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THE IMPACT OF DISTRIBUTION CHANNELS ON THE BARGAINING POSITION OF CROATIAN WINE PRODUCERS

Abstract

This paper presents an exploratory study of the relationship between wine producers and distributors in the Croatian wine sector. It focuses on the impact of distribution channels on the bargaining position of wine producers, thereby adding to the growing body of research seeking to determine the factors that influence the growth potential of the traditional agricultural sector. Due to the fragmentation on the production side of the market and a high level of concentration on the distribution side, the wine sector provides a suitable context for studying the bargaining power of agricultural (wine) producers and hypothesizing on future outcomes in terms of industry structure and growth potential. Presuming that the share of value retained by the wine producer depends on his bargaining position, two hypotheses were tested: H1: A higher degree of self-reliance improves a wine producer's bargaining position and H2: A higher number of distribution channels improves a wine producer's bargaining position.

After a brief review of relevant scientific literature, five regression models were created and tested on a sample of 124 Croatian wine producers, which yielded statistically significant results confirming the hypotheses. The final model controls for production volume, number of labels and respective region. The paper ends with some general conclusions and recommendations for future research.

Keywords: Distribution channels, wine producers, market power, bargaining position

1. Introduction

The paper explores the relationship between wine producers and distributors and presents data relevant for understanding the market conditions that influence the development of the wine sector in Croatia.

Considering the fragmentation on the production side of the market, and high concentration on the distribution side, the wine industry is a suitable setting for investigating the impact of distribution channels on the producers' bargaining position. While many winemakers are small-scale producers,

the more ambitious ones among them are seeking for ways to develop their business and looking for new distribution channels. To keep up production levels and enter new markets, they often seek the services of specialized distributors possessing specific knowledge about consumer markets and the logistic infrastructure to deliver the product to the final buyer.

The empirical part of this research is based on in-depth interviews that have been used to establish the current Croatian wine producers' bargaining position towards vis-à-vis the distributors. The authors interviewed 124 wine producers, which account for one quarter of the total number of wine producers listed in the Croatian Wine Registry, producing wine for commercial purposes; and approximately one half of all wine producers using the services of distributors. Interviews were conducted from March to July 2019.

The paper is structured as follows. After a brief outline of the theoretical background, some facts and figures on the Croatian wine industry are provided, that set the context for examining the relationship between wine producers and distributors. The fourth part of the paper presents model development. The fifth part of the paper provides the key results of an empirical analysis of the producer-distributor relationship. The paper ends with a discussion on the findings confirming theoretical expectations, and with a proposal of issues that require further research.

2. Theoretical background

The ideas for structuring this research are drawn from market structure and mechanism design theory and, partly, from agency theory, which offer insights into some of the reasons why producers may have a problem in controlling the distribution of their products. The purpose of intermediaries in a distribution channel is to connect the producer and the consumer markets. A channel may have several intermediaries, forming what theory refers to as a vertical chain of interrelated actors. At each stage of this chain, a specific bargaining relationship is established, determining how the profits within the channel are shared among the participants and how this affects the price paid by the end consumer.

The economic theory on vertical relationships relies on the explanations of market power. Historically, theory was inclined to expect dominant positions on the sellers' side of the market. However, more recently, due to the increased importance of mass distribution (Allain, 2002), the dominant position may have shifted to the distributors' advantage. It is likely that the increase in the number of intermediaries has affected the balance of power between producers and retailers. More recent research confirms that intermediaries have gained stronger bargaining power, even in cases of low market concentration (Haucap et al., 2013; Hayashida, 2018). The buyer power of intermediaries in the modern agricultural distribution chain can obstruct the development of producers in the wine industry. Battigalli et al. (2007) analyzed the impact of buyer power on producers' investment behavior and concluded that the bargaining process can affect the producers' motivation to invest in quality. In the longer term, increasing buyer power of intermediaries by lowering the profits of producers may increase producer concentration (Haucap et al., 2013), leading to lower variety and lower service quality.

Due to the imbalances of bargaining power between contracting parties, unfair trading practices can emerge on any side of the retail chain. For some products it is likely that producers can achieve a better bargaining position as a result of the power of their brand and the degree of consumer brand loyalty, while in other circumstances intermediaries hold a greater bargaining power. The sources of this imbalance are diverse and depend on the presence of switching costs, informational asymmetry and incomplete contracts, and the perishable nature of goods (European Commission, 2014)[1]. Incomplete contracts theory sets the basic propositions that define the bargaining position of contracting parties under asymmetric market conditions. According to Hart (2017: 1750), "contracts are incomplete in reality and contractual incompleteness underlies numerous significant phenomena…". As noted by Schmitz (2013: 3), different authors may focus on different problems. These phenomena can be observed at the microeconomic level, in setting the rules that govern the relationships among parties on the market;[2] and on the intermediate level of industrial organization, especially for regulation purposes (market design, vertical agreements). In

his Nobel Prize lecture, Hart was mostly focused on firm boundaries, i.e. ownership rights (transaction internalization); however, he also mentioned "mechanisms design theory" (2017: 1732). Chan et al. (2018) explore how information asymmetry between producer (manufacturer) and retailer influence contract-format choice by making comparison between profits gained within transfer contracts instead of vertical or shared contracts.

Agency theory will expect at least part of this efficiency to be governed by the quality of control instruments applied by those engaging intermediaries, or distributors, as is the case in this research. The originators of agency theory, Jensen and Meckling (1976), suggested that whenever there is delegation of authority, there will be some loss of value due to the differences in motives (interests) of the principal and agent. In a situation where an agent exploits his position and behaves opportunistically[3], the principal will be deprived of some value that would otherwise accrue solely to him (i.e. in cases where there are no intermediaries). To prevent excessive appropriation of value by the agent, the principal will be willing to take some actions (i.e. set up system mechanisms) that will limit the possibilities of opportunistic behavior by the agent. These actions, whether monitoring or bonding (incentives that might prevent the agent from exploiting his position of power), add some costs to the principal's overall costs of doing business. Agency costs, when it comes to the relationship of producers and distributors, are, in effect, a reflection of market positions of different actors along the same value chain.[4] Researchers that investigated agency relationship in the buyer-supplier relationship include: Mishra et al., 1998; Whipple, Roh, 2010; Steinle et al., 2014; Cadot, 2015. They viewed the buyer (customer) as a principal who is faced with an information asymmetry: inability to evaluate the suppliers' intentions and product/service quality, and opportunistic behavior of the distributor (agent). In this paper, in wine producer – distributor relationship, the wine producer is perceived as the principal who creates a product and uses the services of distributors (agents) to gain access to the market.

With the increase in production, each producer is faced with a decision on distribution of additional quantities. Deciding how many and which distribution channels to use is strategically as important as product development and production itself (Kalubanga et al., 2012). The decision to increase the number of distribution channels requires significant financial investment and also economic analysis to examine the cost effectiveness and to exploit the potential benefits of a larger number of distribution channels.

3. The Croatian wine sector

Wine production stands out in Croatian agriculture, being a traditional culture with large potential for branding Croatia as a tourist destination. Employment in the wine sector is substantial, and so are the returns generated by the industry. After a period of expansion, the sector is at a crossroad, trying to identify opportunities for future growth.

Both geographical position and political and economic context have a big influence on different sectors (Sokolic et al., 2014; Kastelan Mrak et al., 2016). The same applies to the viticulture and wine production. While geographical features are important because the possibility for grape growing depends on the quality of land, economic characteristics, especially tourism, divide wine regions into those that have tourism as a "natural" distribution channel (Adriatic region) and the ones that do not so they have to think of a different way to place their products on the market (Continental region). Each wine region has a significant number of wine producers who produce the same wine type and use the same technological processes, leading to intense competition among producers also at the regional level.

According to the Paying Agency for Agriculture, Fisheries and Rural Development[5], on December 31, 2018 there were 38,475 registered wine producers in Croatia, the total area under vines was 19,409 ha, while the reported production for 2017 was 575,939.75 hl. Given that only 1,648 companies submitted a request for placing wine on the market, that would be the probable number of commercial producers, while the rest produce wine for their own needs. Chart 1 shows the distribution of production relative to the size of area under vines on December 31, 2018. The data presented helped to estimate the actual population size of this research, or more concretely, how many wine producers use the services of a distributor.

Chart 1 Distribution of production according to the size of area under vines on December 31, 2018
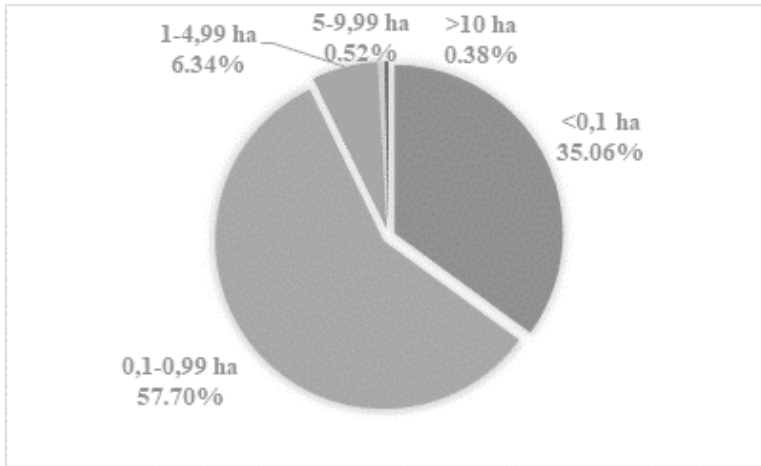
Source: Authors' calculation according to data from the 2018 Vineyard register, available at: www.apprrr.hr

According to the information obtained from wine producers during interviews, producers who produce less than 40,000 liters, which implies cultivation of about 5 ha in Adriatic Croatia and about 6.5 ha in Continental Croatia, mainly do not use the services of a distributor, but rather sell their products through their own shops and distribute their products themselves. Based on the data in the previous chart, 0.9% or about 345 wine producers cultivate over 5 ha, so our estimation is that between 200 and 250 wine producers use the services of a distributor, and are thus the subject of this research.

There is a trend of increasing the share of *quality and premium wine* segment in Croatia. Its share in total production increased from 68% in 2009 to 81% 2018. The share of *premium wine* doubled, while the share of *quality wine* increased by 15%, which indicates changes in consumer demand (www.apprrr.hr).

The following Chart (Chart 2) shows wine consumption trend in Croatia.

Chart 2 Wine consumption trends in Croatia in the period from 2000 to 2017
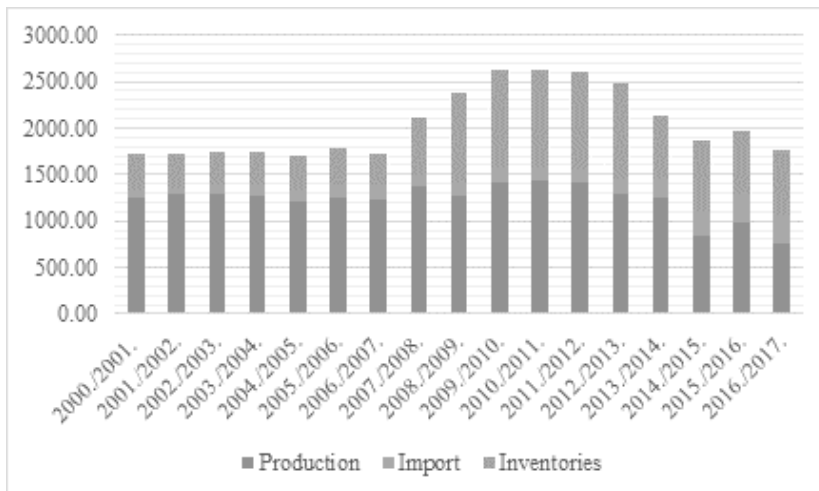
Source: Authors' calculation according to the Croatian Bureau of Statistics[6]

Most of the wine Croatia imports comes from Macedonia and Bosnia and Herzegovina, while Croatia exports wine mainly to Bosnia and Herzegovina and Germany (Čačić et al., 2010). The increase in imports is the result of increased market demand (imports compensate for a low yield) and increased tourist demand (which cannot be met in the short term). This has caused imports to increase by 100% in the last 10 years. Wine exports is decreasing because Croatia does not produce enough wine to meet domestic market needs, and the degree of self-sufficiency is decreasing - it was lower than 80% in 2016/2017 (CBS). Considering the small quantities potentially available for exports, and due to land constraints and labor force shortages, significant export growth is not expected in the near future.

The last 25 years have been marked by political, technological and social changes that have facilitated the development of the private sector. Similar market dynamics have also affected wine production and wine distribution, resulting in a growing number, scaling in size and differentiation in quality of today's operating companies. EU funding has enabled wine producers to modernize production equipment, thereby improving wine quality. To continue the positive trends, agricultural policy should take into account the fact that excessive concentration along the distribution chain may cause redistribution of the new value being created by joint efforts of wine producers and public authorities that support the sector.

4. Model development

The research was conducted to get a better understanding of factors that affect power positions of distributors in the market. The factors considered in this research are briefly described below.

4.1 Variables

An effective distribution range gives the producer access to the market (clearance), and can also render competitive advantage: access to markets he is unable to reach on his own, better visibility, lower costs, and steady financial performance. If the producer wants to have more substantial control of the distribution process, he/she will bear the costs of warehousing, additional employment, administration, marketing and logistics, when needed. However, due to small quantities and varying production volume on a year-to-year basis, combined with low man-power and investment capacity, the majority

of wine producers not selling directly from farm gate will turn to specialized distributors. Moreover, once a larger share of their distribution is taken up by specialized distributors, a hold-up problem is likely to occur.

To ensure the distribution of products, wine producers may turn to several distribution channels, as was observed in this research.

The distribution range (distribution channels) indicates the number of alternative channels available for product distribution. In the wine sector, the reported channels of distribution employed by Croatian wine producers include:

Direct sales (farm gate sales, own shops)

Sales to tourist industry establishments (HoReCa - a distribution channel that includes hotels, restaurants and catering services) – vertical integration

Retailers (generalist distribution chains) – vertical integration

Specialized beverage distributors.

Several authors studied the influence of the number and nature of distribution channels on value-creation and appropriation. Levary and Mathieu (2000) find that distribution through two channels, self-controlled and through intermediary, leads to increased profits for both parties. Lassar and Kerr (1996) argue that the greater the number of distributors in one area, the greater the loss of control for the manufacturer and the possibility of distributor opportunistic behavior. Mukhopadhyay et al. (2008) introduce a model that allows the distributor to add value to the product and thus differentiate the product from the product directly sold by the manufacturer in order to prevent manufacturer-distributor conflict. Vinhas and Heide (2014) investigate how opening manufacturer own sales channels affects the opportunistic behavior of distributors, and conclude that increasing competition, caused by manufacturer opening own sales channels, increases the opportunistic behavior of distributors, but also provides benefits for customers. Adimo and Osodo (2017) conclude that distribution differentiation increases sales, revenues and market share at the micro location. Research has also been dedicated to online sales, as a special distribution channel. Yan and Bhatnagar (2008) compared online sales and distributor sales and concluded that the type of product had a significant impact on the financial performance of a distribution channel.

Yan shows that concerns about unfair distribution of profits may be two-sided. His 2011 paper argues that selling products directly through online sales exacerbates the conflict between manufacturer and distributor because the distributor believes that a part of the profit is being stolen from him. This finding suggests that the fairness of the distribution of profits may be a matter of perception.

Based on the results of previous research, the expectation in this research was that the higher the number of distribution channels employed by the wine producer, the better his bargaining position. It is also expected that a decrease in the dependence on the distributor, which is measured by the ratio of the percentage of sales through own shops compared to the percentage of sales through intermediaries, will improve the bargaining position of wine producers. According to the analyzed sample, the wine producers manage to sell only 20% of their production to the final customer through their own shops, while 80% of their production reaches the final customer through intermediaries, mostly through the distributor (40.6%).

Previous research provided the basis and motivation for exploring how the number of distribution channels and the dependence on the distributor affect the bargaining position of the wine producer. Large margin spreads encountered in the research sample raised a question whether the margins appropriated by the agent fairly represent their share of contribution in new value creation. The collected data indicated a variation in the total intermediaries' margin, spanning from 31% to 67% of the final price at the end market; implying that at least a part of this spread[7] may be the result of unequal bargaining position of individual wine producers that contract the services of a distributor.

This observation leads to the principal hypothesis: **the share of value retained by the wine producer depends on his bargaining position.** A better bargaining position, measured by the producer's share in the retail price would reflect a higher participation in the total value generated.

In this research, a wine producer's bargaining position is seen as being influenced by two factors: the number of distribution channels employed (related to the possibility to choose the most efficient channel; the possibility for distributors to compete on the price and quality of the service offered; attenuation of information asymmetry) and a degree of dependence (exposure to hold-up problems).

Thus, two hypotheses were proposed and tested:

H1 A higher degree of self-reliance improves a wine producer's bargaining position

H2 A higher number of distribution channels improves a wine producer's bargaining position

The research was designed to control for the following factors: size (production volume), scope (number of labels) and region. The arguments for designing such a model are explained below.

By producing closely related products (wine labels) and increasing production volumes, the average cost of production is reduced (economies of scope and scale). The benefits of economies of scope and scale are cost savings, increased competitiveness and better utilization of management skills and sales network, all of which strengthen the bargaining power of a wine producer vis-à-vis the intermediaries (Velázquez et al., 2017). The intermediaries are willing to accept lower margins in order to be competitive in the wine market. Because of the above, the indicators of company size (production volume and number of labels) are ***control variables*** in this paper.

Many researchers have examined the impact of the region of origin of wine on the purchasing decisions, which is also expected to affect the bargaining position of the wine producer. In their study on a sample of 352 Australian wine consumers, Mc-Cutcheon et al. (2009), as well as Chamorro and Garcia-Galan (2015) who used a sample of 427 Spanish wine consumers, concluded that, in addition to the quality, price and type of wine, the decision to buy wine is also influenced by the region of origin. Čop et al. (2019) conducted a survey of business performance of wine producers in the Adriatic and Continental Croatia on a sample of 95 wineries, and concluded that the region had no significant impact on the operations of Croatian wineries. Given that their research was conducted on a sample including only limited liability companies and public limited companies, which account for only about 1.1% of the total number of registered larger wine producers in Croatia, a similar survey was conducted on a sample of 124 wine producers (Katunar, 2019), where all wine producers, regardless of the type and size of business (small, medium and large), were represented. Katunar concluded that there is a correlation between the region and selected indicators of winemakers' business, and that wine producers from Adriatic Croatia achieve better business results than wine producers from the Continental region. This finding supported the decision to include the region of origin as a ***control variable*** in this paper. The variables used in this study are explained in the following table.

Table 1 Definition of variables

Variable	Acronym	Definition
INTERMEDIARIES MARGIN	MRG	Intermediaries margin serves as an indicator of the bargaining position of the wine producer. It is calculated as the difference between the price for the distributor and the average retail price, and expressed as a % of the retail price
NUMBER OF CHANNELS	NRCH	Number of channels is the number of distribution channels that wine producers use to reach the final consumer
INTERMEDIARIES	DISTR	Intermediaries is calculated as a percentage of production that wine producer sells to final consumers through an intermediary (retail chain, distributor or HoReCa)
PRODUCTION VOLUME	PV	Size of a wine producer expressed as the production volume in liters (economies of scale)
NUMBER OF LABELS	NRL	Size of a wine producer expressed as the number of wine labels (economies of scope)
REGION	REG	Region of origin: Adriatic and Continental

Source: Authors

4.2 Research instrument

The research instrument was set up according to the research hypotheses. The questionnaire, which was the basis for conducting in-depth interviews, was used to collect empirical data. 124 wine producers were interviewed at 7 wine fairs, from March to July 2019. The interviews lasted approximately 25 minutes. The questionnaire consisted of 45 questions divided into 4 groups. The first set of questions comprised general information about the wine producing entities. The second and the third set of questions were used in qualitative and quantitative analysis. The fourth set of questions encouraged the wine producers to express their opinions and views on particular issues, which was essential for the interpretation of the results.

4.3 Sample

During the data collection phase, 124 wine producers were interviewed. These producers cultivate 5,300 ha of vineyards. Given that according to the data of the Vineyards Register, there were 19,409 ha under vineyards in Croatia in 2018, the observed sample covers over 25% of the total Croatian wine industry, and about 50% of wine producers sell at least part of their production to final customers through intermediaries. Table 2 shows the share of the interviewed producers in the total number of registered wine producing entities, along with the share in the total area under vines. Table 3 presents data on the types of businesses in the Croatian wine industry and in the sample.

Table 2 Share of wine producers and of the area under vines in Croatia and in the sample by regions

Wine region	Share of wine producers in Croatia (%)	Share in the sample (%) (n=124)	Area under vines in Croatia (%)	Share in the sample (%) (n=124)
Slavonia and Danube Region	34.37	21	39.25	56.4
Central Croatia	25.49	24,2	12.11	19.8
Dalmatia	32.11	17,7	32.27	11.2
Croatian Istria and Kvarner	8.03	37,1	16.37	12.6
TOTAL	**100%[8]**	**100%**	**100%[9]**	**100%**

Source: Authors' calculation based on conducted interviews

Table 3 Share of wine producers in the total number of entities in Croatia and in the sample by type of business

Type of business	Share in total no. of business entities in Croatia (%)	Share in the sample (%) (n=124)
Sole proprietorship	1.2	21.8
Family-run agricultural business	97.6	31.5
Cooperative	0.1	2.4
Limited liability company (llc)	1.0	38.7
Public limited company (plc)	0.1	5.6
TOTAL	**100%**	**100%**

Source: Authors' calculation based on conducted interviews

Although 97.6% of the total number of registered wine companies are family-run agricultural businesses (Wine register 2018), this number cannot be considered relevant as a number of commercial wine producers, since the majority of family-run agricultural businesses are engaged in agriculture for their own needs.

5. Results of empirical analysis

This part of the paper presents descriptive statistics and correlation analysis, followed by five regression models and a final regression model.

Table 4 Descriptive Statistics

Variable	Variable	N	Minimum	Maximum	Mean	Std. Deviation
INTERMEDIARIES MARGIN	MRG	124	31	67	45.04	6.58
NUMBER OF CHANNELS	NRCH	124	1	4	2.82	0.77
INTERMEDIARES	DISTR	124	10	100	79.72	19.39
SIZE (PRODUCTION VOLUME)	PV	124	8.000	9.000.000	316.209,7	1051232.
SIZE (NUMBER OF LABELS)	NRL	124	2	45	9.73	6.36
REGION	REG	124	0	1	0.56	0.49

Source: Authors' calculation

Table 5 Correlation analysis – Spearman test (n=124)

Correlation	MRG	NRCH	DISTR	PV	NRL	REG
MRG	1.000000					
NRCH	-0.283097	1.000000				
DISTR	0.276268	-0.357623	1.000000			
PV	0.044178	0.302128	0.096213	1.000000		
NRL	-0.184226	0.267302	-0.035857	0.584387	1.000000	
REG	-0.346928	0.397209	-0.239824	-0.119360	-0.082405	1.000000

Source: Authors' calculation

Table 6 Regression models

Variables		(1) MARGIN	(2) MARGIN	(3) MARGIN	(4) MARGIN	(5) MARGIN
NRCH	Coeff.	-2.28		-1.84	-1.80	-0.76
	Std. Error	(0.739)		(0.761)	(0.792)	(0.870)
	p-value	(0.003)*		(0.017)**	(0.025)**	(0.381)
DISTR	Coeff.		0.08	0.06	0.06	0.06
	Std. Error		(0.029)	(0.030)	(0.030)	(0.029)
	p-value		(0.007)*	(0.029)**	(0.029)**	(0.050)**
PV	Coeff.			-3.64E-07	-3.12E-07	-6.27E-07
	Std. Error			(5.56E-07)	(6.29E-07)	(6.30E-07)
	p-value			(0.515)	(0.620)	(0.2883)
NRL	Coeff.				-0.02	-0.06
	Std. Error				(0.106)	(0.105)
	p-value				(0.860)	(0.595)
REG	Coeff.					-3.37
	Std. Error					(1.294)
	p-value					(0.010)*
N		124	124	124	124	124
Adjusted R²		0.065	0.051	0.090	0.083	0.125

*p<0.01, **p<0.05
Source: Authors' calculation

Table 6 shows 5 models of the influence of distribution channels on the bargaining position of Croatian wine producers. The number of entities included in research is 124. The first 2 models ((1) and (2)) are tested with single linear regression. According to results for model (1) and model (2), the influence of the independent variable (number of channels (model (1)) and intermediaries (model (2)) on the dependent variable (margin) is statistically significant (p<0.01) *confirming the hypotheses tested in this paper.*

According to the interpretation of the results obtained, an increase in the number of distribution channels by one distribution channel reduces the intermediaries margin by 2.28%, i.e. improves the bargaining position of wine producers. Increasing wine producers' dependence on intermediaries by 10% increases the intermediary margin by 0.82%, i.e. weakens the bargaining power of wine producers.

Models (3), (4) and (5) include control variables (production volume expressed in liters, number of labels, and region).

The final model (model (5)) was developed and tested by multiple linear regression.

The estimated regression equation of the given model (5) is:

MARGIN = 45.19 – 0.76 NR OF CHANNELS + 0.06 INTERMEDIARIES – 6.72E-07 PRODUCTION VOLUME – 0.06 NR OF LABELS – 3.37 REGION

In the final model, independent variable DISTR (intermediaries) and control variable REG (region) are statistically significant (p<0.05). The value of R^2 of 0.125 in the final model indicates that 12.5% of the variation of the dependent variable is explained by the variations of the independent variables. Increasing wine producers' dependence on intermediaries by 10% increases the intermediary margin by 0.6%, i.e. weakens the bargaining position of wine producers.

After estimation of models (3), (4) and (5), diagnostic tests were conducted for multicollinearity using Variance Inflation Factors and heteroscedasticity (White test).

Table 7 Variance Inflation Factors (VIF)

Variable	(3) VIF	(4) VIF	(5) VIF
NRCH	1.09	1.17	1.48
DISTR	1.05	1.05	1.06
PV	1.05	1.33	1.40
NRL		1.42	1.45
REG			1.35

Source: Authors' calculation

Table 8 White test

Variable	(3)	(4)	(5)
NRCH	0.2906	0.2114	0.1200
DISTR	0.9961	0.5255	0.7417
PV	0.9369	0.8418	0.9603
NRL		0.3770	0.4442
REG²			0.7575

Source: Authors' calculation

According to the VIF factor (Table 7), which is significantly below 10, there is no problem of multi-collinearity. Moreover, given that the p-values of the White test (Table 8) are above 0.05, there is no problem with heteroscedasticity in the models (3), (4) and (5).

6. Discussion and conclusion

Even though the research presented in this paper is part of a broader exploration of business policies and growth strategies of Croatian wine producers, by focusing on the bargaining positions of wine producers in the distribution chain, this paper has confirmed the presence of power asymmetry between producers and intermediaries. Thus, it confirmed the findings of other authors that a shift of market power from the producers to the distributors is occurring along with the trend of increasing importance of mass distribution.

This paper investigated the role of distribution channels and its impact on the bargaining position of wine producers, as a weaker contracting party in the Croatian wine sector, and provides recommendations for wine producers. The results confirmed the importance of managing distribution channels on the part of wine producers. The conclusion is

that a higher degree of self-reliance improves the wine producer's bargaining position. Furthermore, the findings suggest that the higher the number of distribution channels employed, the stronger the wine producer's bargaining position. The research model also controlled for production volume, number of labels and region.

Considering that most Croatian wine producers are small producers, several additional observations have been made. Firstly, small wine producers in Croatia do not have direct access to retail chains, making them likely to employ distribution services to reach the retail chain. A second observation refers to a characteristic typical of wine producers – they tend to start as a cottage food operation, selling their product at the gate. As their production volumes increase, they turn to intermediaries to move their goods to the final user. However, it appears that the wine producers that do not switch completely to intermediaries, maintain a better bargaining position. This was evident from the data analyzed - producers with a higher share of sales through own shops had a higher share in the total margin. This suggests that it is beneficial for producers to sell at least part of their product range through their own shops. Also, in addition to increased bargaining power, selling though own shops solves the problem of payment uncertainty and enhances cash flow.

The limitation of the research is its design that was adapted to accommodate the data available through interviews. Due to the inability to obtain more detailed data, especially financial figures, variables were measured by the limited data provided by the interviewed wine producers. Recommendations for future research include the use of accounting data and broadening of data sources: the discussion of the results could benefit from the opinions of tourist industry representatives and professional sommeliers. Moreover, similar research might be conducted on a sample of EU countries to observe their distribution strategies and regulatory treatment of distribution channels.

There were also problems in proving some apparently common and sound theoretical assumptions, such as the influence of size/scale on the producers' bargaining position. Theory assumes that relative size should influence the bargaining position, however, in the analyzed sample, production volumes (scale) and number of labels (scope) did not prove to be statistically significant factors. One of the pos-

sible explanations for this finding could lie in the fact that even the largest Croatian wine producers are rather small in comparison to distributors, and none of the producers account for a significant share in any distributors' total sales. This finding indicates significant market asymmetry favoring distributors. However, in order to construct sound arguments concerning potential abuses of market power (the issue of market regulation was not taken into account in this research), further research is required. Some of the issues that should be explored in future research are market demand trends (expansion/contraction), profit margins, as well as the cost structures and earning potential of the distribution side of the market. A portfolio approach differentiating producers of different sizes and different business models could be of benefit to both wine producers and distributors. Another complementary approach concerns studying the content of contractual arrangements. If some categories of wine producers or agricultural producers in general can be shown to have some influence on contract arrangements, these could be used to put forward recommendations for agricultural producers trying to develop their business models.

Acknowledgement

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Endnotes

1   European Commission (2014), "Study on the Legal Framework Covering Business-to-Business Unfair Trading Practices in the Retail Supply Chain".

2   A contract agreement serves to explicitly stipulate mutual expectations of bargaining parties.

3   Behavior that can lead to a situation of moral hazard, that is, the behavior of the agent that results in less successful business operations of the company for the owner.

4   Another strand of this research (Katunar, 2019) has demonstrated that those producers that employ assets to monitoring and bonding activities, do enjoy higher shares in the value (selling price) achieved at the end market.

5   Paying Agency for Agriculture, Fisheries and Rural Development (PAAFRD), Vineyards Register data 2018, available at: https://www.apprrr.hr/ (Accessed on: December 7, 2019)

6   Croatian Bureau of Statistics, available at: www.dzs.hr (Accessed on: December 5, 2019)

7   The other part of this margin spread represents higher costs of operations, as it should be acknowledged that some wine producers, for example, smaller in scale, of lower wine quality, lower brand recognition, may raise the operations' costs for the distributor. Still, with the available data it was impossible to establish the share of justified expansion of the agents share in the final price.

8   According to the Paying Agency for Agriculture, Fisheries and Rural Development (APPRRR) (Vineyards register) in 2018 there were 38.475 entities in Croatian wine industry.

9   According to the Paying Agency for Agriculture, Fisheries and Rural Development (APPRRR) (Vineyards register) in 2018, in Croatian wine industry 38.475 entities cultivated 19.409 ha of vineyards.

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Utjecaj distribucijskih kanala na pregovaračku poziciju hrvatskih vinara

Sažetak

Ovaj rad istražuje odnos proizvođača vina i distributera u hrvatskom vinskom sektoru. S obzirom na rastući broj istraživanja koja se bave pokušajem utvrđivanja čimbenika koji utječu na potencijal rasta tradicionalnog poljoprivrednog sektora, u ovom smo se radu usredotočili na pitanje kako distribucijski kanali utječu na pregovarački položaj proizvođača vina. Zbog fragmentacije na strani proizvođača i visoke koncentracije na strani distributera, smatramo da je vinski sektor pogodan objekt za analizu pregovaračke moći poljoprivrednih (vinskih) proizvođača i za spekuliranje o budućim ishodima u kontekstu strukture industrije i potencijala rasta. Pretpostavljajući da dio vrijednosti koja ostaje proizvođaču ovisi o njegovom pregovaračkom položaju, u radu se ispituju dvije hipoteze: H1 - Viši stupanj prodaje putem vlastitih prodajnih kanala poboljšava pregovarački položaj proizvođača vina i H2 – Veći broj kanala distribucije poboljšava pregovarački položaj proizvođača vina.

Nakon kratkog pregleda relevantne znanstvene literature, na uzorku od 124 hrvatska proizvođača vina formira se i ispituje pet regresijskih modela koji pokazuju malu, ali statistički značajnu potvrdu hipoteza. Konačni model kontroliran je za količinu proizvodnje, broj etiketa i regiju proizvodnje. Rad završava općenitim zaključcima i preporukama za buduća istraživanja.

Ključne riječi: distribucijski kanali, proizvođači vina, tržišna moć, pregovarački položaj