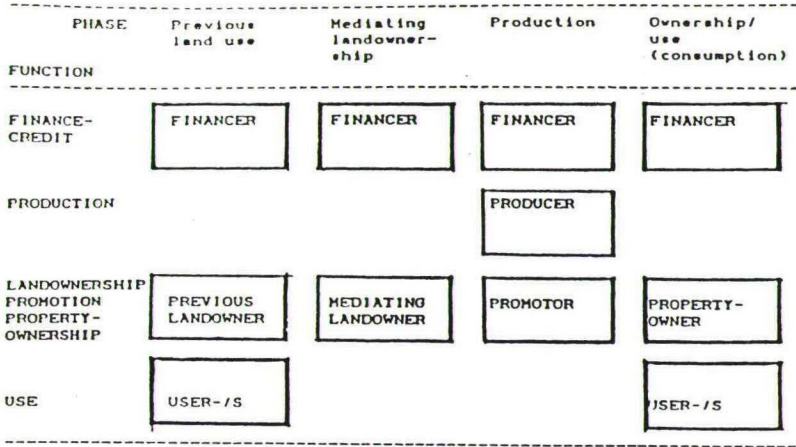
Is it possible now to make a classification of problematic institutional relations on property markets? According to Chambert, a development process consists of four different stages, namely the phase of previous land use, the phase of mediating landownership, the phase of production and the phase of ownership/use (consumption). In each of these stages a number of functions is carried out by the agents in the development process: the provision of finance/credit, land and property development, the actual production of the building and the final use of the building (Chambert, 1988).³⁶ Subsequently, the actors are identified that are involved in each stage of the development process: the previous landowner, the mediating landowner, the promoter/developer, the financier, the producer, the property owner and the user. Moreover, Chambert identifies eight different forms of interaction that will generally occur during a development process. These moments of interaction highlight the social relations that underlie the organisation of the property development industry. For each of them we can describe under which circumstances these social relations may be problematic and lead to market failure.³⁷

³⁶ Comparable models of the development process can be found in Gore and Nicholson (1991) and Healey (1991).

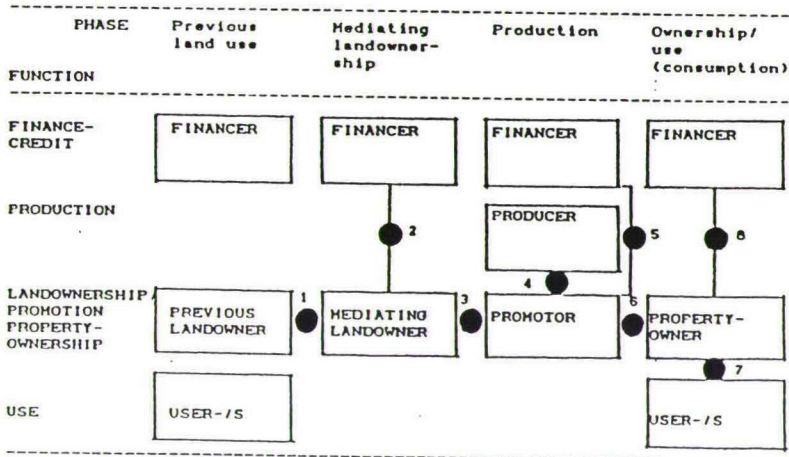
³⁷ We must keep in mind that the organization of the development industry varies in different sectors of the property market and also in an international context. Here, the discussion is limited to the market for commercial property in the Netherlands.

Model for comparative/historic analysis of forms of housing production

AGENTS IN THE PRODUCTION, OWNERSHIP AND USE OF URBAN BUILT ENVIRONMENTS; NEW HOUSING



FORMS OF INTERACTION IN THE PRODUCTION, OWNERSHIP AND USE OF URBAN BUILT ENVIRONMENTS; NEW HOUSING



FORMS OF INTERACTION: INTERRELATIONS/TRANSACTIONS/EXCHANGE

- | | |
|-------------------------------|-----------------------------|
| 1 MEDIATING LANDPURCHASE | 5 CREDIT FOR CONSTRUCTION |
| 2 CREDIT FOR LANDPURCHASE | 6 SELL OF HOUSES/FLATS |
| 3 LANDPURCHASE FOR PRODUCTION | 7 OWNER/USER RELATION |
| 4 BUILDING CONTRACT | 8 LONG TERM CREDIT/MORTGAGE |

(source: Chambert, 1988)

(1) *Mediating land purchase: land sale from the previous landowner to mediating land owner (land developer).*

In the majority of cases in the Netherlands, the local government is the mediating landowner. This is due to the fact that relatively high costs are involved with servicing the land. Because land prices, even on top locations, are low and are not expected to rise very much – there is an oversupply of high quality locations that are more or less identical to each other – private developers are not interested in developing the land. This tendency is even more pronounced because of externalities that occur on the land market, i.e. soil pollution and costs of infrastructure and so on. Local governments do not in the first place develop building land to make a profit out of it. They see it as their task to make sure that there is always enough building land available.³⁸ In this stage of the development process supply/demand relations may be disturbed when previous landowners don't want to sell their land because of non-economic reasons. In the Netherlands, this does not seem to cause any problems, because the existing legal framework is appropriate to deal with it (compulsory purchase powers of municipalities). Nevertheless, more and more municipalities seem to complain now that they are running out of building land, especially on the edges of towns where they need to develop new residential areas.

The existing building structure may act, moreover, as a constraint to land development: new developments can take place only after existing buildings are demolished. As a result, in many cases the redevelopment of inner-city areas takes place only heavily subsidised by the central government.

(2) *Credit for land purchaser: credit/investment from financier to land developer.*

In the Netherlands, municipalities pay the costs of buying the land and land development with money that they borrow on the capital market; this does not, in general, cause any problem. Municipalities are considered to be reliable creditors. Municipal land departments operate relatively independently and in recent years they seem to do this, in financial terms at least, successfully. However, Kortenoever has shown that municipalities risk financial setbacks as land developers in a period of economic stagnation (Kortenoever, 1989). They have to bear high interest costs when they are not able to sell the building plots.

In countries where the land developer is a private company, the developer may encounter difficulties with financing the proposed development because of several reasons: the financier

³⁸ Building land is considered as a public good, like water and electricity; see Needham (1992) on this point.

possesses only limited information about the value of the developed land, and uncertainty exists about obtaining planning permissions, the demand for building land, or other investment opportunities.

(3) Land purchase for production: land sale from land developer to promoter/developer.

In this case problems will particularly come into existence because of a lack of clarity with respect to the price of land. Land as a product is not homogenous, transactions may be few and prices may adjust only very slowly to eliminate surpluses or deficits. The value of land depends on the future revenues of the building that will be developed on the land minus the costs of the development. It proves to be very difficult to assess both these future gains and the building costs, so that it is not certain that the realized land price correctly reflects the economic value of the land. This is a typical example of a-symmetric information. The developer possesses more information about the costs of the development project and the likely future revenues out of the development than the municipality does. So, the developer knows exactly what the maximum price is that he is willing to pay for the land. The municipality knows this only approximately. In the Netherlands several authors have argued that municipalities charge relatively low land prices resulting in large development gains for the property developers (Kruijt *et al.*, 1990). One of the reasons for this is that municipalities use land policy as part of their economic policy: they offer cheap land to attract companies to their towns.

(4) Building contract: from developer to producer.

Variations exist with respect to the organisation of the development industry: who is the developer and who is the builder? Sometimes the developer also carries out the construction work (or vice versa), sometimes the developer is a subsidiary company of the investor; in other situations there is no relation between the developer, the building company and the investor. The way the development industry is organised affects the extent to which problems may occur, in this respect. In a study of building developments in an urban region in the south of the Netherlands, it appeared that on the residential property market most developers had their origins in this region, while on the commercial property market property developers also came from outside the region (Boekema and Van der Krabben, 1992; Van der Krabben and Boekema, forthcoming). The construction companies that were involved with new developments came almost exclusively from inside the region. Four regional construction

companies operated as a joint venture in this region; they were responsible for a large part of all building construction activities. It is not surprising that the scale of the *building construction market* is limited to a regional level. The market is very complicated and a lack of information (i.e. about municipal development plans, the availability of land, the demand for new buildings, etc.) will prevent many developers from outside the region from participating in new developments.

In the Netherlands the municipalities, as land developers, usually negotiate with property developers in the case of new building developments. The significance of this should not be underestimated: particularly with respect to residential property, municipalities contract with the developers/construction company. Often, they work together with only a few familiar companies, in this way possibly influencing competition on the market (among other things, because it is difficult to find out exact market prices available on the market for building construction). On the commercial property market, the property developers more often take the initiative for new developments. Besides, commercial property developers operate almost always on a national (and sometimes international) scale. As a result, the developers operating on a regional commercial property market are a mixed bag of companies from both inside and outside the region.

(5) *Credit for construction: from financier to developer/producer.*

Aspects that play a role in the relationship between the financier and the developer are, among others, the type of relation, the uncertainty with respect to future gain, the consequences of changes in investment strategies of financial institutions, and the variations that exist in different sectors of the property market and in different regions with respect to the risk of the development (who bears the risk).

Financial institutions sometimes have their own development companies; in these cases the relation between financier and developer is unproblematic. When the relation between financier and developer is a market relation, then the extent to which uncertainty exists with respect to future gain defines the negotiations between financier and developer. In the Netherlands financiers are usually willing to invest in commercial property only when the building is already let (at least 75% of the building); in other words, the developer has to bear the risk. For that matter, municipalities often do not allow speculative property development: they issue building permission only when a large part of the building (75%) is already let. The flow of capital to the commercial property market seems to be stable and growing over the years; therefore, consequences of changes in investment strategies of financial institutions

for the functioning of the property market seem to be only marginal.

(6) Sale of property: from developer to property owner.

Because of the special characteristics of both commercial property markets and industrial property markets, problems may arise with respect to assessing the correct price for property. Again, property as a product is not homogenous, transactions may be few and may adjust only very slowly to eliminate surpluses or deficits, uncertainty exists about future gains (risks of vacancy and/or a drop in rent levels); moreover, the property market consists of two sub-markets – a market for new buildings and a market for second-hand buildings – which are closely interwoven with each other. Price adjustments on one of these sub-markets affect prices on the other sub-market. These aspects make the assessment of the correct price sometimes extremely difficult. The residential property market, on the other hand, is transparent and regional price developments are monthly published. Note that, in principle, property markets in the Netherlands are fully transparent, since all sales are recorded in a public register (the *kadaster*); considerable information costs, however, are involved.

An extensive framework of institutional arrangements exists. In comparison with other markets, the nexus of institutions on property markets, determining, among other things, correct prices (surveyors) and bringing supply and demand together (real estate agents) is relatively advanced, resulting in a more or less smoothly functioning market.

(7) Owner/user relation: from final owner to final user: tenancy.

In the Netherlands, tenancy contracts for commercial property usually last for a period of five years. In this period rent levels are adjusted only to inflation; real price adjustments can take place only once in five years. The level of rent for commercial property on different locations and in different regions can be determined with some precision; rent levels, moreover, are regularly published. In essence, owner/user relations are unproblematic. Note that renting office space is common practice, but that industrial property is almost never developed commercially. Investors apparently consider the risks as too high (no standardised buildings; risk of vacancy is unacceptable for them).

A particular aspect of the Dutch commercial property market is the absence of large variations in prices, both with respect to regional and local variations, with respect to differences between new and existing property, and in time. Although this issue is only indirectly related to the tenancy issue, it is mentioned here because it defines (differences in) rent levels and in this way also the working of the price mechanism. This price mechanism doesn't function

properly on the Dutch office market: price adjustments do not take place in case of oversupply or shortage. The difference in quality between new office buildings and existing office buildings is not reflected in an equal difference in price. As a result, we may expect relatively high vacancy rates in the existing building stock, because the financial threshold for firms to move to a new building is low (rent levels are only slightly higher).

(8) Longterm finance: from financier to property owner (when property owner is final user).

On the commercial property market firms rent office space; the property owner, then, is usually a financial institution who invests its own money in the building. It is estimated that roughly half of all office space is developed commercially. If the user of the building is also the owner, there are two possibilities. Either the property owner borrows money on the capital market, or it finances the purchase with its own money. In general, banks are ready to provide long-term financing, since the building is a security for their risks.

The above must be considered as examples of social relations between actors involved in the development process. When these social relations are complicated and/or imperfect, they may lead to market failure. In this respect, *market failure* refers not only to situations in which oversupply or a shortage of supply exists, but also to situations in which either the location of new developments, the type of new developments, or the moment in time when the building is developed is not optimal. Moreover, non optimal institutional relations in the property development industry may lead to unwanted side-effects.

6.4 A concept of market failure

Having described the various types of market imperfections on urban land and property markets, we will finish this section now by providing a concept of the different types of market failure that are caused by these imperfections. We make a distinction here between *absolute market failure* and *concealed market failure*. This needs more explanation.

In a "simple" market we speak of market failure when the market does not produce the socially optimal level of output of a particular good or service. The level of production is then below the social optimum: the costs of increased provision would be exceeded by the value of that production, but the market fails to bring about the optimal production. In most cases this can be explained by assuming that the market is temporarily out of equilibrium (unless

externalities or a lack of information exist, but government intervention can deal with this). In a complicated market, it doesn't make sense to speak of temporary disequilibria; the market is *structurally* out of equilibrium. Besides, we cannot even define the equilibrium. In such a market, it is much more interesting to take real market situations as a starting point instead of testing the validity of the theoretical model. This means that we must try to classify different situations in which market failure plays a role, be it absolute market failure (an absolute shortage of supply or an absolute oversupply) or concealed market failure (suboptimal market solutions, unwanted side-effects). These situations have in common a mismatch between supply and demand. Often, they are connected with the special characteristics of land and buildings. We must make a careful distinction here between *causes* and *consequences*; imperfect market conditions are considered to be the causes, while market failures are the consequences of these imperfect conditions.

The following operational concept is proposed:

Absolute market failure:

1. The market fails to provide property for which firms, institutions or households are willing to pay a price: an absolute shortage of property;
2. The market provides property for which there appears to be no effective demand: an absolute oversupply of property.

Concealed market failure

3. Firms, institutions or households are located either in a building or on a location that is not optimal from the point of view of production or, in case of the location of households, from the point of view of their utility function: either the quality of the building or the type of building is suboptimal. We speak of *locational inertia*.
4. New developments are carried out only by the development industry, when subsidised by the government. The development industry is not able to build for the current market price.
5. When vacant buildings are not reoccupied, considerable costs are involved with demolition of the building and redevelopment of the area. If redevelopment does not take place, the area becomes run down.
6. When a firm establishes itself on a certain location, then this location is no longer available for other firms that would be optimally located on the concerned location and that are willing to pay the market price. This is a consequence of the fact that space is limited.
7. Because every location is unique, places with unique locational qualities may come into existence, resulting in undesirable monopoly ownership of land. Monopoly ownership of land is therefore characteristic to urban land markets.
8. New developments that are carried out by the development industry are of a low quality, resulting in a low quality of the built environment as well.
9. Undeserved development gains are made by one of the market parties (including local governments) out of land or property development, because of the imperfect working of the price mechanism.

7. CONCLUSIONS

Can we conclude now from this mainly theoretical study that applying the concept of institutional-economic theory to the processes taking place on urban property markets leads to a better understanding of those processes? Obviously, we think this is the case; in this concluding section we will argue why. We will explain why we think that institutional economic theory provides a better understanding of urban development processes compared to the explanations provided by neo-classical economists. Moreover, we will stress that institutional economic theory should be preferred above the so-called institutional analyses. However, at the same time we must be careful with these statements, since we haven't *proven* anything. It was not our intention to falsify any of these theories, simply because it is impossible to this. We recall that the development of an *institutional-economic urban theory* in this paper was not a goal in itself, but was meant to bring us to a better understanding of property development processes. In an international context, we noticed several dissimilarities with respect to property market functioning. Additionally, urban property markets are characterised by market imperfections, problematic institutional relations and market failures. In our eyes this constitutes a demand for explanation. To achieve this goal, the strategies of the actors involved in the processes underlying the provision of the built environment must be analyzed. What distinguishes an *urban* economic theory from other economic theories is that in urban theory economic processes are related to location: economic processes define urban spatial development and vice versa.

We will now successively pay attention to the usefulness of institutional economic theory for our purpose and we will specifically give our opinion about North's theory of institutional change. The problems with respect to finding empirical evidence to test the theoretical assumptions are discussed. Moreover, we will try to answer the question if this theory indeed brings us closer to an understanding of urban development processes. Finally, some directions for further research are pointed out.

The strength of an urban theory based on the concept of institutional economics is in its realistic approach to the dynamics of urban systems; the weakness of such a theory is that it does not provide clear and straight answers to questions concerning the way the spatial-economic development of cities takes place. Slightly oversimplified, one can argue that neo-classical theory explains all urban development by taking the demand for land and buildings as a starting point. In situations where supply doesn't keep step, it is assumed that either

externalities or supply-side blockages caused by a lack of information exist. Institutional economics also takes the demand for land and buildings as a starting point, but gives more weight to the context in which this demand comes forward; it explains why individual behaviour does not always lead to optimal allocation and why individuals sometimes lack information or why externalities exist. In many cases a neo-classical urban model is appropriate to explain market processes; however, on more complicated markets supply/demand relations are affected by all kind of factors which cannot be explained by standard economic theory or which are taken as exceptional cases, as apart from *general* market processes. In institutional economics five different aspects of an economy are emphasized: actors behave boundedly rational, actors show sometimes opportunistic behaviour, in many economic processes transaction costs are involved, and obtaining information costs money (information costs are involved), and information is typically a-symmetric. As long as only *problems of allocation* play a role, then standard economic theory sufficiently explains how these are solved; as soon as also *problems of coordination* occur on a market (which neo-classical theory by definition cannot explain), then we must look for other explanations.

In this paper much attention has been paid to market imperfections and market failure. We have attempted to show that the standard neo-classical explanation for market imperfections – the basic assumptions of a perfect market are not met – fails to recognise that market failure may also be caused by other market aspects; i.e. the individual agents in the development process behave boundedly rational or show opportunistic behaviour, uncertainty remains to define market processes, because it is too costly to obtain the necessary information, inefficiencies in the institutional context are responsible for imperfect market conditions. Moreover, it is important to notice that in many situations market imperfections are successfully dealt with, not only by government intervention, but by establishing new institutions/organisations as well. Finally, the institutional context is characteristically dynamic; this may affect, for example, the relations between the actors operating on the market (the organisation of the development industry) or the level of demand for a certain type of buildings or on a specific location.

We have clearly distinguished market imperfections from market failures. Imperfect market conditions are typical to urban real estate markets. Some of them are inextricably bound up with real estate; others are connected with the institutional context and the organisation of the development industry or inherited from the past (the existing building stock, the urban spatial structure). The latter group of market imperfections is mainly responsible for international

differences in property market functioning.

Sometimes imperfect market conditions lead to market failures. They may be the combined effect of several 'imperfections,' or they may depend on changes taking place in the wider economy. In this respect, it is important to note the dynamics underlying property markets, being the result of institutional and/or technological change. The mechanisms that cause market failure – in what situations will market imperfections lead to market failure – are still unexplored.

Section Three of this paper already argued that *institutional analyses* of property development processes lack a solid theoretical base (remember the argument by Ball and Harloe which was quoted in Section Three). If we want to leave the level of describing development processes and, instead of this, try to explain these processes, assumptions about individual behaviour and about the meaning of the institutional context are absolute conditions for achieving this goal. For only with the help of theoretical assumptions about individual behaviour and institutional relations can testable hypotheses about the functioning of urban property markets be drawn up, thus allowing us to understand the 'causalities' in property development processes.

Our choice for the operationalisation of North's theory of institutional change in this paper doesn't mean that other institutional theories are already excluded from the discussion. In fact, we have already argued that institutional economic theory still lacks a clear concept about the functioning of markets. Within the field of *institutional economics* many different approaches exist; sometimes there is a coherence between these approaches, sometimes there is not. However, there are some reasons that explain our choice of North's theory. We believe that North's conception of *new institutional economics* certainly offers realistic explanations for the functioning of markets; especially, the interpretation of dynamics in an economy and the explanation for the long-run change of an economy and international differences between markets is of great value. Besides, North has adopted the assumptions about individual behaviour that are general to new institutional economics; we consider these assumptions to be more realistic than are the neo-classical assumptions about individual behaviour (although, admittedly, the extent to which they are realistic cannot be tested).

When we compare North's theory with Williamson's transaction costs approach (which contains more or less the standard concept of new institutional economics), it is clear that the emphasis in both approaches is on different points.

Williamson explains the distinction between markets and organisations; transaction costs are held responsible for the decision of firms to operate on the market or to organise their production processes via some kind of organisational structure. North focuses on the long-term development of an economy as a whole and on international differences between economic systems. More important with respect to our goal is that North also analyzes *relations* between supply-side and demand-side actors; such an analysis makes it possible to interpret situations in which these relations appear to be problematic. Translated to this paper's problem area – the functioning of the urban property market – one can argue that the transaction cost approach explains the role of organisations and markets with respect to the way property development processes are 'organised,' but the meaning of the institutional context, problematic social relations, international differences with respect to property development processes, changes in social relations, demand levels and institutional structures, etc. are not part of the transaction-cost-approach' study objective. Besides, Williamson is still close to neo-classical economics and his concept of market failure and market imperfections is limited in its scope; it doesn't bring us any further than neo-classical economics does.

Scott is a well-known interpreter of Williamson's theory with respect to urban and regional restructuring dynamics (Scott, 199.); he has incorporated 'transaction cost analysis' into location theory. Scott analyzes restructuring processes on the demand side of the urban property market, affecting locational choices of firms. These economic restructuring processes are, more precisely, processes of vertical disintegration, based on the principle that firms choose to solve their coordination problems via the market (and not via a new organisational structure). Therefore, companies relocate their place of business to be in each other's proximity, thus reducing transaction costs.

This approach helps to understand locational choices of firms and, consequently, the changing demand for office and industrial buildings on a specific location. However, it is apparently implicitly assumed that the supply of buildings automatically keeps up. We do not reject Scott's analysis because of this assumption – for, Scott's objective is different from ours and he intends to explain locational choices of firms and not problematic supply/demand relations on urban property markets – but rather because it is just not useful for our analysis. We do not argue that supply/demand relations on urban property markets are by definition problematic and should therefore be the starting point of every study of urban dynamics; that would be nonsense. But when we confine ourselves to the contents of this paper in which we have made a plea that at any rate more attention must be paid to property development processes,

then we must conclude that a study based on the transaction cost approach is not the best way to achieve this goal. Other concepts in the field of institutional economics – for example Hodgson's neo-institutional economic theory – are left out of the analysis in this paper, but this is by no means done, because we think that they are useless. It is worthwhile to study other institutional concepts more intensely, especially with respect to conceptions about government intervention in the market and about the nexus of institutional relations within the development industry since, in North's theory, these aspects are not sufficiently analyzed. Besides, more attention should be paid to differences between local markets.

A general difficulty with institutional theory is the empirical testing of the assumptions about individual behaviour and the meaning of the institutional context. We have tried to operationalise the assumptions into hypotheses about the strategies of actors who are involved in the property development industry, about the relations between these actors, about the meaning of uncertainty on urban property markets and, particularly, about market failures. However, we must conclude that empirical testing of these hypotheses is still problematic. In this respect we refer to a recent article by Henry in which the author criticizes Scott's theory about locational preferences of firms, which we discussed above for its lack of empirical evidence with respect to the main hypotheses in this theory (Henry, 1992).

Henry criticizes the empirical methods used by Scott in identifying the New Industrial Spaces; the latter are central to Scott's theoretical concept. According to Scott, the New Industrial Spaces are the spatial result of the transaction costs' mechanism, assuming a causal link between the reduction of transaction costs by firms and the formation of new agglomerations. A detailed discussion of Henry's partly theoretical and partly empirical critique on Scott's concept falls outside the scope of this paper. However, his comments with respect to the lack of *empirical evidence* for Scott's explanations of location processes are quoted here, because they are valid for a discussion of institutional theory in general.

Scott has put forward two forms of evidence for the causal processes behind the New Industrial Spaces, which de facto comes to the expansion of high-technology sectors in a specific region. Yet, so Henry argues, the mere appearance of increased numbers of establishments does not provide any information as to the actual locational process which has created the pattern.

'First, it says nothing about whether the increased (external) production linkages created from such agglomeration growth are local or not (...). Second, it says nothing about whether any local linkages created actually played a role in the location process

of the firm' (Henry, 1992: p. 384).

These problems seem to be characteristic to institutional theory: it is problematic to test any theoretical causal mechanism based in institutional theory in a real market situation, because so many different aspects being part of the institutional context play a role. Probably, we must content ourselves with making causal mechanisms *plausible*.

Finally, are we any closer now to an understanding of property development processes? We wanted to know more about the strategies of the actors involved in the property development process, in order to understand the outcome of these processes, the organisation of the development industry, the occurrence of market imperfections and market failures, the type of property that is developed, price developments, and – with respect to all these points – locational differences, changes in time and international differences. Certainly, we haven't been able to explain all these aspects of urban property markets. We have already anticipated this result by stating in the starting sections of the paper that our intention was not explicitly to prove anything, but (more modestly) namely to add to a better understanding of urban property market functioning.

Summarised, institutional economic theory certainly helps to understand why property development takes place and why it does not. However, to make a connection to *location and locational characteristics* remains problematic. We do not yet possess the necessary tools, for instance, to analyze the differences between local property markets; why is the outcome of property development in one city more successful – in terms of amount, type and quality – than in other cities?

We conclude this paper now with some suggestions for further research:

- (1) A study of the different approaches within the field of institutional theory and of their use in the field of urban economics. It is necessary to investigate the possibilities of operationalisation of these institutional approaches. Moreover, it would be interesting to compare the application of institutional theory in studies of the urban economy with similar attempts in other disciplines, like environment economics.
- (2) A detailed empirical study of causal relations between imperfect market

conditions and market failures on urban property markets. The objective would be to find out when and under what circumstances market failures appear.

- (3) A detailed empirical study of property development processes and the organisation of the property development industry in Dutch cities, focusing on the strategies of and the institutional relations between the groups of actors that are involved in these processes. Links between urban property market functioning and local economic growth should also be part of this analysis. In this case the objective would be to identify the "driving forces" underlying property development in Dutch cities.
- (4) An international study of property development processes and the organisation of the property development industry. The emphasis should be on institutional relations within the property development industry and the wider economic context and the impact of urban policy, thus trying to recognise "optimal institutional structures." This would add to a better basis for urban spatial-economic policies.

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