

## The governance structure of agricultural land contracts – discrete structural alternatives

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### Abstract

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In this article, Discrete Structural Analysis (DSA) of the contracts gravitating around the agricultural lands in Bulgaria are made. In practice, this means looking at both market and non-market frameworks of exchange or protection of agricultural land ownership rights. To do this, a methodology from economics, law, and organization is used. Temporal historical methods are combined to review legal norms and economic institutions, their interactions, and what impact they define in different contractual frameworks. Contracts presented as Governance Structure (GS) – a set of fragments related to institutional actors, their behavior as a set of transactions; institutional effects – Transaction Costs (TrCs). What happens in the contracts related to agricultural lands should serve to improve the conditions in which the actor functions, which is always related to establishing the “mistakes” of the system, illuminating a trajectory that would improve their adaptation.

*Keywords:* Agricultural Land; Contracts; Governance structure; Discrete Structural Analysis

### Introduction

The Institutional theory is dualistic. Some authors differentiate between legal and contract institutions and organizations (North, 1990; Klein, 1999). Others consider that institutions and organizations are a homogenous amalgam with a common structure and order (Williamson 1985; 1996).

The theoretical dualism starts from the neo-classical idea of organization as a human group with united aims, combined with the benefits of performing market exchange. Even study disciplines consider the organization as a company or a contract for the transfer of property, usually of the sales type. At the agricultural land market, the concept is additionally supplemented with the use or rent of an asset, for example by a rent contract. The maximization is performed when the land rent is added to the equal price of the sales. The non-market gratuitous contracts seemingly do not exist. The same applies to other means of acquisition of property as inheritance or legal prescription. They do not consider the

variety of legal forms, the process character of the exchange, i.e., what happens within the organization, the secondary transfers of rights and actions of the participants.

The adaptation of economics is a central problem of the economic system (Williamson 2005:1). The exploratory answers offer integrated methods and forms for improvement of the environment. The New Institutional Economics (NIE) gives answers by combining methods from the law, economics, and organization (Williamson, 2000).

The exploratory approach should answer other problems of the organization and its surpassing rules: (1) at the base of principal-agent, related to those members of the organization, who serve as intermediaries between the owners, sellers, and buyers of the asset; (2) behavioral deformations, deriving from the asymmetry of information and opportunism of the members of this organization; (3) distribution of the effects in both the organization of exchange and the other part of the economic system. That is the analytical frame where the agricultural land and the organizations of exchange related

to it, provisionally called “contracts” by the theory, should offer integrated answers. The contracts with agricultural land should offer models for overcoming global challenges, such as that of virtualising security.

Although, authors like Bekes & Folke (1998) claim that natural resources are considerably volatile and for this reason, the analysis of the means could not be fragmented. We consider that separate sub-structures at a micro level should be viewed separately and afterward assembled in the manageable means of the contract organization.

The study uses DSA. With its help, we combine the explanations from the law, as positive legal analysis, and historical analysis with the retrospective tendencies of the economy. On the other hand, the hierarchy, subordination, and coordination between the participants and the legal acts suggest a new type of marginal analysis of the system – Governance structure (GS). By DSA we should catch the individual “mistakes”, to create an explanation of the causal connection and the subjective and objective parameters to be transformed into synthetic variables.

The current article aims at offering a DSA of GS limited by the frame of the contracts with agricultural land, i.e., to clarify:

- reconciliation of the economic and legal essence of GS.
- subordination, coordination, and integration in contracts.
- specifics of the assets determined by information, transactions, and time.
- effects and their distribution.

Lastly, there would be answers offered that should improve the GS, determined by the contracts with agricultural land in the Bulgarian example.

### **Governance structure and agricultural land contracts.**

North (1990: 3) considers institutions as “rules of the game” – constitution, laws, social norms, and limitations. Institutions limit uncertainty. The author offers a term for the economic organization (North 1990: 5).

Williamson (1985: 15) defends the opinion that the contract is probably the most important institution because it is the means for the implementation of the economic exchange. The contract combines the different levels of the social architecture and helps for the sub-ordination and coordination between the participants in the social processes (Williamson, 1998: 26). Klein (1999: 458) makes a difference between institutional environment and “institutional contracts”. When the contracts are a kind of institutions, how should we distinguish them from the economic organizations of exchange?

Alchian and Demsetz, (1972: 15), Demsetz (1967: 347), Alchian (1969: 197) find that the proprietary rights are a public relationship created about the exchange of assets and the power of the individuals which they exert in the means of the distribution of resources. Monissen and Pejovich (1977: 283–284) claim that by property rights individuals optimize their function of usefulness. The organizations functioning in the economic exchange go by a myriad of simultaneously happening contracts, and the interests may be non-market, which may lead to the conclusion that there is a lack of automatization between the distribution of resources and the assets created.

The exchange of proprietary rights could be performed without a market. The analytical frame of contract institutions, the management of property, and the mechanisms that defend individual interests from the distribution of resources, as well as the idea of measuring the effects of that distribution is offered to us by Williamson (1996: 223). The contractual and bilateral character of the organization (Williamson, 1996: 142) combines analysis of the individual and group interests, and the vertical and horizontal essence of the exchange (ibid. 379). Governance structure (GS) is a phenomenon combining different forms that sometimes flow into each other “markets, hybrids, hierarchies” (ibid. 14), which could exist even when the limits of the organization are not always clear (ibid. 105).

GS uses forms known from the contract law, but works also with others, to make clear the volatility and multipolarity of the organization (Williamson 1991: 280; 1996: 104). By the legal form of the contract, we identify the business targets, but in the proprietary exchange what is important is also what is happening in the process (Masten, 1999). Williamson (1979: 236–238) opinionated that the contract is “classical, neo-classical and relational” and it should be used for the economization of the system. Even opportunism in the organization should be presented in an integrated behavioral format (Williamson, 1985: 32).

Contract organization is predefined by the existence of hybrid forms, where the market and non-market character is integrated, for example, the transfer of rights within the franchise (Rubin, 1978; Ménard, 2013a; Ménard et al., 2014: 262); association and intercompany cooperation (Klein et al, 1978; Ouchi, 1980; Bradach and Eccles, 1989; Cheung, 1983); contracts where the technological and the physical interface of the environment are mixed, i.e. the frame of the digital and the physical actions, as in Balakrishnan and Wernerfelt (1986); Harrigan (1986); Robertson and Gatignon (1998); the mutual sharing and management of resources and common property (Ménard, 2013b; Eccles, 1981; Dwyer and Oh. 1988; Sauvée, 1997: 2002), i.e. the comprehensive discreet knowledge of the economic organization and the exchange.

Studying the economic and political rents from the land (Cheung, 1969b; Stiglitz, 1974; Yovchevska, et al., 2022); specifics of the assets in agriculture (Allen and Lueck, 1992b); management and measurement of non-production efforts and payments related to them known as transaction costs (Allen and Lueck, 1992a; 1993; Cheung, 1969a); access to property rights, right to acquire ownership, concentration and fragmentation of the assets (Hartvigsen, 2014; Kay et. al, 2015; Peuch and Franco, 2015; Korthals Altes, 2022, Dudás, 2022) – scientists define agricultural land as part of the food chain and as means to tie GS of contracts with victualling security.

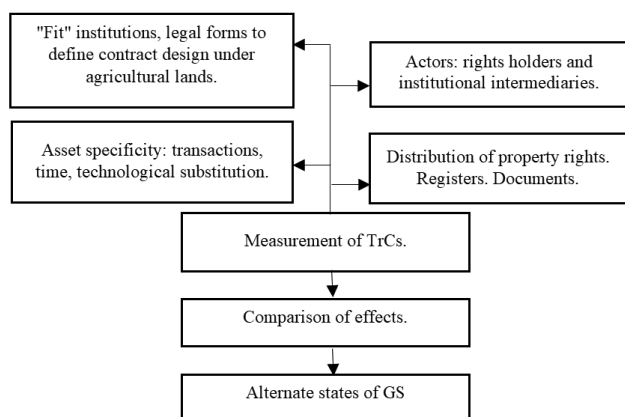
## Materials and Methods

### Analytical frame of the study

The analytical frame is an abstract follow-up of the order and causative relations of the separate parts of GS.

In Figure 1 there are seven panels shown where the order of the study could be observed.

First – order of theoretical conceptions, deriving from NIE, *theory of Land mobility, theory of contract*; legal theory and the relation between legal and contractual character and legal process; organizational doctrines – relation between physical and technological essence of the environment. Second – follow up on the behavior of the system participants who bear rights related to the asset (agricultural lands) and those who support the system – intermediaries – arbitraries. Third – analysis of *asset specificity* – actions – physical and technological actions needed to exchange rights. Fourth – measurement of the cost’s effects. Fifth – analysis of the distribution. Sixth – comparison between the alternatives. Seventh – elaboration of the system is suggested.



**Fig. 1. Framework for analyzing GS in agricultural land contracts**

Source: own research

## Methods

The combination of legal and economic analyses allows the evaluation of institutions, kinds of contract forms, hierarchy, and coordination of the behavior of the participants (Williamson, 1979). Historical and legal analysis complemented by methods known to the American legal realism should represent the relationships between the legal acts, between legal and contractual institutions and their changes and their integration into GS; positive legal analysis with a retrospective analysis of the economic tendencies should explain the “errors”. For the variety of research approaches of GS in agriculture, see Bachev (2010a; 2010b 2018a; 2018b); Bachev and Terziev (2018).

### Discreet structural analysis (DSA)

DSA should clarify the logic of the processes in the organizations (Williamson, 1996:231). In the contract organizations by decomposing the matrix of the public relations we clarify the interaction between (1) laws, legal forms, and legal reasonings; (2) legal forms and parameters of the contract measured as asset specificity: participants and transactions (3) asset specificity and size of the effects – TrCs; (4) distribution of the effects in the contract (TrCs) and impact over problems with high significance (food chains and victualling security).

Table 1 represents the mix of formal institutions; contractual frames built on market and non-market principles; contractual frames deriving from legal dispute and their relationship with the institutional effects. It encompasses the “transfusion” of the interrelated organizational order set up at the same time as the institutions, legal forms of the contracts, and their integrated effect.

On that basis, the following basic variables are defined:

NADM – institutional intermediaries in the contract/count

NTP – “physical” transactions/count

TOTNTR – total of transactions in the contract/count

TOTHOU – time for execution of the contract/hour

TOTTRC – total transaction costs/euro

The measurement of TrCs, the effect of micro-acts. They are measured by mixing their objective (market) part and subjective (non-market) part. For that approach, see Benham and Benham (2000); Benham and Benham (2001); and Benham et al. (2004).

Table 2 shows how TrCs are measured with agricultural lands. The concept is adapted for the measurement of market and non-market contracts by combining objective and subjective parts of the costs (Benham et. al, 2004). The e measurement follows the logic of Table 2, where  $TotalTrC = \sum K10 = \sum K1 + \sum K2 + \sum K6$ , and:  $the\ sum\ of\ fees = \sum K1 = A1 + B1 + \dots J1$ ;

The sum of the other costs non-market =  $\sum K2 = A2 + B2$   
+ ... J2 for costs of [Seeler] [Landowner] [Applicant of the legal case] and

The sum of the other costs non-market =  $\sum K6 = A6 + B6$   
+ ... J6 for the costs of [Buyer] [Tenant] [Defender of the legal case].

### Sources of information

The study uses empirical data from 110 contracts – processes where rights of agricultural land were transferred from 8 regions from the whole country. Conditional division by legal form: 43 sales; 37 land rents, 25 other legal forms (market and non-market means for translation and protection

**Table 1. Matrix of integration between institutions and agricultural land contracts**

	Contracts	Purchase and sale	Rent / Leave	Donation	Division of land	Easement of property	Right of use	Notarial deed	Bequest of property agricultural land	Disinheritance	Mortgage in consequence loan	Inheritance	Others	
Institutions		a	b	c	d	e	f	g	h	i	j	k	l	Legal Disputes
OA, 1951*	1													Possession Art. 75, 76 OA
LOUAL, 1991*	2													Ownership Art. 108, 109, 111 OA
LAL, 1995	3													Dispute Art. 11 LOUAL
SPL, 1996*	4													Dispute Art. 14 LOUAL
MPA, 1996*	5													Property Division Art. 34 CPC
IA, 1949	6													Division of Inheritance Art. 69 of the Civil Code
LPAL, 1996*	7													Right of redemption Art. 33 OA
LCPR, 2000	8													Error according to Art. 54 LCPR
LLTF, 1997	9													The invalidity of a transaction Art. 26 LO
LOC, 1950	10													Termination of contract Art. 87 of the LO
NNAA, 1998	11													Preliminary contract-final Art. 19 LO
CRL, 1999	12													Nullity of note. Certificate / entry Art. 576, 577 (CPC)
LER	13													Illegality AA
AL, 2004	14													Challenging AA / Art. 37c LOUAL
ECL, 2007	15													Dispute of Rent 239-239 / lease
S-CC (IS) – 1	16													Others
S-SC (IS) – 1	17													
EC (A) – 2	18													
Regulations/ Rules/ Ordinance- 19	19													Legal cases are not exhaustively listed
Tariffs – 3	20													
Others	21													
	Effects GS	Exchange organization (framework); Property Rights (distribution); Transaction costs (amount/euro)												

\*The Law is supplemented by functioning Regulation; Ordinance; Tariff.

Source: own research

of rights); 5 legal disputes related to agricultural land. For the condition of comparability of the contracts, the costs for unfinished contracts are measured for a period of one year since the beginning of the dispute or from the first action of transfer of property rights. Production costs are measured for the relative subject of property (agricultural land). Sources of information for the legal acts are taken from the legal information systems: lex. bg and CIELA.

### Legal and economic essence of agricultural land institutions and contracts.

The institutional environment defining the public relations with agricultural lands in Bulgaria is formed by 33 normative acts at a national level. Taken into consideration are also 1 decision of The Constitutional court, 1 interpretative communication of the European Commission (EC) for the concentration of agricultural lands, the procedure that the EU started against the country for violation of the EU law; one decision confirming the new thesis in the doctrine, related to “conversion” into deals. Considered are also the normative acts for: fees related to certification of tax evaluation of agricultural land; as well as differences in taxation burden in contracts related to the acquisition of immovable property in the municipalities of the country (570 local normative acts).

The political part of the institutional change is closely interfering with the coordination and sub-ordination of GS. First: because of the need for consolidation of the property. In the period from 2010 until 2012, this ensued intensive changes in normative acts related to agricultural land. The number of changes varied from 37 to 58 per annum. Second: the attempt at creating a project for *Agricultural Codex*, which was meant to integrate the legal acts by balancing between the legal organization of the country and that of the EU. Third: the need for harmonization of the legislation caused by the “green transition”, which after 2019 accelerated the changes again. There is a visible decrease in the number of changes at the beginning of the COVID-19 crisis based on the political risks for changes, which may be negative for each contract execution.

By the consolidation of the legislation, there should have been positive effects on the production and agriculture in general. But this happened only for some intensive agricultural cultures. The rise in the concentration of agricultural land should be viewed as a possible reason for the decrease in the number of sales, as well as the number of dealings with agricultural land in general. The political institutions are distinct GS with a lot of unfinished contracts (rent), which are considered to create long-term relations with low investment risk and conditions for more effective markets – something that we, the authors of the current study, could not agree unconditionally.

**Table 2. Matrix presentation of measuring of TrCs in agricultural land contract**

		Notary fee for the initial act €	Lawyer's payment €	Notary fee for the current act €	Registration fee €	Tax evaluation fee on real estate €	Tax-for-money acquisition of real estate property €	Heir certificate fee €	Burden fee (certificate) €	Cadastral plan sketch fee €	Bank fees €	Total
		a	b	c	d	e	f	gg	h	i	j	k
Fees/Charges	1											
Seller /landowner	2											
Moving (transport)	3											
Time	4											
Information (Communications)	5											
Buyer /tenant	6											
Moving (transport)	7											
Time	8											
Information (Communications)	9											
Total €	10											

Source: Adapted from Georgiev & Roycheva (2017).



Basic normative acts, defining GS within the agricultural lands are OA, 1951, which defines institutes as property, possession, and the use of property, as well as process conditions for claims related to legal disputes for property. LOC, 1950 in its terms defines obligatory relationships, the invalidity of deals, and formal rules for some legal forms of the contracts. Specialized laws such as LOUAL, 1991 and LLA, 1995 regulate public relations in agriculture, stating specifics of the distribution of property rights related to obtaining and use of agricultural land. MPA, 1996, and SPL, 1996 define how public relations develop regarding agricultural land being municipal or state property. NNAA, 1997; RE, 1951; CPC, 2008; LCPR, 2000 define the subordination and coordination with translation and protection of property rights – activities related to obtaining documents, performing and registration of deeds and others, notary forms, legal disputes, and appeals. EDEASL, 2017; and ECL, 2007 are legal acts, that create conditions for the technical exchange of the transactions. All normative acts together define the framework, and coordination within GS of contracts with agricultural land.

The passage to more unfinished contracts created hybrid forms of organization – contracts that were not always suitable for use of local producers, working on the agricultural land. This is the reason why the number of these actors has decreased.

The legal integration did not help in decreasing some negative effects as it happened with the forms of lease and rent (Res. CC, 2015). Unnamed contracts (Art. 20 LOC, 1950) related to agricultural lands also did not decrease in numbers. This normative part of the GS created higher preferences for short-term contracts with the production of agricultural cultures with a low payback period of the investment in lands, i.e., the institutions created contracts with higher risk and incentives for mono-cultural production.

The rules created also many new administrative organs: Regional governor, Mayor, Local office for agriculture and forests, and others which distribute the use of rights between the owners, renters, and producers in the region. For example, the cases of not submitted on term declaration under Art. 69, REG: LOUAL often transforms into expensive legal disputes.

Another example is a contract deriving from Art. 32, §2 from OA, 1951 when distributing the right of use of agricultural land *in fine*; legal processes on the grounds of Art. 365, p.1, CPC, 2008, for adjustment of trade deals to newly-established circumstances when dividing a mutually owned property (Art. 32 OA, 1951) have increased in number, which led to an increase of the uncertainty and complications of GS.

Gradually GS formed where the rules were the reason for the increase of the fees under the tariffs and the levels of the cost's effects.

### **Subordination and coordination between actors, registries and documents.**

*To clarify the contractual sub-ordination* DSA the structural analysis of GS at a deeper level is a depiction of the design of the contract in the form of fragments. In sales (the most used legal form), it would look in the following way:

First: Issuance of a Notary deed on the grounds of Art. 474, Art. 94, NNAA, 1997; Second: Issuance of Certificate of inheritance on the grounds of The Law for Civil Registration – Art. 24, §1; Art 106, §1, p. 1, about Art. 5, p. 2; (LLTF, 1997) – art 110, § 1, p. 1; ORD, 2012 certificates on the data in the population register – Art. 9; Art. 10; Art. 11; Art. 12. Third: Issuance of Certificate for tax evaluation of agricultural land, on the grounds of (Appendix 2, LLTF, 1997) – Art 2, Art 3, §. 2. Fourth: Issuance of Sketch of real estate on the grounds of Art. 52 LCPR, 2000 about the Transition and final provisions – §. 4. Fifth: Registration on the grounds of Art. 4e RE, 1951. We observe many activities needed for the sale of agricultural land.

In a legal dispute for property (Art. 108 OA, 1951) – agricultural lands, the contract would look like this:

First. Gathering of evidence: Notary deed; Decision of the Commission under Art. 14 LOUAL, 1990; collateral evidence; Second: Submitting of Legal claim in Court together with the evidence gathered, Request for expert opinion, Payment of state fee. Gathering of other evidence. Registration of the Claim; Third. Answer by the Defendant (Art. 131 CPC, 2008) – presentation of evidence, raising objections, and counterclaims, payment of fees. Fourth. Presentation of written expert opinions and statements in the process; Fifth. Hearing of witnesses. Sixth. Decision of Court; Seventh: Eventual appeal. Presentation of new evidence; Eight. Answer of the appeal claim. Presentation of new evidence; Nine. The final decision of the Court; Ten. Registration of the decision. [Cassation court instance]. We observe more and more complicated forms for the defense of the rights related to the property of agricultural land.

Table 3 shows the possible participants by their names from the viewpoint of the different legal forms of contracts related to agricultural land, their eventual links, and the use of different types of registers and documents.

To create a clearer system for the retention and transfer of real estate property rights related to agricultural land in recent years, several new registers have been started for property, borders, and means of land usage, as well as systems for reporting of the different types of users and other bearers of real property rights, where benefits (payments) related to agricultural land are related. These new systems increased

**Table 3. DSA: Interaction between law forms; actors, registries, documents**

	Legal forms	Bearers of property rights	Administrators	Registries	Types of documents
Deals Acquisition through primary means Defensive proceedings	Sale Rent Lease Liquidation Donation, Right of way Right of use Final will (Legacy) Loan (Mortgage) Loan for use Waiver of succession  Succession Obtaining by legal time-limits	Buyer [Seller] Rentee [Renter] Donator [Beneficiary] Owner of dominant estate [Owner of the submissive estate] User [Owner] Creditor [Debtor]  Testator [Heir] Tenant	Registry Agency Notary GCCA Office for real estate property registration Office for agriculture and forests (OAF) Local taxes agency Notary State register for citizen registration (GRAO) Lawyer OAF Mayor Regional Governor  Bank	Real estate property register Cadastré State register for citizen registration (GRAO) Map of the real estate property Local taxes and fees  Registries under Art.37c LOUAL, 1990 Registers under REG:49MR. Art. 69; 70; 73 REG: LOUAL Register on REG: PRLC Others p.1-9  Legal claims	Decision of Court Administrative act Notary deed Sketch Contract for liquidation Preliminary contract Certificate of inheritance Declarations : Art.264 TIPC, 2007; 69 REG: LOUAL. Art. 25(8) (NNA, 1997) Receipts by a notary Power of attorneys Bank receipts  Constatative notary deed for check of circumstance
Procedures Administrative proceedings	Art.37c LOUAL, 1990.	Administrative body  Applicant Claimant Addressee			Lots Requests Art.22 REG:49MRP. References Requests: Art.18(1) REG:49MRP;
Court proceedings	Claims: Art. 124 of CPC, 2008. under Art.75; 76; 108; 109; 111 OA, 1951 under Art. 11; Art. 14 LOUAL, 1990 Art. 26 LOC, 1950 Collaterals Claims against orders. Art. 37c LOUAL	Claimant [Defender] Co-liquidator Creditor [Debtor] Owner [Tenant]	Primary Court, Count Court, Appellative Court Supreme Cassation court Supreme Administrative Court		Claims under Art.2 CPC, 2008

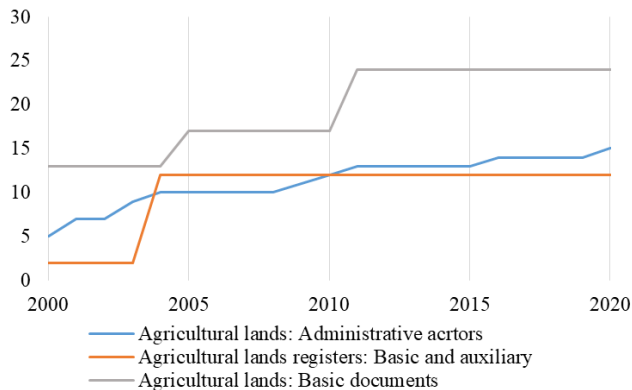
Source: own research

the role of institutional arbiters and intermediaries who support the processes.

In Figure 2 the number of that type of actors is represented as well as the number of registers which they serve that increases in the period (2000–2020). There is an accumulation observed which means an increase of the process actors, which leads to an increase of the counterpart interests in the contracts. The need for integrating the mechanisms for service, even the technical exchange of transactions, for ex-

ample, digital documents should have improved the process coordination. Instead, we can claim that the contracts needed additional adaptation. For example, after 1991 the Land Commissions were administrators for the “restitution of real estate property”. They were the organs that re-instated the owners with documents for their return of real estate property.

Later this actor was transformed into a Local office for Agriculture, whereas the functions of issuing a document – sketch for the real estate property – were transferred to the Geodesy,



**Fig. 2. Actors, registries systems, and documents – Agricultural Lands (2010–2020) / N**  
Source: own research

Cartography and Cadastre Agency (GCCA). Alongside this where no cadaster plans were yet executable, the old order remained observed. Practically this means that the contracts were served not by one but by two actors. Doubled functions within some actors created doubled alternatives. These were accompanied using alternative fees which were not in the best interest of all participants in the contracts with agricultural land.

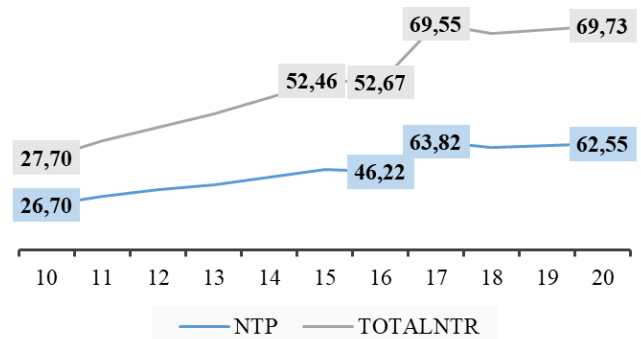
The contracts at the end of the period became engaged with an increased number of institutional arbitraries/intermediaries, and an increased number of documents and registers not always integrated. Thus, it could be said that the interests of the institutional intermediaries and arbitraries were intertwined with the interests of the other bearers of rights in the contract. The lack of this kind of integration did not make the GS more flawless.

#### **Asset specificity. Physical and digital transactions, processes time of agricultural land contracts**

In a neo-classical context, the specificity of the asset is connected to the object of property, i.e., with the functional characteristics deriving from the agricultural land. In an integrated approach to studying GS, there is a need for further information.

Figure 3 shows the medium count of transactions in a contract with agricultural land – in the first case these are physical transactions, while at the other – the total count of transactions in the contract. It is obvious that despite the digital formats (the first were created in the country *Trade register* and the *Real estate register* existed after 2008), the count of physical transactions is increasing.

To obtain documents and fulfill their interests some participants, especially those who transfer their rights, have to perform more actions than it was previously needed. This



**Fig. 3. DSA – Transactions in agricultural land contracts (2010–2020) / N**  
Source: own research

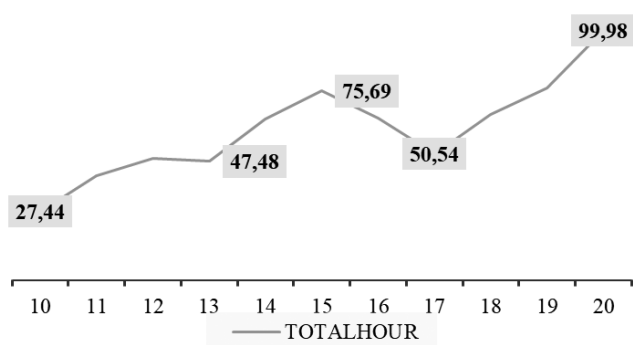
is especially obvious in hybrid contracts, where newly developed circumstances are being declared (procedures under Art. 37c LOUAL).

GS should present the participants with additional information for the possible technical exchange and the total level of costs for each alternative. This is because the digital alternative requires initial investment – a fee for an electronic signature, paid access to a secured internet connection and requirements for social capital (a certain level of knowledge, deriving from education and following the adaptability of the participant). This may make the digital tools inaccessible to some of the actors, for example, the older participants in the process. There is a tendency of dependence between the motivation to use digital media and the singular contracts. The physical transactions are still preferred when at least for one of the participants the contract is completed. For example, the seller is devoid of their property and there is a lack of repeat element. In those cases, digital formats are less often used, for example, the cases in Art. 49 p. 12 REG:49MRP. I.e., the organizational economies from the range are few.

Figure 4 shows the total time for the contract flow. Until 2015 the time for a contract is increasing, reaching a total of 75 expense hours for all participants in the contract. This means that the increase in the number of transactions and the time from transactions make agricultural land contracts highly specific.

Partly the use of rights on behalf of the institutional intermediary adds to the increase of time used in agricultural land contracts, i.e. the alternatives acting in favor of the administrator of the process or another institutional intermediary. For example, Art. 57 from the Ordinance for *prices of services and rights, provided by the Municipality of Plovdiv to physical and legal persons* – according to Art. 6, Art. 2 LLTF, 1997 defines





**Fig. 4. Real-Time of agricultural land contracts (2010–2020)**

Source: own research

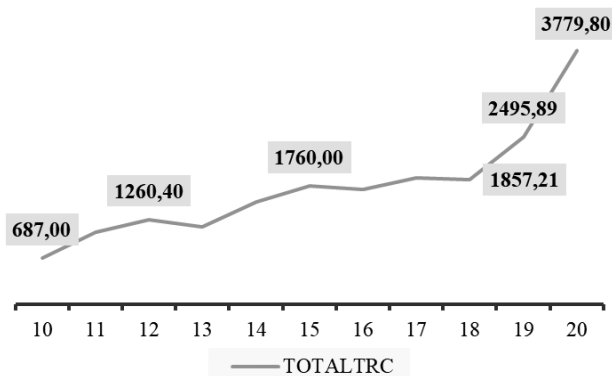
three types of services by the time of obtaining the document. The obtaining itself depends on the price, related to certain terms, i.e., the time for some contracts is increasing when the participant who wants to obtain a document chooses an alternative with a lower price of the service.

A conclusion could be made that in the hybrid contracts with agricultural land, the specificity is increasing. Despite the increase in the digital possibilities and an increase in the digital contracts with agricultural land, GS at the time of the study became more complicated.

#### Transaction costs and allocation of the effects

The increased costs for payment of fees and taxes are connected to the price of the agricultural real estate property and this automatically leads to an increase in the costs for those services in an absolute amount. Alongside with this the taxes on the transaction, the fees for obtaining documents, notary fees, the fee for registration in the real estate registry, the attorney fees were increased multiple times with amendments in some of the listed normative acts/tariffs: T-NNAA; RE, 1951; REG: MALF, 2004; T-CPC; TIPC, 2007. For example, T-NNAA had an increase in 2009. REG: MALF, 2004 was amended in 2010, 2014; 2016; 2020; 2022, and T-CPC – in 2013 and 2017. The tariffs for local taxes for the paid transactions of the real estate property initiated by the municipal administrations are an example for the increase in the sums required and were also increased at the costs of the right-bearers of the real estate property in agricultural land. For example, the Municipality of Plovdiv has increased the payment from 1, 5% to 2, 0% and additionally since 2015 to 2, 5% of tax as per the price being paid.

In Figure 5, at the beginning of the period, TrCs almost tripled for a period of 5 years, reaching 1760, 00 Euro per



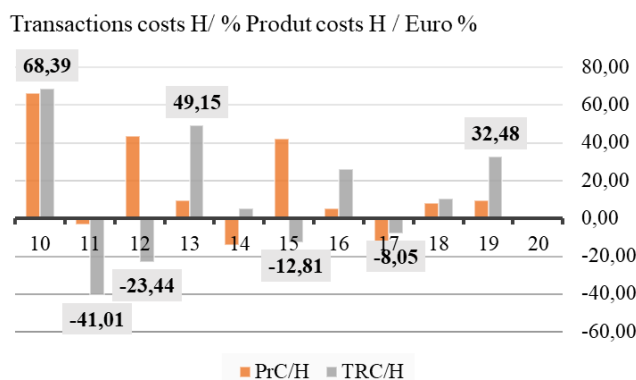
**Fig. 5. Transaction costs in agricultural land contracts (2010–2020) / Euro**

Source: own research

contract. The main reason is the constant increase in the prices of the market deals.

In 2013, there was a brief decrease in TrCs as an outcome of the inclusion of the large funds for the real estate property management in agricultural land and the possibility for them to make economies based on the range. In the next year – from 2014 until 2018 the trend was relatively low, but positive, nevertheless. Despite the increase in electronic forms of transactions, there is no decrease in TrCs observed. After 2019 with the beginning of the “green deal”, the transaction costs rose again because of the abrupt increase in some tariffs (see tariff for attorney fees), so TrCs have been increased two times.

Figure 6 shows a comparison between the increase in Average TrC / of Average PC on an annual basis. In 2014, the transaction costs increased, and the production costs de-

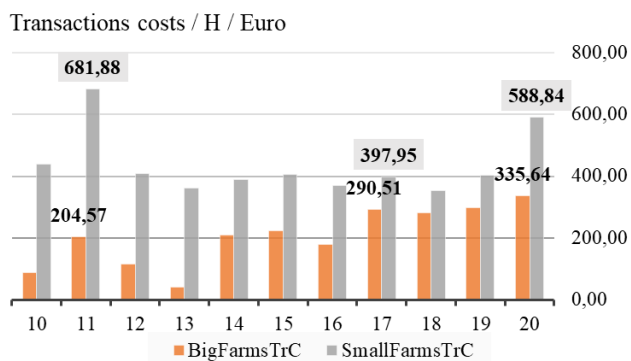


**Fig. 6. DSA – TrCs (2010–2020) Euro / Ha v/s Product costs (2010–2020) Euro / Ha**

Source: own research

increased. This is an outcome of the delayed lag of the positive effects related to the consolidation of agricultural land (three years after the beginning of the measures under Art. 37c LOUAL, 1990, and three years after the initiation of the companies for the real estate property management in agricultural land under LSIPC, 2021). After 2016, the increase temp of TrCs was always higher than that of the product costs (PC). The latter is happening despite the increase in the prices of energy supply, which influence directly the PC. The model of consolidation of agricultural land at the basis of its use does not support the reasoning that the mechanisms defining GS stimulate a decrease in the size of TrCs in the contracts.

In a detailed analysis of the mechanisms and their following costs, it becomes obvious that they do not affect similarly all the actors operating with agricultural land. Figure 7 provides a comparison between the rise of TrCs in the larger and smaller actors.



**Fig. 7. Allocation of transaction costs (2010–2020)**

Source: own research

The rise is significantly higher for the smaller actors. Probably the increase of TrCs is due to their internal transfer between the actors, obviously with a higher degree at the cost of the smaller actors.

## Discussion

Bulgarian legal doctrine without ignoring the obligatory interpretation from the union law, deals with a lot of questions “opposing” the individual over-effectiveness which creates indirect problems with the access to certain target groups of right bearers to agricultural land and the possible competition for that resource.

The legislation is expansive with a lot of formal institutions and a large number of amendments, creating dualistic effects and this makes the adaptation of all subjects even harder.

The technical exchange should be analyzed with attention when physical transactions are interchanged with digital/electronic transactions. In the cases where the subjects perform singular contracts or contracts with a low level of repeat, the technical exchange should be obligatory. Some of the markets providing both digital and physical services (e.g., in the form of documents) should have the same prices for those services despite the differences in format for the digital and physical alternatives of the service. This could diminish the transaction costs for actors who due to objective reasons experience difficulties with their adaptation. For example, elderly people, actors with lower income, and actors who perform singular actions – transfer or protect their rights on real estate property of agricultural land.

The model of change should be tied to long-term measurements for all alternatives. For example, the decrease in the number of institutional intermediaries, and arbitraries does not always lead to a decrease in TrCs. This is because (1) the lack of an intermediary may increase the asymmetry of information in the contract or lead to difficulties in the functionality of the system; (2) some of those institutional actors may obtain a monopoly of power for a certain part of the process, and thus, try a transfer of costs to some of the other actors.

## Conclusion

### Proposals for improvement of GS in agricultural land

*A.* Over-efficiency, which happens in agricultural land contracts on the grounds of Art. 37c LOUAL, 1990 should be changed and the resource should be exclusively granted to the producers – actors living in the same area.

*B.* Introduction of unified tariffs would diminish the number of alternative norms and would simplify the GS. Some tariffs should accept simplified scales for the calculation of the fees. For example, in Art. 8 T-NNAA, where a step-by-step scale of five alternative fees is provided about the paid price of the real estate property, their number should be decreased.

*C.* The tariffs for local fees for issuing certificates where the fee is related to the term for obtaining the document should be unified with a universal fee that includes digital alternatives and thus accommodates these “quasi-markets” to the ideal competition.

*D.* Integration of document transactions. Issuing mutual documents from two or more institutions. For example, The GCCA as well as The Agency of the real estate property could issue a mutual document, which includes the current notary deed and a current sketch of the real estate property.

*E.* Unification of actors with similar functions, integration of registries. Some of the electronic forms of services

could be provided non-alternatively. For example, the attorney and the notary could verify and issue the same documents, and thus the decrease of the service price could be pursued. Unification between State agencies in the framework of the same Ministry could ensure economies from the range of the services offered.

F. Decrease in the number of types of legal forms related to agricultural land contracts would lead to better coordination in GS and a long-term diminish in the transaction costs in agricultural land contracts.

### Guidelines for future studies

G. Measurement of the distribution of costs by actors with special attention to the different groups of producers from agricultural land. This could suggest how the distribution of TrCs affected not only the profits but also the size of the yields, i.e., what is the meaning of GS in the food chains? The approach could help us for the correction of the normative acts that define GS of agricultural land contracts.

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