

-RESEARCH ARTICLE-

## FACTORS AFFECTING WINE CONSUMPTION - CASE OF ALBANIA

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### —Abstract—

In Albania, winemaking and viticulture are well-known and established industries. In addition to locally dominant wine products, imported beverages, primarily Italian, French, or from the region, such as those of Montenegro, Macedonia, Kosovo, etc., dominate the current market. Given this context, the development of this industry in the country necessitates special care and is highly complicated, particularly in grape types. This research aims to identify and quantify the factors that influence wine intake utilizing a questionnaire and interviews with 250 respondents, half male and half female. Follow the Categorical Regression Estimation model for categorical response variables when conducting data analysis. In addition, it strives to meet the requirement by advising wine producers on the need to comprehend which packaging traits or cues are significant to customers and to concentrate their marketing efforts on wine production. In addition to 250 face-to-face interviews, a questionnaire was developed to analyze the impact of wine consumption on socio-demographic parameters associated with the consumer profile. The analysis and interpretation of the results reveal intriguing determinants of wine

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consumption. Age, education, income level, and wine price are the primary determinants of a consumer's decision to purchase wine. Older persons (those over 40 years old) are 1,4 times more likely to purchase wine than younger people. The likelihood that those with a higher income will purchase wine is 2.15 percentage points greater among those with a higher income than those with a lower monthly income. Education tends to have a positive effect on wine intake. However, gender does not appear to make a substantial difference. The findings increase the comprehension of wine consumption patterns in growing wine-producing nations.

**Keywords:** Albania, wine production, factors, wine consumption, Categorical Regression.

JEL Classification: M11, M3

## 1. INTRODUCTION

Albania has the potential to build a competitive wine industry in the region and abroad due to its geographic location, number of sunny days, good soil, and indigenous grape types. Currently, Albanian producers work in a market hampered by unfair competition, particularly imported wines. Some producers have invested in vineyards and technology. However, there is still no definite program or plan to develop and promote this industry and the "Made in Albania" product, leaving the wine market in disarray (Zhillima et al., 2012). In Albania, the cultivation of vineyards and the manufacture of wine have a rather lengthy history. In the past three decades, these two industries have undergone tremendous change, which has led to the growth of their respective subindustries, viticulture and the wine business.

In Albania, winemaking and viticulture are well-known and established industries. In addition to locally dominant wine products, imported beverages, primarily Italian, French, or from the region, such as those of Montenegro, Macedonia, Kosovo, etc., dominate the current market. Given this context, the development of this industry in the country necessitates special care and is highly complicated, particularly in grape types. This industry considers vineyards, local producers (wineries and factories), packaging suppliers, and local merchants to match the consumer's taste with regionally produced goods. In the meantime, the importers of these products from Italy, France, and the region continue to be a crucial factor in this industry (Vukatana, Sevrani, & Hoxha, 2016).

This product has a small share of household expenditures, but its share increases yearly due to economic growth and dietary improvement. As fine wine offers the prospect of price liberalization, which translates to quality wine at a higher price for the buyer, the competition among imported goods is rather strong. Among the concerns of the Albanian entrepreneur Vukatana et al. (2016). are the European Union's criteria for manufacturing and product hygiene, product certification, enhancing food safety, storage, and trade, and meeting all of these standards.

The wine business's demand and supply sides in Albania have experienced extraordinary growth over the past few years. There has been an increase in the quality and quantity of demand for wine, which has been met by the wine industry's ongoing efforts to meet this need. Nationally, the quantity of wine drunk in our country during the past two decades has fluctuated inexplicably, which can be explained by the fluctuations of macroeconomic and political-social indices. At the regional level, the Albanian consumer has the lowest per capita wine consumption (Zhllima et al., 2012).

Consumers in Albania typically purchase wine and rakia directly from primary producers. They frequently shop at farmers' markets or in the countryside. A consumer in Albania with a low-to-middle income is more likely to favor farm-produced wine. Middle-to-high income consumers are increasingly gravitating towards overseas fashion names. In recent years, customers, particularly those with higher incomes, have become more conscious of wine safety concerns (Zhllima et al., 2012). The Albanian wine business is diverse and dominated by small wineries. Companies in the winemaking industry could not expand due to a deficiency in grape supplies. Quality wine brands are still underdeveloped - local producers of high-quality wine can sell their products. Still, imports of quality wine are on the rise, indicating that the domestic wine supply does not match the quantity and quality needs of the domestic market. According to the study, Albanian consumers are substituting wine for rakia (a traditional drink made primarily from grapes) as their income level rises, resulting in altered consumption patterns.

According to Salai, Gašović, and Čelić (2013), grape production in Albania increased by over 250 percent between 2000 and 2016. This is mostly due to the subsidy programs implemented by the Albanian government in the late 2000s, which increased crop area and output yield. In the same years, wine output has increased significantly, with a 2.5-fold increase Schamel (2017) discovered that despite the recent growth in wine production in Albania, there is still room for improvement. According to them, the imports-to-exports ratio is still significantly skewed toward imports. Their study found that Albania can replace imports and profit from the growing tourism industry. The focus should be placed on enhancing quality and efficiency at the production and processing levels of farms/grapes.

The wine value chain can potentially be regarded as a priority industry in light of wine import substitution and the expansion of the Agritourism market. According to the research by Zhllima et al. (2012), the location where wine is made is the most influential element in influencing customer behavior on the market. According to much research, customers in Albania prefer Albanian wine to imported wines. And even the wine-producing region inside Albania significantly impacts consumer behavior. According to Zhllima et al. (2012), most Albanian customers consider the region/area of origin to be either significant or very important when purchasing decisions. According to Zhllima et al. (2012), indigenous wine is not the market leader in Albania. The market is dominated by wines imported from the European Union, specifically Italy. In addition, they assert that there is

potential for local wine in the Albanian market and identify a segment of consumers willing to pay higher costs for local wine. Consumers favor Albanian wines from specific regions, such as Permet, Vlore, and Lezha. There is also a tradition of grape farming and processing in these regions. Most respondents in their study are willing to pay a premium for the desired origin [Zhllima et al. \(2012\)](#).

In this regard, another study by [Vukatana et al. \(2016\)](#) explores wine traceability alternatives as a topic that has gained international importance. EU member states and the United States must implement food quality control programs. Intent on joining the EU, Albania has enacted most EU food regulations. Regarding the vineyard industry, the law requires winemakers to maintain traceability information. In addition, the traceability system gives consumers transparency and the confidence that they know what they are drinking. Companies who develop such a relationship with their customers will likely experience a significant increase in market share ([Vukatana et al., 2016](#)).

According to [Zhllima et al. \(2012\)](#) introducing quality schemes in wine production, such as Geographical Indications (GI), indicates a possibility. The autochthonous grape varieties grown in specific regions of Albania for centuries (such as Serina in Korca, Vlosh in Vlora, Pules in Berat, and Kallmet in Lezha) indicate a relationship between a specific cultivar and a specific geographical area and represent a potential for developing a wine quality scheme, including geographical indicators (GI) but not limited to ([Zhllima et al., 2012](#)). Consumption per capita in surrounding nations is significantly higher than in Albania. In addition to the continued growth of domestic wine production by industry and artisanal methods, wine imports have increased dramatically in recent years.

Based on the preceding information, the following studies are deemed crucial and of great value for dissecting the factors that govern wine consumption and its trajectory. This article focuses on wine market research with the primary objective of finding the elements that influence consumer behavior and decision-making in Tirana, the region of Albania, concerning wine consumption. Also, the purpose of this study is to determine the consumers' perceptions of wine consumption by identifying the factors that influence consumers to understand better the characteristics of wine consumers. It focuses on the attributes they seek when deciding to purchase wine, as well as assisting the Albanian stakeholders involved in the wine area of production and commercialization in improving their marketing strategies under the market's needs and contributing to the development of the Albanian wine industry.

## 2. LITERATURE REVIEW

Albania produces a limited amount of wine compared to other nations in the region. According to state statistics, Albania's wine production in 2019 was only 21 million liters, around 35% of Macedonia's production and 10% of Serbia's. Despite imports, indigenous production dominates Albanian wine consumption; imports account for less than 10 percent of the domestic supply.

Various scholars from various nations have conducted studies assessing and evaluating the elements that influence wine consumption. [Cembalo, Caracciolo, and Pomarici \(2014\)](#) cites several elements influencing wine consumption, including consumer education, other wine-related activities (subsidiary products), distribution channels, quality, price, provenance, and income level. In addition to factors such as quality, another study conducted in Romania by [Speriusi-Vlad \(2014\)](#) demonstrates that price plays a significant role in consumers' purchasing decisions.

[\(Stanciu, 2015\)](#) interviewed one thousand Moldavian consumers. Consequently, wine consumption is contingent upon quality, price, and socio-economic level. In this study, it must be underlined that neither gender nor age structure significantly affects wine consumption. In empirically examining the factors influencing wine consumption among American consumers, 122 surveys revealed a substantial positive correlation between wine knowledge and consumption. Although age and race influence wine consumption, knowledge continues to be the most influential factor ([Hussain, Cholette, & Castaldi, 2007](#)).

[Hertzberg and Malorgio \(2008\)](#) conducted a choice experiment on 444 wine purchasers in North-Eastern Italy, replicating the selection of an everyday wine in a supermarket. They found that the presence of controlled origin designation (COD) or typical geographic indication (TGI) designations of origin, a well-known brand, and the indication of the grapevine variety on the label all increase the choice probability associated with a positive willingness to pay - WTP. The link between price and utility is quadratic. Price has a smaller impact than other qualities. The private label has a negligible effect on customer decisions, which can be favorable or negative depending on the original price of the wine.

[Schamel \(2017\)](#) investigated the important components of consumer demand for the successful development of a wine and culinary tourist segment in South Tyrol. Using Pine and Gilmore's 4E-Model of experiential consumption, we argue that the four domains of an experience, namely entertainment, education, escapist, and aesthetic, correspond to the primary components of consumer preferences. Utilizing exploratory factor analysis, the author determined the primary components of customer demand preferences. The most desired demand characteristic of a culinary wine experience is educational entertainment. The second characteristic pertains to educational social-cultural activities. Third are escapism-related wine and food activities, and fourth is the aesthetics of accommodation characteristics and style in the culinary and wine domains.

[\(Mauracher, Procidano, & Sacchi, 2014\)](#), and Sacchi explored the demand of wine tourists at various stages of their experience in a 2014 study. Specifically, their research focuses on determining the tastes and demands of wine tourists who elect to visit Prosecco-producing regions and purchase local goods. In summary, the logit model employed by the authors indicates that the likelihood of visiting the Prosecco District is determined by being over 60 years old, having planned another wine tourism experience, consuming Prosecco frequently, and being an international tourist. They contend that the findings will, on the

one hand, raise the level of understanding of tourists' preferences and, on the other, assist in meeting tourists' expectations and demands. A comprehensive understanding of wine tourists' motivations, characteristics, and levels of satisfaction will enable businesses to position themselves appropriately in the market.

Wang (2011) analyzed the preferences of Chinese customers for wine and food goods in 2011. A logistic regression model is used to assess the relationship between purchasing habits and behavior and socio-demographics and forecast the chance and frequency of probable wine consumption. Income and education have a marginally significant favorable effect on wine intake. In response to increased concerns about the connection between diet and health, the food industry has developed so-called "functional foods." In this context, Barreiro-Hurlé, Colombo, and Cantos-Villar (2008) conducted an exploratory estimate of the potential market for available wine, a wine made from grapes with an increased resveratrol content. This study's findings indicate that the functional attribute positively and significantly influences the likelihood of picking a red wine and that the willingness to pay for this characteristic is comparable to wine aging .

Regarding food goods and factors influencing consumer behavior, A. Kapaj, Deci, Kapaj, and Mece (2013) analyzed the significance of several socio-economic aspects in determining the ultimate customer behavior. Among these criteria, notably Age, Education, Income, and price have been utilized. Most consumer behavior research utilizes these variables. The objective of the study by Srivastava, McLaren, Wohlgenant, and Zhao (2015) is to evaluate the price elasticity of demand for 12 disaggregated types of alcoholic beverages in Australia (red bottled wine, white bottled wine, sparkling wine, and cask wine). Results demonstrate elastic own-price elasticity for the vast majority of goods. Any planned cask wine tax hike may also shift customer demand for less desired beverages (other potent alcoholic beverages).

Also, according to Salai, Gasovic, and Celic, the behavior of wine consumers in Vojvodina is greatly impacted by environmental and individual factors. Specifically, these are geographical, demographic, economic, sociological, social, cultural, political, and legal determinants (Salai et al., 2013). The income and purchasing patterns in wine shops, as well as the habit of drinking between meals, significantly impact the disposition to purchase Sicilian wines, according to the reported preferences of 953 Italian wine purchasers. Based on an Italian study, it has been determined that these characteristics influence the market behavior of consumers. (Caracciolo, Di Vita, Lanfranchi, & D'Amico, 2015). The purpose of a study undertaken by Bruwer, Saliba, and Miller (2011) in Australian regions is to understand better customers' product style preferences and what this means for wine product marketing. They discovered distinct disparities in the wine consumption patterns and sensory preferences of males and females, as well as between generational cohorts, particularly Millennials and older consumers. Females consume less wine than males and spend less on it, but they tend to "compensate" for this by purchasing more expensive wine per bottle, which may be a risk-reduction technique (Bruwer et al., 2011). The empirical

findings among Canadian consumers indicate that their response to wines made abroad differs from that of domestically produced wines. The spending elasticity of white wines from British Columbia, Europe, and the rest of the world is greater than that of red wines (Carew, Florkowski, & He, 2004).

The premium wine segment has grown substantially to the detriment of basic wines. Nonetheless, in traditional wine-producing and -consuming nations, inexpensive wines continue to account for a significant volume and value share of the market (similar to Albania) Cembalo et al. (2014). According to the authors of this study, marketing techniques for such wines are altered to penetrate this increasingly competitive market. The QUAIDS Censored method was applied to a sample of 6,773 Italian households to determine the extent to which replacement occurs in the home consumption of inexpensive wines, which is the principal distribution channel for inexpensive wines in Italy. While pricing is an important factor in supply strategies, data also highlight the importance of packaging as a glass substitute, such as cartons. In their study, Barber, Almanza, and Donovan (2006) found that label design and bottle closures were essential to responders. Also, they determined that self-confidence significantly influenced age and gender, with women and respondents between the ages of 31 and 40 being more hesitant to make a wine-purchasing decision .

In the example of Tian, Hao, Mu, Shi, and Feng (2021) explore the factors influencing wine consumption by collecting data from 431 wine consumers. The findings reveal that wine consumption is influenced by cultural, demographic, consumer attitudes, consumption patterns, and other factors. In the example of Camillo (2012) examines the elements that influence wine consumption in the Chinese market. It has been determined that consumer education, wine-related activities, communication channels, taste, country of origin, quality, and price rank are significant determinants of Chinese consumers' purchasing and consumption behavior. In the same year, Mann, Ferjani, and Reissig (2012) interviewed 404 Swiss wine drinkers to investigate the determinants of organic wine consumption. The data reveal that the price and origin of wine are more relevant than the preference for organic and imported French wine over Swiss wine. Predominantly metropolitan women place a premium on organic wine consumption and wellness. By utilizing a binary logit model in the Italian wine consumption market, D'Amico, Di Vita, Chinnici, Pappalardo, and Pecorino (2014) demonstrate the significance of socio-demographic factors such as income and occupation in determining the behavior of consumers of locally produced goods. Jovanović, Kaščelan, Joksimović, and Kaščelan (2017) explore the preferences of 207 randomly selected respondents about purchasing wine. The classification decision tree indicates socio-demographic factors, such as region, place of residence, family size, age, income, and consumer education, as well as cognitive-behavioral factors, such as price, place of purchase, and product attributes, influence wine consumption. Pentz and Forrester (2020) examine the influence of wine qualities on the wine-purchasing behavior of South African consumers of different generational groups, such as the young and the elderly, using data collected from 646 South African wine consumers via a structured online

questionnaire. The findings of the T-test indicate that an in-store promotional display of wines was ranked as the least significant wine feature by the older cohort. In contrast, the younger cohort rated an alcohol level below 13 percent as the least significant wine attribute.

Migliore, Thrassou, Crescimanno, Schifani, and Galati (2020) investigate which wine quality features, consumer attitudes, and socio-demographic factors influence consumers' willingness to pay (WTP) a premium price for a bottle of natural wine on the Italian market. The study is experimental, and data were obtained from 613 Italian wine drinkers; the Tobit model was used to analyze the data. Tian et al. (2021) examine the channels via which Chinese consumers purchase wine; for this goal, researchers collect data from 34 provinces of China via questionnaires from 2,976 respondents using the technique of convenience sampling. The findings of the logistic regression model indicate that among the 12 influencing factors in 4 categories, consumers' education and a few other criteria had a substantial impact on their decision about wine purchasing channels. In Kruger and Viljoen (2022) study of the association between age and wine consumption preferences in South Africa, questionnaire data from 20,997 respondents were collected. To differentiate the market, the researcher categorizes age into five cohorts. Based on their socio-demographics, wine preferences, and consumption patterns, the age cohorts of South African wine consumers exhibit statistically significant variations. Although different authors have conducted several studies in other countries to determine the elements that influence consumer decisions about food products in general and wine in particular, Albania lacks such research. Determining the elements that determine wine consumption in Albania can assist wine producers in making more successful marketing decisions based on wine consumers' age, Education, Gender, and Income level.

### 3. METHODOLOGY

This study aims to discover and quantify factors that influence wine consumption. The present study is descriptive and is concerned with collecting sufficient data to test hypotheses or inquire about the research issue's current situation. Typical descriptive research evaluates attitudes, opinions, demographic data, situations, and methods.

The study was conducted in Tirana, the largest city in Albania, which is also the country's capital, and the population of the study is wine consumers in Tirana. The questionnaire's choice experiment requires a sample size between 200 and 350 (at a confidence level of 5 percent) (Hertzberg & Malorgio, 2008). The total number of responders was 250, with fifty percent female and fifty percent male. They were randomly selected by professional interviewers, typically at Tirana's supermarkets.

The selection of more than 200 samples ensures a representative sample of Tirana's wine consumers.

A questionnaire has been developed for data collection based not only on the literature but also on identifying the customer profile in the country, taking into consideration several



socio-economic aspects. Consumer information was acquired through structured questionnaires and in-person interviews. The location and words of the interviewers and the days and times of the interviews have been carefully chosen to minimize bias (Stanciu, 2015). The interviewers chose interviewees older than 25 years old. This is necessary for the sample selection, as these individuals are potential wine customers.

In the instrument development process, each questionnaire consisted of three sections: the first examines purchasing and consumption behavior and motivations with a primary focus on market-related factors, the second is a product choice experiment, and the third examines involvement, objective knowledge, and socio-economic characteristics. This study focuses on socio-demographic variables such as income level, age, education, religion, food diet, wine pricing, wine origin, and others strongly associated with the consumer profile.

Consumption of wine is quantified using a binary variable. The following questions are used for data collection:

**Binary variable (Dependent):**

"Do you consume wine?" A12 (1=Yes; 2=No)

**Variables in the model (independent):**

- A5 - Education
- A8 - Religion
- A10 - Age
- A16.1 - Wine origin domestic (binary)
- A16.2 - Wine origin domestic (binary)
- A19.1 - Is price an important factor affecting your buying behavior (binary)
- A20 - Income level (binary)

The dependent variable (A12) is a categorical binary variable. Again, all other independent variables are categorical. The respondents' responses are inserted in a database created in excel, and the data have been analyzed using SPSS software. Literature suggests that before running in SPSS the binary logistic regression, we must run Spearman's correlation matrix (I. Kapaj & Kapaj, 2013). This is to determine the significantly correlated variables responsible for many independent variations.

Data analysis using a binary logistic regression model indicates Categorical Regression Estimation for non-numeric response variables. Previous studies use this method (Correia, Oliveira, & Butler, 2008; Frye & Bachan, 2017; Hilbe, 2009; Lipovetsky, 2015; Long & Freese, 2006). A Binary logistic model is used to study the probability of occurrence of a binary-dependent variable (there are only two values: 0 and 1). When the dependent variable is in binary form, we cannot analyze with normal linear regression because the model will violate the regression assumptions and invalidate the system statistics of the tests in the regression, leading to inaccurate results

(Nguyen & Vu, 2021; Omondi-Ochieng, 2021; Pourmahmoud & Gholam Azad, 2022). Binary logistic regression does not necessarily satisfy these assumptions (Sanchez-Varela, Boullosa-Falces, Larrabe Barrena, & Gomez-Solache, 2021; Tang, 2001). Therefore, in this study, the authors use the binary logistic model to determine the factors affecting wine consumption in Tirana, Albania.

#### 4. STUDY RESULTS

As mentioned above, the main goal of this study is to assess the effect of factors determining wine consumption in the Tirana region. The correlation matrix in [Table 1](#) below reveals that only two factors are significantly correlated with dependent, and that is A20 (Income level) and A5 (Education level). A19.1 (price level) with close to 95% confidence level can be included in the binary logistic and using the same judgment, A10 (Age) with a confidence level of 92.7%. Now we can move towards running the regression of the binary logistic model.

In [Table 2](#), the binary logistic model reveals that explanatory variables show a greater variation in the dependent variable. This means that Age, Education, Income level, and price of the wine are the main factors affecting the consumer's decision to buy wine. From the variables in the equation table, it appears that A10 (Age) and A20 (Income level) have a significant effect on the dependent (decision to buy wine). So, when we go from one to the other category in –Age Variable (from younger to older people), the chance to buy wine increases by close to 1.4 times concerning the preceding category, as similar findings indicate ([Kruger & Viljoen, 2022; Pentz & Forrester, 2020](#)).

Meanwhile, when we go from the lower to higher categories in the Income level variable, the chances of consuming wine increase by 2.15 times more than in the preceding category. Education and wine price affect the decision to buy wine. Although the effect is not that significant, similar findings indicate by ([Camillo, 2012; Mann et al., 2012](#)). People who don't buy wine state that price is the main factor, whereas when going from the lower echelons of the society to the higher ones, taking into account their level of education too, the prospects to purchase wine increase by 1.7 times in correlation to the preceding category.

We found the same conclusion in the study of wine buying decisions among American consumers [Hussain et al. \(2007\)](#), where age and knowledge associated with education affect the buying decisions significantly alongside race. [Tian et al. \(2021\)](#) found out the education on the consumption pattern of wine. The wine consumption decisions among citizens in the Tirana region are affected significantly by age and income. At the same time, other factors like education and price have a significant role in the consumer buying decision. Based on the results and also in line with previous studies, we are sure of the outcomes of this study. So to summarize, the main factors affecting Albanian consumers toward wine consumption are Age, Education, Income level, and price.

**Table 1. Correlation Coefficients**

Correlations matrix			A12	A20	A10	A5	A8	A19.1	A16.1	A16.2
Spearman's rho	A12	Correlation Coef.	1.00	.279**	.119	.152*	-.006	.129	.039	-.036
		Sig. (2-tailed)	.	.000	.073	.021	.932	.051	.604	.626
		N	230	230	229	230	230	229	183	183
	A20	Correlation Coef.	.279**	1.000	.005	.152*	.032	.006	-.239**	.195**
		Sig. (2-tailed)	.000	.	.940	.021	.632	.931	.001	.008
		N	230	230	229	230	230	229	183	183
	A10	Correlation Coef.	.119	.005	1.000	-.027	-.026	-.045	-.089	-.022
		Sig. (2-tailed)	.073	.940	.	.684	.696	.501	.230	.772
		N	229	229	229	229	229	228	183	183
	A5	Correlation Coef.	.152*	.152*	-.027	1.000	.073	.003	-.086	.114
		Sig. (2-tailed)	.021	.021	.684	.	.272	.963	.244	.124
		N	230	230	229	230	230	229	183	183
	A8	Correlation Coef.	-.006	.032	-.026	.073	1.000	.137*	.008	.225**
		Sig. (2-tailed)	.932	.632	.696	.272	.	.038	.917	.002
		N	230	230	229	230	230	229	183	183
	A19.1	Correlation Coef.	.129	.006	-.045	.003	.137*	1.00	.007	.126
		Sig. (2-tailed)	.051	.931	.501	.963	.038	.	.921	.089
		N	229	229	228	229	229	229	183	183
	A16.1	Correlation Coef.	.039	-.239**	-.089	-.086	.008	.007	1.000	-.610**
		Sig. (2-tailed)	.604	.001	.230	.244	.917	.921	.	.000
		N	183	183	183	183	183	183	183	183
	A16.2	Correlation Coef.	-.036	.195**	-.022	.114	.225**	.126	-.610**	1.000
		Sig. (2-tailed)	.626	.008	.772	.124	.002	.089	.000	.
		N	183	183	183	183	183	183	183	183

\*\* . Correlation is significant at the 0.01 level (2-tailed).  
 \* . Correlation is significant at the 0.05 level (2-tailed).

**Table 2. The Binary Logistic Regression Model**

<b>Model Summary</b>			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	207.299 <sup>a</sup>	.113	.176
a. Estimation terminated at iteration number 6 because parameter estimates changed by less than .001.			

<b>Hosmer and Lemeshow Test</b>			
Step	Chi-square	df	Sig.
1	26.156	8	.001

<b>Variables in the Equation</b>							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 <sup>a</sup>	A10	.329	.167	3.860	1	.049	1.389
	A5	.539	.307	3.079	1	.079	1.714
	A19.1	1.879	1.052	3.191	1	.074	6.546
	A20	.768	.216	12.635	1	.000	2.155
	Constant	-2.585	1.035	6.232	1	.013	.075
a. Variable(s) entered on step 1: A10, A5, A19.1, A20.							

## 5. CONCLUSIONS

Using a regression model known as "Categorical Regression Estimation" for non-numerical response variables, this paper aims to identify and quantify the factors that influence wine consumption. In addition, it strives to meet the requirement by advising wine producers on the need to comprehend which packaging traits or cues are significant to customers and to concentrate their marketing efforts on wine production. Late in the twenty-first century, domestic demand for wine in Albania stimulated expanded cultivation and production. This has primarily occurred due to changes in consumer lifestyles. The Albanian government's subsidy programs are an additional factor contributing to this increase. Despite this, Albania's wine production is modest compared to neighboring nations.

The Albanian wine industry must accommodate the characteristics of consumer demand while pursuing growth and expansion. Although wineries strive to service all consumer segments, they must account for the fact that consumers with a high income and over 40 are more ready to purchase wine regardless of the price. The development of viticulture and the wine industry in Albania has shown an upward trend. In the past decade, these two industries have undergone substantial upheaval. This transformation has led to a shift in wine consumption patterns. Nationally, the quantity of wine drunk in our country during

the past two decades has fluctuated inexplicably, which can be explained by the fluctuations of macroeconomic and political-social indices. The wine market in Albania is vibrant and has had a remarkable development in recent years, both from a demand and a supply standpoint. The wine business in Albania is diverse, ranging from recently founded tiny wineries to the bigger ones that were formerly state-owned but have since been privatized.

It is believed that money, age, education, religion, nutrition, culture, wine prices, and wine provenance have the most impact and influence on wine consumption in the Tirana region. According to the study's findings, age, level of education, income, and price of wine is the most influential aspects of consumer purchasing decisions. Education and price have a minor effect on deciding to purchase wine, but the effect is not negligible. People who do not purchase wine claim pricing is the most important factor. However, when one ascends the social hierarchy, one must also consider their education degree. Also, according to the results of the survey, age and income have a major impact on the wine consumption decisions of Tirana residents. The influence of the wine consumption determinant in the Tirana region may not be the same in other Albanian regions. Before 1990, the south part of Albania was renowned for producing and eating rakia. Today, the region is dominated by the legacy of Rakia consumption. Consequently, the wine market factors in this region and their influence on consumer decisions may differ from those in the Tirana region. The same is true for the northern area of Albania, where the wine market is underdeveloped due to low income and traditional alcohol consumption patterns. Our study's technique merits application in future studies involving other regions of Albania. This study's conclusions must be interpreted in light of its limitations. The first limitation is the limited sample size and study location. The sample size may have been larger for a study centered on urban Tirana. The second issue relates to the absence of statistics regarding wine production. The study provides valuable insights into the peculiarities of wine consumption in Tirana and the target market.

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