

Informal Urban Property Markets and Poverty Alleviation: A Conceptual Framework

Manya M. Mooya and Chris E. Cloete

[Paper first received, May 2005; in final form, March 2006]

Summary. In the context of increasing urbanisation, growth of informal settlements and the urbanisation of poverty, this article suggests a conceptual framework to link urban informal property markets and poverty alleviation. Using conceptual tools of the new institutional economics, principally theories of transaction costs and property rights, the framework describes theoretical conditions under which property markets may be a mechanism for capital accumulation for the urban poor. The article highlights knowledge gaps in the literature and argues that the institutional approach holds the most promise for analysing the interface between informal property markets and poverty alleviation.

1. Introduction

Despite the fact that land and real estate assets comprise a significant proportion of the national wealth of most countries, these assets are dormant or underutilised in most developing countries (World Bank, n.d.). Thus there is clearly a need to investigate how the latent value of property can be unlocked to aid the process of economic development and poverty alleviation in these countries. In his path-breaking book *The Mystery of Capital*, Hernando de Soto (2000) uses the analogy of nuclear fission to emphasise the enormous latent value of property which could be unlocked to fight endemic poverty in developing countries, the trigger, according to him, being appropriate formal ownership regimes.

This article proposes a conceptual framework that links urban informal property markets and poverty alleviation. Using

conceptual tools of the new institutional economics, principally theories of property rights and transaction costs, the framework describes theoretical conditions under which property markets may be a mechanism for capital accumulation for the urban poor.

The paper is organised as follows. Section 2 sketches out some background issues for context. Section 3 introduces the new institutional economics in terms of its basic concepts. Drawing on the preceding section, section 4 then proposes a conceptual framework linking informal property markets and poverty alleviation. This is followed in section 5 by a review of the literature on property and poverty. Section 6 concludes by way of articulating a research agenda and the potential contribution of the proposed conceptual framework to that agenda.

Manya M. Mooya is in the Department of Construction Economics and Management, University of Cape Town, Private Bag 7701, Rondebosch, Cape Town, Cape Town 7701, South Africa. Fax: +27 21 689 7564. E-mail: manya.mooya@uct.ac.za. Chris E. Cloete is in the Department of Construction Economics, University of Pretoria, Hillcrest, Pretoria 0002, South Africa. Fax: +27 12 420 3598. E-mail: chris.cloete@up.ac.za. The ideas in this article were first aired at the Third World Bank Urban Research Symposium held in Brasilia in April 2005. The authors wish to thank the anonymous referees for their helpful comments, and Dr David Root for help with language editing.

2. Urbanisation, Poverty and Property Rights

In surveying the urban landscape in developing countries, Jones (2003) draws attention to three 'transitions' that he says will set the context for contemporaneous research activity and policy formulation. The first is the increasing urbanisation of developing countries, with many countries expected to have over 80 per cent of their populations living in urban areas by 2025 (Jones, 2003). This means that the orderly development of urban areas is going to continue to be problematic, with the historical explosion of informal settlements continuing unabated. Currently in most developing cities in Asia, Latin America, sub-Saharan Africa and the Arab states, between 25 and 70 per cent of the urban population is living in irregular settlements (Durand-Lasserve and Royston, 2002, p. 3). These figures are likely to increase.

The second transition refers to what Jones calls the urbanisation of poverty. According to him

The number of poor people in urban areas in some countries is now increasing at a faster rate than in rural areas ... By 2025, it is estimated that two-thirds of the poor in these regions [Latin America, east and central Europe, central Asia], and a third to almost half the poor in Africa and Asia will live in cities or towns (Jones, 2003, p. 1; citing Department for International Development, 2000, p. 3).

The scale of the problem is immense. Up to 500 million people in developing countries live in absolute poverty, representing about 40 per cent of the total poor and 25 per cent of the urban population (Jones, 2003). The World Bank reportedly sees urban poverty in apocalyptic terms as the most significant and politically explosive problem of this century (World Bank, 1991; cited in Jones and Ward, 1994). Within urban areas, the map of poverty can be superimposed on informal settlements with a fair degree of accuracy (Durand-Lasserve and Royston, 2002).

The third transition according to Jones (2003) is the greater prominence given to

property rights in the development agenda. This transition is a natural consequence of the ascendancy of new institutional economics within economics thinking, with its emphasis on property rights (and transaction costs). Thus the ideas of leading proponents of property rights in developing countries, such as Hernando de Soto, the World Bank and UNCHS-Habitat are symptomatic of this transition. As a consequence, for example, land titling programmes have been implemented in many countries in the past few decades (Payne, 2002).

3. The New Institutional Economics

3.1 *Introducing the New Institutional Economics*

The New Institutional Economics (NIE) is widely considered to be the most significant theoretical development in economic theory in recent times. The creation of the name is credited to Oliver Williamson in 1975 but the intellectual roots are conventionally traced to Ronald Coase's 1937 seminal article on the nature of the firm (Kherallah and Kirsten, 2001; Coase, 1998; Langlois, 1986). Its growing importance was underscored by the award of the Nobel Prize in Economics to its leading exponents, Ronald Coase in 1991 and Douglass North in 1993 (Hariss *et al.*, 1995).

The NIE began as an attempt to extend the range of applicability of neo-classical theory (Furubotn and Richter, 1998; North, 1995; Eggertsson, 1990). Neo-classical economic theory, although credited with providing powerful theoretical tools for the analysis of problems of resource allocation, has been criticised as being unrealistic. According to Furubotn and Richter (1998) the weakness of the neo-classical approach resides in its institutional neutrality or its predisposition to neglect serious consideration of institutional constraints and transaction costs. Consequently, they argue, neo-classical economic theory can only be applied in a highly abstract sense to questions of resource allocation.

NIE extends neo-classical theory first by explicitly adding new constraints, the key

ones being the structure of property rights and transaction costs, and secondly by attempting to explain the organisation of markets and the structure of contracts (Eggertsson, 1990). Thus NIE attempts to introduce greater realism in economic analysis (Ankarloo, 2002), while retaining the strong theoretical foundations of neo-classical economics. The central economic problem remains that of resource allocation, but its explanation lies in the institutional and organisational structure of society (D'Arcy and Keogh, 1996).

The novelty of the NIE stems from the existence of an older school of institutionalism in economics, associated with the work of Thorstein Veblen, John Commons, Clarence Wendell and Allan Grunichy (Vandenberg, 2002; Kherallah and Kirsten, 2001; Klein, 1999; Hariss *et al.*, 1995; Langlois, 1986). The key rallying point of old institutional economics (OIE) was opposition to the then developing neo-classical view-point (Langlois, 1986), particularly its emphasis on the rational-maximising self-seeking behaviour of individuals (Hariss *et al.*, 1995).

The NIE is based on a few logical and coherent concepts (Menard, 2001). The key ones (and those directly relevant to the proposed conceptual framework) are theories of property rights and transaction costs, in addition to the concept of institutions itself.

3.2 Institutions

Institutions have been defined as the humanly devised constraints that shape human interaction, and their enforcement mechanisms (North, 1990). Heltberg (n.d.) defines institutions as rules, norms, habits and formal hierarchies that shape agents' actions and expectations. North (1990) argues that institutions exist to reduce the uncertainties involved in human interaction. These uncertainties arise as a consequence of both the complexity of the problems to be solved and the limited computation abilities possessed by the individual.

Simply put, institutions simplify human interaction by a system of rules and procedures. By limiting the choice set of actors

in complex or uncertain situations, discretionary action is constrained and human interaction is structured into predictable and manageable ways. Institutions, however, do much more than constrain behaviour. They also provide incentives and therefore potentially provide a powerful tool to explain a wide range of economic and social outcomes.

Institutions can be informal (sanctions, taboos, customs, traditions and codes of conduct) or formal (constitutions, laws, property rights) (North, 1991, cited in Leitmann and Baharoglu, 1999; Ensminger, 1996; North, 1990). Institutions come into being either by creation or evolution (North, 1990). Thus at one extreme institutions may evolve spontaneously as a result of the actions of individuals, or may be a product of deliberate design at the other (Furubotn and Richter, 1998). The guiding principle in the NIE is that institutions emerge to reduce frictions and uncertainties, collectively called transaction costs (D'Arcy and Keogh, 1996; Eggertsson, 1990). This view, closely associated with the work of Oliver Williamson, sees institutions as efficiency-enhancing. North (1990) on the other hand argues that the major role of institutions in society is to reduce uncertainty by establishing a stable but not necessarily efficient structure to human interaction. The observed institutions may merely reflect the interests of those who have the power in society and therefore may not necessarily be efficiency-enhancing (Ensminger, 1996). Perhaps the more realistic view is that, since institutions reflect influence and power in the society in question, they are likely to reduce transaction costs for certain groups and activities but not for others (Keogh and D'Arcy, 1999).

There is some consensus, however, that institutions have a profound effect on the performance of economies (Bates, 1989), largely by their effects on the costs of exchange and production (North, 1990). According to Heltberg

Institutions serve a number of important economic functions, such as handling situations with missing or asymmetrical information, facilitating and enforcing market

and non-market transactions, substituting for missing markets, co-ordinating the formation of expectations, encouraging co-operation and collective action and reducing transaction costs (Heltberg, n.d., p. 1).

3.3 Transaction Costs

A transaction occurs “when a good or service is transferred across a technologically separable interface” (Williamson, 1985, p. 1; cited in Furubotn and Richter, 1998, p. 41). In this sense, a transaction is seen as the physical delivery of resources. Transaction being “the alienation and acquisition between individuals of the *rights* of future ownership of physical things” (Commons, 1934, p. 58; cited in Furubotn and Richter, 1998, p. 42) refers to transfer of intangible rights. This latter sense is generally the one applicable to property markets, as the physical commodity cannot be physically transferred.

There are several types of transaction costs but the proposed conceptual framework is based on those costs arising from the need to use the market. These market transaction costs arise principally due to information problems. As Eggertsson (1990) puts it, when information is costly, various activities related to the exchange of property rights between individuals give rise to transaction costs. Eggertsson (1990, p. 15) lists these costs as follows

- (1) The search for information about the distribution of prices and quality of commodities ..., 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.
- (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.

Furubotn and Richter (1998) condense the cost of using the market into three categories—search and information costs, bargaining and decision costs, and supervision and enforcement costs. *Search and information costs* in the context of property relate to the process of finding the right transaction partner. Typical costs here are advertising costs, communication costs and information costs arising from the need to evaluate relative prices and quality. *Bargaining and decision costs* are incurred once a suitable prospective transaction partner is found. For formal markets, legal fees, valuation fees, estate agent’s fees and various statutory charges come into the picture. Depending on its opportunity cost, time spent in negotiations may be a significant cost. *Supervision and enforcement costs* arise after the transaction has been consummated and relate to the need to monitor and enforce agreements. Thus, in the context of property, rent or capital sums must be paid, premises vacated, delivered or defended, construction must conform to time and budget, etc. Throughout this process, there is considerable scope for cheating, shirking and other forms of ‘opportunistic’ behaviour.

High transaction costs can cause market failure. In order for exchange to take place, the gains from the exchange must be significantly higher than the cost of exchange. Thus if the transaction costs are too high, exchange at the margins will not take place or will be severely constrained (Eggertsson, 1990, p. 16) and in these instances we speak of market failure. Alternative ways of resource allocation, such as state provision, then become necessary. That is why the analysis of transaction costs is important to the understanding of markets and the role of the state.

According to Williamson (1979; cited in Furubotn and Richter, 1998) economic transactions can be characterised by three critical features: uncertainty; the frequency with which transactions occur; and, the degree to which transaction-specific investments are made. All three are understood to exert systematic influence on economic behaviour.

In general, transaction costs *per exchange* are positively related to uncertainty and transaction-specific investments and negatively related to the frequency of *market* transactions. Thus at the level of the individual transaction, low transaction costs are consistent with low levels of uncertainty, low levels of transaction-specific investments and high frequency of market transactions. Low transaction costs result in increased efficiencies in the economy and have a positive effect on economic outcomes.

3.4 Property Rights

Eggertsson (1990, p. 34) identifies three basic categories of property rights. First, there are user rights that determine what individuals can legitimately do on their property. Secondly, there is the right to earn an income from an asset and to engage in contracts with others for this purpose. Thirdly, there is the right to alienate or sell ownership rights over an asset to others.

Economists concerned with property rights often consider any restrictions on those rights, called 'attenuation of rights', to be undesirable (Eggertsson, 1990; Barzel, 1989). As Barzel goes on to explain, a person's ability to realise the potential value of property depends on the extent of their property rights which, as discussed above, consist of the ability to use (and exclude), to alienate and to derive income from the property. The ability to exclude prevents the property from becoming common property and the ability to alienate and to derive income permits the realisation of gains from exchange.

The argument for secure rights with respect to land has been summarised as follows (Alston *et al.*, 1996, p. 32): the more secure one's property rights, the more secure is the future rental stream that the land produces; the better one is able to use land as collateral; and, the larger is the market for sale. Well-defined and secure property rights are therefore predicted to stimulate demand for resources, encourage investment, promote markets and have positive effects on asset values. They are thus seen to be the *sine qua*

non for the emergence and continued functioning of decentralised markets and the efficient use of resources.

According to Alston *et al.* (1996, p. 9), the link between institutions, such as property rights, and wealth involves complex and only partly settled theoretical issues. However, they go on to make important generalisations. According to these authors, the creation of value is curtailed: (1) when property rights to valuable resources are undefined or unclear because vague property rights tend to give rise to wasteful behaviour; and, (2) when property rights to valuable assets belong to and stay with individuals who do not put the assets to their most valued uses. With regard to point (1), there is some evidence (see for instance, Field, 2003) that where property rights are unclear, considerable household investment in terms of time and resources may be diverted to defensive activities. This investment would of course have been otherwise channelled to more productive activities, with positive effects on household wealth. With regard to common pool resources, it is widely recognised that vague property rights may provide powerful incentives for overexploitation, leading to resource degradation and 'tragedy of the commons'.

Point (2) is based on the premise that the market provides a mechanism for transferring assets to those who perceive and can create the most value out of them. Thus if the effect of a particular regime of property rights is to impede or constrain the exchange process, overall wealth creation is curtailed.

The relationship between property rights and transaction costs is intimate and will be readily apparent from our earlier definition of transaction costs. Barzel (1989, p. 2), for example, defines transaction costs as the costs associated with the transfer, capture and protection of property rights. The definition, exchange and enforcement of property rights is costly (Eggertsson, 1990). The definition of rights to land, for example, requires expensive surveying and titling programmes. Exchange and enforcement costs with respect to property have been discussed in

the previous section and are equally costly. In addition, the creation and maintenance of the necessary legal and bureaucratic infrastructure are expensive.

Realising the potential value of an asset presupposes exchange. To the extent that high transaction costs prevent or severely constrain exchange, this potential cannot be realised. The conventional wisdom is that well-defined property rights lower transaction costs. Indeed, there is a widely held view that high transaction costs arising from defective formal property rights account for the underdevelopment of most developing countries. North puts it as follows

When we compare the cost of transacting in a third world country with that in an advanced industrial economy, the costs per exchange in the former are much greater—sometimes no exchange occurs because costs are so high. The institutional structure in the third world lacks the formal structure (and enforcement) that underpins efficient markets. However, frequently there will exist in third world informal sectors (in effect underground economies) that attempt to provide a structure for exchange. Such structure comes at a high cost, however, because the lack of formal property right safeguards restricts activity to personalised exchange systems that can provide self enforcing types of contracts (North, 1990, p. 67).

This is a key argument in Hernando de Soto's *The Mystery of Capital*. De Soto (2000) argues that informal property rights in Third World countries prevent the emergence of impersonal exchange systems he sees as necessary to unlock the 'dead capital' locked in the immense real estate holdings. He advocates a formalisation of property rights as a necessary condition for fighting poverty in these countries.

4. Property Markets and Poverty Alleviation: A Conceptual Framework

Property markets can be conceived of in terms of users, investors and developers (DiPasquale

and Wheaton, 1996). Each form distinct market segments—namely, the letting market, the capital market and the development markets respectively. The respective 'prices' are rentals, capital values and profit or yields. In addition, all this is embedded in an institutional framework, which may be formal or informal.

It is perhaps a trite point to make, but what the property market deals in are 'interests' or property rights, not the land or real estate itself (Harvey, 1996; Balchin *et al.*, 1988). This immediately begins to shed light on the property market in institutional terms (D'Arcy and Keogh, 1998). The range of possible interests is wide and may be formal or informal. Following on from our discussion of property rights, it will be expected that these interest have effects on the use of property via the incentives and constraints that they create.

As has been argued above, realising the latent benefits of property presupposes exchange in the capital, rental or development markets. Property markets in comparison with other markets are distinguished by relatively high transaction costs (Liu *et al.*, 1990; Clapp *et al.*, 1995). We have made the point that high transaction costs may cause markets to fail or not to function well. Well-defined and secure property rights for their part play an important role in creating incentives, lowering transaction costs, increasing demand for and investment in property. All these have potentially the effect of fostering exchange in property markets and enhancing social and economic welfare.

As Alston *et al.* (1999, p. 3) emphasise, real estate is often the major, if not the only, asset held by the poor and "their ability to claim and sell land and then to move on to settle, claim and sell yet again and again is a critical element in social and economic advancement". Through this process, according to the authors, individuals eventually accumulate enough wealth to stay on site permanently. Key to this process are property rights. Alston *et al.* (1999) argue that secure tenure allows the development of wider markets, encouraging land to be used for

highest-valued uses and allowing owners to capture capital gains from sales. The authors also make the point that if property rights are enforced, uncertainty of control is reduced, allowing individuals to focus on productive activities, instead of spending scarce resources on defending their claims. All this has salutary effects on poverty alleviation.

The context is settlement on the Amazon frontier, but the principle has clear relevance to the urban poor in most developing countries, where the desirable end-state may be full integration into the formal sector. For example, research in urban settlements of Ecuador, Hungary, the Philippines and Zambia shows that housing is by far the most important productive asset held by urban poor (Moser, 1998). In many ways, informal settlements can legitimately be conceived as frontier regions for new immigrants, being a point of entry into the formal urban economy (see for instance, Berner, 2000). While Alston *et al.* (1999) emphasise property rights in their analysis, transaction costs are equally important as it is these which ultimately determine if markets will function well.

The thesis outlined in this paper is that both (relatively) high transaction costs per exchange and inappropriate and/or inadequate property rights configurations account for the failure to unlock the potential of property to create wealth. The contention is that relatively low transaction costs and secure property rights in property markets are a necessary (but not sufficient) condition for the unlocking of the potential of property to alleviate poverty. These two factors together create conditions that make it possible for large numbers of secure and impersonal transactions in a decentralised market to take place.

Contrary to conventional wisdom, however, the authors' position is that higher transaction costs and insecure property rights are not an inevitable feature of informal property markets. Antwi and Adams argue succinctly thus

From one's understanding of the economics of property rights, there are no automatic

reasons why insecurity and lack of clarity of property rights should result simply because transactions are organized informally. Indeed informal transactions may predominate precisely because this mode of organizing transactions may be better attuned to available opportunities. This would be the case if the costs of organising transactions differently far outweigh the benefits (Antwi and Adams, 2003, p. 69).

Indeed, many studies (for example, Antwi and Adams, 2003; de Soto, 2000; Omirin and Antwi, 2004) have shown that navigating the formal system may be too costly for the poor. In the context of property transactions, in addition to the usual information costs, the formal system prescribes the use of lawyers, conveyancers and other professionals who come at a considerable expense. In addition, there are costs arising from bureaucratic procedures such as delays and corruption. If the totality of these costs is excessive, activities will be driven into the informal sector. Thus informality may be an optimal solution to the complications of the formal legal process (de Soto, 2000; Pamuk, 2000).

On the other hand, informal property markets are not without their own problems. Fekade (2000), for instance, notes that participants in informal markets are faced with problems such as conflicting and unrecorded ownership claims, multiple sales of the same property and other costs arising from insecurity of property rights. In similar fashion, Kironde (2003) observes that, while the informal property market is credited with supplying land at low cost, it exhibits a number of problems, principally high transaction costs and defective property rights. These, according to Kironde, include lack of information on land availability relying on communication by word-of-mouth, considerable possibility of fraud and lengthy negotiations. In addition, he argues that there is no general framework for setting prices and that land acquired has no official title. Kironde offers no empirical support for these conclusions, but nevertheless highlights issues that are of interest.

The foregoing suggests that the question of the relative levels of transaction costs and security of property rights, as well as their effects on property markets and economic welfare, is a matter for empirical investigation in each specific context. In Figure 1, we propose a conceptual framework that links property rights, transaction costs, property markets and poverty alleviation. As the figure indicates, there is a dynamic two-way relationship between property rights and transaction costs. Well-defined, secure and well-enforced property rights reduce transaction

costs—by clarifying property boundaries, validating ownership rights and making those rights easily transferable (Lanjouw and Levy, 2002). The need for extensive search of ownership is thus obviated (Pamuk, 2000). Similarly, resources spent on private enforcement are reduced (Field, 2003). Low transaction costs for their part stimulate the demand for secure property rights as a prerequisite for engaging in market exchange.

Secure property rights and low transaction costs are predicted to increase market turnover, by expanding market depth and

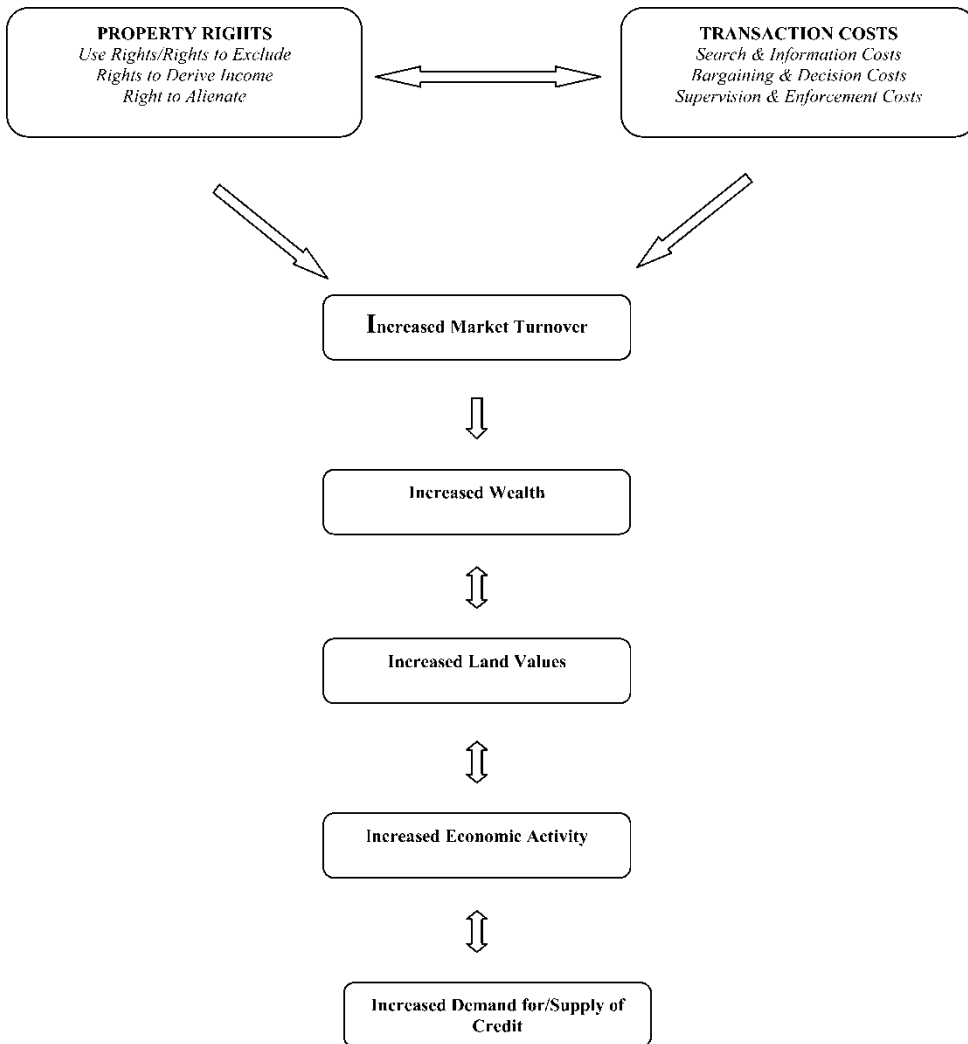


Figure 1. Property rights, transaction costs, property markets and poverty alleviation: a conceptual framework.

making it easier for exchange to take place. Increased market activity provides opportunities to realise capital gains, as well as gains from the letting and development markets. This in turn should increase aggregate wealth, resulting in increased demand for, and values of, assets including property. Increased aggregate wealth and higher property values should stimulate increased general economic activity, increasing the demand for credit and therefore the need to use property as collateral. The increase in demand for (and supply of) credit should reinforce these positive outcomes, spurring further increases in economic activity, property values and household wealth.

Crucially, all these outcomes are predicated on the existence of facilitative institutional arrangements/regulatory frameworks. These include a cultural framework supportive of impersonal market exchange, appropriate laws, mechanisms for dispute resolution and arrangements for provision of market information.

It will be noted from our illustration that the demand for credit (and therefore the need to use property as collateral) will only reach significant levels once a certain threshold of economic activity has been attained. As many studies have shown, the demand for formal credit in informal settlements for purposes other than consumption is low (Ward *et al.*, 2004; Smith, 2003; Ward, 2003; Gilbert, 2002; Varley, 2002). This is due to a number of reasons, including widespread risk aversion, high interest rates, ineligibility for formal credit and the lack of opportunities to invest such credit.

Deininger and Binswanger (1999) note that titling confers benefits, but only under conditions where informal land transactions *are common*, a credit market that permits the use of title as collateral exists and profitable investment opportunities exist. The latter two conditions are likely to be absent in many informal settlements. Credit supply depends on the lenders' confidence that they can foreclose (Smith, 2003). However, for cultural and economic reasons it may not be possible to repossess land as a consequence

of default, rendering formal credit markets impossible. In addition, financial institutions find it unprofitable to lend the small amounts that the poor need.

The emphasis in some of the literature on the link between formal property rights, access to credit and improved welfare is therefore premature. The immediate task is to increase turnover in markets. This requires directing attention to those factors that impede exchange. The key therefore is to gain a better understanding of transaction costs in informal property markets and how they are mediated before taking prescriptive action. This means examining how formal and informal institutional arrangements work to facilitate or hinder the functioning of property markets in informal settlements. Property rights, due to their incentive effects as well as their effects on reducing transaction costs, are clearly important.

Following on from our conceptual framework, property markets in informal settlements will need the following attributes if they are to be a tool for poverty alleviation

- well-defined, secure and enforced property rights;
- liquidity—i.e. frequent numbers of impersonal transactions;
- low levels of uncertainty with regard to individual transactions;
- low levels of transaction-specific investment; and
- facilitative regulatory framework/institutional arrangements.

These attributes are a function of two factors. First, property markets are embedded in particular institutional framework/arrangements, both formal and informal. These arrangements are expected to exert systematic influences on the functions of these markets and the behaviour of actors. These effects could be either positive or negative. Secondly, the series of individual transactions that define market activity will have certain characteristics, which will also either be facilitative or inhibitive of overall market activity.

This conceptual framework dovetails and is consistent with the emerging consensus in the

conceptualisation of poverty—the so-called vulnerability/capital assets framework. Through this conceptualisation, poverty is seen as vulnerability to insecurity, impoverishment and reduced self-respect of households which lack assets that they can mobilise and manage in the face of hardship (Rakodi, 1999; Moser, 1998). Poor households are seen to be managers of portfolios of assets which constitute a stock of capital which can be stored, accumulated, exchanged or depleted and put to work to generate a flow of income or other benefits (Rakodi, 1999). These assets include tangibles, such as labour and human capital and housing, and largely intangible assets such as household relations and social capital (Moser, 1998).

According to Rakodi (1999), the crucial determinants of households' ability to achieve increased well-being are their access to these capital assets and the effects of external conditioning variables which constrain or encourage the productive use and accumulation of such assets. Moser goes on to point out that operationally the vulnerability/capital assets framework facilitates interventions promoting opportunities, as well as removing obstacles, to ensure that the urban poor use their assets productively. According to her

In those urban contexts where the poor are systematically excluded from formal sector jobs, and the capacity of macroeconomic growth strategies to generate additional jobs is limited, the removal of tenure-insecurity related obstacles that prevent or constrain households from using their housing effectively as a productive asset is possibly the single most critical poverty reduction intervention (Moser, 1998, p. 11).

5. Property and Poverty Alleviation: A Survey of the Literature

The 'popular economics' of Hernando de Soto is perhaps a fitting place to begin a survey of the literature on property and poverty. In the words of Jones (2003), de Soto has placed a

largely well-known discussion of property rights, legal reform and state intervention into an anti-poverty discourse. The central message in de Soto's *The Mystery of Capital* is that the poor in developing countries possess immense resources, but they hold these resources in defective forms.

Because the rights to these possessions are not adequately documented, these assets cannot readily be turned into capital, cannot be traded outside narrow circles where people know and trust each other, cannot be used as collateral for a loan and cannot be used as a share against an investment (de Soto, 2000, p. 6).

De Soto describes these resources as 'dead capital' to emphasise the point that they cannot be deployed to create wealth. The 'undercapitalised' informal sector which is the abode of this dead capital is described thus

It is a world where ownership of assets is difficult to trace and validate and is governed by no legally recognised set of rules; where the assets' potentially useful economic attributes have not been described or organised; where they cannot be used to obtain surplus value through multiple transactions because their unfixed nature and uncertainty leave too much room for misunderstanding, faulty recollection and reversal of agreements. Where most assets in short are dead capital (de Soto, 2000, p. 29).

In more formal terms, de Soto is arguing that ill-defined and enforced property rights result in high transaction costs, thereby impeding the development of impersonal exchange systems necessary for the creation of surplus value. In practical terms, de Soto is advocating the formalisation of property ownership in the 'extra-legal' sector and the simplification of procedures for granting formal property.

Moving further afield, the influence of property titling as discussed in the literature has focused mainly on three outcomes: gains from trade in land, greater investment incentives and improved credit access

(Besly, 1995; Field, 2003; Smith, 2003). Alston *et al.* (1999) see the promotion of market formation as one of the primary outcomes of a property rights regime. According to the authors, clear and recognised property rights have three positive effects. First, they assist in attracting buyers, thus supporting wider markets. Secondly, they allow owners to focus scarce resources on productive activities rather than on defending their claims. Thirdly, they promote investment by creating incentives for longer-term planning horizons and making mortgage finance feasible. Deininger and Binswanger (1999) and Deininger and Chamorro (2004) for their part list reduction of private enforcement activities, greater incentives for investment, access to credit and increased transferability of land as the key benefits of secure property rights. Formal property titles reduce information asymmetry about landownership and quality or transaction costs generally, thus encouraging the development of wider markets.

Consequently, property titling is increasingly considered an effective form of government intervention for targeting the poor and encouraging economic growth in urban areas (Field, 2003). It is seen as the main instrument for increasing land tenure security, stimulating land markets and facilitating the use of land as collateral in credit markets (Lanjouw and Levy 2002; Deininger and Binswanger, 1999; Deininger and Chamorro 2004). Ward (2003) list the positive outcomes associated with full property title regularisation, reflecting conventional wisdom in this area, as follows

- provides security against eviction;
- brings people into the market from which they can benefit by free sale at full market price;
- raises land values;
- provides incentives that stimulate investments in home improvements and consolidation;
- makes possible the introduction of basic services such as electricity and water;
- generates greater access to credit by using the home as collateral on loans;

- incorporates residents into the property-owning democracy and citizenry; and
- integrates settlements and property into the tax and regulatory base of the city.

It will be apparent that many of these outcomes would potentially have the effect of reducing poverty. Results of empirical research addressing the effects of formal property rights are, however, mixed. Doebele summarises the issues as follows

The assumption that markets that are 'formal' or 'regularised' are more efficient and productive is not yet proven. On the other hand, some of the literature argues that 'informality' and illegality reduce the costs of land and housing for the urban poor. Others argue that as long as the poor are insecure as to the legal status of their homes, their major assets in life, they will never enjoy full access to the economic and political system. One of the most interesting reviews of this issue ... concludes that the current state of research does not permit prediction of whether a more formalised land market is likely to benefit or harm the poor (Doebele, 1994, p. 52).

Research by Alston *et al.* (1999, p. 8) in the Brazilian Amazon frontier shows that title is "a vital institution in promoting investments and in expanding markets". Title was seen to increase significantly land values and wealth, and to create incentives for long-term planning. Although this was in the context of settlements in the frontier regions of the Brazilian Amazon, the results have relevance to urban settlements where successive waves of immigrants are analogous to frontier settlers and where land can be an important means for capital accumulation. Urban informal settlements are in many respects a frontier region, juxtaposed as they are between the formal and informal, the rural and the urban.

Besley (1995) reports on his investigation of the relationship between investment and land rights in Ghana. He tests the hypotheses: that security of tenure encourages investment; that security of tenure makes access to formal credit easier (encouraging investment as a

result of increased demand as well as lower interest rates); and that better rights lead to expanded trading opportunities, the ability to exploit gains from trade and enhanced investment opportunities ('superior' transfer rights are modelled as lowering the cost of exchange). Besley finds that the data are supportive of his models (1995, p. 910). Besley concludes that there are gains from trade arising from easier transfer of rights in the capital and rental markets and that better rights to land encourage or facilitate investment but that these need not be formal transfer rights (Rakodi, 1999).

Frequently cited research on small farmers in Thailand by Feder and Onchan (1987) and Feder and Feeny (1991) found that formal titles and collateral play an important role in economic development (Alston *et al.*, 1999). With regard to their impact on land values, Lanjouw and Levy (2002) find that in urban Ecuador the effect of land title was to raise values by almost 24 per cent. These results have been corroborated by Kim (2004) who found that in Vietnam properties with legal title transferred on average between 3 and 10 per cent higher than those with incomplete rights. Similar findings are reported for Nicaragua where receipt of registered title was found to increase land values by 30 per cent and, at the same time, greatly increase the propensity to invest (Deininger and Chamoro, 2004). Evidence from Peru suggest that households in titled communities devote fewer human resources to informal property protection, both at the household and the community levels, and more resources on productive activities outside the home (Field, 2003).

While there has been much attention placed on property rights, literature that has as a central focus the study of transaction costs in informal property markets is rather thin. This could be explained by the well-known problem that transaction costs are notoriously difficult to observe, let alone measure. Gough and Yankson (2000) show evidence from Ghana of markets bedevilled by high transaction costs and ill-defined property rights, although this is tempered by the high cost of

formalisation. Results from Tanzania also make allusion to informal markets hampered by lack of information, fraud and lengthy negotiations (Kironde 2000).

On the other side of the debate, there is a considerable body of literature highly critical of the posited benefits of formal property titles. For a start, de Soto's arguments have elicited some fairly robust criticism—perhaps not unexpectedly, considering the polemical nature of his discourse. For example, the methodology used to arrive at the estimate of the amount of 'dead capital' remains obscure and of doubtful validity. Payne (2002) observes that de Soto fails to provide any empirical evidence to support the posited causal relationship between the development of property rights and the increasing prosperity of the West. Many have called for empirical validity of de Soto's arguments, noting that interest among the poor in possessing property title has been found to be quite low, the security of such title overrated and the necessity of title to extend a finance market for reasons other than consumption largely unproven (Jones, 2003; Smith, 2003).

A major research project commissioned by the UK government's Department for International Development (DfID), and recently completed, had as its main aim to test de Soto's thesis of a linkage between property rights and poverty (Home and Lim, 2004). Teams of researchers undertook empirical work in peri-urban areas in Botswana, Trinidad and Zambia. The overall results with regard to the main aim of the research project can be fairly described as ambiguous.

The study found little evidence of market activity in peri-urban plots "with plot-holders more likely to pass their land to relatives ... than sell" (Home and Lim, 2004, p. 146). This finding is consistent with the observation by Doebele (1994) that property markets in informal settlements are not well developed despite considerable *de facto* security of tenure. Home and Lim (2004) attribute this to 'resistance to market pressures', resulting from the conception of land as a security and welfare support rather than a

tradable asset. The conclusion here appears to be that de Soto's ideas cannot work because people will not participate in the market for social reasons, even if they are granted formal property rights. An equally plausible explanation for low market activity, on the other hand, which the authors do not or cannot address either theoretically or empirically, is the possibility of high transaction costs in these markets. The study therefore suffers from a serious methodological flaw with respect to the question it seeks to answer. The research adopts an essentially anthropological approach to address a question whose theoretical substrate is in economics. The research team of land surveyors, planners, a lawyer and a social anthropologist would have benefited from the added perspective of a land economist. The research thus missed a valuable opportunity to examine the land *market process* in these peri-urban areas and thereby help to illuminate an area that has not been well studied (Antwi and Adams, 2003; Gough and Yankson, 2000; Kironde, 2000; Payne, 1997).

Home and Lim (2004) also report that there is widespread aversion to the use of land as collateral in all the three countries. This finding is also consistent with results elsewhere. Ward *et al.* (2004), for instance, in the context of *colonias* in Texas, find that receiving full title made little difference to the residents' propensity to use their homes as collateral. Gilbert (2002) reports similar findings for Bogota, concluding that property titles made little or no difference to the availability of formal finance. Research in Mexico by Varley (2002) comes to broadly the same conclusion, that poor people eschew formal credit as it entails, in part, a loss of flexibility.

It is our view, the emphasis in the literature, including from de Soto, on the link between property titles and access to formal credit is misplaced and premature in many cases. The reasons for this have been discussed elsewhere in this paper. It must be noted, however, that a finding of aversion to formal credit is not the same as finding that formal credit is not beneficial to poverty alleviation efforts.

Some literature has sought to demonstrate that many of the assumed benefits of property titles have no empirical validity. Razzaz (1993) presents results from Jordan which cast doubt on the assumed causal relationship between formal property rights, security of tenure and land investment. Kironde (2000) finds that titles in settlements around Dar es salaam, Tanzania, do not result in significantly higher land values. Durand-Lasserve (2003) points to research in (rural) South Africa which seems to suggest that individualisation of tenure has been found to increase inequality and landlessness, to have little or no impact on the mortgageability or productive use of land, to result in land falling into disrepair after the first set of transfers and to lead to ever-increasing fragmentation of land parcels.

A most interesting study, in that it deals with a developed country, explores the impact of title on the performance of land markets in irregular settlements in Texas (Ward *et al.*, 2004). The study finds little positive direct relationship between title regularisation, rising property values and turnover of lots. The study concludes that property titles have little impact on land market performance. It must be noted that the authors equate market performance with price increases. This of course presents only a partial view of the market. Significantly, no empirical evidence is presented to show the effect of title on *market turnover*. This therefore calls into question the credibility of the overall conclusions.

Ward *et al.* (2004) concede that substantial capital gains are possible, but only if the market in these irregular settlements were to be 'primed'

Unless the market is 'primed' to allow for greater mobility and sales, then there is little prospect that low-income residents will be able to benefit financially from homeownership (Ward *et al.*, 2004, p. 2641).

Unfortunately Ward *et al.* (2004) do not engage with the question of how the market may be stimulated. This may be explained by their exclusive focus on property rights.

Combining insights from both theories of property rights and transaction costs may have provided a better perspective to deal with this issue. This comment is also relevant to Gilbert's work in the informal settlements of Bogota. Gilbert (2002) concludes that property titles have not resulted in a healthy housing market. He notes the lack of a secondary market for 'quality homes' but does not satisfactorily explain why this might be the case.

Some research has taken issue with the often *a priori* assumption that lack of formal title has a negative impact on informal land markets (Antwi and Adams, 2003; Ward, 2003). Evidence from a study of informal transactions in Ghana, for example, found that most of them were the optimal solution in an environment where the formal system is riddled with excessive bureaucracy and cost, and the resulting formal property rights of limited value (Antwi and Adams, 2003). Kim (2004) presents evidence from Vietnam of property markets functioning very well even with incomplete legal property rights. Similarly, in Bogota an active market for plots was found to exist despite the lack of legal titles (Gilbert, 2002). In fact, the evidence suggested that, by increasing cost, formalisation of titles in Bogota's informal settlements had the effect of reducing market activity.

Ward (2003) argues that it is not only legality and secure property titles that prime the marketplace as de Soto seemed to suggest. In both formal and informal property markets, regulation and restrictions sometimes can, and do, severely inhibit market activity. With regard to the former, the policy ambiguity, procedural complexity and prohibitive cost involved in obtaining titles which legalise ownership of urban land have forced the urban land market to continue in the informal or illegal way (Fekade, 2000; citing McAuslan, 1985, p. 8).

It is clear from the foregoing review of the empirical literature that we are still unable to establish whether formalised property markets are harmful or beneficial to the urban poor. What is clear is that in some contexts, more formalised property rights have

had beneficial effects on markets and household welfare. Yet in others the anticipated benefits have not materialised. Could these differential effects be explained by differences in institutional environments and arrangements? Could incorporating transaction costs and institutional variables in the analysis perhaps clarify conditions under which formalisation is likely to succeed or fail?

The point to underline here is that one must not make *a priori* assumptions based on notions of formality or informality. Some authors have even questioned the usefulness of maintaining this dichotomy (see for instance, Varley, 2002). Research from Ecuador has suggested that the effect of formal property rights on economic behaviour and welfare depends on an informal source of those rights (Lanjouw and Levy, 2002). According to these authors, the key distinction is not whether property rights are formal or informal but rather whether they are transferable or not. Thus stronger rights to the extent that they are not transferable may make it difficult to engage in transactions. This underscores the importance of empirical research to try and provide answers.

Overall, a survey of the literature on property and poverty alleviation reveals a number of gaps. The major problem identified is lack of basic information regarding the functioning of urban property markets in Africa and other developing countries (Antwi and Adams, 2003; Gough and Yankson, 2000; Payne, 1997). This is particularly the case for informal settlements.

Basic questions, for instance, about the numerical size of the informal sector, the volumes of transactions, sums of money involved, the amount of land changing hands, the general pattern of the distribution of land transactions, land prices or land values have not been satisfactorily answered (Doebele, 1994; Kironde, 2000). We remain relatively ignorant about the behaviour of the actors, the incentives and constraints they face, the costs of exchange that they incur and the mechanisms by which exchange is facilitated.

In particular, little systematic attention has been placed on the role of informal

institutions that allow markets to function regardless of government regulations (Pamuk, 2000; Rakodi and Leduka, 2003). Formal property markets rely on a host of institutional arrangements, organisations and actors to structure and facilitate exchange (see Keogh and D'Arcy, 1999; Jaffe, 1996), including statutes, land registries, listing agreements, contracts, estate agents, conveyancers and lawyers. These work to reduce transaction costs in these markets.

It is known that informal property markets develop informal institutions to facilitate exchange. For instance, recently completed research in six African cities concludes that informal delivery systems are often effective in delivering land for housing, because of their user-friendly characteristics and social legitimacy (Rakodi, 2005). In the context of Tanzania, Fekade (2000; citing Kombe, 1995) notes that, although transactions are not legally protected, the informal land market has devised its own procedures to authenticate ownership, transfer and sale of urban land. He says that such informal measures are able to control the incidence of fraudulent transactions to manageable proportions. Pamuk (2000), on the other hand, presents empirical evidence from Trinidad which suggests that informal institutions support transactions by reducing transaction costs and providing mechanisms to deal with uncertainty.

Such studies as have been cited are few and do not deal comprehensively with the issue of informal institutions in property markets. For example, empirical evidence on the effects of unclear property rights on transaction costs is limited (Deininger and Binswanger, 1999). Thus Pamuk (2000) calls for additional empirical work from different parts of the world to document the effects of informal institutional arrangements in property markets.

It is of interest to find out how, comparatively speaking, the problem of exchange in informal property markets is resolved in institutional terms and the resulting incentives and constraints. Without this knowledge, it becomes difficult to see how these markets

may aid poverty alleviation and to make prescriptions for improvement.

6. Concluding Comments: A Research Agenda

Jones (2003) calls for research, based on robust theoretical and empirical platforms, to demonstrate clearer the links between land markets and poverty alleviation. We contend that conceptual tools of the new institutional economics, principally theories of property rights and transaction costs, provide an appropriate framework for such research.

The value of adopting an institutional approach to the study of informal property markets is that it brings a particular perspective that is more realistic and therefore more likely to yield knowledge relevant for policy-making. Hitherto, the dominant paradigm in the study of property markets has been the neo-classical approach. As Evans (1995, p. 6) notes "most of the [early] literature on the property market is written as though it was the very paradigm of a neo-classical perfect market—many buyers, many sellers, homogeneous product, full information, etc." (also see comment by Watkins, 1998, p. 57). According to D'Arcy and Keogh (1998), this approach to the analysis of property markets lacks institutional or behavioural content and tends to ignore many of the defining characteristics of property such as high transaction costs, illiquidity and information problems. While technically excellent, neo-classical tools such as David Dowall's 'land market assessment' are therefore largely inappropriate for the analysis of property markets (Jones and Ward, 1994).

A central proposition of the institutional approach is that institutions matter for economic performance (Mathew, 1986, p. 903; cited in Williamson, 2000, p. 595; Williamson, 1990; cited in Pratten, 1997, p. 782). As indicated earlier, the guiding principle is that institutions such as property rights emerge to reduce frictions and uncertainties, collectively called transaction costs (D'Arcy and Keogh, 1996; Eggertsson, 1990). Property markets

are generally regarded as both institutionalised and inefficient (Hastings and Adams, 2005).

Our contention is that informal property markets must work better (i.e. more efficiently) if they are to be a tool for poverty alleviation. While it may be impossible to achieve a completely efficient property market, there is virtue in attempting to minimise inefficiency. The role of institutions, by their effects on transaction costs and economic outcomes, is clearly important.

Fundamentally, institutional analysis directs attention to the importance of the institutional environment within which property market activity takes place and the institutional structure of the property market itself. A broad range of property issues then becomes amenable to analysis. Of particular interest to us is what has been referred to as the property market process (D'Arcy and Keogh, 1999, 1996).

According to Armitage and Keogh, the property market process is specific to the market in question and

may be defined variously in terms of the institutions which collectively constitute the property market, the legal framework which constrains the operation of those institutions, and a set of conventions which govern the way that actors operate and perceive opportunities in the market (Armitage and Keogh, 1996, p. 1).

To this, we can add the effect of these institutions and conventions on economic outcomes.

The conceptual framework presented in this article brings together institutional arrangements, property rights and transaction costs as determinants of property market liquidity. Market liquidity is argued as being important in the realisation of the latent value of property, which in turn helps in the accumulation of capital for the poor. The basic empirical question then becomes determining the link between property rights, transaction costs, market turnover and capital accumulation. Establishing this link will help to resolve the important question of whether more formalised markets are harmful or beneficial to the urban poor.

Over 10 years ago, Doebele raised a number of important research questions with respect to what he termed the second-hand housing market.

Why do so few re-sales appear to be taking place in informal settlements (if indeed such is the case)? When do they occur, to whom are the plots or properties sold and how is the price fixed? How do sellers use the proceeds of their capital accumulation, and what economic consequences result? For example are the proceeds from such sales generally used to purchase better housing, to capitalise micro-enterprises, or to fulfil one-time social obligations such as weddings or funerals? Does the exclusion of land and housing from formal markets actually cause them to appreciate in value more rapidly than they would be if they were formally marketed? Is the absence of a second hand market constraining an efficient urban property in general? How does sluggishness in such a market affect the succession or (filtering) phenomenon in which marginal housing stocks receive and pass up successive categories of urban migrants? (Doebele, 1994, p. 50).

It is clear that these questions are still relevant today and that the answers lie at the heart of the relationship between property markets and poverty alleviation. Additionally, the following questions need addressing: What institutional arrangements facilitate or constrain the function of informal property markets? What incentives or constraints do actors face? What is the case for reform? What is the (potential) contribution of property to poverty alleviation?

The conceptual framework presented in this article brings analytical rigour to the study of informal property markets as they relate to poverty alleviation. It raises the possibility of engaging in research that is predictive, prescriptive and comparable across different contexts. This will hopefully help to reduce the incidence of idiosyncratic case studies that have hitherto characterised much research in this area (Doebele, 1994).

References

- ALSTON, L. J., EGGERTSSON, T. and NORTH, D. (Eds) (1996) *Empirical Studies in Institutional Change*. Cambridge: Cambridge University Press.
- ALSTON, L. J., LIBECAP, G. D. and MUELLER, B. (1999) *Titles, Conflict and Land Use: The Development of Property Rights on the Brazilian Amazon Frontier*. Ann Arbor, MI: Michigan University Press.
- ANKARLOO, D. (2002) New institutional economics and economic history, *Capital and Class*, 78(Autumn), pp. 9–37.
- ANTWI, A. and ADAMS, J. (2003) Economic rationality and informal urban land transactions in Accra, Ghana, *Journal of Property Research*, 20(1), pp. 67–90.
- ARMITAGE, L. and KEOGH, G. (1996) *The Bangkok property market: an application of the mature market paradigm to an emergent market in the ASEAN region*. Discussion Paper No. 96-03, Aberdeen Papers in Land Economy, University of Aberdeen.
- BALCHIN, P., KIEVE, J. L. and BULL, G. (1988) *Urban Land Economics and Public Policy*. London: Macmillan.
- BARZEL, Y. (1989) *Economic Analysis of Property Rights*. Cambridge: Cambridge University Press.
- BATES, R. H. (1989) *Beyond the Miracle of the Market: The Political Economy of Agrarian Transformation in Kenya*. Cambridge: Cambridge University Press.
- BERNER, E. (2000) Poverty alleviation and the eviction of the poorest: towards urban land reform in the Philippines, *International Journal of Urban and Regional Research*, 23(4), pp. 554–566.
- BESLEY, T. (1995) Property rights and investment incentives: theory and evidence from Ghana, *Journal of Political Economy*, 103(5), pp. 903–937.
- CLAPP, J. M., DOLDE, W. and TIRTIROGLU, W. (1995) Imperfect information and investor inferences from housing price dynamics, *Real Estate Economics*, 23(3), pp. 239–269.
- COASE, R. (1998) *The new institutional economics* (accessed from unknown website, circa May 2004).
- D'ARCY, E. and KEOGH, G. (1996) *Property market analysis: an institutional approach*. Paper presented at the University of Connecticut/AREUEA International Conference, Orlando, Florida, May.
- D'ARCY, E. and KEOGH, G. (1998) Territorial competition and property market process: an exploratory analysis, *Urban Studies*, 35, pp. 1215–1230.
- D'ARCY, E. and KEOGH, G. (1999) The property market and urban competitiveness: a review, *Urban Studies*, 36(5/6), pp. 917–928.
- DEININGER, K. and BINSWANGER, H. (1999) The evolution of the World Bank's land policy: principles, experience and future challenges, *The World Bank Research Observer*, 14(2), pp. 247–276.
- DEININGER, K. and CHAMORRO, J. (2004) Investment and equity effects of land regularisation: the case of Nicaragua, *Agricultural Economics*, 30, pp. 101–116.
- DEMSETZ, H. (1988) *Ownership, Control and the Firm: The Organisation of Economic Activity*. Oxford: Basil Blackwell.
- DIPASQUALE, D. and WHEATON, W. C. (1996) *Urban Economics and Real Estate Markets*. Englewood Cliffs, NJ: Prentice-Hall.
- DOEBELE, W. A. (1994) Urban land and macro-economic development, in: G. JONES and P. M. WARD (Eds) *Methodology for Land and Housing Market Analysis*, pp. 44–54. Cambridge, MA: Lincoln Institute of Land Policy.
- DURAND-LASSERVE, A. (2003) Land tenure, property system reforms and emerging urban land markets in sub-Saharan Africa, in: G. A. JONES (Ed.) *Urban Land Markets in Transition*. CD ROM. Cambridge, MA: Lincoln Institute of Land Policy.
- DURAND-LASSERVE, A. and ROYSTON, L. (2002) *Holding their Ground: Secure Land Tenure for the Urban Poor in Developing Countries*. London: Earthscan.
- EGGERTSSON, T. (1990) *Economic Behaviour and Institutions*. Cambridge: Cambridge University Press.
- EGGERTSSON, T. (1996) A note on the economics of institutions, in: L. J. ALSTON, T. EGGERTSSON and D. NORTH (Eds) *Empirical Studies in Institutional Change*, pp. 6–24. Cambridge: Cambridge University Press.
- ENSMINGER, J. (1996) *Making a Market: The Institutional Transformation of an African Society*. Cambridge: Cambridge University Press.
- EVANS, A. W. (1995) The property market: ninety per cent efficient?, *Urban Studies*, 32(1), pp. 5–29.
- FEDER, G. and FEENY, D. (1991) Land tenure and property rights: theory and implications for development policy, *World Bank Economic Review*, 3, pp. 135–153.
- FEDER, G. and ONCHAN, T. (1987) Land ownership security and farm investment in Thailand, *American Journal of Agricultural Economics*, 69, pp. 311–320.
- FEKADE, W. (2000) Deficits of formal urban land management and informal responses under rapid urban growth: an international perspective, *Habitat International*, 24, pp. 127–150.

- FIELD, E. (2003) *Property rights and household time allocation in urban squatter communities: evidence from Peru*. Paper presented at the *Second Urban Research Symposium*, World Bank, Washington, DC, December.
- FIRMIN-SELLERS, K. (1996) *The Transformation of Property Rights in the Gold Coast: An Empirical Analysis of Rational Choice Theory*. Cambridge: Cambridge University Press.
- FURUBOTN, E. G. and RICHTER, R. (1998) *Institutions and Economic Theory: The Contribution of the New Institutional Economics*. Ann Arbor, MI: University of Michigan Press.
- GILBERT, A. G. (2002) On the mystery of capital and the myths of Hernando de Soto: what difference does legal title make?, *International Development Planning Review*, 24(1), pp. 1–19.
- GOUGH, K. V. and YANKSON, P. W. K. (2000) Land markets in African cities: the case of peri-urban Accra, Ghana, *Urban Studies*, 37, pp. 2485–2500.
- HARISS, J., HUNTER, J. and LEWIS, C. M. (Eds) (1995) *The New Institutional Economics and Third World Development*. London: Routledge.
- HARVEY, J. (1996) *Urban Land Economics*. London: Macmillan.
- HASTINGS, E. M. and ADAMS, D. (2005) Facilitating urban renewal: changing institutional arrangements and land assembly in Hong Kong, *Property Management*, 23(2), pp. 110–121.
- HELTBERG, R. (n.d.) *New institutional economics: a survey of property rights and natural resource management* (<http://www.econ.ku.dk/derg/papers/nie3fn.pdf>; accessed 15 July 2004).
- HOME, R. and LIM, H. (2004) *Demystifying the Mystery of Capital: Land Tenure and Poverty in Africa and the Caribbean*. London: Glasshouse Press.
- JAFFE, A. J. (1996) On the role of transaction costs and property rights in housing markets, *Housing Studies*, 11(3), pp. 425–434.
- JONES, G. A. (Ed.) (2003) *Urban Land Markets in Transition*. CD ROM. Cambridge, MA: Lincoln Institute of Land Policy.
- JONES, G. and WARD, P. M. (Eds) (1994) *Methodology for Land and Housing Market Analysis*. Cambridge, MA: Lincoln Institute of Land Policy.
- KEOGH, G. and D'ARCY, E. D. (1999) Property market efficiency: an institutional economics perspective, *Urban Studies*, 36, pp. 2401–2414.
- KHERALLAH, M. and KIRSTEN, J. (2001) *The new institutional economics: applications for agricultural policy research in developing countries*. MSSD Discussion Paper No. 41, International Food Policy Research Institute, Washington, DC.
- KIM, A. (2004) A market without the 'right' property rights, *Economics of Transition*, 12(2), pp. 275–305.
- KIRONDE, J. M. L. (2000) Understanding land markets in African urban areas: the case of Dar es Salaam, Tanzania, *Habitat International*, 24, pp. 151–165.
- KIRONDE, J. M. L. (2003) The new Land Act and its possible impacts on urban land markets in Tanzania, in: G. A. JONES (Ed.) *Urban Land Markets in Transition*. CD ROM. Cambridge, MA: Lincoln Institute of Land Policy.
- KLEIN, P. G. (1999) *New institutional economics*. Department of Economics, University of Georgia (<http://allserv.rug.ac.be/~gdegeest/0530book.pdf>; accessed 17 May 2005).
- LANDA, J. T. (1994) *Trust, Ethnicity and Identity*. Ann Arbor, MI: University of Michigan Press.
- LANGLOIS, R. H. (Ed.) (1986) *Economics as a Process: Essays in the New Institutional Economics*. Cambridge: Cambridge University Press.
- LANJOUW, O. J. and LEVY, P. I. (2002) Untitled: a study of informal and formal property rights in urban Ecuador, *The Economic Journal*, 112, pp. 986–1019.
- LEITMANN, J. and BAHAROGLU, D. (1999) Reaching Turkey's spontaneous settlements: the institutional dimensions of infrastructure provision, *International Planning Studies*, 4(2), pp. 195–212.
- LIU, C. H., GRISSOM, T. V. and HARTZELL, D. J. (1990) The impact of market imperfections on real estate returns and optimal investor portfolios, *AREUEA Journal*, 18(4), pp. 453–478.
- MENARD, C. (2001) Methodological issues in the new institutional economics, *Journal of Economic Methodology*, 8(1), pp. 85–92.
- MITLIN, D. (2003) Addressing urban poverty through strengthening assets, *Habitat International*, 27, pp. 393–406.
- MOSER, C. O. N. (1998) The asset vulnerability framework: reassessing urban poverty reduction strategies, *World Development*, 26(1), pp. 1–19.
- NEE, V. (1998) Norms and networks in economic and organisational performance, *The New Institutional Economics*, 88(2), pp. 85–89.
- NORTH, D. C. (1990) *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.
- NORTH, D. C. (1995) The new institutional economics and third world development, in: J. HARISS, J. HUNTER and C. M. LEWIS (Eds) *The New Institutional Economics and Third World Development*, pp. 17–26. London: Routledge.
- NORTH, D. C. and WEINGAST, B. R. (1996) Constitutions and commitment: the evolution of institutions governing public choice in seventeenth-century England, in: L. J. ALSTON, T. EGGERTSSON and D. NORTH (Eds) *Empirical Studies in Institutional Change*, pp. 134–165. Cambridge: Cambridge University Press.

- OMIRIN, M. M. and ANTWI, A. Y. (2004) *Informality, illegality and market efficiency: a case for land market deregulation in Accra and Lagos*. Our Common Estate Research Paper Series, RICS, London.
- PAMUK, A. (2000) Informal institutional arrangements in credit, land markets and infrastructure delivery in Trinidad, *International Journal of Urban and Regional Research*, 24(2), pp. 379–396.
- PAYNE, G. (1997) *Urban land tenure and property rights in developing countries: a review*. Intermediate Technology Publications/Overseas Development Administration, London.
- PAYNE, G. (Ed.) (2002) *Land, Rights and Innovation: Improving Tenure Security for the Urban Poor*. London: ITDG Publishing.
- PRATTEN, S. (1997) The nature of transaction cost economics, *Journal of Economic Issues*, 31(3), pp. 781–803.
- RAKODI, C. (1999) A capital assets framework for analysing household livelihood strategies: implications for policy, *Development Policy Review*, 17, pp. 315–342.
- RAKODI, C. (2005) *Land for housing in African cities: are informal delivery systems institutionally robust and pro-poor?* Paper presented at the Third World Bank/IPEA Urban Research Symposium, Brasilia DF Brazil, April.
- RAKODI, C. and LEDUKA, C. (2003) *Informal land delivery processes and access to land for the poor in six African cities: towards a conceptual framework*. Working Paper No. 1, University of Birmingham.
- RAZZAZ, O. M. (1993) Examining property rights and investment in informal areas: the case of Jordan, *Land Economics*, 69(4), pp. 341–355.
- SMITH, R. E. (2003) Land tenure reform in Africa: a shift to the defensive, *Progress in Development Studies*, 3(3), pp. 210–222.
- SOTO, H. DE (2000) *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*. London: Black Swan.
- VANDENBERG, P. (2002) North's institutionalism and the prospects of combining theoretical approaches, *Cambridge Journal of Economic Perspectives*, 26(2), pp. 217–235.
- VARLEY, A. M. (2002) Private or public: debating the meaning of tenure legalisation, *International Journal of Urban and Regional Research*, 26(3), pp. 449–461.
- WARD, P. M. (2003) Land regularization in Latin America: lessons in the social construction of public policy, in: G. A. JONES (Ed.) *Urban Land Markets in Transition*. CD ROM. Cambridge, MA: Lincoln Institute of Land Policy.
- WARD, P. M., SOUZA, F. DE and GIUSTI, C. (2004) 'Colonia' land and housing market performance and the impact of lot title regularisation in Texas, *Urban Studies*, 41(13), pp. 2621–2646.
- WATKINS, C. (1998) Are new entrants to the residential property market informationally disadvantaged?, *Journal of Property Research*, 15, pp. 57–70.
- WILLIAMSON, O. E. (2000) The new institutional economics: taking stock, looking ahead, *Journal of Economic Literature*, 38, pp. 595–613.
- WILLIAMSON, O. E. (2003) Transaction cost economics and organisational theory, in: K. BASU (Ed.) *Readings in Political Economy*, pp. 35–67. Oxford: Blackwell Publishers.
- WORLD BANK (n.d.) *Land and Real Estate Assessment*. Washington, DC: The World Bank.