Challenges and Possibilities in Accessing Finance for Albania's Agricultural Sector

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Abstract: - The sector of agriculture plays a vital role in the economy of Albania and employment. However, the sector has not seen significant growth over the years and one of the factors that directly undermine the sector's development is lack of access to finance. While access to finance is essential to improve and accelerate growth of the sector, it appears that the sector of agriculture remains heavily underfinanced by financial institutions. The aim of this paper is to study the factors that significantly affect the access to loans for agribusinesses. The data collected were derived from a unique loan referral system in Albania and these primary data included 158 agribusinesses in a period of 6 years. A multivariate linear regression was used in this paper to study several independent factors. The results of the regression model showed that eight factors significantly contributed to the loan amount an agribusiness can obtain namely revenues, number of employees, collateral, export, year, region, type of investment and the COVID-19 situation. All factors seem to be positively correlated to the loan amount, except for exports and COVID-19. This study and the respective results have significant value to the policymakers and the banking industry which may better target their policies and procedures according to regions and needs of agribusinesses.

Key-Words: - agriculture, loans, banks, revenues, collateral, Albanian economy, development, financial sector

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1 Introduction

Albanian economy has undergone major transformations over the last decades and yet the sector of agriculture remains one of the most vital sectors of the economy. Despite the importance of the sector, there are critical problems that undermine the development of agriculture in Albania. One of the most evident issues that limits the capacity of Albanian agriculture sector to develop and reach new markets while achieving better standards, seems to be the limited access to finance.

The sector of agriculture, though of great significance, is perceived as a risky sector for the banking industry as well as for the insurance companies which are reluctant to offer products tailored to the sector's needs. The high risk of the sector is rooted in the uncertainty of the operations and many other social and economic factors that create a barrier between financing institutions and local producers. The complication arising from the lack of financing opportunities affects not only individual subjects, but the whole value chain of agricultural activities creating an issue that must be addressed with absolute priority.

Agriculture and Financial Sector in Albania

Agriculture has historically been a sector of great importance for the Albanian economy. Going back to the end of the Second World War, 87% of the Albanian population was in the rural areas and 60% of the labour force was engaged in agricultural activities [17]. The trend continued during the communist era when agricultural production experienced major expansion. However, the development of the sector was impeded by the lack of technology in the farming production processes [18].

After the fall of communism, Albanian economy has shown remarkable progress. However, this trend has not been followed by the sector of agriculture. While transitioning to a market economy, the value added of the sector of agriculture in the Albanian economy started to decline sharply from 36.4% of

GDP in 1996 to 16.8% of GDP in 2009, the lowest contribution of agriculture to GDP that the country has ever experienced [21]. Agriculture sector started to recover after the year 2009 and as of 2022, it accounted for 18.62% of the GDP, contributing by 0.06% in the increase of GDP from the previous year [11].

Despite the unsatisfactory performance of the sector in the recent years, and the sharp decline in the contribution to the value added of GDP, agriculture continues to be a predominant sector, employing 32.3% of the labour force [12], and remaining a priority in the agenda of the government policies for the following years. Compared to member countries of the European Union, where the agriculture sector accounts for roughly 1.3% of GDP and 4.2% of employment [7], it is pretty much evident the important role this sector has in the Albanian economy.

An important sub sector of Agriculture that carries out the growth potential of manufacturing, while being strongly related to agriculture, is Agro-processing. This sector accounts for 24.4% of the total sector's turnover and 4.5% of the Albanian GDP and has been rapidly expanding as a sector in the last decade.

Among several factors that have hindered the development of the sector of agriculture, lack of access to financing opportunities remains a critical one. Financial institutions are reluctant to offer financial products to operators in the agriculture sector due to the high risk perceived and lack of development during the last decades. According to the national census by INSTAT, 52.3% of people reside in rural areas, agriculture employs 36.4% of the labour force and accounts for 18.39% of the GDP as of 2019, but yet less than 2% of the total lending portfolio of financial institutions is dedicated to this sector [5].

Limited collateral, small-scale farms, high sector and product risk, seasonality, illiteracy and low educational levels, and informality appear to prevent agribusinesses from benefiting from financing opportunities [19].

Without new funding opportunities and help, Albanian agribusinesses have little possibilities of growing into modern and sustainable commercial companies able to compete in international markets. This lack of opportunities to ameliorate which are evident from the smallest farmer to bigger scale agribusinesses create a barrier and affect the whole value chain of local production.

According to [20] in the report presented to the Bank of Albania, an efficient agricultural financial market plays a crucial role in the development of agriculture sector and productivity. There are currently 12 Banking Institutions operating in Albania and 32 non-bank financial institutions and according to official data retrieved from the Bank of Albania, LEK 183,433 million loans were disbursed as of 2020 and only 1.36% of those were dedicated to the agriculture sector. It appears that the availability of credit to agribusinesses, or lack thereof, has significantly impeded the productivity, output levels, stagnated exports and overall economy development.

Literature Review

Several research papers conducted in different countries were explored before considering the different variables in this paper. Many studies conducted in Albania that are related to this topic have treated the subject in the macroeconomic perspective from the viewpoint of the banking sector. The insights and results from these papers were valuable, but not directly related to this study. This paper treats the matter in a microeconomic perspective and has a wide-framed study as it encompasses the whole agriculture sector including not only primary agriculture and farmers, but also Agro-processors and consolidators.

A research paper conducted [1] provides an overview of the Ethiopian market and considers several independent factors that were believed to play a role in the access to finance. The first variable was collateral, a logical choice as it is in line with the banking sector policies to assess the creditworthiness of the applicant. The study found that there exists a positive correlation between availability of collateral and access to finance and that financial institutions are reluctant to offer credit to businesses if the latter lack collateral that would serve as a guarantee in case of a default. This finding was supported by another publication reviewed which stated that the collateral is positively related to access to finance [16].

Another important variable taken into consideration by the study is the age of the business, or the experience of it in the market. The motivation behind choosing this variable is that more experienced business entities will have a greater

chance of being profitable for the foreseeable future and thus repay the loan as scheduled. However, the results of the study found that the experience was not statistically significant related to successful access to capital. This result is supported by another study according to which the age of the firm in the market was statistically insignificant [8]. Yet, another study supported the fact that experience was not statistically significant when it comes to access to credit [14].

Number of employees was another independent variable considered in the study by Adore [1], with the rationale that a higher number of employees which might have been an indicator of the business size would positively affect the access to finance. However, the results were surprising given that this variable was not statistically significant.

The level of profit of the enterprise has been considered also with the reasoning that a high profit level would positively impact the willingness of the banks to offer credit to entities. Surprisingly, the results were not significant implying that the profit levels were not important in determining the success rate of a loan application [1]. However, according to [2], firms' sales level was very significant and showed a positive correlation with access to credit.

Finally, education and skills were perceived as important factors affecting access to financial products [13] but in this study were found to be statistically insignificant. However, this study was broader than our study as it assessed the factors affecting all micro, small and medium enterprises, not only those in the agricultural sector.

The importance of the region

To our best knowledge, the topic of factors determining access to finance for agribusinesses has not been studied from regions perspective. It was found useful to include regions in this study as it would be of particular interest if the results were statistically significant. Currently, according to official data from INSTAT, Albania is divided into three main regions [10]. The three main regions are: the North Region, the Central Region and the South Region. According to official data from the Bank of Albania (2020), the three regions have meaningful differences related to access to finance in the sector of Agriculture.

At the end of 2020, the allocation of agriculture loans into the three regions shows that the south region dominates the access to finance in the sector of agriculture as it accounts for 55% of the total agricultural loans outstanding, followed by the north region which constitutes 23% of the total agricultural loans, and the central region which holds 22% of these loans. Given the fact that loan balances are not similarly distributed across regions, special attention is required for this particular variable. The expectations are that the region variable will be a statistically significant one.

2 Problem Formulation

As stated above, the agriculture sector plays a vital role in the Albanian economy, and yet it remains heavily underfinanced by the financial institutions.

The main objective of this study is to identify relevant factors that affect the successful access to loans and financial products for agribusinesses in Albania following three directions: (i) to identify the factors that affect a firm's ability to access credit; (ii) to analyse the importance of the region in which an agribusiness operates and its relationship with access to financial support; (iii) to analyse COVID effect as a macroeconomic factor in the study and to conclude whether this global pandemic have had a significant impact on access to finance by the agricultural sector.

2.1 Research design

To answer the above stated questions, a multivariate regression analysis was conducted using SPSS that identify the kind of relationship between the dependent variable and the independent factors. Several hypotheses were formulated to evaluate the importance of each factor in the credit access for the agribusinesses.

This study encompasses a period of 6 years, from 2015 to 2021 and reveals the relationship to several factors of the loan amount that an agribusiness can obtain. The aim of this study is to clearly identify the relationship between different factors and the access to finance for the agribusiness sector. Since the access to finance is the focus of this study, the *amount of the loan obtained* represents the dependent variable to be explained through several factors. This variable is reported in Albanian LEK throughout the years taken into consideration. To develop the model, the tests will involve the use of logarithm for the dependent variable.

Several factors that are believed to impact access to finance are considered. The first factor studied is the *Revenues (1)* reported on the year prior to obtaining the loan. This variable is reported in Albanian LEK, and the tests will again include the application of the logarithm. As proved by fellow researchers, revenues' level is expected to be a significant variable that is positively correlated with access to finance. It is a well-known fact that the primary criterion for obtaining a loan is to have the ability to repay it through the daily operations and profits of the firm.

The second factor considered is the *collateral (2).* This factor is treated as a discrete variable to show whether the loan applicant offered collateral in exchange for the loan amount or not. The usage of this factor was strongly suggested by many previous studies conducted.

The third explanatory factor is the *number of employees (3),* and the study aims to show whether a higher number of employees affects the success rate of a loan application.

Given the fact that during this period a global pandemic happened, a macroeconomic factor was included in the model, specifically as a discrete variable whether the loan was taken before or after the *COVID situation (4)* was reported as a state emergency. This new variable, which is an innovation in this study, aims to show evidence whether the pandemic had a significant effect on the process of loan application. More specifically, the period beginning from the second quarter of 2020 was considered to be post-COVID given that the state of emergency was announced in March 2020 in Albania.

Another important variable included in the study that remains specific to this particular paper is *the region (5)* where the applicant conducts business. The classification into three statistical regions was done according to official data and statistics published by INSTAT. This particular variable was perceived to be important given that the sector of agriculture is not equally spread in all three regions. Inclusion of this variable aims to give an insight whether the access to finance is affected by the region in which business is conducted. The results and findings related to this variable can give important perceptions to policymakers and financial institutions.

The factor *Type of Investment (6)* is included as a dummy variable that showed whether the loan that was being applied for would be used for investments in fixed assets and buildings, machinery and production lines or working capital.

Another factor included is *grant application (7),* which gave insights as whether the particular loan application was backed by a government grant scheme, such as IPARD or not. These particular grants help agribusinesses by co-financing 60% up to 70% of the total investment cost. However, the applicants that are eligible for a grant must complete 100% of the investment with their own funds and then obtain a reimbursement in form of a grant. The procedures are often time consuming and lengthy. The conclusion to this finding might be helpful for other grant scheme opportunities the government is seeking to employ and other similar policies to incentivize the sector.

Furthermore, the *market access (8)* factor was included in the analysis as a dummy variable and driven by exports. Specifically, this variable stated whether the agribusiness exported its products or sold them locally. Other researchers [6] have included market access in their studies considering it among the influential factors for agricultural financing.

Lastly, the variable *year (9)* is included in the model to indicate when the loan was taken. The period taken into consideration is 5 full years and three quarters, beginning from the second quarter of 2015 up to the first quarter of 2021.

It is important to mention that other potentially significant factors that were believed to impact the loan amount were included in the model. An attempt to study the agriculture *seasonality* was done by dividing the loans according to the specific quarter in which they were obtained. Then, the gender factor was taken into account, as suggested by many previous studies related to the topic, to mention the study conducted in Turkey [9] where individual characteristics were included among others: age and gender of the family. *Experience* in the field and *age of business* [8] were the last factors considered when conducting the study as proposed by previous papers done. None of them has proven to be significant with regards to this study.

2.2 Methodology and data used

This section explains the model used to conduct the regression and states the null and alternative hypothesis. It also provides information on the source of records and how the data was gathered and analysed.

2.2.1 Data Selection

Data selection is an important process, and it is critical to the viability of the model and therefore, the credibility of results and findings. The data was derived from a primary source of information, thus making this study unique in its nature.

The advantages of using a primary data source are numerous, including the fact that primary data gives the researcher control over the design of methods and techniques of analysis. Primary data are often free from personal biases and provide authenticity and credibility compared to secondary data. They help answer specific research questions and provide a new perspective on the topic at hand [4]. The use of primary data helps pave the way for new research papers to be conducted on the same topic and can provide interesting insights that can be used by different stakeholders.

Referring to this case, there is a patented credit referral system that connects Albanian agribusinesses wishing to obtain a loan with various banking institutions, developed as a USAID - supported initiative, and is restricted to use by a limited number of people. This loan referral system hosts a total of 468 referred loan applications to all the banks that operate in Albania from which 158 loans have been successfully disbursed up to the end of the first quarter 2021. No sample selection process has been carried out for this paper because all 158 successful loan applications have been taken into consideration and included in the sample.

The loan referral system has an integrated application form that must be filled with various important information regarding each applicant, including all the independent and dependent variables integrated in this paper, giving an opportunity of information that would otherwise be very difficult to obtain. Moreover, having the possibility to use primary data ensure authenticity and reliability compared to secondary data.

2.2.2 Hypothesis and Regression model

The theoretical framework of the paper is based on describing the factors that have an impact on access to credit for agribusinesses. The hypothesis is built upon the above-mentioned independent variables, specifically the dependent variable being the loan amount approved and the independent variables being number of employees (EP), revenues (RV), collateral (CL), pre or post COVID (CO), grant application (GR), export opportunities (EX), region south (RE S), region north (RE N), region central (RE C), year (YR) and type of investment which was divided into three variables and only two were included in the regression, namely investment in building (IB) and investment in working capital (IWC).

The regression analysis used is a multiple linear regression between the dependent variable and 9 independent variables. The Multiple Regression Analysis (MRA) allows for the assessment of strength of relationship between the loan amount disbursed as a dependent variable and the other predictors as independent variables. This model was conducted using SPSS as the statistical software. The hypotheses are as follows:

Null hypothesis: These factors (EP, RV, CL, GR, EX, RES, REN, YR, INB, INWC, CO) do not affect the access to finance of agribusinesses.

Alternative hypothesis: At least some of the factors affect the agribusinesses' access to finance.

To perform the analyses two of the variables have been divided in order to obtain a more insightful result from the regression. The factor of regions was divided into three variables that compose the north region, the central region and the south region. The central region was used as a comparing benchmark and was not included in the regression. The results from the regression show how the loan amount that is obtained differs in each of the north and south region when compared to the central region.

The other factor that was split into three is the type of investment. The types of investment for which the loans were obtained were categorized into investments in buildings and immovable fixed assets, investments in machineries and tractors and investments in working capital. The second one was taken as a benchmark in order to compare the loans obtained for the other two categories.

Then, the multiple regression analysis has been developed to understand the relation between the loan amount disbursed and the independent variables such as collateral, year, revenues,

investment type, export, grant opportunities, region, number of employees and the pandemic situation following the equation:

$$LnLoan = \beta 1 + \beta 2CL + \beta 3LnRV + \beta 4CO + \beta 5EP + \beta 6EX + \beta 7GR + \beta 8RE(S) + \beta 9RE(N) + \beta 10IN(B) + \beta 11IN(WC) + \beta 12YR + \varepsilon \quad (1)$$

Where:
LnLoan is the amount of loan disbursed, denoted in Albanian LEK and taken as the logarithmic of the values so that the explanation of the variable is done in percentage terms;

CL is the collateral;
RV is the revenues amount denoted in Albanian and the explanation of the variable is done in percentage terms;

CO is COVID denoting whether the loan was disbursed pre or post pandemic situation;
EP is the number of employees a firm had hired at the time of the loan application;

EX is the export;

GR is grant, giving information on whether the intended investment was backed by a grant;

RE represents the region in which the agro-firm conducts business and specifically, *RE(S)* is the south region;

RE (N) is the north region;

IN(B) is the type of investment for which the loan will be used, specifically fixed immovable assets;

IN(WC) is the type of investment for which the loan will be used, specifically working capital;

YR is the year in which the loan was taken;

ε is the error term.

3 Problem Solution

This section will present the specific results for each variable along with the individual impact on the dependent variable – loan amount disbursed for agribusinesses. The information retrieved provides the means in analysing the hypothesis and answering the questions that were laid in the first section.

Table 1. Summary of Regression Results

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.868	0.753	0.753	0.57626
a. Predictors: ((Constant), Year, Region1 (sud), Collateral, Invest Building, Employees, Grant, Export, Region2 (Nord), LnREvenues, COVID, Invest WC				

The R Square has a value of 75.3% meaning that 75.3% of the loan amount disbursed is explained by the factors considered in this regression (Table 1). The adjusted R Square, which takes into consideration the non-significant variables, is 73.5% which means that we can proceed with this model. For the purpose of this study, a 90% confidence interval has been chosen, which makes the significance level 0.1 to reject the null hypothesis and accept the alternative hypothesis that states that the independent factors taken into consideration have a significant impact in the amount of loan disbursed.

The dependent factor of Loan Amount as well as the independent factor of Revenues has been transformed to logarithmic form in order for the impact to be evaluated in percentage terms, and thereafter the regression was modelled.

Table 2. Regression Coefficients

Model	Coefficients	P-Value
(Constant)	-152.544	0.045
LnRevenues	0.289**	0.000
Region1 (South)	-0.302**	0.040
Region2 (North)	-0.317*	0.090
Invest 1 (Building)	0.41**	0.042
Invest 2 (WC)	-0.08	0.660
Collateral	1.155**	0.000
Export	-0.391*	0.072
Employees	0.026**	0.000
COVID	-0.294*	0.098
Grant	0.122	0.358
Year	0.081**	0.033
Dependent Variable: LnLoan		
*p < 0.1, **p < 0.05		

It becomes evident that following the 90% confidence interval, all the factors are determinants of the loan amount obtained by the agribusiness except from the grant (Table 2). A thorough explanation follows for each factor and its importance in determining the loan amount.

Revenues

According to the results, the factor of *Revenues* has a p-value of 0.000 giving evidence that this variable is statistically significant. This means that the revenue level of the agribusiness is crucial in determining his success rate in obtaining a loan as well as the loan amount. The result is logical and according to expectations as well as in line with the results from previous studies. Probably the most important thing that the banking institutions observe in a client is their ability to repay the loan since the banks have a conservative approach towards client's default [3]. The positive coefficient of 0.289 indicates that the relationship between loan amount obtained and revenue level is positive which means that for a 1% increase in the revenues, a 0.289% increase in the loan amount that can be obtained is expected.

Collateral

As depicted in the table above, *collateral* is statistically significant and important in explaining the loan amount obtained. As previously mentioned in the Literature Review section, this variable was found to be significant by empirical evidence of other studies. The expectations were the same for this study. Collateral is used as a guarantee by the financial institutions in case the client defaults, thus assuring that the bank can recuperate at least part of the lost loan. Evidence found that collateral is positively related to the loan amount, which means that offering collateral to the bank can increase the amount of loan one can obtain by 217%. This is calculated using the Halvorsen and Palmquist method of the antilog.

Number of Employees

This variable included in the regression was expected to have a positive impact in the dependent variable. Given the results from the regression model, the number of employees is a statistically significant variable at 0.1 and 0.05 p-value and is positively related to the amount of loan obtained. The coefficient of 0.026 explains that for one unit increase in the number of employees, the amount of loan that an agribusiness can obtain increases by 2.6% as previously mentioned; many small family farms do not have any employees and often work as a family. When a loan applicant shows that he has the capacity to employ helping staff and the capacity to pay these employees regularly, he is implying that he has liquidity and managerial skills which have a positive impact in the loan evaluation process.

Investment

This variable was split into three variables, and it gave information regarding the type of investment that the loan applicant intended to make with the loan. The three categories were: investment for fixed immovable assets such as facilities and buildings, investments in machineries or working capital. This division was done in order to see which category of investment got a higher amount of loan. Expectations were that investments in facilities and business premises would require a higher loan amount, followed by investments in machineries and lastly investments in working capital. These expectations were confirmed by the results from the regression model.

The category of investments in machinery was left out of the regression and used as a comparable benchmark for the other two. The factor was statistically significant at a p-value of 0.1 and should be taken into consideration. The regression shows that an investment in buildings and immovable fixed assets generally got a 51% higher loan amount when compared to an investment in machinery. On the other hand, though not statistically significant, the negative sign of the coefficient of investments in working capital show that generally loan amounts given for the purpose of working capital are lower than loan amounts given for the purpose of investment in machineries. These results were derived from the Halvorsen and Palmquist method of the antilog as well.

Regions

Regions present a very important factor in regard to the amount of the loan disbursed. In the first model, the central region was used as a benchmark against the two other regions and was excluded from the regression. The results show that this factor is statistically significant. More precisely, compared to agribusinesses operating in the central region, southern agribusinesses were observed to obtain a loan lower by 26%. The same observation was done for the northern region which was found to obtain loans 27% lower than the central region.

In addition, a multiple linear regression through the origin was used to assess the importance of each

region and to create three separate equations for each one.

$$LnLoan\ (South) = 9.691 + 0.284\ LnRevenues + 1.142\ Collateral - 0.315\ Export + 0.101\ Grant + 0.027\ Employees - 0.044\ COVID + 0.356\ Invest(b) - 0.123\ Invest(wc) \quad (2)$$

$$LnLoan\ (North) = 9.668 + 0.284\ LnRevenues + 1.142\ Collateral - 0.315\ Export + 0.101\ Grant + 0.027\ Employees - 0.044\ COVID + 0.356\ Invest(b) - 0.123\ Invest(wc) \quad (3)$$

$$LnLoan\ (Central) = 9.968 + 0.284\ LnRevenues + 1.142\ Collateral - 0.315\ Export + 0.101\ Grant + 0.027\ Employees - 0.044\ COVID + 0.356\ Invest(b) - 0.123\ Invest(wc) \quad (4)$$

COVID

This variable was treated as a discrete variable to prove whether the pandemic situation had any effect on the loan amount obtained by agribusinesses. Many economists around the world have stated that the pandemic situation had a major negative effect on businesses in general thus it would imply that the COVID situation would have a negative impact in the loan obtaining process as well [15].

The results from the regression model show that this factor is statistically significant at a p-value of 0.1 as expected, the negative coefficient sign shows that the period post pandemic negatively affects the loan amount obtained. More precisely, a 25% decrease in the loan amount disbursed is expected post pandemic. Even though the sector of agriculture might not have been as severely hit by the pandemic situation as other sectors such as the tourism, it still is negatively impacted by it following the distressing economic situation the pandemic has created.

Grant

This factor was treated as a discrete variable and gave insights in whether the loan that was applied for would be backed by a grant scheme such as IPARD grant scheme. Expectations were that a grant backup would positively impact the loan application and loan amount. The rationale behind this was that when an investment is backed by a governmental or international grant, the risk of the financial institution is shared among other stakeholders, thus improving the chances of a business to obtain a loan. Nevertheless, the results from the regression showed that this variable is a statistically non-significant one. The p-value of the variable was 0.358, much higher than the significance level, implying that it was not possible to reject the null hypothesis.

The finding that a grant scheme backing up the investment was not important to the banking institutions was surprising. The justification behind this result is that while a grant the applicant might have won is important, the other factors such as the revenues, collateral, region or number of employees are far more influential as they better demonstrate the future prospects of the business. Furthermore, it is worth noting that many applicants in grant schemes are start-up companies that do not have a proven record of revenue streams or collateral. Even though these agribusinesses may be backed up by a grant up to 70% of the total investment, the rest of the loan remains uncovered, hence not reducing the possibility of default by the client.

Export

The export factor was treated as a dummy variable as well and it gave information regarding the market access that the loan applicant had. The expectation was that having access to foreign markets would be positively correlated with the loan amount obtained. The rationale behind this is that exporting companies are generally larger and better structured than companies that sell locally. These companies often are regulated by formal contracts and agreements between parties which were perceived as a positive thing regarding the loan application as it offered a better guarantee to the bank that the client would have the capacity to repay the loan.

This factor was statistically significant at p-value of 0.1 implying that export was indeed an important in the loan amount a business can obtain. However, it is surprising to find that this factor was negatively related to the loan amount meaning that exporting companies were able to obtain a loan 32% lower than non-exporting companies. Nevertheless, it must be highlighted that less than 10% of the companies included in this study were exporting companies, thus it may create a distorted picture of this particular factor.

Year

The year in which the loan has been disbursed appears to be a statistically significant factor that has a positive correlation with the loan amount. For each passing year starting from 2015, an increase of

8.1% in the amount of the loan disbursed is observed. This finding is encouraging, showing that attempts have been made by agribusinesses to invest more and improve their activity. In addition, this result might be partially contributed to the fact that from 2015 the IPARD grant scheme has been in place, one of the biggest agricultural grant schemes in our country and it has gained popularity in the last year. It might be probable that agribusinesses are now investing more since they are incentivized by these grants schemes.

Therefore, the equation of the study is as follows:

$$LnLoan = -152.544 + 0.289LnRV - 0.302\,RE(S) - 0.317RE(N) + 0.41IN(B) - 0.08IN(WC) + 1.155CL - 0.319EX + 0.026EM - 0.294CO + 0.122GR + 0.081YR \quad (5)$$

Judging from the standardized coefficients of each variable in the regression model, factors that affect access to finance can be ranked according to their importance in predicting the phenomena. The variable with the highest standardized beta in absolute term is the best predictor of the model. In this particular model, the key variable is revenues. It is no coincidence that revenues as a factor is the most important predictor of the loan amount, and it once again highlights this finding that the loan amount an agribusiness can obtain is highly dependent on the revenues that the same business generates.

Following is collateral which has shown a significant positive standardized coefficient. This means that collateral is an important predictor of the loan amount and that the fact that the business offers collateral can strongly impact the loan amount this agribusiness can obtain. However, as can be seen, this variable is not as important as revenues. As a consequence, it can be concluded that while having collateral is essential, it is more important to have a strong stream of revenues to support the loan obligation.

The rationale behind this result is that the banking institutions prefer a business with a strong prospect and future rather than a business that offers collateral but cannot guarantee the revenues to be generated in the future and the capability to repay the loan. As a matter of fact, selling the collateral of a default client to recuperate the loan amount given comes at great legal and financial costs for the financial institution.

The following factor that best contributes to explaining the loan amount is the number of employees. Ranked third, this factor positively impacts the loan amount that a banking institution can grant for an agribusiness. As previously mentioned, a high number of employees show a managerial and financial capacity of the business manager, therefore increasing the potential of a company or farm to obtain a higher loan.

Year in which the loan was obtained is also a significant factor right after the number of employees.

Regions in which the agribusiness is situated have a rather significant position as predictors to the loan value that can be obtained. This comes as no surprise given that the three regions are very much unalike in terms of agricultural activity and have presented different economic developments in the sector of agriculture.

It must be emphasized that while performing the regression, several other variables were taken into consideration. Apart from the year in which the loan was disbursed, the quarter was studied believing that seasonality would play a role in the loans disbursed. Nevertheless, the quarter resulted to be a non-significant factor and was not included in the final model. In addition, other demographic factors were studied, such as gender, age and experience and the three of them failed to explain the loan amount obtained. Therefore, all these non-significant variables were excluded from the final model of the regression.

4 Conclusion

The sector of agriculture in Albania comprises a vital sector and agribusinesses can be considered as the backbone of the Albanian economy. Access to finance and funding opportunities are what drive the economy; consequently it is of great importance to study the factors that influence them. By better understanding the factors that impact access to finance, it becomes easier to tackle sector specific development problem and design policies in accordance with the goal of economic development.

This study uses data from a unique and proprietary loan referral system with restricted access to public to explain the factors that contribute to the loan amount disbursed through a period of 6 year, from the agribusinesses' perspective. It has shown that there are various factors that impact access to

finance for the agricultural business, more precisely: the revenues, the region, the type of investment, collateral, export, number of employees and COVID.

Revenues and number of employees were among the most important quantitative variables that were positively related to the amount of loan obtained. Considering discrete variables, collateral was of great importance, as well as regions, type of investment, export possibilities and the pandemic situation. A special attention was given to the regions.

The study was conducted just after the pandemic situation happened; hence, it would be recommended for fellow researchers to conduct another similar study and include more data post pandemic. Economists from around the world declare that the true effects of the pandemic will become more visible in the years to come, thus an extended study with more data post pandemic would provide a clearer picture of the impact that COVID-19 had on the sector of agriculture.

The study also revealed the importance of regions in obtaining a loan in the sector of agriculture. This study and further extended studies on the same topic would be of great importance to the government and policymakers in order to design their policies on agriculture by factoring in the regions as well.

Another recommendation would be to the banking and financial institutions that might use this study as groundwork to devote more time and resources to the sector of agriculture and develop dedicated products to the sector. In addition, with the increasing importance of the sector, it would be recommended to develop a new credit scoring model tailored to the sector.

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