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LINKING FARMERS' BARGAINING POWER IN TRADE TO THEIR PLANS FOR FUTURE ECONOMIC ACTIVITIES

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Abstract

This paper aims to examine the relationship between the bargaining power of farmers in trade and their plans for future economic activity. While there is existing evidence shedding light on the factors influencing trading power and its consequences, there remains a compelling exigency for scientific substantiation clarifying the aforementioned nexus. A questionnaire was designed and utilized to collect primary data from farmers in Albania (with a sample size of 640). Factor analysis, reliability test and non-parametric statistical methods were used. Evidence was found in support of the aforesaid relationships. Hence, farmers who have plans for investments reflect a higher bargaining power in trading, as opposed to those without such plans. Moreover, interest in increasing farm activity is significantly associated with improved bargaining power in trade. This study enriches the literature, especially in the agribusiness field, by offering additional insights from a transition and developing country.

Keywords: *trade bargaining power, future plans, farmers, decision-making, agribusiness, Mann-Whitney test*

JEL Classification*: Q12, Q13*

1. Introduction

This paper explores the relationship between farmers and their buyers, examining how bargaining power in trade (hereinafter referred to as trading power) is affected by future decision-making regarding new investments and the prospective expansion of economic activity. In addition, by focusing on the influencing factors, this paper aims to augment the academic discourse by furnishing such a relationship with novel insights. When discussing buyers and sellers, field experts prefer to use the term "conflict". In this paper, the term is utilized to refer to the disputes arising after such a relationship emerges. Notwithstanding, what can cause these types of discordances between them? Experts'

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efforts to answer this question have become a central issue in the field's literature. A great number of them converge into one point – factors that lead to "conflict" between buyers and sellers are numerous and can be classified, including – albeit not limited to – psychological, social, economic, political, geographic, and demographic. Powers and Reagan (2007) mention in their research paper main factors like reputation, performance satisfaction, trust, social bonds, power/interdependence, cooperation, shared technology, cooperation, and commitment. The extent of agreement between farmers and buyers, put otherwise as the facility on which an agreement is attained, is strongly defined by the above-mentioned factors. However, sources of conflict require delicate balancing acts to prevent a trading relationship from losing its impetus and failing to fully develop its trading potential (Dwyer et al. 1987; Lam and Chin 2005; Harwood 2013; Çera, Meço, et al. 2019).

In principle, the most basic mechanism in an economy is the economic relationship. In order for an economic relationship to be completed, two actors are required: the buyer and the seller. They should be willing to exchange money or other in-kind contributions with goods or services. As soon as this happens, as a consequence, a trade relationship is established between these two parties in which financial actions will be taken based on how supply and demand are met. In fact, the relationship between buyers and sellers is among the most commonly discussed topics between scholars, academicians, researchers, economists, and even policymakers. A multitude of articles examining this correlation can be found in the literature.

One of the core problems discussed in this paper pertains to the decision-making power of farmers in a transaction, and how the latter influences farmers' decision to invest in the long run. In the past decade, multiple concerns have been expressed about this instance. At the axis of the relationship between these two trading parties, also stands the power to decide, the balance of which could shift between the farmer and the buyer. Farmers are believed to be more disadvantaged in the power distribution compared to buyers. For instance, modern literature attributes this disadvantage to farmers' bargaining power, countervailing power, and the role of contracts in the agriculture sector. On the other hand, Sexton and Xia (2018) in their recent study relate this disadvantage to farmers' lack of access to selling opportunities, liquidity constraints, and the absence of adequate storage facilities. In addition, they highlight the lack of a legal framework to enforce fair competition. In Albania, a comparable scenario unfolds, with farmers encountering significant disadvantages compared to their potential buyers. As corroborated by literature, the lack of a well-organized market, poor infrastructure, low sale prices due to overproduction, lack of suitable space for storage or conservation of production, climate problems, etc., are all predicaments that exert considerable pressure upon farmers to expedite the sale of their produce. Considering the factors above, in many cases, farmers try to sell their products immediately and at devalued prices, driven by lingering incomes. Moreover, there are many other occasions in which farmers dispose of their products without being able to sell them even at depreciated values.

This research was conducted in Albania, an IMF-designated developing country with an economy that is mostly driven by agriculture and food processing. About half of the labour force is employed in this sector, which amounts to about 20% of the Gross Domestic Product (World Bank 2019). Even though the agriculture sector in Albania has an essential role in the wellbeing of the economy, it has been facing some serious challenges over the last three decades. Woes such as poor infrastructure, lack of subventions or other financial incentives, lack of efficient agriculture-supporting policies, and old technology, have all contributed negatively to this sector's growth (Kittova and Steinhauser 2018; Dvorský et al. 2019; Çera, Breckova, et al. 2019; Çera et al. 2021). However, in recent years, the interest in studying this topic has risen sharply. Owing to the strong correlation between the Albanian economy and the rural sector, it is worth going further in the study.

In the relationship between farmers and buyers, experts often bring to attention a phenomenon called "moral hazard". It is strongly related to the so-called "asymmetric information" between these two parties. This is also a contributing factor in market power between farmers and buyers. Moral hazard refers to farmers' egoistic behaviour after reaching an agreement with purchasers (Olounlade et al. 2019). It occurs when insured farmers are less concerned about the possibility of a loss as a result of their insurance coverage, thus tending less to their crops (He et al. 2019). Farming moral dangers are characterised as violations of "production orders" or "hidden action" in the course of agricultural activities (Zhang and Li 2016). Moral hazard's reputational impact can potentially harm long-term partnerships between farmers and purchasers (Zhang and Li 2016). Moral hazard is a major worry in the context of crop insurance, since it can lead to farmers taking more risks in the presence of crop insurance than they would otherwise be prepared to accept. The role of trust, risk, and time preferences for farmers' contract choices is also studied in the context of moral hazard (Fischer and Wollni

2018). Asymmetric information has two consequences: moral hazard, which arises after contracting when the agent's activity cannot be witnessed, and adverse selection, which occurs before contracting (Minarelli et al. 2016). Asymmetric information concerns, such as moral hazard and adverse selection, have long been a source of worry for crop insurance, as they might lead to farmers taking more risks in the presence of crop insurance than they would otherwise (He et al. 2019). Because of the existence of information asymmetry between buyers and rice farmers, the moral hazard problem is the primary impediment to the growth of the contract farming market (Olounlade et al. 2019).

Our study is significant because it has the potential to empower farmers pertaining to their trading ties, henceforth encouraging sustainable farming practices. We give insights into policy tools tailored to improve the agricultural sector by finding the beneficial association between power in trade and investment plans, particularly in emerging markets and transition economies where institutional flaws remain rampant. Our research emphasizes the necessity of considering farmers' trading power as a major aspect in defining their strategies for future activities. Empowering farmers in their trade connections may result in higher investments and activity expansion, eventually benefitting the agriculture industry, farmers, and the economy as a whole.

The rest of this paper is structured as follows: in section two a literature review on the relationship between farmers and their buyers is provided, mainly focused on bargaining power in trade, plans for future investments and interest on expanding economic activity; section three describes the aim, methodology, and the data; section four consists of an analysis of the study's results; whereas, section five and section six provide the paper's discussions and concluding remarks, respectively.

2. Literature Review

As already mentioned above, this paper is concerned with the relationship between farmers and buyers. Such a relationship, particularly based on the long-term perspective, has attracted a lot of interest. In the majority of consulted research pieces, this fact is strongly highlighted; being argued that the relationship represents a great source for developing competitive advantage for both parties (Dwyer et al. 1987; Janda et al. 2002; Lambe et al. 2002; Wong et al. 2005; Tarí et al. 2020; Dvorský et al. 2021; Zarnadze et al. 2022). Within the scholarly discourse, a consensus appears to hold sway among researchers on the fact that farmers are facing a very dynamic environment nowadays, which encompasses changes in technology, climate, market prices, as well as institutional and political changes, leading to the need for farmers to adapt as soon as possible (Ihli et al. 2014; Skreli et al. 2015; Evteeva et al. 2019; Maloku, Çera, Metzker, et al. 2021; Maloku, Çera, Poleshi, et al. 2021). In a similar fashion, the relationship between farmers and buyers has undergone rapid changes. Farmers all over the world are under the pressure of economic decision-making, including the renewal of older technologies, possible expansion of production activities, adopting newer and more efficient production techniques, etc. All of the above-mentioned situations can be considered as investments from the farmers' perspective, hence yielding increased influence on their incomes and consumption trends, in accordance with the long-term point of view (Feder et al. 1985). When talking about investments, authors usually consider the long run. In this context, we can use the term 'investments' interchangeably with farmers' plans for the future.

As previously discussed, there is a vast number of factors that influences farmers' relationship with the buyers. In this typology of trading relationship, as well as in the conflict that arises between farmers and buyers, it is essential to highlight "decision-making power". Power is defined as the capacity of one party to gain advantage over another, sometimes also implying the party persuading or coercing the other into complying with something they would otherwise not (Wilson 1995). In his research, Collins (2002; 2007) considers power as a multidimensional variable and links it to activities that include products, delivery, and price margins. On the other hand, there are studies on relationship performance that in their analysis include efficiency, flexibility, responsiveness, parties' satisfaction, and food quality (Aramyan et al. 2007). Furthermore, it is very important to understand how power is exercised in a relationship between buyers and farmers. It directly affects commitment, satisfaction, performance, value distribution, risk sharing and participation in a trading relationship (Brown et al. 1995; Batt 2003; Benton and Maloni 2005). In the literature, there are also authors (Grosh 1994; Katchova and Miranda 2004) who scrutinize the variable from the "problem-solution" point of view. In their studies, they frame contract farming as an institutional solution to instances of market failures mostly pertaining to low access of credits, insurance and information in general.

However, along with the multiple questions that can be posed to this regard, one that stands out would ask: "Is there any relationship between farmers' power over the buyers and their plans for the future?"

Referring to the literature of the field, especially within the local (Albanian) scholarly debate, there seems to be a knowledge gap when studying the impact of farmers' decision-making power compared to buyers and their ability to invest in the long run. This possible relationship seems to have been pushed out of sight, as the current studies do not imply a direct relationship between these two variables. Often power relations with farmers' investing decisions are accounted for only indirectly by authors of the field, without referring conclusions explicitly (Malak-Rawlikowska et al. 2019).

Most of the authors link the decision of farmers to make investments in their farm with financially based factors, more concretely, to their incomes. Investment decisions are directly related to farmers' income and prospective consumption patterns (Hill 2010). Sun, Zhang and Zhang (2018) also find a direct relationship between farmer's monetary situation and their plans for the future, principally centred around the transformation of their land. The financial situation of farmers in Albania is generally indigent. This can be directly related to contract farming. On the whole, contract farming can be considered as a mix of spot market transactions and vertical integration. This type of making business has its own advantages, such as flexibility, high coordination, better quality control for the products offered, etc. (Prowse 2012). It is worth highlighting the low level of contract farming in Albania which can be translated into lower product commercialization for the farmers, lower incomes, decreased productivity and lower modernization (Maertens and Swinnen 2009; Bellemare 2012; Lushi et al. 2021). In fact, contract farming, especially in the context of developing countries like Albania, has received considerable attention in recent years (Xhoxhi et al. 2019). Ton et al. (2018) in their recent study show that poor farmers, in the context of land and other assets, are rarely involved in contract farming.

However, this is not the only influencing factor as there are many others that contribute to this regard. Amidst other factors, the lack of a well-organized market, poor infrastructure, and the absence of adequate places for the storage and preservation of products have all resulted in lower income rates for farmers. This is directly associated with a decrease in their financial capacity, which in turn diminishes their intention to opt for long-term investment plans. In such circumstances, even when farmers desire to invest with assistance from banks or other financial institutions, they often encounter practical impediments due to being perceived as financially unreliable by such lenders. In this context, farmers in Albania find themselves in a disadvantaged position compared to buyers, primarily due to the aforementioned factors. In today's socio-economic reality, many concerns have been expressed about the unequal distribution of power between farmers and buyers (OECD 2014). Lower farmer power compared to their buyers implies a disadvantage in their products' price-setting position, risk reduction, financial flows, price stability, and security of sale. Consequently, as the buyer gains market traction, farm prices and incomes become significantly redundant. In addition, lower incomes for the farmer mean lower financial capability and as a result, lower capacities for future investments. Being under the pressure of financial uncertainty makes farmers hesitate to invest (Winter-Nelson and Amegbeto 1998).

However, from a purely theoretical standpoint, the other side of the coin is also plausible. If sellers have market power, farmers in this case can create markups above marginal cost at each stage of the supply chain where such power is present. One of the most influencing factors in having market power for the farmer is reputation. It is related with the trading relationship fairness between the farmer and the buyer, built consistently over time (Wilson 1990). In theory, this would create a more favourable environment for the farmer to improve his financial situation and therefore, increase the possibilities of investing in the future.

In this context, the majority of authors in the literature of the field agree that trading power positively correlates with farmers' decision to make new investments, or to expand their economic activity in the future (Bingen et al. 2003; Warsaw et al. 2021). Local authors agree with this line of thinking, pinpointing the fact that farmers in Albania tend to be disadvantaged towards their buyers (Xhoxhi et al. 2019 2020).

3. Methods and procedures

The aim of this research is to study the relationship between trading power and plans for future activities. Such a relationship is investigated in the context of the agribusiness sector in a developing country, namely Albania. The output of this work seeks to contribute to the literature by providing additional evidence in either support or opposition to the above association. Such results can be very useful not only for the farmers themselves, but also for the researchers, academicians, managers or other decision-makers concerned with this issue. Since the economy of Albania is mainly boosted by the rural sector, our findings can also assist policy-makers in designing and pursuing the right policies to this end.

The research design entailed data collection employing a structured questionnaire. The questionnaire

was developed based on literature review and productive consultations with relevant field experts. Its section composition includes household general information, different aspects focused on livelihood, main activity, and trading relationship.

An in-person data collection modality was utilized. A total of 640 valid questionnaires were collected, covering various areas where agribusiness is extant in Albania. As shown on Table 1, the majority of the respondents were above 55 years old (65%), while 12% of them were younger than 45 years old. Almost two-thirds of respondents chose secondary school as the highest completed level of education, whereas less than 4% of the respondents had graduated from a higher education institution. Table 1 also depicts the number of family members over the age of 14.

The two main variables in this research are trading power and plans for future activity. The second one is represented by two indicators, which are (1) plans for investments and (2) interest in increasing the activity. Plans for investments was a dummy variable (Yes/No), where respondents were asked to respond to the following question: Do you have plans for investment in the future? On the other hand, the other indicator, namely interested to increase the activity, was formulated as a nominal variable (Yes, Undecided, No), and the query in the questionnaire associated to this variable was: Is the family interested to increase its agricultural activity?

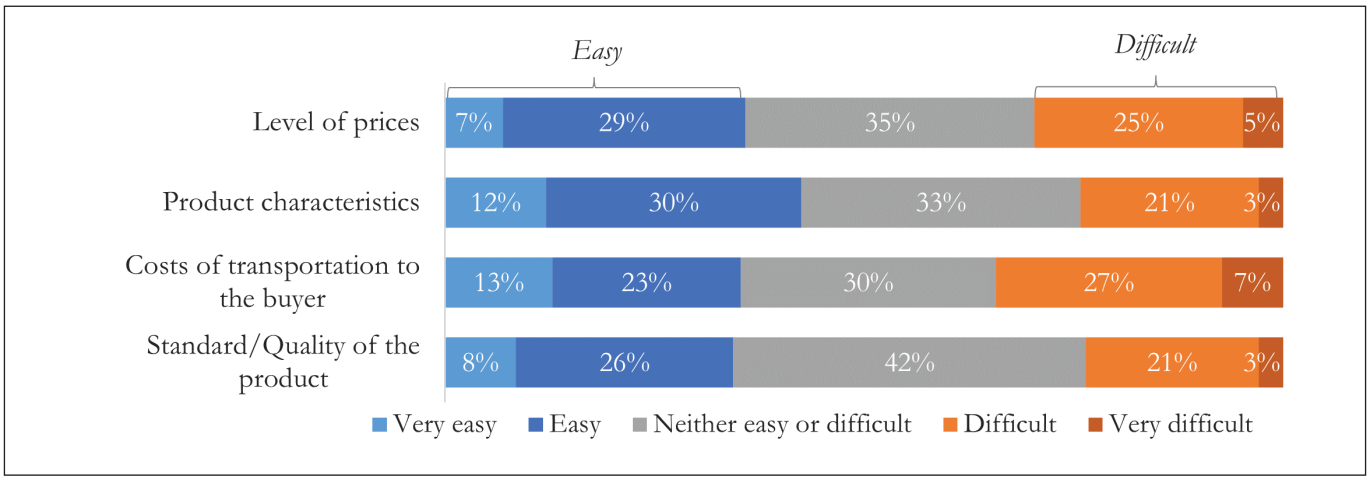
Trading power is a latent variable, which is constituted by four indicators/statements. Trading power refers to the purchasing and selling power between trading partners. Various forms of trading power are possible depending on the market design, ranging from short-term trading to long-term power purchase agreements. The core question was: How easy it is to agree with the buyer about…? The four indicators were: "Level of prices", "Product characteristics", "Costs of transportation to the buyer", and "Standard/Quality of the product". Although ease of reaching an agreement may depend on numerous factors, such as the commonality of values between the two parties, in our case it focuses on the market power only. Each indicator answer was formulated as a Likert-type scale with five options: 1 = Very easy, 2 = Easy, 3 = Neither easy, nor difficult, 4 = Difficult, 5 = Very difficult. To compute the trading power variable, a factor analysis was run, meaning that the indicators (statements) will not have the same loading.

Figure 1 illustrates the distributions of the answers of the respondents per each statement/indicator that were used in constructing the trading power variable. If "Very easy" and "Easy" categories are combined together to form a bigger category, named "*Easy*", and "Difficult" and "Very difficult" categories are summed up to form a bigger category, labelled "*Difficult*", then it can be said that the "*Easy*" ranges from 34% (Standard/Quality of the product) to 43% (Product

Table 1. Sample profile

Variable	Category	Count	Percentage
Age of the respondent	25-34 years old	36	5.63%
	35-44 years old	42	6.56%
	45-54 years old	148	23.13%
	55-64 years old	191	29.84%
	65 + years old	223	34.84%
Education of the respondent	Elementary-up to 4 years	43	6.72%
	Secondary-8/9 years	353	55.16%
	High School	163	25.47%
	Professional High School	59	9.22%
	University	22	3.44%
Members over 14 years old	1 member	24	3.75%
	2 members	282	44.06%
	3 members	124	19.38%
	4 members	134	20.94%
	5 members	57	8.91%
	6 or more members	19	2.97%

Figure 1. Distributions of the answers of per each statement/indicator of trading power



characteristics), while the "*Difficult*" moves from 24% (Standard/Quality of the product and Product characteristics) to 34% (Costs of transportation to the buyer). On average, more than 1/3 of the respondents selected the "Neither easy, nor difficult" option, which represents a considerable share.

For analysis purposes, the variable of trading power was composed using factor analysis (Fabrigar and Wegener 2011). Considering the low number of indicators, only one factor from the factor analysis conducted is expected to emerge.

To test the association between trading power and plans for future activity, the Mann-Whitney test was performed. The assumptions of applying t-test were not satisfied, which implies the use of the Mann-Whitney U test (Hollander et al. 2013; Gravetter and Wallnau 2017). The Kolmogorov-Smirnov test for normality was used to test whether the above assumption is satisfied. This statistical technique examines the difference only between two groups. U statistic formula incorporates the number of the subject per each category and the sum of the ranks (*R*) for individuals in the respective sample, and between the following calculations, the lowest one represents the Mann-Whitney U value.

$$U_1 = n_1 n_2 + \frac{n_1(n_1+1)}{2} - \sum R_1 \quad \text{and}$$

$$U_2 = n_1 n_2 + \frac{n_2(n_2+1)}{2} - \sum R_2$$

The Mann-Whitney U can be standardised using the following formula:

$$z = \frac{U - (n_1 n_2 / 2)}{\sqrt{n_1 n_2 (n_1 + n_2 + 1)/12}}.$$

All the analysis conducted to get the results presented in this paper were performed in SPSS, version 23 (Meyers et al. 2013; Pallant 2016).

4. Results

As mentioned in the previous section of the paper, four indicators were used in constructing trading power, since it is a latent variable. Different ways can be used in constructing such a variable. One such way includes summing up the respondent's scores based on the four indicators, and the result will yield the latent variable. Another way of spotting an unobserved variable can be by calculating the average of the four indicators per each respondent. The third approach in calculating a latent variable pertains to using such an approach that can provide the weights of each indicator in calculating the latent variable, like factor analysis. Hence, the third method listed for calculating a latent variable does not assume that the loading of each indicator is the same, so it is neither the average, nor the sum. In this paper, factor analysis was used to yield the trading power variable (Fabrigar and Wegener 2011). As it was expected, only one factor emerged from the performed principal component analysis, explaining 72.62% of the variation in the sample. The Kaiser-Meyer-Olkin value was greater than the threshold of 0.80 and Barlett's test of sphericity was significant (Hair et al. 2010), providing evidence of the appropriateness of factor analysis. The component matrix is shown in Table 2. All factor loadings were well in excess of Stevens' (2015) benchmark of 0.40, showing evidence of construct convergent validity.

In addition to factor analysis results, reliability test was conducted for the composed variable, and its

results are shown in Table 2. The Cronbach's alpha of the latent variable (trading power) was found to be 0.872, which is above the conservative threshold of 0.7. Thus, there is no issue with the reliability, meaning that the latent variable can be used in further analysis.

To examine the differences in trading power between farmers who have plans for future activities or not, an independent t-test can be performed. Nonetheless, this statistical technique can be used only if certain principles are satisfied, one of whom is usually distribution (Pallant 2016). In cases when this assumption is violated, then a non-parametric technique such as the Mann-Whitney test can be performed. To investigate whether the above assumption is satisfied or not, Kolmogorov-Smirnov test in SPSS 23 was executed (Meyers et al. 2013), and its result is reported in Table 3. The test showed that both the indicators and extracted factor do not follow a normal distribution, meaning that the application of the Mann-Whitney test should be used instead of independent t-test.

The aim of this work is to link trading power with plans for future activities. Regarding the nature of the variables under study, this aim can be achieved by testing the difference between two groups of farmers, those who have plans for future activities and those who do not. If the data confirms that there is a statistical difference between the two groups, then the above association is established.

As stated earlier in this paper, plans for future activities were represented by two indicators, which are plans for investment and interest in increasing the activity. "Plans for investment variable" is a dummy one (yes/no), while "interest in increasing the activity" variable is a nominal one. To test the relationship between trading power and plans for future activities, the Mann-Whitney test was used.

It was found that, when comparing those who have plans for future investment to those who do not, farmers perceived trading power differently (see Table 4). Furthermore, the results indicate that those who have plans for investments reflect higher trading power, as compared to those who do not have such plans. The last row of Table 4 refers to the results of the Mann-Whitney test related to the latent variable (trading power). It was demonstrated that farmers which have plans for investments (mean rank = 422.07), scored higher in trading power than those without such plans (mean rank = 352.32), $U = 27520$, $z = -3.233$, $p < 0.01$. Three out of the four indicators used to compose trading power provided the same result as with the latent variable. Hence, compared to farmers who do not have plans for investments, the data showed that those who have such plans scored higher in level

Table 2. Component matrix and Reliability test

How easy it is to agree with the buyer about…?	Loading	Communalities	Cronbach's Alpha if Item Deleted
Level of prices	.897	.663	.856
Product characteristics	.858	.805	.807
Costs of transportation to the buyer	.837	.701	.847
Standard/Quality of the product	.814	.736	.833

Note: Extraction method, Principal Component Analysis. Kaiser-Meyer-Olkin Measure of sampling adequacy = 0.823. Sig. Bartlett's test < 0.001. Eigenvalue = 2.905; Variance explained = 72.62%; Cronbach's alpha = 0.872.

Table 3. Tests of normality

How easy it is to agree with the buyer about…?	Mean	Standard deviation	Kolmogorov-Smirnov[a]		
			Statistic	df	Sig.
Level of prices	2.92	1.00	0.178	640	0.000
Product characteristics	2.73	1.02	0.187	640	0.000
Costs of transportation to the buyer	2.94	1.14	0.170	640	0.000
Standard/Quality of the product	2.84	0.95	0.224	640	0.000
Power in trading (*as a latent variable*)	0	1	0.079	640	0.000

[a]. Lilliefors Significance Correction

of prices (U = 27821.5, z = -3.213, p< 0.01), product characteristics (U = 28714, z = -2.749, p< 0.01), and costs of transportation incurred by the buyer (U= 24204, z = -5.016, p< 0.001). No significant difference between the two groups of farmers regarding "standard/quality of the product" was found, U = 33975.5, z = -0.053, p> 0.10. However, taking into account all the above results, it can be stated that there is a significant relationship between trading power and plans for investments. Besides, it was demonstrated that this association is a positive one, meaning that those who have plans for investments reflect a higher trading power, as opposed to those without such plans.

Table 5 summarizes the results of the Mann-Whitney test for the second variable that represents plans for future activities, which is "interest in increasing the activity" (Yes, No, Undecided). Evidence shows that, when comparing those who are interested to increase the activity (mean rank = 240.23) with those who are undecided (mean rank = 164.79), farmers perceived trading power differently, U = 9289, z = -6.284, p < 0.001. Even though the mean rank for "Yes" (= 232.26) is a bit higher than for "No" (= 216.74), yet that does not suffice to get a significant difference in trading power, U = 17998, z = -1.143, p > 0.10. The authors believe that the reason for such a result is because two out of four indicators that comprise trading power did not show statistical differences, namely product characteristics (U = 18841, z = -0.451, p > 0.10) and standard/quality of the product, U = 17167, z = -1.916, p > 0.05. On the other hand, compared to those who are undecided (mean rank = 249.22),

Table 4. Results of Mann-Whitney test: Plans for investment

How easy it is to agree with the buyer about…?	Mean rank		Mann-Whitney U		
	Yes (n = 111)	No (n = 614)	U	z	p
Level of prices	419.36	352.81	27821.5	-3.213	0.001
Product characteristics	411.32	354.27	28714	-2.749	0.006
Costs of transportation to the buyer	451.95	346.92	24204	-5.016	0.000
Standard/Quality of the product	363.91	362.83	33975.5	-0.053	0.958
Power in trading (*as a latent variable*)	422.07	352.32	27520	-3.233	0.001

Table 5. Results of Mann-Whitney test: Interest in increasing the activity

How easy it is to agree with the buyer about…?	Mean rank			Mann-Whitney		
	No (n = 320)	Undecided (n = 256)	Yes (n = 121)	U	z	p
Level of prices	295.96	279.18	–	38573.5	-1.257	0.209
	–	168.83	231.68	10324	-5.549	0.000
	208.2	–	254.86	15262.5	-3.558	0.000
Product characteristics	318.75	250.69	–	31281	-5.077	0.000
	–	172.07	224.82	11153.5	-4.618	0.000
	219.38	–	225.29	18841	-0.451	0.652
Costs of transportation to the buyer	331.75	234.44	–	27120.5	-7.210	0.000
	–	156.22	258.36	7096	-8.843	0.000
	210.08	–	249.89	15864.5	-3.053	0.002
Standard/Quality of the product	314.75	255.68	–	32559	-4.465	0.000
	–	184.16	199.23	14250	-1.358	0.174
	227.85	–	202.88	17167	-1.916	0.055
Power in trading (*as a latent variable*)	319.93	249.22	–	30904	-5.075	0.000
	–	164.79	240.23	9289	-6.284	0.000
	216.74	–	232.26	17998	-1.143	0.253

farmers who are not interested to increase the activity (mean rank = 319.93) scored significantly higher in trading power, $U = 30904$, $z = -5.075$, $p < 0.001$.

Regarding the results of the test for individual indicators, it can be said that, compared to either those who are not interested, or those who are undecided, farmers who are interested to increase the activity scored statistically higher in "level of prices" and "buyer transportation cost" (see Table 5). Moreover, evidence shows that there are significant difference between those who are not interested to increase the activity and those who are undecided, in "product characteristics" ($U = 31281$, $z = -5.077$, $p < 0.001$), "buyer transportation cost" ($U = 27120.5$, $z = -7.210$, $p < 0.001$), and "standard/quality of the product" ($U = 32559$, $z = -4.465$, $p < 0.001$).

Considering all the above, results related to the variable "interest in increasing the activity", show that there is an association between the latter variable and trading power. Given the fact that "plans for investments" and "interest in increasing the activity" together represent "plans for future activities", and the significance of the associations of these variables with trading power, it can be said that the proposed association is supported by the data of this study.

5. Discussion

This work has demonstrated interesting results regarding the linkages between trading power and plans for future activities. Evidence found supports the relationship stated above. Despite the results demonstrating that there is an association between trading power and plans for future activities, yet again there is a need to discuss the obtained results, especially because the factor "plans for future activities" is represented with two indicators: plans for investments and interest in increasing the activity.

To test the association and to get the results, a rigorous set of procedures was followed. Firstly, the trading power variable was developed with four indicators, which captures issues like Level of prices, Product characteristics, Buyer transportation costs, and Standard or quality of the product. These aspects do matter in forming trading power, in particular in the agribusiness context. Secondly, to compose this latent variable, a factor analysis was performed, as to obtain the weights of each indicator. As expected, one factor emerged from the factor analysis. Thirdly, to have a better understanding of plans for future activities, two indicators were used, as to have a clearer view over the future plans that farmers have. Finally, the latent variable was tested to see whether it had any correlation to plans for future activities by using a non-parametric technique. The steps mentioned were followed to examine the above linkage in the agribusiness sector in the context of Albania's free-market transitioning economy.

As stated above, two associations were tested in this paper, which lead to the overall relationship. The first association is the one that links trading power to plans for investments, whereas the second one shed light over the linkage between trading power and interest in increasing the activity. Both associations are supported by field-relevant literature. A number of authors consider income level to be a highly significant indicator in their approach towards the two above-mentioned factors (Bellemare 2012; Ton et al. 2018).

Regarding the relationship between trading power and plans for investment, it was found that farmers who have plans for investment reflected higher trading power levels compared to those who have no such plans. This finding establishes a positive relationship between these factors. Therefore, the mere existence of the linkage was not only proved, but its positive nature was also discovered. Maart-Noelck and Musshoff (2013) are on the same line as in their study that linked farmers' plans for investment to higher financial knowledge, better financial behaviour and higher risk tolerance. All these factors, as stated by the authors, imply enhanced trading power relationships. The relationship between farmers' plans for future investments and their market power is complex and can be influenced by several economic phenomena. Here are some of the substantive economic phenomena that can justify this directionality of the relationship. *Improved productivity*: Farmers who invest in their farms can improve their productivity, which can increase their revenue and profitability. This, in turn, can provide them with more resources to invest in their farms and improve their production processes (Warsaw et al. 2021). *Access to capital*: Farmers who have access to capital can invest in their farms and improve their production processes, which can then increase their market power. Access to capital can also help farmers weather economic downturns and other challenges (Carlisle et al. 2019). *Technological advancements*: Farmers who invest in new technologies can improve their production processes, reduce costs, and increase their market power. For example, the implementation of digital connectivity in agriculture can improve efficiency, resilience, digitization, agility, and sustainability, which can improve farmers' market power (Goedde et al. 2020). *Sustainable agriculture practices*: Farmers who invest in sustainable agriculture practices can improve the quality of their soil, reduce the use of harmful chemicals, and increase

their yields. This can lead to better-quality produce, which can increase farmers' revenue and profitability and enhance their market power (Warsaw et al. 2021). *Market access*: Farmers who have access to markets can sell their products and generate more revenue, which can be reinvested in their farms. For example, farmers' markets can improve food access and affordability, which has the potential to expand the demand for locally grown produce and provide farmers with more opportunities to sell their products and generate more revenue (Warsaw et al. 2021).

Regarding the linkage between having interest in increasing the activity in the farm and trading (market) power, the analysis conducted supports such an association. A positive relationship between trading power and having interest in increasing the activity is referred to by many authors, especially those embracing the "contract farming" point of view. A vast number of studies (Eaton and Shepherd 2001; Byerlee et al. 2008; Silva and Ranking 2013; Xhoxhi et al. 2018, 2019, 2020) posit this relationship, even though not explicitly. There is an agreement between these authors pertinent to the positive correlation between trading power and farmers' income level. As was shown above, contract farming has a direct positive relationship with higher incomes as it helps farmers improve their access to credit, or explore additional possibilities for agricultural extension. However, generalizations cannot be made for all the farmers as there are many contributing factors to their income level. Csaki et al. (2008) underline the fact that farmers' income level is highly affected by their region's economy. In this context, farmers operating in poor regions, exhibit a lower trading power – and, as a consequence – less interest in increasing their activity.

6. Conclusion

This study sought to identify whether a linkage existed between trading power (bargaining power in trade) and plans for future activities in the context of the agribusiness sector in a developing country. Plans for future plans are represented by two factors which are: plans for investment and being interested in increasing the activity. Trading power is a current topic in the agribusiness field of study. Scholars have tried to explore potential factors that impact farmers' trading power to entice the design and implementation of different policy instruments for farmers. This problem is quite pronounced in developing and transition countries, where institutions are weak and principles of fair competition are not observed accordingly, as opposed to more advanced economies (Çera, Breckova, et al. 2019). Considering the above discussion, this research aims to fill this gap in literature and offer some insights into the context of developing countries.

To the best of the authors' knowledge, the linkages between trading power and plans for future activities have not received much attention by scholars. Furthermore, it can be said that this study is among the first, since we have failed to find any other paper covering such an issue in the literature. In addition, the originality of this work lies in the fact that "plans for future activities" is represented by two factors, which lead to more consolidated results.

This work demonstrated that plans for future activities are associated with farmers' trading power. Indeed, the study's findings underline that the latter is significantly associated with plans for investment, and, to some extent, with the fact whether farmers are interested in increasing their activity or not. Moreover, findings of this study claim that farmers' trading power is positively linked to plans for investment. This result means that those farmers who plan for future investment reflect higher power over the buyer, as compared to those without such plans. This claim stands for three indicators of trading power, which are level of prices, product characteristics, and buyer transportation cost.

Promoting the horizontal coordination of farmers can potentially increase their market power and facilitate investments in the Albanian agrarian sector. Horizontal coordination among farmers can lead to economies of scale, better bargaining power, and improved access to markets (Imami et al. 2021). This can increase farmers' market power and provide them with more resources to invest in their farms.

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