How to Approach a Market? A Theoretical Concept for Defining and Describing Land Markets

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How to Approach a Market ?

A Theoretical Concept for Defining and Describing Land Markets

by

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Abstract

Land markets have received a considerable amount of attention in economic literature. Since the treatment of the topic covers various approaches, areas, and questions, it seems desirable to attempt an overview of the results. This paper devises a way in which to present a complete picture of the land market by drawing together the various contributions. The first step is to establish a method by which a market in its entirety can be defined. It is suggested that the application of Oliver Williamson's "Four levels of social analysis" is an appropriate approach to be used in this endeavour. In the second step, the contributions to land market research are reviewed, according to Williamson's scheme, within four broad categories: (1) embeddedness, (2) institutional environment, (3) governance and (4) resource allocation. The topics covered include cropshare tenancy, land titling and registration, communal land ownership, farmland policies, credit access and land reform. The paper closes with some proposals for further research and a discussion of the value of the approach used.

Keywords

New Institutional Economics, Land Markets, Sharecropping, Land Reform, Land Titling

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One of the most interesting topics and biggest challenges for the European agri-food system is the restructuring of agricultural production in the Central and Eastern European Countries. Markets for agricultural land play a crucial role in this development. A vital ingredient of successful transition is that land markets are able to allocate land in an efficient way and that they support changes towards sustainable and socially acceptable property rights structures in land. To approach the question of how land markets should be designed to fulfil these functions and to suggest adequate policy solutions, one important condition has to be fulfilled: we need to have a sound understanding of what land markets are. This said, the first step probably is to know what *markets in general* are and how they should be approached in the attempt to analyse them.

The proof that agricultural economists consider land markets an important area of research is given by the multitude of publications on the topic. However, while the contributions cover a variety of approaches, topics and areas, very little effort seems to have been made so far on drawing together the different strands of research in order to create one whole, fairly complete, image of the land market. This paper intends to fill this gap by putting together the various pieces of information to one puzzle. Apart from creating a complete picture, this approach can help us to identify missing pieces, i.e. important areas in land market research that have received little or no attention so far. To avoid getting tangled up by dealing with too many questions at once, the preceding step in this paper is to find an approach to the market that allows us to identify an underlying structure within which to review the contributions of the different research works – to stay in the picture: to devise a pattern that makes finding the broad area in which the puzzle piece has to be located within the complete image easier.

The paper is structured as follows. The first part starts with some general thoughts on what markets are and what methods we have at hand for trying to understand them. It continues with a discussion of why land markets are considered such a particularly important field of research by many agricultural economists. The second part presents and explains the underlying scheme used for defining the market and structuring the contributions to land market research. The third part consists of the description of the land market through the presentation of land market literature according to the devised structure. In the fourth and last part of the paper, based on the information gained in the overview, some proposals for further research on land markets are made. Furthermore, the value and appropriateness of the approach used are discussed.

Grasping the Market

It is obvious that "markets are at the center of economic activity, and many of the most interesting questions and issues in economics concern how markets work" (Pindyck/Rubinfeld 1998: 10). The centrality of the market concept in economics makes the study of markets an exceptionally intriguing task and therefore it is striking how little has been written, especially in neoclassical economics, in an attempt to characterise and grasp what exactly a market is – the "most interesting questions and issues" seem to have been largely ignored. Barber (1977 quoted in Swedberg 1994: 257) points out: "I had expected to find the history of economic thought full of discussions on the idea of the market. As I went through some of the literature I was […] surprised to find practically no discussion at all […]". The same observation is made by North (1977) who finds it "a peculiar fact that the literature on economics […] contains so little discussion of the central institution that underlies neo-classical economics – the market".

Neoclassical economics contains the abstract notion of the perfect market in which competition and information are perfect and exchange therefore is costless. In this setting, markets are price-making mechanisms and determine the allocation of resources but do not really have any characteristics of their own. Pindyck/Rubinfeld (1998: 9) give a definition of a market in the following terms: "a market is the collection of buyers and sellers that, through their actual or potential interactions, determine the price of a product or set of products". This definition allows markets to be specified with respect to the participants and, thus, to consider the influence of the market structure, i.e. the numbers of buyers and sellers interacting, but it neither allows the market to have any characteristics that are determined from "the inside" nor does it leave room for the thought that the type of transactions carried out on the market influences its characteristics in any way. This is why White (1990 quoted in Swedberg 1994: 268) believes that "there does not exist a neoclassical theory of the market – [only] a pure theory of exchange".

While the concept of the market is always "implied rather then explicitly discussed" (Swedberg 1994: 257) in neoclassical theory, the body of work known as New Institutional Economics (NIE) allows it to be more of a "social institution in its own right" (ibid.: 264). NIE diverges from the perfect market assumption by introducing transaction costs – i.e. the costs of information, negotiation and the enforcement of rights – which leads to the understanding that using the price mechanism does not come for free (Richter 1990: 576). With the revelation in mind that exchange on markets does not work automatically and frictionlessly, it appears likely that economic actors choose for their transaction the governing structure which minimises transaction costs, and that markets are only one such structure among others. Additionally, the importance of institutions for markets becomes apparent: "allowing for information asymmetries makes the price system insufficient for efficiency and creates incentives for a variety of institutions" (Hoff/Braverman/Stiglitz 1993: 7). Institutions shape the expectations and the behaviour of all actors, and by this they influence the transaction costs associated with transactions on markets and within other governance structures. Thus, markets cannot be understood without regarding where and why costs accrue in their use and without looking at the underlying institutional framework – these features give markets characteristics of their own, and make them into something more than just price-making mechanisms.

In addition to filling markets with characteristics, NIE also stresses the importance of understanding markets. It is pointed out that, on markets that are not perfect, it is possible to identify kinds of market failures that neoclassical economics ignored and since "new kinds of market failures imply new sorts of policy solutions" (ibid.: 19), it can be said that with more realistic assumptions of market conditions "the justifications for market interventions grow in number, but also in complexity and side effects" (ibid.). Complex interventions into markets should certainly be based on some understanding of what exactly "the market" is. In the research works regarded in this paper, approaches from both neoclassical theory and New Institutional Economics are applied in an effort to understand the market as an institution of exchange. It is a particular market that is chosen here which, of course, makes the results not universally applicable – especially since the market concerned here is a factor and not a commodity market - but the approach may be of use as an example of an attempt to define a market.

This thought leads on to the question of why it is this particular market – the market for agricultural land – that has been chosen as the subject of analysis here. Land may not be considered such a crucial production factor in countries where secondary and tertiary industries, that are not extremely land-dependent, produce most of the GDP and employ the vast majority of the people. In most third world and many transition countries, however, the importance of agriculture is still very high and, thus, the question of who has access to and

control over land is of vital importance. Deininger/Feder (1998: 1) point out that "in agrarian societies land is [...] the main means for generating a livelihood" and "the way in which land rights are assigned therefore determines households' ability to produce their subsistence and generate marketable surplus". Where certain people or groups of people are systematically prevented from or restricted in their access to land, serious differences in economic status between those who do and those who do not have the possibility of acquiring land are likely to result. This situation is aggravated by the fact that land performs more economic functions than just that of a production factor. Additionally, it is a means "to accumulate wealth and transfer it between generations" (ibid.) - especially when other ways of accumulating savings are insecure or not present -, an insurance for old age or times of hardship and a collateral to satisfy the security requirements of financial markets. With these important functions, "land becomes the pivot of power because people depend on it for their vital needs: the greater the dependence, the more strategic becomes control of land and the more power it confers. Monopoly control over land may lead to monopoly control over people" (Christodoulou 1990: 1). The importance of land, therefore, exceeds its economic value and stretches out into fields of power – even more so where land and questions of peoples' identity are entangled as with many, not only traditional tribal, societies.

If land rights have such an enormous importance, it is worth looking more closely at land markets as a place where property rights to land are transferred. Bardhan/Udry (1999: 60, emphasis in original) stress that, "compared with the massive influence of the distribution of land on economic and social activities, the extent of actual transactions in the land market in a given year is relatively low. The market *flow* is a trickle compared to the weighty *stock*, and even the market is often more active in land-lease than in the buying and selling of land". The reason for this must lie somewhere in the particular characteristics of the land market. Questions of land allocation are particularly important in developing countries where access to land is often not organised equitably, resulting in extreme wealth differences, but also in transition countries that were, and in many cases still are, concerned with rearranging land rights after communist times. However, developed countries also have reasons to pay attention to land questions to ensure fair access to this factor of production and to deal with questions of sustainable land use that are of increasing importance lately. Thus, the economic and social meaning of land, particularly its direct importance for the survival of many people, its meaning as a source of power and its importance in questions of environmental sustainability, make land and the way in which land is transferred between users a particularly significant area for research.

Defining the Market

It has become clear that, due to the complexity of the market phenomenon, grasping a market is not an easy task. In this paper, I try to approach the problem by finding a definition for markets in general that highlights their underlying structures. These structures can then be applied to the concrete market regarded here as a scheme for reviewing the numerous contributions to land market research.

The structural framework used for the definition of the land market in this work is based on Oliver Williamson's "Four Levels of Social Analysis" (Williamson 1998; 2000) presented in Figure 1. In his scheme, Williamson distinguishes between four levels, each of which serves a different purpose in the working of the economy. This is of advantage to our particular task of presenting land market research because it provides a structure for the analysis in the way that each level can be clearly identified and regarded separately. Yet, the system is fully interconnected and the way in which the levels influence each other can be shown (Williamson 1998: 26). The higher levels impose constraints and limits on the levels immediately below, expressed by the solid arrows, while from the levels below to those above

feedback takes place which is indicated by the dashed arrows. These processes have to be regarded to understand the system as a whole and the changes in the four levels that take place over time.

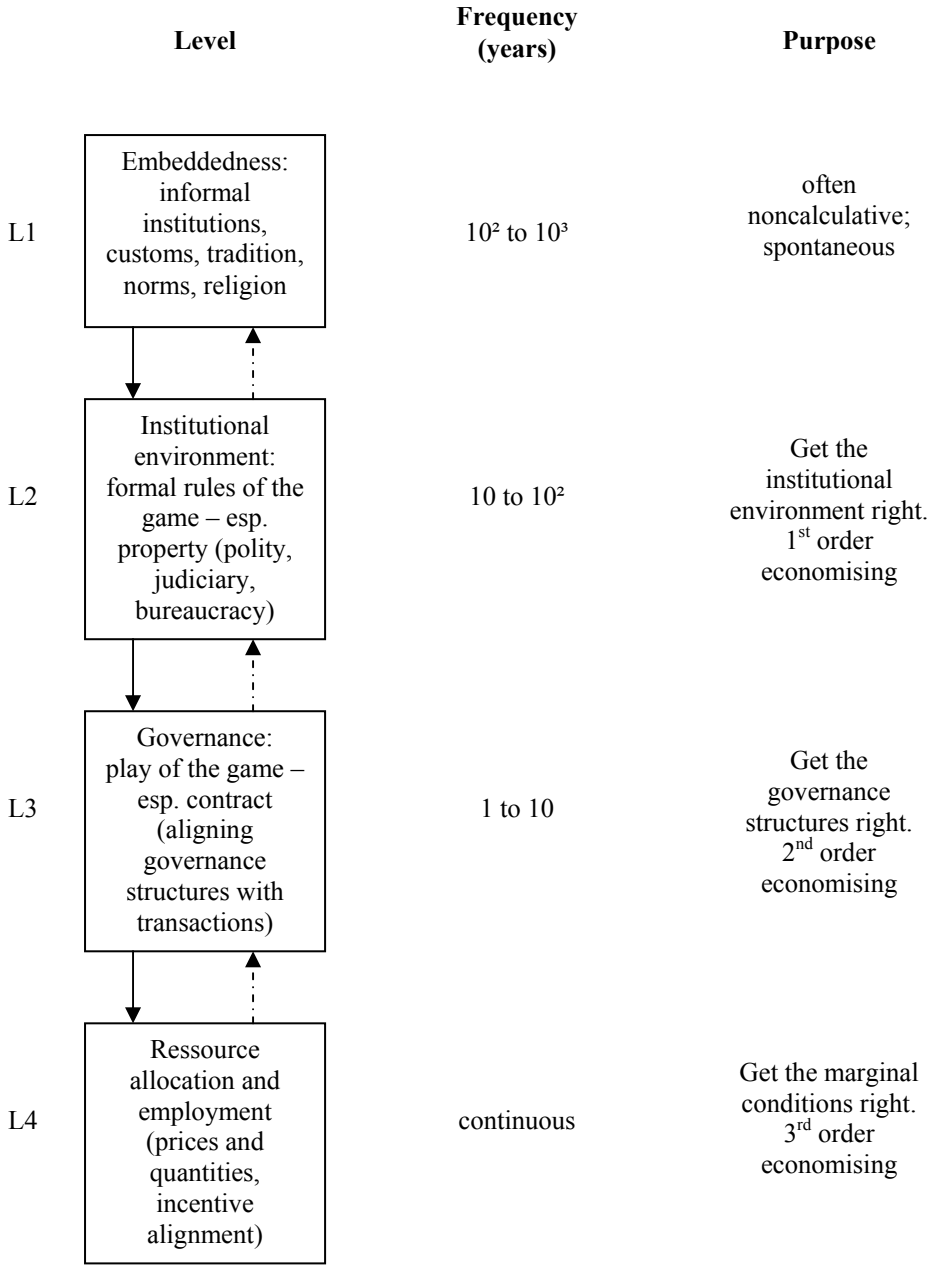

Figure 1: Four levels of social analysis
Source: Williamson (1998: 26)

Level 1 is the level of social embeddedness. It is where the underlying values of societies are located: customs, traditions, norms and religion. "Level 1 is taken as given by most institutional economists" (Williamson 2000: 596) and analysis of this level has been more of the field of study of social scientists than economists which is why social theory is stated as being the main means to explain what is happening at this level. The informal institutions governing at level 1 are believed to be mainly of spontaneous origin – "deliberative choice of a calculative kind is minimally implicated" (Williamson 1998: 27) – and changes of them take place very slowly, not faster than in centuries or millennia. Level 1 sets the frame for the activities that are acceptable in the society at all, which is why although informal institutions are usually not of the written kind and enforceable by law, they "have a lasting grip on the way a society conducts itself" (ibid.: 27) and a "pervasive influence upon the long-run character of economies" (North 1991: 111).

Within the constraints imposed by the embeddedness level, the formal rules of the game are lain down. Like the informal institutions of level 1, level 2 institutions can have arisen of "evolutionary processes, but design opportunities are also posed" (Williamson 2000: 598). This opens up the possibility to shape the rules of the game in the right way, i.e. to get the institutional environment right by 1st order economising. The instruments employed on this level are "the executive, legislative, judicial, and bureaucratic functions of government as well as the distribution of power across different levels of government (federalism)" (ibid.: 598). It is on this level that property rights are created, determining who has what rights to the use of resources, and their enforcement has to be assured. Institutions of this level change faster than those of the embeddedness level but unless sudden massive changes like wars, occupations or breakdowns take place, modifications still take decades or even centuries (ibid.: 598). The theoretical background for the analysis of this level is given by the economics of property rights.

Williamson (ibid.: 599) points out one weakness of the property rights approach when he states that "the claim […] that the legal system will eliminate chaos upon defining and enforcing property rights assumes that the definition of enforcement of such rights is easy (costless)". Transaction cost economics (TCE) considers a legal system that functions costlessly and frictionlessly to be impossible which has the consequence that "much of the contract management and dispute settlement action is dealt with directly by the parties" (ibid.). This makes it necessary to regard level 3 at which the play of the game, the governance of contractual relations, takes place. The purpose of this level, i.e. getting the governance structure right, is based on the idea that for each specific transaction there exists an efficient, i.e. transaction cost minimising, governance structure. 2nd order economising, therefore, requires to: (1) determine in which attributes transactions differ, (2) identify distinctive governance structures and (3) find the efficient "match" between specific transactions and specific governance structures to align governance structures with transactions (ibid.). Changes at level 3 take place in much shorter time spans than those at level 1 and 2, often at intervals of contract renewal or with the speed at which attributes of transactions change (e.g. when equipment is renewed) (ibid.). It is the levels 2 and 3 that are the main concern of the school of economics known as New Institutional Economics which incorporates as two of its most important fields property rights theory (used to analyse level 2) and transaction cost economics (used to analyse level 3).

The last level of economic activity, level 4, is concerned with getting the marginal conditions right. 3rd order economising is done by means of neoclassical economics, which generally regards institutions and governance structures as given and as having no influence on efficiency. Continuous adjustments of prices and quantities take place to get the marginal conditions right. Additionally, the non-neoclassical problem of incentive alignment is dealt with on this level. To this end, agency theory, which has its roots in NIE and is concerned

with risks stemming from asymmetrical information in principal-agent relationships, is employed.

Describing the Market

In this section, I will present land market research within a structure based on the four level scheme explained above. This is done moving up from level 4 to level 1. The reason for this bottom-to-top approach lies in the fact that by this method we can start from the perfect market assumption and the ideal working of the land market according to neoclassical theory and then, step by step, allow deviations in the original assumptions. It seems more consistent to regard markets moving from the small determinants to the large embeddedness structure that the other way round. Due to the limited space in this paper, the discussion of the contributions of the different research works is kept as short as possible. For a more detailed overview refer to Hurrelmann (forthcoming).

Level 4: Resource allocation

Neoclassical theory provides a basis for understanding the reasons for land transfers by focusing on efficiency aspects. A fixed amount of agricultural land is allocated to different users, whereby the most efficient land user is able to pay the highest price due to the fact that he receives the highest marginal revenue from the land. The more productive user acquires land until his marginal revenue product is levelled with that of other producers. Thus, the land price alone serves to allocate land efficiently. Since very few sources for increasing returns to scale can be identified in agricultural production, due to the seasonal nature of production and the existence of rental markets for expertise and machinery, initial farm size is considered not to play a role for the efficiency of farming in neoclassical thought. Additionally, the question of whether land is rented or purchased is of no importance since the sale price always equals the capitalised rent (Henze 1987: 152-173; Henrichsmeyer/Witzke 1991: 360-366; Samuelson/Nordhaus 1998: 248-250).

It is of no doubt that neoclassical economics makes a very important contribution by identifying efficiency considerations as a crucial determinant of land transactions. However, in reality there seem to be more obstacles and other influences concerning such transfers than are contained in the theory. Bardhan/Udry (1999: 61) stress that "as for the function of the land market in reallocating land in favour of more efficient cultivators, an important theoretical puzzle is why the land market does not always function that way". The reason why neoclassical theory alone is inadequate for addressing the complex processes that characterise land markets in reality lies in the assumption it makes of a perfect market which includes, among other elements, perfect information. The perfect market assumption is not applied to the land market alone: connected markets are believed to function frictionlessly as well.

Supplementing the study of land markets with ideas from the field of agency theory, which allows for conditions that are much closer to reality, helps to achieve deeper insights into land market determinants. According to agency theory, actors on markets tend to have incomplete information due to the fact that the acquisition of information does not come for free – as in neoclassical theory – but is costly. Incomplete information of actors leads to information asymmetries between them which may result in moral hazard and adverse selection in principal agent relationships. The literature identifies agency problems on markets that are directly connected to the land market: the labour, credit and insurance markets.

On the labour market, the principal agent relationship exists between employer and employee. Due to the difficulty employers have in controlling their employees' work effort completely, agency costs accrue. In agriculture, this situation leads to an efficiency advantage of (small) family farms over (large) farms that are operated with hired labour because family labour is cheaper to supervise – mainly because of the fact that family members are residual

claimants to farm profits. Thus, one can expect efficiency advantages of small farms that should result in land transfer from large to small enterprises (Binswanger/Elgin 1998: 317-322; Schmitt 1991, Deininger/Feder 1998: 17).

However, there are countervailing forces that oppose land transfers in this direction. On credit markets, agency relations between lender (principal) and borrower (agent) are likely to result in credit rationing because interest rates are used as a screening mechanism to distinguish between high and low risk borrowers. Due to the fact that the transaction costs of providing credit to smallholders are extremely high, it is usually the small producers that are disadvantaged as a result of credit rationing and who do not get access to loans to purchase land. This is an important obstacle in realising efficiency enhancing land transfers, because it often prevents smallholders from increasing the size of their enterprise even though it would be desirable from an efficiency point of view. Additionally, credit market imperfections raise the land purchase price because the difficulties of accessing the market become capitalised in land prices. This makes it impossible to repay the loan from agricultural profits alone. Again, this is of disadvantage to smallholders who are unlikely to have accumulated savings from agricultural activities. Land rental markets can prove a way to perform land transfers while being undisturbed by credit restrictions. However, rented land tends to be cultivated less efficiently because it provides less security of tenure. In addition to this, it has the disadvantage of not serving some of the important functions of owned land, like being collateral for loans or an inflation hedge (Barham/Bouncer/Carter 1996; Deininger/Feder 1998: 18f.; Stiglitz/Weiss 1981; Hoff/Stiglitz 1993).

Insurance markets, which feature the insurer (principal) and insured (agent), suffer from essentially the same problems as credit markets. It tends to be extremely difficult for small producers to gain access to insurance due to high transaction costs. Small farmers can be forced to either face high risks or turn to insurance substitutes, such as low-profit-low-risk portfolios that decrease efficiency and, thus, lower the demand for land. A lack of insurance can have grave consequences in crisis periods, since it may force farmers to sell land to large landowners for low prices to ensure the livelihood of their family, thus provoking distress land transfers that actually are decreasing efficiency (Newbery 1993; Deininger/Feeder 1998: 21; Bardhan/Udry 1999: 94-109).

It becomes clear that, relying on neoclassical theory alone, it is not possible to cover all aspects that determine efficiency and to shed light on the fact that there can be obstacles to performing efficiency enhancing transfers. Combining neoclassical economics with principal agent theory helps to explain the observation made on land markets that, despite the fact that small farms tend to be more efficient than large ones, they are often unable to make use of these efficiency advantages in the purchase of land due to imperfections on other markets. Thus, land transfers from large to small producers take place only very reluctantly and where they happen, such transfers are much more likely to occur on rental than on sales markets, while land transfers from small to large landowners, that are actually efficiency decreasing, are quite common particularly in distress periods.

Level 3: Governance

The literature on land markets that is concerned with the choice of the governance form for land transactions focuses very strongly on rent transactions. One field that has received a large amount of attention is the choice between sharecropping, fixed wage and fixed rent contracts for land that cannot be cultivated by the owner alone. Sharecropping has long been believed to be an inefficient form of land cultivation, inferior to both fixed rent and fixed wage contracts, due to the fact that the tenant receives only a fraction of the marginal product of his labour and thus reduces his work effort if the landlord is unable to enforce work input (Marshallian view; see Hayami/Otsuka 1993: 34-39; Cheung 1969a: 42-51). The fact that sharecropping contracts exist and persist, despite this alleged inefficiency, has motivated a

number of economists to develop theories that explain why and under which circumstances crop sharing can, in fact, be an efficient arrangement.

One explanation that can be regarded as "as innovative application of the Coase-theorem" (Taslim 1992: 258) is based on the assumption that the landlord is actually able to monitor and enforce work effort perfectly (Cheung 1968). If the tenant is contractually bound and forced to provide efficient work input, sharecropping achieves the same efficiency level as the other two contractual forms, which is a reason why share contracts *can* exist, but not why they *must*.

Another theory introduces the assumption of uncertainty in agricultural production and different attitudes towards risk by the actors, while sticking to the idea that effort is perfectly enforceable (Cheung 1969a: 68; 1969b: 26f.). In this situation, contract choice depends on the attitude towards risk of tenant/worker and landlord. A positive reason for the existence of sharecropping is given when risk aversion is present on both the landlord's and the tenant's side. However, the two theories presented above can be criticised for the unlikely assumption that work effort is perfectly enforceable which contradicts the ideas of agency theory.

There is another positive reason for the existence of crop share tenancy when one is considering a trade-off between risk sharing and transaction costs. Cheung (1969a: 69-72; 1969b: 27-30) suggests in his model that the tenant/labourer's work effort and land management are costly to enforce, resulting in transaction costs that accrue due to labour shirking, land mismanagement and enforcement effort. Additionally, agricultural production is risky and actors are risk-averse, which causes costs stemming from the existence of risk. Sharecropping is considered to be inferior to fixed wage and fixed rent contracts with respect to transaction costs because of the fact that negotiation costs are higher due to the complicated nature of the agreement, while costs due to labour and land shirking are taken to be equal in all three contract forms. However, sharecropping reduces risk costs as opposed to other arrangements because it provides the possibility of sharing risk. Which of the three contract forms is the most efficient, therefore, depends on the sum of the relative transaction and risk costs associated with them.

Yet another modification of assumptions is made in the transaction cost-model that combines risk-neutrality of the actors with incomplete labour input and land management enforcement (Barzel 1997: 33-54; Datta/O'Hara/Nugent 1986). Here, the choice between contract forms is determined solely by transaction costs, which are caused by the respective losses due to labour and land shirking and enforcement effort under the different contracts. In this model, the transaction costs of sharecropping are not considered to be generally higher than those of the other contract forms. Depending on the course of the cost curves of labour and land shirking, an optimum output sharing rate can be determined.

In a further explanation for the coexistence of different contract forms, Eswaran/Kotwal (1985) consider the influence of the absence of markets for some non-land inputs. Their idea is that the inputs labour supervision and management ability can only be obtained by involving the factor owner in the production process, whereby the tenant is considered to have an advantage where labour supervision is concerned (because family labour is employed), while the landlord has an advantage in the provision of management (because of better access to information and education). Both sides shirk their factor input depending on the size of their share of the profits. Consequently, contract choice depends on the relative abilities of the two parties in the activities they are disadvantaged at, and sharecropping results where for both parties these abilities are low.

The last model presented to explain contract choice is based on the idea that landlords who do not have any knowledge of tenants/workers' abilities can offer different contracts to screen workers (Hallagan 1978). Depending on skill levels, workers choose between the three contract forms and in this way pass information of their entrepreneurial abilities to the

landlord. Another version of the screening model suggests that, by offering different land contracts to tenants, landlords pass on a signal about land quality (Murrell 1983).

A different aspect of land contracts is regarded by Allen/Lueck (1992) who focus on the duration period and content of land lease contracts. Their point is that low asset specificity, a well-developed body of common law and a close relationship between the contracting parties reduce transaction costs to very low levels in land rental contracts, and make very simple, little-specified and short-term contracts possible. Beckmann (2000: 165-170) comes to a similar conclusion in an examination of the influence of specific investment on the choice between different duration periods of rent contracts and sale contracts for land when he points out that the greater value and duration period of site and land specific investments the more likely the choice of long-term rent or even sale contracts.

The main focus of all cropshare theories lies on the instruments of incentive intensity and administrative control that different contract types provide, and in a broad sense they are all hinged on the concept of transaction costs and the attempt to minimise these by the choice of the best contract. The incentive to provide high input of labour or land management (transaction cost model, trade-off model, screening model) and management and supervision (unmarketed inputs model) is different depending on the contract chosen, and losses due to shirking and expenditures to control effort have to be considered.

Level 2: Institutional environment

The discussion of formal institutions influencing the land market is centred around three main topics. One is the historical evolution of private property rights in land as a response to increasing population density and technological development (Platteau 2000: 73-188). This topic also includes the identification of forces that can be an obstacle to the adoption of western-style land rights systems in developing countries, like the tenure security and insurance function that indigenous systems provide, and that are lost in the conversion to individual property or the opposition to individualisation of tenure from groups that feel their position weakened in the process (Atwood 1990; Firmin-Sellers/Sellers 1999; Platteau 2000: 97-107; Sjastaad/Bromley 1997). The problem of the evolution of land rights is, in fact, closely connected to level 1 of Williamson's scheme - the informal institutions – since it is based on the idea that, with progressive economic development, informal institutions that govern the land market no longer provide adequate incentives and have to be converted to formal ones. The discussion on the evolution of land property rights, thus, sheds some light on the influence and feedback processes between levels 1 and 2. It becomes clear that a formal property rights structure cannot be independent of the original informal one, since it has to take into account the fact that groups hurt in the conversion process might be induced to revolt. In turn, once formal rights are established, they will send feedback signals to change the nature of informal rights in the way that their meaning is reduced and the power positions of groups may be altered.

The second prominent issue regarded in the literature are land reforms. Land reforms have been carried out in many regions of the world with varying programmes and successes, but what they all have in common is the idea on which they are based: that the land market alone cannot produce a socially optimal, efficient and equitable allocation of land because of the multiple imperfections which are prevalent. This is considered to make government intervention necessary. Land reforms have often failed or have only had limited success because they did not consider the political realities in the countries concerned, that usually allowed powerful large landowners to influence the reform process in their favour and reduce the amount of land actually reallocated. This sometimes left the intended beneficiaries of reform even worse off than they were before (for experiences with land reforms in different regions of the world see, e.g., Deininger 1999: 652f.; Lerman 1999; de Janvry/Sadoulet 1989; Dasgupta 1992; Hayami/Quisumbing/Adriano 1990). More recently, models have been

developed that take into consideration the differential endowments of political power between the actors in land reform programmes, and the direction in which these may lead the reform process (Grossman 1994; Binswanger/Deininger 1997: 1988-1995; Horowitz 1993). The lesson learnt from past experiences and theoretical considerations is mainly that the success of land reforms depends strongly on whether they manage to reduce market imperfections in the land market and related markets in addition to changing the property rights structure in land. Only where power relations change and market distortions that favour large landowners are corrected, can a redistribution of land lead to lasting changes and substantially improve the position of the intended beneficiaries.

The third issue discussed as a problem of formal land market institutions are policy interventions into private property rights in land that are less far-reaching than land reforms (OECD 1998; Rolfes 1999). Virtually no country in the world allows the land market to operate completely free of any administrative control because "there are externalities not being taken into account in the market place" (OECD 1998: 44) that result in a non-optimal allocation of land rights. It is considered the state's duty to correct this misallocation. Interventions take place in various areas and can concern all of the sub-rights making up fully private property rights: the transfer of land property rights (e.g. transfer taxes, registration fees), the use of land (e.g. land taxes), the use of the fruits from the land (e.g. tax on capital gains from farmland) and the change of form and substance of the land (e.g. planning and zoning).

Level 1: Embeddedness

As regards the influence of informal institutions on the market for land, there is a striking lack of economic literature on this topic. Anthropological or sociological publications, that have largely been ignored here, might prove helpful in shedding more light on the subject. However, one point that can be extracted from writings of economists is that culture influences the peoples' relationship with the land, often in such a way as to increase land values above what is reasonable from a purely economic standpoint. This is mainly due to the fact that land often conveys an identity feeling that is directly connected to a certain plot or area, the importance of which is extremely hard to determine in monetary terms (Platteau 2000: 76f.). The same is true for the function of land ownership as a source of power (Bardhan/Udry 1999: 61).

A second role that culture and tradition seem to play is particularly important for contractual relations and is concerned with trust. It is stressed that positive or negative experiences with co-operation as well as the contracting history influence the degree of trust people in a society have when making agreements. Obviously, levels of trust are an important influence on transaction costs in economic relationships and, as such, also in land contracts (Platteau 2000: 94-96). Young/Burke (2000a; 2000b) stress another effect of culture on contracting when they point out that contractual terms in land contracts are influenced not only by economic considerations but also by local custom und traditional considerations of what is a "fair" contract.

To sum up, the contributions to the literature on land markets paint the following picture. Land sales markets are rather inactive (few transactions) and thin (few participants) because of the fact that the economic agents who presumably have efficiency advantages and are potential buyers, i.e. small farmers, are restricted in their demand mainly by capital constraints. Some policy features, e.g. transfer taxes, raise the costs of land transactions and, thus, worsen the influence of capital constraints. The fact that land ownership bears more advantages than just the possibility to use land as a factor of production (i.e. the insurance function, tax function, inflation hedge function of land and its meaning in terms of identity and power) further increases land prices and makes purchase by the poor even more difficult.

A way out of this situation are rental markets that allow poor farmers to increase their land holdings in the face of capital constraints. However, land rental markets suffer from the following imperfections. First, cultivation on rented land tends to be less efficient than on owned land due to labour and land shirking. Second, in many counties the institutional environment discourages land rentals, e.g. by placing landlords who rent out in danger of losing their land altogether in a land reform, or by prohibiting rent or certain forms of rent.

Land reforms provide a possibility to establish an efficient and equitable land allocation where land markets are lacking or failing. They will, however, only manage to create lasting changes towards more equity and efficiency if, in their course, the initial market distortions are eliminated. In addition to this, land reform design has to take into account the fact that reforms will likely be opposed by large landowners with considerable political power based on wealth and political connections. It has been a particularly grave mistake in past land reforms, that the programmes have often ignored the political realities in land reform countries.

Concluding Remarks

What has been done in this paper? First, markets were defined as structures consisting of four levels that are each accessible by a different theory or set of theories. Then, the land market was described by drawing together the results gained from studies by numerous researchers to present a picture of what is happening on each level and between the levels. Thus, an image of the land market as a whole was obtained.

I will now turn to answering two final questions. The first one deals with missing pieces of land market research. What areas can be identified where research promises some enlightening results but has not, or not sufficiently, been undertaken so far? The second question concerns the approach used here in the presentation of the research on land markets. Is the structure used, Williamson's four level scheme, able to do justice to the aims of this paper, namely to present results of land market research, identify open questions and establish a way of grasping a certain market in its entirety?

To the first question, one point that becomes clear when regarding land market research within the four level scheme is that the processes of influence and feedback between the different levels of the land market have received very little attention. The fact that the vast majority of contributions presented can be dealt with without reaching across levels makes their presentation within Williamson's scheme very – maybe surprisingly – easy. However, while the easy applicability can certainly be viewed as a strength of the approach, it, at the same time, points to a weakness in the treatment of the topic in the literature. Quite obviously, there are interesting and relevant questions concerning the connections between the levels, the most important being how the formal and informal institutional environment influences the costs of land transactions. A few indications as to how the institutional environment may affect contracting decisions have come up sporadically in some of the works considered here, but the topic does not seem to have received any systematic treatment and analysis. Benham/Benham (2000: 368) point out the importance of research that compares transaction costs: "Imagine having ready access to credible information on transaction costs across time and across various institutional settings. Such information would be highly useful in providing answers to fundamental questions". They believe that "systematic collaborative efforts across countries" (ibid.: 373) that attempt to measure and compare the transaction costs of exchange in different institutional settings could contribute much to the understanding of markets. The comparison of transaction costs "across groups, countries and time periods" would make it possible to "map out and compare the extent of the market across settings with different costs of exchange" (ibid.). In short, it can be suggested that research

that measures the transaction costs on land markets and compares them between different institutional settings could make a valuable contribution to understanding the impact of land market institutions of both the formal and informal kind.

Other questions that could give new insights are concentrated within certain levels. I will only point out three that seem of particular interest. First, it is quite obvious that there is a general lack of studies concerning the embeddedness level. Works that tackle the question of how culture affects the land market would certainly have to be carried out with the involvement of an interdisciplinary team of researchers that could combine expertise from quite different fields.

A more concrete question concerns level 3, governance. Models of contract choice in land contracts have concentrated in much detail and with many variations on the choice between different kinds of lease contracts while the more fundamental decision between lease and sale has hardly been included. It is surprising that the decision between rental and sale contracts has been treated with so little interest in the field of the study of contracts, since the sale and rental market are obviously not independent of each other as Hayami/Otsuka (1993: 176) point out: "existing studies do not pay sufficient attention to the operation of market for land. The role of the land market is highly relevant in the study of tenancy, because land may be sold to the tenant if tenant cultivation is less efficient than owner cultivation". They consider it an omission in research, that attempts to explain the decisions for different governance forms in land contracts "have so far been partial without considering the whole range of contract choice" (ibid.: 177). The conclusion from this criticism is that "we have to broaden our perspective on contract choice by incorporating the courses of differential access among rural people to technology, and factor and product markets" (ibid.). This could be done by formulating models of contract choice that consider a wider range of possible contract forms – including sale contracts - and a wider range of determinants that incorporates access to credit and insurance.

Another interesting research question concerns resource allocation on level 4. Here, it seems interesting to regard the influence of different market structures for land transactions – a topic that has not been found to have received any explicit attention so far in land market literature. It is very unlikely that land markets show the characteristic of atomistic competition, as assumed in the pure neoclassical model, since they – due to the immobility of the production factor land – are local markets. Consequently, the number of suppliers in an area is limited. The number of demanders can be regarded as restricted as well if one supposes them to be inflexible to some degree, too, and not be able to move wherever land is on offer. A small total number of actors on land markets can be expected to have some important consequences for the operation of this market. One could think of a bilateral oligopoly situation where few equally sized buyers are facing few equally sized sellers, which would create an interdependency of the actions of all actors on the market. Another possible market structure is that of a limited monopoly, i.e. where one (large) supplier of land is opposed to a limited number of buyers. A situation like this could arise, e.g., in an area where a large state or collective enterprise is liquidated and local families demand land for individual agricultural activities. It is also possible that a number of suppliers are faced with one (large) demander, a limited monopsony situation, e.g. in a crisis period where small farmers are forced into distress sales and only one local landlord is a potential buyer. It is likely that with every different market structure, the outcome of the market process also differs. An interesting area for research on the impact of various market structures on land markets could be the Central and Eastern European Countries where collective or state enterprises were privatised, and today large successor enterprises coexist with small family farms.

I come to the discussion of the appropriateness of the structure used in this paper for the definition of the market and the presentation of research on land markets. It has become clear

that Williamson's four level scheme helps to manage the large amount of literature that exists on land markets by embedding each individual work in a larger context. This makes it easier to be aware of the exact research question behind a certain approach, and to come to a judgement of the scope and the limits of the answers gained. To illustrate this thought with an example, one can turn to resource allocation on level 4. The way in which the neoclassical theory of the land market explains the allocation of land and the transfer of property rights to land is logical and formally correct but, as becomes clear when viewed in the context of the four level scheme, it is only valid within a certain set of assumptions because it ignores all other levels. As soon as incomplete specification of property rights and transaction costs, factors that are determined on level 2 and 3, are taken into consideration, the equilibrium solution is likely to change. The same situation exists on level 3, where all theories of contract choice regarded abstract from the institutional environment and assume freedom to contract and free choice of contract form. When bearing in mind the fact that the institutional framework of level 1 and 2 may well be different from what these assumptions suggest, it is possible to define the scope in which the answers of the contract theories are valid and also, to a certain degree, to judge how they could change under different conditions.

It can be considered an advantage of the structure employed in this paper that it allows to regard the works presented with their own assumptions and outcomes, which does them justice, but also with an awareness of their limits, which may stop false conclusions from being reached. A clear demarcation between different spheres of influence is retained, but not without allowing for interconnections. Additionally, Williamson's scheme makes it possible to capture the complexity of the topic by allowing for the consideration of land market determinants from various fields and it provides the chance to regard influences from the "very small" marginal conditions to the "very large" cultural superstructure. By organising the bulk of literature, the scheme also facilitates the identification of promising areas for further research. Therefore, a positive judgement with respect to the application of the four level structure in the context of this work seems justified. Employing the scheme can be regarded as an adequate means for giving a backbone to the task of defining and describing land markets.

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