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# Institutions and properties of the transaction: influences on land rental contract design in Poland Institutionen und Eigenschaften der Transaktion: Einflüsse auf die Gestaltung von Bodenpachtverträgen in Polen

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#### **Abstract**

The article analyses influences on the design of land rental contracts in Poland. Attention is paid to the effect of both the properties of the transaction as identified in Transaction Cost Economics (asset-specificity, uncertainty, frequency) and the features of the institutional environment (legal as well as customary rules) as studied by the Economics of Property Rights. The conclusion is that institutional influences have a very strong effect and should not be disregarded in the explanation of contract choice.

#### Key words

institutions; transaction costs; contract choice; Poland; land market

# Zusammenfassung

In diesem Artikel werden Einflussfaktoren auf die Gestaltung von Bodenpachtverträgen in Polen untersucht. Aufmerksamkeit wird sowohl den Eigenschaften der Transaktion gewidmet, die von der Transaktionskostenökonomie identifiziert werden (Spezifität, Unsicherheit, Häufigkeit), als auch dem institutionellen Umfeld (formalen und informellen Regeln), das die Ökonomie der Verfügungsrechte betrachtet. Die Schlussfolgerung ist, dass institutionelle Einflüsse sehr bedeutsame Auswirkungen haben und bei der Erklärung der Vertragswahl nicht vernachlässigt werden sollten.

# Schlüsselwörter

Institutionen; Transaktionskosten; Vertragswahl; Polen; Bodenmarkt

## 1. Introduction

KLEIN, CRAWFORD and ALCHIAN (1978: 326) claim that "[t]he pertinent economic question we are faced with is 'What kinds of contracts are used for what kinds of activities and why?'". This article seeks to contribute to answering this question by exploring determinants of contract choice in the particular empirical setting of the agricultural land market in Poland.

The motivation for the study lies both at a theoretical and at a policy level. As far as theory is concerned, the discussion of the determinants of contract choice has in the past been characterised by two distinct strands, one looking at the institutional environment and the other at the attributes of the transaction. Here, attention is paid to both of these areas and to the way in which they interact and jointly influence contracting decisions. With respect to policy, this approach allows the connection between particular laws and norms and the actual land contract design chosen by farmers and landowners for individual transactions to be established. In this way, the consequences of specific institutions can be determined clearly and tested against the effects that were

originally desired by policy makers. Thus, this article constitutes an addition to existing literature on the Polish land market, such as PROSTERMAN and ROLFES (2000), WORLD BANK (2001) and CHRISTENSEN and LACROIX (1997) on legal setting and land policy, MILCZAREK (2002) on land privatisation, FAŁKOWSKI (2004) on the determinants of land rentals, and the annual reports by IERiGZ (various years) on land market activity.

The article is structured as follows. Section 2 explains the theoretical background of the study. Section 3 presents the empirical setting and methodological approach. In section 4, the theoretical considerations are connected with empirical findings as to the observed relevant properties of land transactions and the most influential elements of land and land-related legislation in Poland. The article ends with conclusions in section 5.

# 2. Theoretical approach

Transaction Cost Economics (TCE) focuses on the impact of the properties of the transaction in determining the choice of institutional arrangements (governance structures and contract designs), while the analysis of institutions and property rights regimes regards the incentives and disincentives for particular contracts exerted by the institutional framework of a society. In this section, I first present these two approaches and then turn to addressing the properties of the transaction and relevant institutions in the concrete case of land rental contracts.

# 2.1 Properties of the transaction and transaction costs in TCE

According to TCE, governance structures form a continuum that reaches from the pure spot market (which corresponds to the neoclassical "ideal" market) to full vertical integration in a hierarchy. In between these lie various hybrid forms, such as specification contracts, alliances and cooperation. Depending on the characteristics of the transaction, transaction costs reach a different level under different contract forms and economic actors are motivated to select the type of contract that minimises their transaction costs in an exchange (WILLIAMSON, 1985, 1996).

For WILLIAMSON (1996: 105), there are three attributes whereby transactions differ: the *frequency* with which the transaction takes place, the *uncertainty* the transaction is subject to and the type and degree of *asset-specificity* involved in supplying the good or service in question. It is advantageous to conduct transactions that are characterised

by high frequency, high uncertainty and/or high assetspecificity under governance of hierarchical regimes because these allow for the application of administrative controls. Transactions of low frequency, low uncertainty and low asset-specificity, by contrast, are best guided by the high incentive intensity provided by markets (WILLIAMSON, 1996: 103-105).

Governance structures are associated with distinct contract law regimes. Classical contract law is characterised by formal features, it is inflexible because it does not allow for ex-post adjustments, the identity of the parties does not matter, remedies are narrowly described and the envisioned mechanism of contract enforcement is court litigation, which results in the liquidation of the contract. Hybrid governance structures correspond to neoclassical contract law, which provides for longer-term contractual relations, more flexibility and third party arbitration in case of conflicts, which allows the continuity of the contract. Under hierarchical governance, relational contracting takes place, where the complexity, duration and flexibility is further increased and dispute settlement takes place directly between the involved parties (MACNEIL, 1978; WILLIAMSON, 1985: 68-72).

Thus, with increasing frequency, insecurity and asset-specificity in a transaction, the advantages of flexible, co-operative, long-term contracting solutions become more pronounced as they provide against various contracting hazards, while "safe" transactions of low frequency, low uncertainty and low asset-specificity are best governed by classical contracts that bring a minimum of bureaucracy costs. It is important to note that pure Transaction Cost Economics reasoning, mostly implicitly, assumes a "neutral" institutional environment that does not discriminate against or favour certain contract law regimes.

## 2.2 Institutions and property rights

Transactions take place within the institutional framework of a society. Formal institutions are the political, judicial and economic rules contained in laws and constitutions that are enforced by the state, while informal constraints consist of typically unwritten behavioural norms, codes of conduct and conventions in society that are based on socially transmitted information (NORTH, 1990: 36-53).

A subgroup of institutions, namely property rights, regulate the relations among actors with respect to the existence and use of scarce resources. According to the Economics of Property Rights, the value of a good is entirely dependent on the rights associated with it; hence two physically identical goods have different values if they are connected with different rights. As a result, the definition of the term "transaction" differs from that of TCE in that it is not the transfer of the physical good that matters but that of the rights associated with it: "When a transaction is concluded in the marketplace, two bundles of property rights are exchanged" (DEMSETZ, 1967: 347). A second contrast to Transaction Cost Economics lies in the fact that in property rights literature - instead of assuming a vaguely "neutral" institutional setting of private property rights and freedom to contract - "[t]he institutional environment in which economic activity takes place tends to be specified with precision. In particular, the existing property relations and the exchange, policing, and enforcement costs of contractual activities are spelled out in detail for each case studied" (FURUBOTN and PEJOVICH, 1972: 1157). In the words of NORTH (1990: 52): "Contracts will reflect the incentive-disincentive structure embedded in the property rights structure (and the enforcement characteristics); thus the opportunity set of the players and the forms of organization they devise in specific contracts will be derived from the property rights structure".

In this article, I try to bring the two strands of reasoning presented above together by arguing that the actual design of contracts is the result of the impact of both the properties and the institutional environment of transactions and of their interplay.

#### 2.3 Influences on land rental contract choice

How can the general theoretical reasoning of TCE and institutions/property rights approaches as presented above be applied to explaining contract choice in agricultural land transactions and, more particular, the design of land rental contracts?

First of all, it is necessary to connect the features of land rental contracts with the definition of classical, neoclassical and relational contracts that TCE operates with. Quite obviously, rental contracts are all market contracts and, thus, cover only a small fraction of the full spectrum of organisational forms from market to hierarchy. However, within this spectrum it is possible to differentiate between contracts that lean more towards the classical contract side and contracts that lean more towards the relational contract side. As can be extracted from Williamson's arguments above, the trade-off is between more short-term adjustment possibilities and more long-term security. Thus, contracts can be classified according to which of these aspects they cater for primarily. On the basis of this idea, land rental arrangements ought to be evaluated looking at the three features of duration, formalisation and complexity. In this way, they can be arranged along a continuum stretching from the extreme of short-term, oral and few specifications<sup>2</sup> (representing the classical contract tendency) to the extreme of long-term, written and detailed specifications (representing the relational contract tendency).

Second, it has to be established what forms the properties of transactions actually take in land rental transactions. A source of *uncertainty* for the landlord is the possibility of shirking by the tenant, e.g. with respect to regular and timely rent payments and the proper management of the rented land (CHEUNG, 1969a, 1969b; HAYAMI and OTSUKA, 1993). Tenants may be insecure about the long-term possibility of using rented land and the development of rental payments demanded by the landlord. *Frequency* in land transactions depends on how often landowners and tenants make or renew contracts. The aspect has two dimensions: for a contracting party it matters on the one hand how often (re-)contracting with one other transaction partner takes

This is in accordance with the argument of ALLEN and LUECK (1992), who differentiate between rental contracts in the USA according to duration and complexity.

What is meant by specifications is whether the contract contains details on land management practices required of the tenant, the conditions for rental payments and penalties in case the contract is violated, etc.

place, on the other hand how often contracts with various partners are made in general. *Asset-specificity* can be caused by particular features of the resource land, such as permanent investments like fixed drainage or irrigation equipment connected to it. It can also be the result of the characteristics of the rented plot and the tenant's farm, since how dependent a tenant is on the security of a reliable long-term option for using land depends on the share of rented land in the total land he farms and the size of the rented plot.

Figure 1 shows the suggested way of associating attributes of land transactions with elements of land rental contract design. High asset-specificity and high uncertainty are expected to lead to longer-term, more formalised and more detailed contracts because these provide better security against contracting risks. The aspect frequency is displayed in parentheses, since its effect is not straight forward. A likely reaction of a frequent contractor with many contracting partners would be to extend the duration of each individual agreement (and possibly standardise the terms) in order to reduce his contracting costs. In turn, of course, it has to be considered that long-term contracting reduces the frequency of renewing agreements with the same partner.

Figure 1. Association between attributes of land transactions and elements of land rental contract design Attributes of land transactions Uncertainty Asset-specificity (Frequency) Low High Elements of land rental contract design Short-term Long-term Written Oral Many specifications Few specifications Source: own presentation

As for the *institutional framework*, it is very common that special provisions in legislation address agricultural land transactions. Some examples of land policies frequently applied are restrictions on land transfers (e.g. to prevent excessive land fragmentation or excessive concentration of land use or ownership), rights of first refusal for tenants in case land is sold, demands concerning land registration, special tax arrangements applied to agricultural land and special rules for the inheritance of land (cf. OECD, 1998). Regulations affecting land transfers may stem not only directly from land legislation but also from related areas. Thus, social security provisions may connect land transactions with "social" transactions and environmental legislation may restrict private property rights to land. In addition to legal rules, customs about what is regarded as a "fair" contract (YOUNG and BURKE, 2001) or kinship relations (SADOULET, DE JANVRY and FUKUI, 1997) can play an important role in the design of land rental contracts.

# 3. Empirical setting and methodology

The empirical data used for determining factors of influence on land rental contracts stems from a survey and three case studies carried out in two Polish regions characterised by differences in their agricultural structures. In addition to survey and case study data, documents and legal texts were analysed in order to gain information on land and landrelated legislation in Poland.

In the first research region, the area of Poznan in western Poland, a substantial share of land (about 30%) was used by state farms before 1989. The Agricultural Property Agency of the State Treasury (AWRSP) sells or rents out this land to private farms or, in some cases, delegates this task to the gminas<sup>3</sup>. The farming structure of Poznan is characterised by the coexistence of family farms that are above average in size by Polish standards and large scale commercial farms that are mostly developed on land formerly used by state farms. The second region, the area of Sieradz in central Poland, was not greatly influenced by state farms, which only occupied a tiny portion of land (about 2%). Consequently, the privatisation process did not provoke many changes in the farming structure here. The area remains dominated by rather small family farms.

This study could draw on *survey* data on these two regions that was collected as part of the larger research project KATO<sup>4</sup> in 1999. The survey contains observations on 111 family farms and 37 large farms in Poznan as well as 110

family farms in Sieradz. The time period covered are the years from 1989 to 1998.

Three village case studies were conducted in the same regions in 2003. Two of the villages (referred to here as P1 and P2) are located in Poznan and one (referred to as S) is located in Sieradz. Villages P1 and P2 are situated in the same gmina, in which a substantial share of the land was used by state farms and AWRSP is active in renting out and (to a lesser

degree) selling. P1 is composed mainly of family farms with no state farm having existed on the village territory. However, former state farm land lies in the immediate surroundings and a cooperative operates in the village, which has been selling off land since 1989. P2 is a neighbouring village of P1, where a state farm existed alongside family farms. Today, these family farms coexist with a large Spanish agricultural enterprise that bought and rented in land following the privatisation of the former local state farm. In village S, there are only family farms. Interviews were carried out in the three villages with altogether 37 farmers and landowners based on a questionnaire composed of open questions guided by a manual. Attention was paid to the fact that detailed information on every single land transaction made by the respondents between 1989 and 2003 was collected, allowing a "transaction databank" containing the characteristics of the transaction and the contract in each exchange to be produced.

<sup>&</sup>lt;sup>3</sup> Gminas are the smallest administrative units in Poland.

<sup>&</sup>lt;sup>4</sup> KATO studied privatisation, liberalisation and restructuring in Poland, Bulgaria and the Czech Republic. Cf. ZILLMER (2002) for details on the Polish family farm survey.

# 4. Results and interpretation

As SHELANSKI and KLEIN'S (1995) overview of research in transaction cost economics illustrates, empirical studies that explicitly bring together institutional and transaction cost explanations of contract choice and test their joint explanatory power have so far been rare. In this section, I undertake such an approach. To this end, in the first step, the properties of land transactions in the empirical setting and the relevant attributes of formal and informal institutions are presented. On this basis, expectations as to the design of land rental transactions that should be found in different contracting situations are formed. In the next step, the design of actual contracts observed in survey and case studies is defined according to the categories written/oral, contracting period and specifications and is interpreted in light of the expectations that were formed beforehand.

# 4.1 Properties of land rental transactions

In the case studies and the survey, five distinct settings with respect to transaction partners in land rentals were observed: (1) transactions between family farmers, (2) transactions between AWRSP and family farmers, (3) transactions between the gmina (acting for AWRSP) and family farmers, (4) transactions between other public bodies (church, state forestry office, landscape park) and family farmers and (5) transactions between AWRSP and large farms.

As far as the aspect of *uncertainty* is concerned, transactions between family farmers

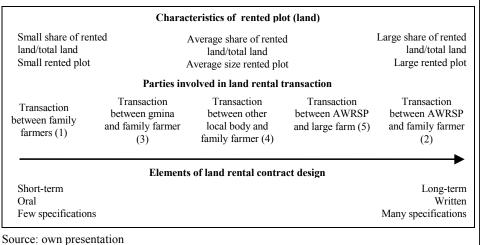
(setting (1)) can be expected to show the lowest degree, because farmers who exchange land usually belong to the same community and are well informed about each others' past involvement in the land market and general reputation. Where AWRSP rents out to family farmers (situation (2)), there is higher uncertainty because no personal relationship exists between the parties and information about reputations will be less direct and reliable. Rentals from the gmina to family farmers (situation (3)) can be expected to have uncertainty levels between those of situation (1) and (2), since the gmina is closer to individual farmers than AWRSP but still more distant from the community than farmers are from each other. The same is true for situation (4). In transactions between AWRSP and large farms (situation (5)), uncertainty is probably lower than in situation (2) because the chances that there is personal acquaintance between large farmers and members of the agency are greater.

With respect to *frequency*, it can be expected that individual producers, be it family farms or large farms, are not involved in transactions with high frequency. The privatisation agency AWRSP is a frequent contractor with many partners due to being responsible for the allocation of vast amounts of land. The gmina probably lies between AWRSP and individual farmers.

The degree of asset-specificity in land transactions was studied with respect to the share of rented land of the farm, the size of the rented plots and land-connected investments. The size of plots rented in reaches from 1 ha to 17 ha in the case studies (this information is not present in the survey) and the share of rented land in total land reaches from 100% to 1% for the farms in the survey. The differences between the regions and types of farms are remarkable for this feature since large farms have a rental share of 79% on average, family farms in Poznan of 36% and family farms in Sieradz of 26%<sup>5</sup>. Durable investments in rented land have not been made by any of the tenants interviewed.

Figure 2 sums up the arguments given above by presenting a rough pattern of the alignment of the characteristics of land transactions with elements of land rental contract design. It, thus, expresses expectations as to contracts that should be found on the basis of TCE reasoning in different contracting situations.

Figure 2. Association between transacting parties, characteristics of rented plot (land) and elements of land rental contract design



# 4.2 Legislative and customary influences on rental contracts

Certain elements of the *formal institutional environment* in Poland are likely to have an influence on the design of land rental contracts.<sup>6</sup> In general, the legal environment of land transactions in Poland tends to support written and longer-term contracts both in transactions that concern state land and transactions that concern private land.

In rental contracts between private farmers, there is a right of first refusal for the tenant in case the land he rented in is sold, as long as there exists a written lease contract for a limited period of time longer than three years or an actual

These percentages are calculated for those 80 farms out of the 258 farms in the survey that have rented land (N=34 for large farms, N=30 for Poznan family farms and N=16 for Sieradz family farms).

The legal provisions referred to in this section are those that were in place during the period covered in the empirical investigation, 1989 to 2003. The new Act on the Agricultural System has only been in force since July 2003 and does not have any relevance for the contracts studied here.

lease having lasted at least 10 years (repealed article 695 § 2 of the Civil Code)<sup>7</sup>. For certain transactions between private individuals, long contracting periods and written contracts are necessary because of the agricultural social insurance fund KRUS. Farmers are only entitled to a disability or retirement pension from KRUS if they give up their agricultural land by either passing it on to a successor, or by selling it or renting it out under a written 10-year contract to an unrelated person (Act on the Social Insurance of Farmers).

A right of first refusal also exists in contracts with the privatisation agency AWRSP, in this case after a lease has lasted for at least three years (Act on the Management of the State Treasury's Agricultural Real Estate). Another legislative element supporting long-term leases from AWRSP are tax advantages for up to seven years for rentals with a term of at least 10 years (Act on the Agricultural Tax).

Predicting the impact of *informal institutions* is much more difficult. As mentioned before, as far as the aspect of trust is concerned, transactions between family farmers are likely to be characterised by a high level of trust due to good and long-term knowledge. Trust is possibly even more pronounced in transactions between relatives. It is hard to establish whether there are any contracting customs dictating what is considered a "fair" rental contract with respect to the characteristics of contracts considered here, but it may be safe to assume that traditional ways of contracting rather rely on oral and unofficial designs.

#### 4.3 Rental contracts in the empirical setting

Table 1 provides information on the numbers of oral and written rental contracts of each group of farms in different duration categories as found in the *survey data*. The most striking observation is the differences between the groups. In comparing large farms and family farms, it becomes clear that the former rely exclusively on written contracts, while in the latter group a substantial number of oral contracts exists. Furthermore, large farms clearly prefer longer contract duration (shown by the large number in the >6-year category), while family farms make more than half of their rentals for a <6-year period. Differences also appear between the contracting behaviour of family farms in Poznan and Sieradz, as oral and short-term contracts play a relatively much higher role in Sieradz than in Poznan.

In their general tendency, these observations are in keeping which the expectations that can be derived from Transaction Cost Economics reasoning. The more farms are involved in transactions of higher risk and higher frequency characteristics and the higher the asset-specificity, the more pronounced is longer-term and written contracting. Large farms rented almost exclusively from the privatisation agency and, thus, made the overwhelming majority of their contracts with AWRSP. For family farms, the most com-

Table 1. Characteristics of rental contracts of different farms in the survey\*

	Large Farms Poznan		Family Farms total		Family Farms Poznan		Family Farms Sieradz	
	Oral	Written	Oral	Written	Oral	Written	Oral	Written
1 year <sup>a</sup>	0	2	2	11	2	11	0	0
>1-6 years	0	15	14	26	6	15	8	11
>6-12 years	0	15	7	11	6	10	1	1
>12 years or open end	0	23	13	9	8	8	5	1
Sum	0	65	36	57	22	44	14	13
<1-6 years	17		53		34		19	
>6 years or open end	38		40		32		8	

<sup>\*</sup> The numbers used are the total numbers of rental contracts made by the 258 enterprises in the sample.

Source: own presentation on the basis of KATO survey data

mon rental was from other family farms or private persons but some also rented from the gmina, AWRSP or other bodies. In Sieradz, 14 family farms made contracts with other private persons, while two rented from AWRSP. In Poznan, similarly, rental from private persons was most frequent (18 farms carried out such transactions) and two farms contracted with the privatisation agency. In addition, there is the substantial number of nine farms who rented from the church, the forestry office and the landscape park in Poznan.<sup>8</sup> As mentioned above, the share of rented land is much higher for large farms than for family farms and within the groups of family farms the share of rented land is higher in Poznan than in Sieradz.

The information available from the survey suffers from the fact that data was collected only at farm-level and not at transaction-level. For this reason, it was impossible to associate the characteristics of each individual land transaction carried out by the respondents with the design of the respective contract in a discriminative way. The application of statistical tests to further quantify the relationships between variables was, thus, rendered impossible.

More precise information on the conditions of individual transactions was collected in the *case studies*. In table 2, a descriptive cross-tabulation method is used to present the characteristics of the 30 land rental contracts recorded in the case study villages. The table shows for each contract, first, the properties of the transaction represented by the constellation of actors involved in the transaction (transacting parties) and the particular characteristics of the rented plot or land (share of rented land, size of rented plot) and, second, its design features (written/oral, period, specifications). In addition to this, it is indicated where KRUS regulations played a role, where transacting parties are relatives and in which village the contract was made. This method of

The article was repealed by the Act on the Agricultural System. See footnote 6.

<sup>&</sup>lt;sup>a</sup> In the large farm questionnaire, the time spans given were actually 1 year, 1-5 years, >5-10 years, >10 years and open end. Since this represents only a minor distortion, the number of contracts in each category was simply transferred into the slightly different categories of the family farm questionnaire displayed here.

The fact that the number of contracting farms and number of contracts made are not equal is due to the fact that some farms made more than one rental contract. The number of contracting farms refers to the year 1998.

Table 2. Contracts and their characteristics in the three villages P1, P2 and S

C	X7:11	Provided to the thirty with the second of the transfer of the				
Contract between	Village	Rented plot (land) / total land <sup>a</sup>	Written or oral	Period	Specifications	
Family farmers	P1	1 / 16,5	Oral	Unlimited/ indefinite	Few	
		16 / 33	Written	1 year	Few	
		13 / 63 (27 / 63)	Written	10 years	Few	
		11 / 33	Written	10 years <sup>b</sup>	Few	
		14 / 63 (27 / 63)	Written	10 years <sup>b</sup>	Few	
		10 / 42	No information	No information	No information	
	P2	14 / 38	Written	10 years	Few	
		10 / 45 (27 / 45)	Written	10 years <sup>b</sup>	Few	
		4 / 50 (30 / 50)	Written	No information	Few	
		5 / 35 (10 / 35)	Written	No information	Few	
	S	7 / 30	Oral	Unlimited/ indefinite	Few	
		8 / 40 (18+ / 40)	Oral	Unlimited/ indefinite	Few	
		6 / 14.5	Oral	Unlimited/ indefinite	Few	
		6 / 15 <sup>c</sup>	Oral	Unlimited/ indefinite	Few	
		1.5 / 15 <sup>c</sup>	Oral	3 years	Few	
		8 / 30	Written	5 years	Few	
		10 / 40 (18+ / 40)	Written	5 years	Few	
Family farmer and	P1	3.5 / 13	Written	3 years	Some	
the gmina	P2	3 / 16	Written	4 years	Some	
		2 / 15	Written	5 years	Some	
	S	? / 40	Written	No information	Some	
Family farmer and state forestry office	P2	8 / 50 (30 / 50)	Written	10 years	No information	
Family farmer and AWRSP	P1	5 / 32	Written	10 years	Many	
	P2	11 / 38	Written	10 years	Many	
		12 / 50 (30 / 50)	Written	10 years	Many	
		6 / 50 (30 / 50)	Written	10 years	Many	
		5 / 32	Written	10 years	Many	
		5 / 35 (10 / 35)	Written	10 years	Many	
		11 / 27	Written	10 years	Many	
		17 / 45 (27 / 45)	Written	10 years	Many	

<sup>&</sup>lt;sup>a</sup> Gives the size of the plot subject to the transaction in relation to the size of the whole farm of the tenant. In case the plot is not the only one the tenant rents in, the total size of rented land in relation to the size of the whole farm is shown in brackets. Where the whole size of rented land is unknown, the lower limit is indicated (e.g. 18+)

Source: own presentation on the basis of case study data

presentation associates individual contracts directly with possible influencing factors, allowing the design to be traced back to determinants. Furthermore, by grouping the contracts according to transacting parties and villages, table 2 makes it possible to compare contracts and determinants between and within distinct sets.

For transactions between AWRSP and farmers, table 2 shows little variance in contract design. This is not surprising since, as a frequent contractor, AWRSP can save costs by not having to negotiate a unique arrangement for every transaction it is involved in. The contract design (written, long period, high specification)<sup>9</sup> is in correspondence with TCE reasoning on uncertainty and frequency as explained before. However, it is important to be aware of the fact that

it is also supported by certain provisions of the legal environment, such as the tax advantages for 10-year contracts with AWRSP and the right of first refusal.

The observation that contracts for rentals from the gmina to farmers differ from AWRSP transactions in having shorter contracting periods and fewer specifications goes together with their position in figure 2. Again, institutional features support these characteristics. Little general inference can be drawn from the one contract with the forestry office but the fact that its features are similar to contracts with the gmina is in line with expectations.

Within the set of transactions made between family farmers, there is a substantial degree of variation in contract design. Furthermore, there are differences in the frequency of certain kinds of contracts between villages that do not exist in any of the other constellations of transaction partners. A number of agreements are oral and short-term (or at least potentially short-term as they are made for an indefinite period) and little specified. However, the majority are

b The desire to obtain a pension from KRUS was given as the reason for selecting this type of contract

<sup>&</sup>lt;sup>c</sup> Transaction with relatives

Contracts with AWRSP contain detailed requirements for land management and precise information on penalties in case the demands are not fulfilled, which go so far as to the withdrawal of the land from the tenant.

written and many have long contracting periods, which TCE reasoning cannot account for. The design only makes sense when paying attention to the fact that for some transactions between family farmers legal regulations are of relevance that are a force in the direction of written and longer-term agreements. Predominant in this respect is the need to comply with standards in order to qualify for a KRUS pension, another influence is the advantage that a written contract of at least three years has in terms of the right of first refusal.

With respect to the category "rented plot (land) / total land", the small number of observations in the case studies does not allow clear patters to be established. The same is true for transactions between relatives. Differences in contract structures between villages, such as the fact that only in S are a large number of contracts between family farmers found to be oral, may be due the fact that in this more traditional village people still rely more on habitual ways of making arrangements (cf. also HURRELMANN, 2004).

# 5. Conclusions

The objective of this article was to shed light on the question of why certain land rental contracts are used in particular situations, paying special attention to the joint impact of the properties of the transaction on the one hand and the institutional environment on the other.

The results of the empirical analysis support the idea that the attributes of the transaction (uncertainty, frequency, asset-specificity) have an influence on the way in which land rental agreements are designed, defined here by the characteristics written/oral, contracting period and specifications. Especially the features high uncertainty and high frequency are found to encourage longer-term, written and highly specified contract designs. However, it also becomes clear that there are cases where the explanation based on properties of the transaction is not sufficient, because legal regulations affecting the land market exert a direct and opposing influence on contrating decisions. In particular in the case of contracts between family farmers, not only the short-term and oral agreements that the properties of the transaction approach would suggest are used, but also contracts that are written and longer-term. This can be traced back to the legal setting, which requires or encourages formalisation and longer duration in certain contracting situations. Where such formal demands apply to land rental transactions, their effects can often be seen to be so pervasive that they outweigh the impact of the transactions' attributes.

At the theoretical level, these outcomes underline the importance of establishing the link between Transaction Cost Economics and the Economics of Property Rights. In order to come to meaningful explanations of contract choice in "real world" conditions, it seems necessary to combine the insights generated in the two strands of theory to achieve full explanatory power. The observations made in this study caution especially against applying Transaction Cost Economics in ignorance of the rules set by the institutional environment, as this may mean disregarding a very relevant set of determinants.

For policy makers in Poland, the results obtained here provide the opportunity to consider whether the observed con-

sequences of particular legal regulations are really desired. In some cases, the influence of certain laws on contracting structures may rather be a side effect of policies aimed at achieving results in other areas, than an intended outcome. An example of this are the KRUS regulations for agricultural pensions, which are most likely primarily supposed to encourage older farmers to leave the sector, not to prolong contracting periods. In particular with respect to the regulations that promote long contract durations in family farm settings, it could be asked whether this may not lead to an undesirable lack of flexibility of the farming sector in adjusting quickly to changes in external conditions.

Finally, it needs to be mentioned that the analysis clearly indicates the limitations of the two data sets that were used. For the survey data, these limitations consist in the fact that information concerns only the farm level and not the transaction level, making it impossible to relate particular contracts to particular properties of the transaction one-to-one. The case study data does allow each individual transaction to be followed but contains a limited number of observations so that for some characteristics of the transaction it is not possible to establish any clear patterns of influence. The results obtained here suggest that a promising approach to gaining further information on contract design would be to create a large "transaction databank" containing detailed information on each land rental transaction carried out by farmers in a survey, which would also make the application of statistical tests possible. The general design of this databank could be oriented on the example provided in this study.

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# Buchbesprechung

FRIEDRICH KUHLMANN (2003):

Betriebslehre der Agrar- und Ernährungswirtschaft. 2. Auflage. DLG-Verlag, Frankfurt; 603 S.; ISBN 3 769 00613 5; € 29,90

Die erste Auflage von Friedrich Kuhlmanns "Einführung in die Betriebswirtschaftslehre für den Agrar- und Ernährungsbereich" war bereits das "etwas andere" Lehrbuch. Von den übrigen Standardwerken unterscheidet es sich in zweierlei Hinsicht: Zum einen durch die Abdeckung des agrar- und ernährungswirtschaftlichen Bereichs, was impliziert, dass auch Themengebiete behandelt werden, die in der Masse der landwirtschaftlichen Betriebe eine geringere Rolle spielen. Dazu gehören z.B. personalwirtschaftliche Fragestellungen, das Beschaffungs- und Lagermanagement oder das betriebliche Marketing. Außerdem ist das Buch klar entscheidungs- und handlungsorientiert und lässt darüber hinaus ein deutliches didaktisches Konzept erkennen, wie man es typischerweise bei den "Textbooks" des angelsächsischen Sprachraums vorfindet.

Die 2003 erschienene zweite Auflage mit dem Titel "Betriebslehre der Agrar- und Ernährungswirtschaft" ist diesem Grundkonzept treu geblieben, was dem Buch weiterhin eine Sonderstellung verleiht. Inhaltlich wurde es gründlich überarbeitet, wobei das Stoffgebiet sowohl erweitert als auch vertieft wurde, was schon im Umfang des Buches deutlich wird. Es umfasst jetzt 600 Seiten, was - bei Berücksichtigung der reduzierten Schriftgröße - gegenüber der ersten Auflage eine Verdopplung mehr als Als eigenes Kapitel neu aufgenommen wurde die Entscheidungsfindung bei unvollkommener Information. Dafür ist das vormals abschließende Kapitel über Steuerungsinstrumente weggefallen. Sein Inhalt wurde auf die Abschnitte zu den einzelnen Handlungsfeldern verteilt, was vom didaktischen Standpunkt her zu begrüßen ist. Zusammen mit der