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It is not just about power, but about the type of power - relational governance in the context of a transiton economy

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ABSTRACT

The paper analyses how intermediary's bargaining power affects relational governance in the context of a transition economy, namely the case of Kosovo. There has been limited research and understanding about bargaining power and relational governance in developing and transition economies. Multinomial logistic regression is employed to investigate the factors affecting relational governance, which is operationalized as categorical variable: 1) Spot market transaction, 2) verbal contract and 3) written contract. The results of the study point out that intermediaries' exercised power over farmers affects the farmers' contracting decisions in different ways. When they exercise power over farmers' margin, it reduces the likelihood of farmers' participation in either verbal or written contracts, while power over product quality related activities increases the likelihood of farmers engagement in written contracts. Another key finding is that for products that require a specific standard and quality, written contracts are more likely than verbal ones.

Keywords: Contract farming, bargaining power, vineyards valu chain.

1 Introduction

Agriculture is characterized by high level of uncertainty; the uncertainty looms larger in the case of developing or transition countries where farmers face additional challenges related to weak institutional framework. Such uncertainty can be caused by inefficient agriculture policy, low access to services, weak market structure which characterize typically developing or transition economies. Lack of trust in the institutional framework, including courts, discourages farmers from engaging in formal contracts, which is a dominating form of value chain coordination in Western/developed countries. Under these conditions, spot markets dominate over other types of relational governance. However, market governance is associated with high transaction costs when specific investments and uncertainty is high (Williamson, 1975, 1985).

Formal arrangements tend to reduce the uncertainty that gives rise to high transaction costs (Poole, et al., 1998). The use of Contract farming (CF) as a relational governance mechanism to coordinate trading relationships between farmers and intermediaries has become increasingly common practice in the developing and developed world. Contract farming generally refers to "agricultural production carried out according to an agreement between a buyer and farmers, which establishes conditions for the production and marketing of a farm product or products" (FAO, 2013). From a producer perspective, it has been shown that CF helps farmers to solve several productivity constraints in the market of insurance, credit, information, and high-quality inputs (Grosh, 1994; Key and Runsten, 1999; Katchova and Miranda, 2004). Furthermore, there are several studies providing evidence on the positive effects of CF on farmers welfare (Singh, 2002; Miyata, et al. 2009; Maertens and Swinnen, 2009; Bellemare, 2012; Wang, et al., 2014). From an intermediaries'[*] perspective, CF helps them to protect their specific investments, get high quality and consistent supply and access cheap labour.

The literature on the motivational factors of smallholders' participation in CF in developing or transition

[*]In this paper the word intermediary refers to all chain agents that stand between the farmer and end consumer.

countries is growing, but there is no consistency about the effect that various factors have on CF participation. Masakure and Henson (2005) argue that these variations between studies reflects countries institutional framework as well as socio-economic conditions. While, the lack of consistency on the motivational factors appears to be more on farmers demographic and socio-economic characteristics', in the authors view if more fundamental variables related to the contracting decision are considered, one could find similarities between studies.

In this view, this study analysis the motivational factors of smallholder participation in CF (as a form of relational governance) by employing the transaction cost economics (TCE) theory as one of the most prominent theoretical perspectives in the study of governance arrangements. In addition, we add to the theory the concept of intermediaries' bargaining power as an instrument that would motivate farmers to contract. Yet, this is not considered in the fundamental TCE framework since it is assumed that possessing bargaining power gives to a trading party options on how to govern the trading relationship. This would/could be true when power is considered as whole but if one considers that power is multidimensional, each dimension might have different effects on an outcome (here is CF) and when the sum of the effects is considered they might cancel out. Thus, the contribution of this study is threefold. First, we contribute to the literature on CF and relational governance by providing a model that would be consistent even when replicated to other conditions. Moreover, we also explore the differences between verbal contracts and written ones, whereas the literature on CF looks only at CF-vs-spot market transactions. Second, we contribute to the development policy literature by showing how to develop sustainable and successful CF schemes. Lastly, we contribute to the TCE theory by adding the concept of power to its fundamental framework as an instrument to improve its predictability.

This study is based on a vinyards farm survey in Kosovo, which is situated in the Western Balkans. Almost half of the population still lives in rural areas. Kosovo had a centrally planned economy under Yugoslavia until the early 1990s. Kosovo emerged as an independent country after the notorious conflict of the late 1990ies. The conflict resulted in human and economic losses – the agrifood sector and the vineyards specifically were damaged. During planned economy as well as transition, agriculture has been one of the main economic sectors of Kosovo in terms of contribution to GDP and has always been a key sector for growing the economy of Kosovo. In terms of the Gross Domestic Product (GDP) and jobs, agriculture is an important sector in Kosovo's economy. Agriculture also provides the largest employment opportunities amongst others sectors in post-war Kosovo - according to results of the Agriculture Census 2015, there are 130,775 agricultural households, employing 86.620 people with full-time jobs (KAS, 2015).

After the conflict, there was growing attention by private business, government, and donors for the agriculture sector in general, and vineyard and wine specifically, which resulted in growth and renewed investments. Grape production is concentrated in the region of Rahovec (more than 4/5 of the national production) while almost 3/4 of the grape production is destined for wine-making. Wine production is growing and have been and remain among the main agri-food sectors in Kosovo in terms of production and international trade since wine is one of the most exported agri-food products (FAO, 2015; Zhllima et al, 2020).

Kosovo has been facing the challenges of strengthening institutions, adapting to free market economy demands, and attracting investments. The agri-food sector as a whole is facing problems with creating market institutions, establishing marketing and distribution chains, meeting EU food safety, veterinary and phitosanitary standards, and building the administrative capacity to support these processes. The agrifood value chain is expected to change substantially in the coming years and the competition from neighbouring countries will increase in the context of regional and EU integration.

The remainder of this paper is organised as follows. Section 2 outlines the study framework and hypotheses. In section 3, the methodology of the study is presented. Section 4, shows the results of the analysis, which are discussed in section 5 and provides conclusions.

2 Study framework

While there are several theories that have been used to explain CF (see Prowse, 2012), the most developed body of work is transaction cost economics. Williamson (1975, 1985) developed the TCE framework, which emphasizes that the decision on how to govern a relationship is principally determined by differences in transaction cost. Williamson (1975, 1985) demonstrated, how asset specificity, uncertainty and transaction frequency relate to transaction costs. The fundamental tenets of TCE theory is that firms will tend to integrate in the presence of high uncertainty, large specific investments and frequent transactions. The reason being that under these circumstances the transaction costs are higher in trading relationships governed by spot market transaction then in hierarchies (i.e. vertical integration or contracting). Following this perspective Minot (2007, p.1) outlines that since contracting involves costs, "it is economically justifiable only when the buyer is a large firm (a processor, exporter, or supermarket

chain)".

Here the other elements of TCE theory (i.e., uncertainty and transaction frequency) are not modeled because for the context of the study it was not possible to operationalize them. Yet, to account indirectly for the market uncertainty the extent of farmers access to information is entered the model. The link between the two is that uncertainty raise when the information is limited and vice versa. Thus, when farmers have access to market information they should face less uncertainty, which based on the TCE theory leads to a lower likelihood of participation in CF. Moreover, those farmers that have access to information (e.g. about market, buyers etc.) might prefer to be flexible, and keep the options open in terms of choice of buyer (type, location, timing), rather than bind him/herself into a contract. While, on the other hand, farmers who lack information, are assumed to perceive higher uncertainty and engage in contracting to reduce that. In this context, the following proposition is made:

Hypothesis 1: *Farmers' specific investment and intermediaries' specific investment are positively related to contract farming, while farmers access to market information is negatively related.*

Bargaining power is not considered in the TCE theory as an element that would affect how trading relationships are governed because the mode of governance is selected after transaction costs are incurred, while power is an ex-ant element that gives option to the one possessing it. The argument stands as long as power is conceptualized as a uni-dimensional variable. However, as argued by Xhoxhi, et al., (2014) power is a multidimensional variable and extends across a wide range of activities, such as margin-related activities, product-related activities, delivery related activities, etc. Assuming that power is a uni-dimensional variable, bias may be introduced into the analysis in favor of one activity over another.

In this view, it can be shown through a game theory perspective that different ways of exercising intermediaries' power could have different outcomes (for this study context –CF vs spot market transaction). By employing simple game theory, let consider a one-shot game (i.e., prisoners dilemma), where it is assumed that point A in (table 1) is spot-market transaction and point D is contract farming. The other two points are unattainable, thus are not considered. The assumption is based on the evidence from the literature on CF about its beneficial effects for both trading parties (Maertens and Swinnen, 2009; Miyata, et al., 2009; Bellemare, 2012). Thus, the intermediary considers what the farmer can do and decides to exploit his power to extract better margins from the farmer. From both scenarios of the table, the one that maximises the intermediary gains is to exploit his power (i.e., if the farmer cheats and the intermediary does not use his power the intermediary gets 2 but if the intermediary exploits his power the intermediary gets 5, on the other hand if the farmer does not cheat and the intermediary does not exploit his power the intermediary gets 10 but if he uses his power the intermediary gets 15). The same rational is also true for the farmer, he (i.e. the farmer) would chose to cheat (e.g. by placing perished products or bad products at the end of the basket). So, the chosen scenario is (A) which is a Nash equilibrium. Nevertheless, there is a global equilibrium (i.e. pareto equilibrium) that has higher returns for both, but it is not possible to achieve and not stable to sustain.

Table 1 **Farmer's and intermediary's dilemma A**

Options	Farmer	
Intermediary	Cheats	Does not cheat
Exercises power over margin	(A) 5, (5)	(B) 15, (2)
Does not exercise Power over margin	(C) 2, (15)	(D) 10, (10)

Note: The values in brackets () is what the farmers gets, without () is what intermediary gets

We can assume that the intermediary has another option of power beside power to affect farmers' margin. For example, he can exercise power over input selection or production process or harvesting and delivery activities, in other words power that influences farmers' way of production with the aim to improve product quality, which the intermediary can sell for a higher price and can make up the profit lost from not using power over margin.

In this case the intermediaries' choice (table 2) in the scenario that the farmer does not cheat provides him (intermediary) the same return. Yet, also in this case the farmer will still chose to cheat because it's the alternative that gives him the highest return after considering what the intermediary can do. Thus, also in this case the solution of the game is (A).

Table 2 **Farmer's and intermediary's dilemma B**

Options	Farmer	
Intermediary	Cheats	Does not cheat
Exercises power over margin	(A) 5, (5)	(B) 15, (2)

Exercise power over activities to improve product quality	(C) 2, (15)	(D) 15, (10)

Note: The values in brackets () is what the farmers gets, without () is what intermediary gets

Until now the focus was on a one-time game, but if repeated games format is considered (which is more realistic), the result will change. In case a farmer cheats, he would lose that relationship and next year it will be more difficult to sell his production because the other buyers will have some information about his opportunistic behaviour. Under these circumstances, the farmer will think about the long-term profitability of the relationship regarding the merit of one-time cheating. In the long run, the profitability of the relationship for the farmer will be much higher than his cheating the current year. Therefore, he would choose not to cheat. In this situation, the intermediary is indifferent regarding his choice, but considering the long-run profitability he would also choose not to exercise power over margin because that might ruin the relationship. The solution of this game would be (D in table 2 which refers to CF option) and is a win-win game, where both parties stand to gain. Following this discussion, it is hypothesised that:

Hypothesis 2: *Intermediaries' exercise of power over farmers' margin decreases the likelihood of farmers CF participation.*

Hypothesis 3: *Intermediaries' exercise of power over farmers' product quality related activities increases the likelihood of farmers CF participation.*

The objective of the written contract is not only to serve as a guarantee for the parties – especially in the case of transition countries such as Kosovo, with weak law enforcement. The distrust in the courts (and law enforcement institutions) is expected to discourage formal contracting. In the case of weak institutional enforcement, farmers often prefer informal and self-enforcing arrangements (Bouis and Haddad, 1990; Jabbar et al., 2008). Williamson (1979) reflects directly on 'relational contracting' stating that an alternative choice to (formal) contracting is (informal) relational contracting which is 'a 'socially enforceable' contract rather than by formal rules and hierarchy'. In the case of Albania (neighboring and similar country with Kosovo) most farmers are found to consider that informal contracts are more enforceable than formal ones (Imami et al., 2013). Thus, written contracts become indispensable (and irreplaceable by informal agreements), when there is a need to have detailed/codified information related to product attributes, such as standards or characteristics, which thereby should be clearly written (to avoid misunderstanding or to remind the parties) – such information is unlikely to be remembered accurately if it is not written. In the case when only price and/or volumes should be agreed, that can be done orally; but when different standard specification or characteristics are required, and when price is differentiated according to them (thus, when there is not one unique price), it is necessary to have that explained and agreed in a written way. This could be particularly the case for grape destined for wine processing, since the characteristics of the grape when harvested can greatly influence wine quality (thus it is necessary to clearly state the characteristics of the harvested grape). Thereby, it is hypothesized that:

Hypothesis 4: *Farmers' producing wine grapes are more likely to engage in written contracts than farmers' producing table grapes.*

Hypothesis 5: *Intermediaries' exercise of power over farmers' product quality related activities leads more to written contracts than verbal ones.*

3 Methodology

The structured survey was designed in 2015 and finalized by 2016. The survey was conducted in the Rahovec region, where most grape production is concentrated. The survey consisted of direct face-to-face interviews conducted by trained graduate students. In total 222 vineyard farmers were interviewed of which 105 specialized in table grapes.

The dependent variable of this study is contract participation which was operationalized with three categories 1) no agreement, 2) verbal agreement and 3) written contract. To analyze the determinants affecting CF, multinomial logistic regression is employed, the results are presented in table 6.

The variables of the model explaining CF: 1) Intermediaries' power over farmers' margin related activities (POM), 2) Intermediaries' power over farmers' product quality related activities (POQ) and 3) Farmers' access to information are latent variables and are operationalized through Likert scale statements ranging from one to five (level of influence for the statements relating to the power variables and level of agreement for the statements relating to the access of information variable) and measures for them were developed using exploratory factor analysis.

To derive measures of power, eight activities important to farmers' business were chosen based on a series of semi-structured interviews with farmers, literature review and discussions with key informants of the supply chain. These activities were: Pesticides selection, fertilizer selection, the way the product is

harvested, the time when it is harvested, the way it delivered, price to the intermediary, payment terms of the intermediary, and total payment of the intermediary. The extent of intermediary influence was captured for each activity by using a five-point Likert scale, ranging from 1 (no influence) to 5 (major influence). To get our measure of power, the level of intermediary influence for each activity was multiplied by a weight of the perceived level of importance of the activity to the farmer. This level of importance of each activity to the farmer was also measured using a Likert scale (1 no importance to, 5 major importance). The main reason of multiplying the influence level by the importance of the activity to the farmer was to get the directional element of power. Power is not just influence, it is influence in a direction that favours the one who exercised it (intermediary) but in this direction, the one who power was exercised over (farmer) would not have freely tended. In this context, one can exercise influence without exercising power. This method of deriving a measure of the power variable was used by El-Ansary and Stern (1972), Collins (2002 and 2007), Xhoxhi, et al., (2014).

As it is shown from EFA using principal component applied to the items of intermediaries' power and farmers' access to information revealed 3 factors (table 3).

Table 3 **Reliability and Exploratory Factor Analysis (EFA) of study latent variables**

	α	F1	F2	F3
F1) Power over product quality related activities (POQ)	**.856**			
how much influence the major buyer of the product has on the Decision how the product is harvested		.846		
how much influence the major buyer of the product has on the Decision on what pesticides/herbicides to		.790		
how much influence the major buyer of the product has on the Decision on what fertilizers to use		.768		
how much influence the major buyer of the product has on the Decision how the product is delivered		.712		
use how much influence the major buyer of the product has on the Decision when the product is harvested		.711		
F2) Farmers' access to information	**.874**			
To what extent can you obtain information necessary to identify market opportunities			.901	
To what extent can you obtain the information required to understand buyers needs			.862	
To what extent can you obtain the information about market requirements about the product quality and standards			.751	
To what extent can you obtain the information about products price			.736	
F3) Power over margin (POM)	**.840**			
how much influence the major buyer of the product has on the Decision on the Price of the product				.886
how much influence the major buyer of the product has on the determination of the payment terms to the buyer (e.g. payment delay)				.885
how much influence the major buyer of the product has on the Decision on the amount to be paid for the product				.833

Note: Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization

These factors explain the structure of the data set accounting for 68.5% of the total variation. Barlett's test of sphericity (= 1262: df=66; P<.000) and the KMO test of sampling adequacy (.726) confirm the

appropriateness of the factor analysis (Field, 2009). All factor loadings are well in excess of Stevens (2002) recommended value of .40, providing evidence of constructs convergent validity. Factor 1 (F1) represents intermediaries' exercised Power Over farmers product Quality related activities (POQ), factor 2 (F2) farmers access to information and factor 3 (F3) intermediaries' exercised Power Over farmers' Margin related activities (POM). The Chronbach's α value for all constructs exceeds the cut-off value of .70, giving evidence of constructs reliability (Nunally, 1981). Lastly, to get the measures of each variable, composites were generated from the EFA using the regression method.

Another condition that the variables must satisfy to be considered valid is that of discriminant validity which referes to the level of variable uniques (i.e. not correlated with the other factors). Evidence for is this can bee seen in table 3, where each of the item loads strongly only on its factor and it does not crossload on the other ones.

4 Empirical research findings

4.1 Descriptive statistics

As Table 4 shows, market relations for the vineyard sector are mostly regulated through verbal agreements. Verbal agreements are implemented in 47.7% of the cases, followed by written contracts with 32.4% and no agreement at all (spontaneous selling) with 19.8%.

Development of personal trust is especially related with the frequency of market exchange. As transaction costs theory suggest, in the case of recurrent transactions, transaction partners become more familiar with each other (importance of trust) and with the products transacted, creating routines. This directly results in a decrease of the transaction costs and will also moderate the tendency to behave opportunistically (Williamson, 1975). The results of this study show that about half of the farmers do not sell to the same buyer consistently (Table 5).

Table 4 **Farmers' relation s with main buyers**

		Frequency	Percent
Relations with main buyers (contract)	Written contract	72	32.4
	Verbal agreement	106	47.7
	No agreement	44	19.8
	Total	222	100
Relations with main buyers (timespan):	Daily	81	37.5
	Several weeks	16	7.4
	Several months	51	23.6
	More than a year	68	31.5
	Total	216	100

Source: Field survey and own calculations

Table 5 **Trading partners for three sectors**

Do you usually sell to same buyer?	Frequency	Percent
Same buyers	113	50.9
Different buyers	109	49.1
Total	222	100.0

Source: Field survey

About 51% of vineyard cultivators report that they trade with the same partner, whereas 49% report to trade with different partners.

4.2 Model explaining contract participation

Table 6 shows the factors that affect both written and verbal agreement compared to the reference category of no agreement. As can be seen the raised hypotheses are supported, aside hypothesis one for which we don't find any significant effects of farmers' access to market information and vineyard size on

contract participation.

Table 6 **Multinomial Logistic regression – DV Contract farming three categories**

Contract		B	Std. Error	Wald	Sig.	Exp(B)	Hyp.
Verbal agreement	Intercept	-2.137	1.913	1.247	.264		
	Farmers' age	.008	.018	.211	.646	1.008	
	Farmers' Educ. years	-.073	.079	.853	.356	.929	
	Farm size	.178	.137	1.702	.192	1.195	
	Vineyard Size	-.429	.580	.547	.459	.651	H1
	Table versus wine grapes	.922	.600	2.357	.125	2.514	H4
	Processor channel	1.950	.892	4.773	.029	7.027	H1
	Retail channel	.359	.557	.416	.519	1.432	H1
	Farmers' access to info.	.254	.232	1.193	.275	1.289	H1
	POQ	.290	.252	1.323	.250	1.336	H3; H4
	POM	-.920	.248	13.754	.000	.399	H2
	Specialization	5.197	2.025	6.589	.010	180.72	H1
Written contract	Intercept	-5.396	2.416	4.988	.026		
	Farmers' age	.007	.025	.081	.776	1.007	
	Farmers' Educ. years	-.046	.092	.256	.613	.955	
	Farm size	.071	.186	.145	.704	1.074	
	Vineyard Size	.070	.643	.012	.914	1.072	H1
	Table versus wine grapes	1.740	.745	5.453	.020	5.698	H4
	Processor channel	3.306	.957	11.941	.001	27.270	H1
	Retail channel	-1.550	.959	2.612	.106	.212	H1
	Farmers' access to info.	-.319	.283	1.263	.261	.727	H1
	POQ	.595	.312	3.640	.056	1.812	H3; H4
	POM	-1.065	.319	11.169	.001	.345	H2
	Specialization	6.797	2.199	9.555	.002	895.24	H1

Note: The reference category is: No agreement; Chi-Square (162.4 on 22 df); Cox and Snell = .527; Nagelkerke .601; McFadden .358

5 Discussion of the results and conclusions

This article explores the relational governance and power between farmers and intermediaries, by viewing relational governance from as a choice between three options 1) spot market transaction, 2) informal/verbal agreement and 3) formal written contract. The study findings show that there are a number of factors that affect in a similar way both verbal and written agreements. Starting with specialization, the more the farmers are specialized in the vineyard production the higher their likelihood to engage in either verbal or written CF (hypothesis 1). As discussed above specialization is a part of farmers specific investment, on the other hand, we do not find any effect of vineyard size, which is the other side of the farmers specific investments on contract participation. The policy implication of this result is that, any initiative that aims to promote contract farming, during the screen process of the candidates (farmers) that are going to be part of scheme, should consider their level of specialization in

the product rather than the size of the farm (or cultivated area).

Furthermore, the channel that the farmers use to sell their produce appears to have a similar effect, those who sell to processors are more likely to participate in verbal/written CF. On the other hand, framers selling through the retail channel appear to have no differences in the mode of governance compared to farmers selling to wholesaler.

Whereas, Intermediaries' exercise of their power over farmers' margins tends to discourage participation in both types of agreements. It is well documented that there is considerable power asymmetry between farmers and intermediaries. This power asymmetry is especially problematic when intermediaries attempt to "squeeze" farmers margin, which compromises their business and livelihood (Xhoxhi, et al., 2014). In this context, when developing a contracting schemes policy makers and development agency can be part of the process of contract setup and should play the part of an honest broker, to build trust between the parties and avoid the development of contracts that favor the party that has more power. In doing so, they can act also as a moderator or arbitrator in case of contract dispute, since access to the judicial system is costly and considerably difficult to be accessed by small farmers.

Although, there are a number of factors that affect in the same way verbal and written contracts, it appears that two variables have different effects on each of them, namely 1) type of cultivated grapes (table grapes VS wine grapes) and 2) intermediaries' exercise of power over farmers' product quality related activities (POQ). These variables affect significantly participation in written contracts but have no effect on participation in verbal ones. Intermediaries POQ power dimensions results to increase farmers' participation in written contracts, while it has no effect on verbal contract. This points out, that written contract require higher product quality than verbal agreements and to achieve this, intermediaries exercise more power over farmers product quality related activities. Moreover, written contracts are more likely for wine grapes than table grapes which is in line with hypothesis 4.

The results of the study point out that intermediaries' exercised power over farmers affects the contracting decisions in different ways. When they exercise power over farmers margin it reduces the likelihood of farmers' participation in CF, while power over product quality related activities increases the likelihood of farmers engagement in written contracts. These results add to the existing literature on contract farming in two ways: first by providing insights on how intermediaries' power on farmers contracting decisions in a developing country context (to the best or authors knowledge research addressing this issue is limited) and second, by developing a multi item scale to measure intermediaries' power dimensions.

Furthermore, the study contributes to the development policy literature by pointing out that not all intermediaries power is negative to farmers business. While, power over margins is problematic and affects negatively farmers business and livelihood, power over product quality related activities could lead to win-win trading relationship between farmers and intermediaries. In this view, when considering rural development, development policies should not only look at the farmers' level, but should focus also on the intermediaries by changing their way of doing business (moving from power over margin to power over product quality related activities). In the authors view, if intermediaries shift from POM to POQ, it would have beneficial effect not only for the farmer intermediary stage but for the whole chain and country development.

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