## The Impact of the Covid-19 Pandemic Situation on the Perception of the Type of Risks Albanian SMEs Face (Case Study – SME's in the Southern Region of Albania)

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*Abstract:* - Albanian SMEs faced unforeseen difficulties during the period of the COVID-19 pandemic. This type of situation, unprecedented before, caused many problems in areas such as the management of activities, liquidity, human capital, sales, marketing, etc. This paper highlights the fact that during this pandemic period, Albanian SMEs felt the need to understand the most important risks that their activities face under these circumstances. The empirical study of this paper was based on the data collected to a structured questionnaire, to identify the perception of the type of risks Albanian SMEs face. Qualitative data collected by SMEs in the southern region of Albania were used for the successful realization of this study. These data were processed with the help of the statistical software SPSS v.21, using logistic regression. As a result, it was concluded that Albanian SMEs have preferences in the perception of some special types of risk that their activities face.

*Keyword:* - COVID-19 pandemic, Albania, SME, risk, SPSS, logistic regression, perception, Southern region.

Received: October 26, 2022. Revised: November 12, 2022. Accepted: December 2, 2022. Available online: December 30, 2022.

### **1** Introduction

The COVID-19 pandemic situation that the whole world faced was an unprecedented situation before. Albania and all types of businesses that extend their activity in Albania also faced this situation. This study is focused only on the businesses classified as Small and Medium Enterprises (SME). In the Republic of Albania there is a different definition of SMEs from that of the European Union. Albania is a country that lies in the Balkan Peninsula, in its south-western part and is on the land border with countries such as Greece, the Republic of North Macedonia, Kosovo, Montenegro and is separated by a maritime border with Italy through the Adriatic Sea.

According to EU recommendation 2003/361 the factors influencing the definition of SMEs are staff headcount, either turnover or total balance sheet, according to table 1.

While in the Republic of Albania the definition of SME is regulated by Law No. 8957, dated

17.10.2002 "On Small and Medium Enterprises", as amended.

Table 1. Definition of SMEs in European Unio	Table 1	1. Definition	of SMEs ir	n European	Union
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Company category	Staff headcount	Turnover	or Total balance sheet
Medium-	<250	<=€50m	<=€43m
size			
Small	<50	<=€10m	<=€10m
Micro	<10	<=€2m	<=€2m

Enterprises that employ up to 9 employees and whose annual turnover does not exceed 10 million ALL are called microenterprises. Small enterprises are those enterprises which employ from 10 to 49 employees and have a business figure or total annual balance less than 50 million ALL. Medium Enterprises are the ones that employ from 50 to 249 employees, have a turnover or total annual balance of up to 250 million ALL (Albanian money), according to the table 2. This difference between European and Albanian legislation exists because of the great economic difference that European countries have compared to Albania. Albania is an economically poor country and is considered a developing country, due to the long economic transition that this country is experiencing.

Company category	Staff headcount	Turnover	Total balance sheet
Medium-	50 to 249	<all 250m<="" td=""><td><all< td=""></all<></td></all>	<all< td=""></all<>
size			250m
Small	10 to 49	<all 50m<="" td=""><td><all 50m<="" td=""></all></td></all>	<all 50m<="" td=""></all>
Micro	<10	< ALL 10m	< ALL 10m

Table 2. Definition of SMEs in Albania

Since 1990, the time when the political and economic system changed from a communist country with a centralized economy to a democratic country with a decentralized market economy. This change is accompanied by a prolonged period of political and economic transition, which is also reflected in the many problems faced by Albanian SMEs.

During the COVID-19 pandemic situation, Albanian SMEs faced numerous problems such as changes in sales volume, sales price, input costs, the general economic climate, unforeseen changes in cash flow, budgeting, tax liability and taxes, debtor and creditor relations with third parties, changing the structure of human relations within the business, acceptance of the organization's norms by the employee, the need for the implementation, management, maintenance of computer networks and large-scale use of the Internet, various problems of personnel recruitment, of matching the requirements of the workplace with the skills and abilities of the employee, the significant impacts of legal and fiscal changes.

The Southern region of Albania is the smallest region in Albania. It comprises about 3.78% of the country's population, [1]. The SMEs of this region make up about 3.5% of the businesses of the whole country, [2]. As you can see, the southern region of Albania has a low specific weight in the country's population and economy, being considered as one of the regions with low economic development. Due to these factors, SMEs in this region faced greater difficulties during the COVID-19 pandemic period compared to those in the rest of the country.

These many problems that appeared during the COVID-19 pandemic period brought the need for a new approach to the perception of new risks faced by Albanian SMEs. Albanian literature is still poor in relation to the risks faced by Albanian SMEs and the process of their identification and evaluation. This work aims to fill this gap, but it is impossible to exhaust all possible problems with this work.

As a result, it remains the task of future researchers to conduct in-depth studies in this direction to analytically and scientifically identify the risks faced by Albanian SMEs and the factors that affect these risks.

It must be admitted that this work, because it provided data for the period of the COVID-19 pandemic (March 2020 - May 2021 in Albania), had some limitations, the absence of which would make possible a more accurate presentation of the results. These limitations bring an obstacle in the provision of raw data and their correct processing. Some of the main limitations are listed below;

• Difficulty in physical proximity between the interviewer and the interviewee. Due to the psychological impact caused by the COVID-19 pandemic, fearing people from being infected with this virus, it was difficult for the interviewer to get physically close to the interviewee. As a result, many businesses were reluctant to accept the interviewer in their premises.

• Lack of regular documentation on the part of SMEs. A small part of SMEs, from the beginning of the pandemic until the period when the interview was carried out, had not kept regular economic documentation, for various reasons such as the infection of the economist, the owner or other employees with COVID, etc.

• In some businesses, the questionnaire was sent electronically, but due to the lack of quality human capital, these businesses encountered difficulties in using information technology and did not understand how this information should be completed and sent online.

The rest of the paper is structured as follows;

Section 2 contains the objectives of the study, in which two research questions and two hypotheses are raised.

Section 3 presents the literature review by analyzing how foreigner researchers studied in a long period of pandemic the performance of SMEs in their country or in other countries, evidencing results and their conclusions and comparing them with other studies.

Section 4 presents the data processing methodology, the sample selection process of the observed population, codification process of the variables taken in consideration.

Section 5 presents data analysis using logistic regression with the help of statistical software SPSS v21 and statistical testing of raised assumptions.

Section 6 presents the conclusions of this study and further recommendations for future researchers and decision-making institutions.

### 2 Objectives of the Study

The main objective of this study is to highlight the impact of the COVID-19 pandemic situation on Albanian SMEs in the perception of the most important types of risks, to which they should pay great attention.

In the context of this objective, the research questions are raised:

- Do SMEs attach importance to all types of risks or do they have preferences for certain types of risks?

- What are the main directions in which the risk management faced by SMEs should be focused?

In focus of the above research questions and the general objective of this paper, the following hypothesis has been raised:

 $H_0$  - SMEs attach importance to all types of risks, having no preferences in their identification and evaluation.

 $H_1$  - SMEs do not attach importance to all types of risks, having preferences in their identification and evaluation.

### **3** Literature Review

The businesses included in the SME group operate in the same environment as large businesses, such as the economic, political, technological, social and cultural environment. But they cannot be compared or compete with large businesses for many reasons such as insufficient capital, human resources, technological capacities, etc.

SMEs face a very stiff competition due to frequent changes in legislation, rapid development of information and communication technology and innovation, globalization of markets, movement of human capital. But, according to [3] [4] regardless of these obstacles, SMEs are able to survive and develop due to their agility and adaptability such as the proximity of their relationship with the customer, their openness to new ways of doing business, but many micro, small and medium businesses are very sensitive to external shocks.

During the COVID-19 pandemic period, all SMEs in the world encountered extraordinary, unforeseen difficulties. They faced great difficulties in liquidity, significant reduction in sales, difficulty in finding employees, difficulty in supplying the right quantities and at the right time, etc. More than half of SMEs have faced severe losses in their revenues. One third of SMEs fear to be out of business without further support within 1 month, and up to 50% within three months.

A recent study on the impact of the pandemic in **Europe**, [5], investigates jobs most at risk and finds that "at least two of three jobs at risk are in an SME, and more than 30 percent of all jobs at risk are found within microenterprises consisting of nine employees or fewer". In **Australia**, SMEs account for 68% of all jobs at risk, [6].

By April 2020, 20 million places will be closed in the USA work, 11 million from to which belonged to SMEs. In New Zealand during the months of March - April 2020, a 4% decrease in the level of employment to small businesses was found.

From a study done from, [7], authors estimated that from 17 countries to taken in the study it turned out that SME long period they had COVID-19 a rate bankruptcy of 12.1% absent to any political intervention, compared to one rate of 4.5% before the COVID-19 pandemic situation.

According to [8] from analysis of SMEs in 19 countries in Europe it turned out that those facing the effects of the COVID-19 pandemic not only estimated the need for cash and liquidity, but also estimated their financial capacities to take debt.

According to [9] in the Union European SMEs cope with more losses than large businesses based on the percentage in relation to total assets (6-11% for SMEs, 2-4% for larger firms).

So, as it turns out from a part of conducted studies during the year 2020, the period in which the crisis from the COVID-19 pandemic arrived at its peak, it turns out that SMEs face risks to many, to what often brought until bankruptcy to a considerable number of SMEs. SMEs, unlike large businesses (large enterprises), suffer from numerous financial problems and lack of human capital. Precisely, due to numerous financial problems and the lack of quality human capital, SMEs find it difficult to apply or use risk management tools, [10]. It is impossible for SMEs to use the same instruments as those of large businesses, because they can be too expensive or too complex, [11].

Risk management is an important process for the survival of SMEs, but according to [12] they are suspicious of and sceptical to apply genuine risk management strategies. According to [13] [14] it is emphasized that one of the reasons for the failure and bankruptcy of SMEs is the weak and poor risk management process, and the lack of planning for the process of risk identification and assessment. It is clear that for European SMEs the literature is diverse, while for Albanian SMEs this literature is poor. Especially for the period of the Covid-19 pandemic, for the Albanian reality, this literature is almost non-existent.

## 4 Methodology

#### 4.1 Logistic Regression Analysis

According to [15] quantitative and qualitative methods should be used to guarantee the success of an article. According to [16] there are many methods to collect data, such as observations, experiments, historical data analysis and case studies. Furthermore, according to [17] it is emphasized that case studies are valuable when qualitative data must be provided to achieve the purpose of the study. In this context, the study is mainly based on the collection of qualitative data in order to explain the main problems of this study as accurately as possible.

The logistic regression model is successfully used to process the qualitative data, which is provided through the questionnaire. Logistic regression is an extension of logical models. Logical models were applied for the first time by, [18], to avoid some shortcomings arising from the application of multivariate discriminant analysis techniques (Multivariate Discriminant Analysis-MDA) for predicting the bankruptcy of organizations. Multivariable discriminant analysis techniques required restrictive assumptions and allowed working with disproportionate samples. Also, in discriminant analysis models, standard coefficients cannot be interpreted as the slope of the regression equation, therefore they cannot have an impact on the relative importance of different variables. These shortcomings were eliminated with the use of conditional logic models. Logical models give a value between zero and one, which conveniently indicates the probability of the event occurring. Also, according to logical models, the estimated coefficients can be interpreted as important in terms of the level of significance for each independent variable in the impact they have on the dependent variable.

Logistic regression is an integral part of the category of statistical models called General Linear Models. Logistic regression is used to analyze problems in which one or more independent variables intervene that affect the dependent variable of dichotomous type, in this case the latter is considered as their dependent case variable, [19]. From a mathematical point of view, logistic regression differs from linear regression. In linear regression, the value of the dependent variable is predicted by one or several predictor variables, while with logistic regression we get a logistic equation in which the logarithm of the *odds* ratio (odd ratios) is given by a linear dependence of the independent variables that participate in the process.

The logistic regression equation will be of the form:  $\ln(p/(1-p) = B_0 + B_1X_1 + B_2X_2 + ... + B_nX_n$  and shows the probability of the event occurring under the influence of all independent variables. One of the independent elements the most important of the multiple logistic regression model is the "odds ratio" or the ratio of chances.

Unlike linear regression, logistic regression coefficients are interpreted indirectly. Odds ratios are calculated  $e^{\beta i}$  and show that when an independent variable changes by one unit and all other independent variables do not change, the chance of impact on the dependent variable will change by a factor of type  $e^{\beta i}$ . So, this factor for the independent variable indicates the relative amount by which the chance of the outcome increases (odds ratio>1) or decreases (odds ratio<1), when the value of this variable increases by one unit.

There are two cases of hypothesis validation:

1. When there is a null hypothesis (H<sub>0</sub>), according to which no predictor variable affects the dependent variable, and to test this hypothesis if it is true, *all the coefficients* of the logistic regression equation must be equal to zero,  $\beta_i = 0$ , otherwise this hypothesis is rejected or rejected,

2. When there is a non-null hypothesis (H<sub>1</sub>), according to which the predictor variables affect the dependent variable, and for its testing, *at least one of the coefficients* of the regression equation must be different from zero, so  $\exists \beta i \neq 0$  then we say that the hypothesis we want to verify, it stands or in other words, it is accepted.

The logistic regression equation will be of the following form;

$$\ln \frac{p}{1-p} = \beta 1 * X1 + \beta 2 * X2 + \dots + \beta i * Xi + \beta 0 \quad (1)$$

In addition to the fact that the coefficients of the logistic regression equation must be different from zero, the significance levels for each coefficient must be less than the allowed level of 0.05, which means that the model is significant at the 95% level of reliability. The best case would be when the level of significance for each coefficient would be Sig = 0.000.

Also, in the focus of hypothesis testing, other statistical indicators such as -2Log Likelihood, Chisquare, as well as their level of significance was analyzed. For this purpose, the complete test of their relationship was performed in the statistical program. -2Log Likelihood indicates the error of the logistic regression model, which is analogous to the "sum of squares". When an independent variable has a relationship with the dependent variable the value of -2Log Likelihood starts to decrease. The difference between the value of -2Log Likelihood in the first step of the regression model with the value of -2Log Likelihood at the end of the process of the regression model will evidence the value of the statistical indicator Chi-square( $\chi^2$ ), for its significance level ( $\alpha$ ) and the corresponding degree of freedom (df). In the case when the level of significance (Sig), corresponding to the Chi-square value of the logistic regression model is less than the value  $\alpha = 0.05$ , for the same degree of freedom (df), then it can be said with complete certainty that the hypothesis is proven with the logistic regression model.

# 4.2 Determining the Selected Sample of Population

Determining the size of the selected sample is one of the most important points of the study. The selected sample must represent the population under study from the point of view of the characteristics to be studied. According to [20] the sample is a part of the population and carefully selected to represent the entire population and listed three reasons in support of sampling:

- 1) Greater accuracy of results
- 2) Greater speed of data collection
- 3) Availability of population elements

For this study, the sample was randomly selected from the population. Random sampling means that each element of the population has the same chance of being selected and that the selection of one element does not affect the chances of another element being selected.

Table 3 shows the number of SMEs in the South region, divided according to their activity. By determining the total number of the population that will serve as a study subject, it is easy to determine the sample size.

able 5. Distribution of birlds by activity	Table 3.	Distribution	of SMEs	by	activity
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Total number of SMEs	Manufactur e	Building	Business	Service s
4,124	835	322	1883	1084

100%	20.25%	7.82%	45.67%	26.26%
100/0	20.20 /0	1.02/0	42.07 /0	20.2070

The exact determination of the sample size was made by relying on the statistical formula, simultaneously determining an error interval between 5% and 10%.

$$n = \frac{N}{(1+Ne^2)} \tag{2}$$

n - indicates the size of the sample to be studied
 N - indicates the full size of the population from
 which the sample will be selected

e - indicates the margin of error

If we wanted to have a 95% confidence level in this study, we should have surveyed:

$$n = \frac{N}{(1 + Ne^{2})} = \frac{4124}{(1 + 4124x0.05^{2})}$$
  
= 364 businesses (3)

In fact, 360 businesses were interviewed, making it possible to maintain the reliability level of 95%. The following table shows the distribution of the sample of the interviewed population, adhering to the specific weight of each business group to the total population, table 4.

 Table 4. Distribution of the selected sample according to activities

Total number of SMEs	Manufacture	Building	Business	Service s	
364	74	28	166	96	
100%	20.25%	7.82%	45.67%	26.26%	

In the southern region, the economic activity is carried out almost by SMEs, and referring to table 4, 20.25% of the businesses of the SME group carry out manufacturing activity such as the production of agricultural and livestock products. 7.82% of SMEs are included in the construction sector, where it should be emphasized that during the pandemic period the construction sector almost did not work. 45.67% of SMEs are involved in trade, where it should be noted that most of the goods are imported from neighbouring countries such as Greece, Italy, Serbia, Kosovo and the Republic of North Macedonia. Albania is a net importing country, which means that the value of imports is greater than the value of exports. 26.26% of SMEs are included in the service sector. The service sector also includes companies operating in the tourist

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sector, since the southern region of Albania is one of the main tourist destinations in Albania.

#### **4.3 Codification of the Variables**

Qualitative ordinal type data were processed with statistical software SPSS v.21, using logistic regression to identify the chance of influence on the dependent variable of ordinal data, which are also independent variables. The independent variables were evaluated using a 5-level Likert scale, which is widely used to measure qualitative data. Meanwhile, the dependent variable is presented as data of a categorical-dichotomous nature (which only takes the values NO = 0 and YES = 1). For the processing of these data with the help of SPSS v.21, it is necessary to codify them in order to process the data as accurately and simply as possible. The process of this codification is the independent and dependent variables, as follows:

✓ "PrefRisk" – Dependent variable, which indicates whether SMEs have preferences or not regarding the identification and assessment of risks

✓ "BiznRisk" - preference for the identification and assessment of business risk

✓ "FinancRisk" - preference for identifying and evaluating financial risk

✓ "TechnolRisk" - preference for the identification and assessment of technological risk

✓ "CapHumRisk" - preference for identifying and evaluating human capital risk

✓ "PolitRisk" - preference for identifying and assessing political risk

It should be said in advance that these types of risks were selected after a preliminary evaluation work with SMEs to identify which risks they had complete or incomplete knowledge of.

## **5** Data Analysis

The first step of creating a logistic regression model using the statistical software SPSS is to evaluate the accuracy of the predictive model with the help of the "Overall Percentage" parameter. From this analysis it turned out that the predictive model tends to be 89.6% correct every time it is used, table 5. This value allows this model to be used as a predictor, but it cannot be said with full accuracy just by analyzing this table how much is the influence of each predictor variable on the dependent variable, for the reason that the following tables must also be analyzed to reach a correct conclusion.

Table 5. Overall	percentage '
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	Observed			Predicted			
			PrefR	isk	Percentage		
			.00	1.00	Correct		
C to a	DrofDick	.00	0	37	.0		
Step	PTEIKISK	1.00	0	323	100.0		
1	Overall Pe	rcentage			89.6		

Table 6 summarizes from a statistical point of view  $R^2$  the logistic regression coefficients, or otherwise called pseudo-  $R^2$ . This is due to the fact that logistic regression does not  $R^2$  have the same regression as least squares (OLS regression). The *Snell-R-Square* coefficient tends Cox to approximate  $R^2$  a multiple based on the probability of the event occurring, the smaller it is, the more accurate the predictive model is. Since Cox Snell R Square = 0.351, it means that the change in the dependent variable is explained by the logistic regression model to the extent of 35.1%. While the Nagelkerke R Square coefficient is a more reliable measure of the relationship between the dependent variable and the independent variables in the logistic regression model, compared to Cox Snell R Square, it is considered as  $R^2$  estimated. This coefficient must always be greater than the value of Cox Snell R Square. According to the summary table 6, *Nagelkerke R Square* = 0.721, which means that the prediction model is influenced 72.1% by the independent variables.

Table 6. Model summary

step	-2 Log	Cox Snell R	Nagelkerke R
	likelihood	Square	Square
1	1087.675 <sup>a</sup>	0.351	0.721

Table 7 shows the variables included in the logistic regression. As can be seen, all the independent variables, "FinancRisk", "CapHumRisk", "PolitRisk", "BiznRisk" and "TechnolRisk", which are included in this model have great statistical significance because their significance levels are at very low (Sig = 0.000 < 0.05), which means that they refer to the 95% confidence level.

		B S.E	Wald	df	Sig.	Exp(B)	95%CIfor EXP(B)		
						-		Lower	Upper
	FinancRi sk	2.312	.677	11,680	1	.001	10,096	2.681	38,019
	CapHum Risk	2.205	.665	10,976	1	.001	9,068	2.461	33.414
Step	PolitRisk	1,964	.672	8.554	1	.003	7.127	1.911	26,578
1 <sup>a</sup>	BiznRisk	2,670	.691	14.911	1	.000	14.439	3.724	55,985
	Technol Risk	2.256	.666	11,486	1	.001	9,548	2,590	35.206
	Constant	- 31.559	10.02 4	9.912	1	.002	.000		

Table 7. Variables of regression equation (4).

Variable(s)	entered	on	step	1:	FinanRisk,	CapHumRisk,
PolitRisk, B	iznRisk, 7	Fekn	olRisk.			

The variables that are included in this table mean that they are the variables with a significant impact, which is determined by the relevant logistic coefficients, on the possibilities that SMEs have to predict the chance that they have to prefer different types of risks. These logistic coefficients serve to build the logistic regression equation (4):

 $\ln \frac{p}{1-p} = 2.312 RiskFinanc + 2.205 RiskKapHum + 1.964 RiskPolit + 2.670 RiskBizn + 2.256 RiskTeknol - 31.559$ (4)

To verify the null hypothesis (H<sub>0</sub>), that no predictor variable affects the dependent variable, all the coefficients of the logistic regression equation must be 0 ( $\beta i \neq 0$ ), which is not true according to the logistic regression equation (4).

But, in the logistic regression equation, it is seen that all the coefficients are different from zero  $(\exists \beta i \neq 0)$ . This means that the alternative (no-null) hypothesis (H<sub>1</sub>) is acceptable and statistically verifiable with a confidence level equal to 95%, according to which the predictor variables influence the dependent variable and the influence of each predictor variable is evidenced by the coefficient  $\beta i$ next to each of these variables.

Referring to equation (4) of the logistic regression, it is noted that all the coefficients of this equation are different from zero. Also, the significance level values are almost at the zero level, which shows that statistically this prediction model is significant within the 95% confidence interval. These mentioned above are summarized in Table 8.

10010 0.1	Juiiiiidi	j or stat	istical parallik	
The coefficients	Value	Sig	Statistical Significance	Testing H <sub>1</sub>
B FinanceRisk				
$\neq 0$	2.312	0.001	Sig<0.05	Accepted
B CapHumRisk		0.001		
$\neq 0$	2.205		Sig<0.05	Accepted
$B_{PolitRisk} \! \neq \! 0$	1,964	0.003	Sig<0.05	Accepted
$B_{BiznRisk} \! \neq \! 0$	2,670	0.000	Sig<0.05	Accepted
B TechnolRisk		0.001		
$\neq 0$	2.256		Sig<0.05	Accepted
			-	

Table 8. Summary of statistical parameters of H<sub>1</sub>

Also, in the focus of testing the alternative hypothesis H<sub>1</sub>, the relationship that exists between the statistical parameters -2Log Likelihood and Chisquare ( $x^2$ ), as well as their level of significance, will be analyzed. For this purpose, a complete test of their relationship has been made in the statistical program, which is presented in table 9.

Starting the data processing with the value of -2Log Likelihood = 1129.739 and finishing the data processing to obtain the most statistically significant independent variables with the value of -2Log Likelihood = 1087.675, it results that the value of Chi-Square ( $x^2$ ) will be the difference of the value of -2Log Likelihood at the beginning of the model with the value of -2Log Likelihood at the last step of the model, i.e. 1129.739 – 1087.675 = 42.064, which is also evidenced in table 10. This value of Chi-square results in a significance level (Sig=0.000), which is compared to the default level  $\alpha = 0.05$ , in order for the model to be significant within the 95% confidence interval.

Table 9. Iteration History <sup>a,b,c,d</sup>

Iterat	ion	-2 Log		T	he coeff	icients		
		d	Consta nt	Financ Risk	CapH umRi sk	Polit Risk	Bizn Risk	Tech nolRi sk
	1	1164.408	-14,280	1.067	1.045	.962	1.199	1.052
	2	1092.693	-25,802	1,889	1,828	1.651	2.161	1,853
Step	3	1087.740	-30,881	2.260	2.162	1,929	2.608	2.208
1	4	1087.675	-31,549	2.311	2.204	1,963	2,669	2.256
	5	1087.675	-31,559	2.312	2.205	1,964	2,670	2.256
	6	1087.675	-31,559	2.312	2.205	1,964	2,670	2.256

a. Method: Enter

b. Constant is included in the model.

c. Initial -2 Log Likelihood: 1129.739

		Chi-square	df	Sig.
	steppe	42,064	5	.000
Step 1	Block	42,064	5	.000
	<mark>pattern</mark>	<mark>42,064</mark>	<mark>5</mark>	<mark>.000</mark>

Table 10. Omnibus Tests of model coefficients

Table 11 shows the distribution of Chi-Square according to the level of coefficient  $\alpha$  and for the corresponding degree of freedom (df), which in this case belongs to level 5. From the comparison of the standard value of Chi-Square = 11.070 in table 11 which belongs level  $\alpha$  = 0.05 for the degree of freedom (df = 5), and the value of Chi-Square = 42.064 in table 10 that belongs to our regression model for the degree of freedom (df = 5), it turns out that 42.064>11.070.

The level of a Df 0.5 0.10 0.05 0.02 0.01 0.001 1 0.455 2.706 5.412 3.841 6.635 10,827 2 1.386 5.991 7,824 9.210 4.605 13.815 3 2.366 6.251 7.815 9,837 11.345 16.268 4 3.357 7,779 9,488 11,668 13.277 18,465 5 4.351 9.236 11.070 13.388 15.086 20.517

Table 11. Distribution of  $\chi 2$ 

This means that for the Chi-square value of 42.064, the level of significance is less than the standard level  $\alpha$ =0.05, and in fact the level of significance for this regression model is Sig=0.000.

Therefore, the alternative hypothesis  $H_1$  is acceptable and statistically tested: SMEs do not attach importance to all types of risks, having preferences in their identification and evaluation. While the hypothesis  $H_0$  is rejected.

#### **6** Conclusions and Recommendations

At the end of this paper, it can be said that Albanian SMEs do not appreciate all the risks they face. However, they have preferences in the perception of identifying and evaluating some special risks of their economic activity. This was also verified with the logistic regression equation (4), according to which all coefficients of the equation are different from 0. This means the verification and statistical

testing of hypothesis  $H_1$ . By analyzing the independent variables, the regression coefficients and their odds ratio {Exp(B)} it results that:

The variable that shows the preference of SMEs in the identification and assessment of financial risk, "RiskFinc" has a positive logistic regression coefficient ( $B_{FinancRisk} = 2.312$ ) and odds ratio recorded as Exp(B)=10.096. This high level of odds ratio means that when SMEs find changes in financial risk, then this change will affect the chance they have to prefer the perception of this type of risk by 10.096 times, when all other variables of forecast do not change.

The variable that shows the preference of SMEs in the identification and assessment of human capital risk, "CapHumRisk" has a positive logistic regression coefficient ( $B_{CapHumRisk} = 2.205$ ) and odds ratio evidenced as Exp(B)=9.068. This high level of odds ratio means that when SMEs find changes in human capital risk, then this change will affect the chance they have to prefer the perception of this type of risk by 9.068 times, when all the variables of others of the forecast do not change .

The variable that shows the preference of SMEs in the identification and assessment of political risk, "PolitRisk" has a positive logistic regression coefficient ( $B_{PolitRisk} = 1.964$ ) and odds ratio evidenced as Exp(B) = 7.127. This high level of odds ratio means that when SMEs detect changes in political risk, then this change will affect the chance they have to prefer the perception of this type of risk by 7.127 times, when all other variables of the forecast do not change .

The variable that shows the preference of SMEs in the identification and assessment of business risk, "BiznRisk" has a positive logistic regression coefficient ( $B_{BiznRisk} = 2.670$ ) and odds ratio recorded as Exp(B)=14.439. This high level of odds ratio means that when SMEs detect changes in business risk, then this change will affect the chance they have to prefer the perception of this type of risk by 14,439 times, when all other variables of the forecast do not change.

The variable that shows the preference of SMEs in the identification and assessment of technological risk, "TeknolRisk" has a positive logistic regression coefficient ( $B_{TeknolRisk} = 2.256$ ) and odds ratio evidenced as Exp(B)=9.548. This high level of odds ratio means that when SMEs detect changes in technological risk, then this change will affect the chance they have to prefer the perception of this type of risk by 9.548 times, when all other variables of the forecast does not change .

At the end of this paper, some important recommendations emerge:

SMEs should pay attention to budgeting and cash flows, debtor and creditor relationships, tax obligations and all other financial information, making it possible to control their financial risk.

SMEs should pay attention to sales volume, sales price, input costs, general economic climate, which affects the best management of business risk. These elements had a very big impact on SME during the period of the COVID-19 pandemic.

SMEs should pay special attention to human capital, which extends in different directions within the business, such as recruiting personnel, matching the requirements of the workplace with the skills and abilities of the employee, implementing the code ethics, the ability to cooperate, etc.

SMEs should pay attention to the implementation, management, maintenance and renewal of the technology used. This means recognizing the need for technology and its cost as part of the business development strategy. During the pandemic period, the most successful businesses were those that used online sales using the Internet, and those that continued the traditional way of selling.

✤ The public sector must be a strategic partner of SMEs, especially in difficult economic and financial times such as the COVID-19 pandemic period. During such periods, the public sector should strongly support SMEs with complete financial packages and fiscal ease until they realize positive cash flows and have financial stability.

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#### Contribution of Individual Authors to the Creation of a Scientific Article (Ghostwriting Policy)

**Lorenc Kociu** was responsible for gathering the quality data from questionnaires and processed them with statistical software SPSS v.21 and editing the paper.

**Alban Korbi** was responsible for literature review, methodology and supervision.

# Sources of Funding for Research Presented in a Scientific Article or Scientific Article Itself

No funding was received for conducting this study.

#### **Conflict of Interest**

The authors have no conflicts of interest to declare that are relevant to the content of this article.

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