# *Measuring the Effect of Covid-19 on Bank Lending: Empirical Evidence from Albania*

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## Abstract

*This study aims to empirically contribute to the identification and evaluation of microeconomic and macroeconomic indicators at the level of lending in Albania. It identifies a number of important factors, such as the level of gross domestic product, return on assets, unemployment rate, inflation rate, non-performing loans rate, capital adequacy, liabilities and regulatory capital to assets risk weighted. Quantitative analysis and econometric models will study the quantitative impact of each of these factors on both the level of net credit stock and the level of new credit. The creation of these 2 econometric*

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*models will serve us to measure and evaluate the changes encountered in the dependent variable over a given period of time, as a result of shocks from other variables. Also, a current and important contribution to this thesis relates to the impact assessment of COVID-19. In order to maintain the simplicity and usefulness of the model, some realistic features of the current economy have been left out, such as the level of loan repayment etc. The study period is from the first quarter of 2009 to the fourth quarter of 2020. The data used were obtained from the Bank of Albania and the Albanian Association of Banks, which were presented in the form of a time series. Despite the limited number of data considered regarding the impact of COVID-19 as well as their temporal distribution, this study with the work it performs, serves as a good starting point for further studies in this field.*

***Keywords:*** *COVID-19, Inflation, Lending, NPL, Unemployment, GDP.*

## 1. Introduction

At the beginning of the first quarter of last year no one would have imagined the long ordeal of coping to date with an emergency situation like the COVID-19 pandemic.

The main challenges facing policymakers recently are related to measuring the effect caused by the COVID-19 pandemic (not only) as well as finding solutions to mitigate the effects of undesirable situations on the real economies of states. The question posed in the case of this study is related to the fact of the impact of the COVID-19 pandemic on the banking system and mainly on lending in Albania.

In this paper, a deductive approach of a scientific research has been developed, where first the research questions and hypotheses have been raised and then models have been built to test and empirically verify how much they stand. This study conducted in such a way aims to achieve a high level of objectivity in research.

### *Research questions*

1) How has COVID-19 affected the level of lending in our country and how strong has this impact been?
2) Is there an increase in the level of net credit stock as a result of measures taken to mitigate the impacts of COVID-19?

### *Study Hypotheses*

1) In the conditions of the crisis caused by the COVID-19 pandemic, the

biggest negative impact on the pace of the net credit stock level was given by inflation

2) In the conditions of the crisis caused by the COVID-19 pandemic, the most impact The positive level in increasing the level of new credit in the country was given by the level of deposits.

*Objective of the study*

The most important objective in this paper is to create a theoretical and empirical framework where the relevant studies of factors affecting the level of lending in our country can be conducted and based on their results to draw the appropriate conclusions from which we can give relevant recommendations or suggestions.

## 2. Literature review and related contributions

Identifying, measuring and evaluating the impact of COVID-19 on lending is a very important issue for various researchers. The literature on this issue is growing rapidly. Ari et al. (2020) reviewed a database that included 88 banking crises since 1990 to learn lessons for resolving non-performing loans after COVID-19. *Ç*olak and *Öztekin* (2020) used and analyzed the banking data of 125 different countries and concluded that the growth of bank lending has declined globally in response to the pandemic shock.

Beck and Keil (2021) concluded that there has been an increase in lending as a result of the easing of regulatory requirements for credit classification and provisioning. As a result the impact of COVID-19 was not so noticeable on banks' balance sheets. This increase in borrowing was used as an instrument by government programs to support the economy. Baker, Bloom, Davis and Terry (2020) in contrast to the researchers above used the same indicators in order to document and quantify the large increase in economic uncertainty in recent weeks. Christensen, Maravalle and Rawdanowicz (2020) studied the growth of bank deposits during COVID-19, potential drivers and impacts. Among the factors that have caused this increase are thought to be the control measures taken, blocking movements, closing bars, restaurants, etc.

*Impact of COVID-19 on lending, at national, regional and global level*

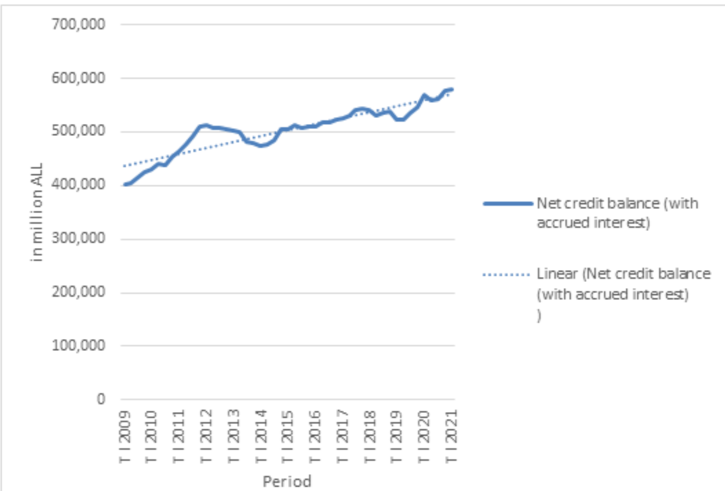
COVID-19 spread rapidly throughout the world causing severe consequences in a very short time. His rise to pandemic proportions prompted a series of extraordinary measures to be taken to mitigate further spread and the consequences of the future.

In almost all countries travel was banned, movements, rallies, manifestations or various organizations were restricted in order to limit the spread, businesses were closed. There were also reductions in interest rates, liquidity support, timely deferral of taxes and loan payments, mitigation of consequences on economic activity and avoidance of financial market turmoil. During this period we faced a new reality, where social distance, lack of staff in financial institutions and regulatory bodies, were and continue to be obstacles that affect the provision of financial services and reduce their quality. In an uncertain and constantly changing reality, there is a lack of desire to take risks and this can increase the cost of financing in the domestic and foreign capital markets.

Central banks created stimulating monetary policies in response to growing concerns about the solvency and liquidity of nonfinancial corporate firms. Many countries introduced unprecedented loan guarantee programs and other forms of credit support for their businesses (Bennedsen, 2020). Loan guarantees, sometimes supplemented by government purchases of corporate bonds, have been key policy instruments to inject liquidity into affected businesses (Alstadsaeter, 2020).

Chart 1 shows the trend of net credit surplus of the banking system, which clearly shows that despite the dynamic fluctuations has been increasing. If we compare Albania with other countries in the region, we understand that our country has the lowest lending rate to the private sector in relation to Gross Domestic Product. The liquidity of this sector has been consistently above the regulatory liquidity adequacy ratio, at a value of 20%, thus consolidating confidence in the banking sector.

**CHART 1.** Reflection of the net credit surplus trend of the banking system, Q1 2009 - Q4 2020 (in millionALL)

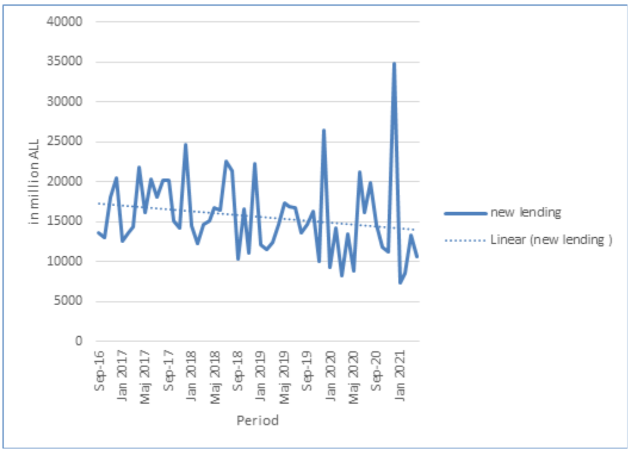



Source: Bank of Albania

The banking sector in Albania is the main and almost the only source of lending to the economy, compared to other countries in the region. Loans are the basic elements in the total assets of each bank. In 2019, loans decreased by 0.85% or ALL 4.94 billion, especially in Q1 with an amount of ALL 17.43 billion, this is claimed to be due to the separation of B.K.T in Kosovo from the reporting of the branch in Albania. In Q3 2019 we had a large increase of ALL 11.23 billion, this expansion has come as a result of the increase in business loans, lek loans, AAGJ loans. Then we see that we have had fluctuations but always in an upward trend. This is as a result of measures taken in connection with the postponement of installment payments, interest expenses or repayment. Deposits remain the main source of financing, covering almost twice the volume of loans in this sector.

Despite the financial and sovereign debt crises affecting neighboring countries, and severe shocks such as earthquakes and pandemics, the Albanian banking sector has managed to maintain a positive profitability. Undoubtedly, the negative effects of these shocks were transmitted to the economy, but through various policies pursued, the impacts on the overall health and stability of the banking sector have been mitigated. Credit to businesses grew 11,8 percent year on year. This increase has come as a result of high lending to big business. For small and medium-sized businesses, banks have shown reluctance to finance, as a result of the uncertainties and the greater risk they carry especially in this difficult period of pandemic. This contraction of lending in this segment at a rate of about 5 percent has been compared to the end of 2020 and is considered among the lowest annual growth rates of the last 5 years. Chart 2 shows the trend of new lending to the banking system, which clearly shows that despite the dynamic fluctuations it has decreased.

**CHART 2.** Reflection of the new lending trend of the banking system, Q3 2016 - Q1 2021 (in million ALL)




Source: Bank of Albania

Graphically looking at the performance of the new credit over the years, there is a dynamic movement with occasional fluctuations, but always with a downward trend. This is a result of the policies and measures taken by central bank and the level 2 banks that sometimes have given and sometimes are more cautious. According to the data, long-term loans accounted for the largest share of the total loan portfolio, followed by short-term and medium-term loans. Credit to businesses has been favored, shifting the SME portfolio towards long-term loans, state guarantee schemes have been established, loans to small businesses have shrunk, and wholesale and retail trade led the new loans. During 2020, the sectors that suffered the most shocks were trade, services, tourism, construction, and it was precisely these sectors that led to the expansion of the business loan portfolio in Q3 2020. With the contraction experienced by the industry, the credit weight that this sector had to the total fell significantly by 25.1%. The decline in January 2021 was due to the increase in interest rates on ALL loans and especially on new loans from 5.3% in the third quarter to 5.4% in Q4 2020.

From global data, an increase in the ratio of credit costs and non-performing assets was reported, as a result of large job losses, wage cuts and the severe liquidity crisis. Technology played an important role during this period, coming to the aid of lenders through:

- Re-imagining the product portfolio, creating new products, which are the target group and distributing them to micro segments of customers.
- Building a digital backbone utilizing the technological architecture of microservices, automating new processes to introduce contactless transaction options, virtual cards and Card-Not-Present transactions {CNP}.
- Increasing digital financial inclusion by adopting an ecosystem approach to establishing partnerships with telephone companies, which through tools and platforms make it possible to provide more advanced choices to customers.
- Mitigation of cyber security risks through key platforms
- Further expansion of the electronic payment system 'e-banking'.

Over time, countries' economies are showing signs of recovery even though pandemic effects are still present in economic activities.

The Western Balkans represents a region composed of small and open economies, where foreign capital predominates in the banking sector. It is this feature that makes the banking financial system of this region vulnerable to external crises. Below are statistically presented percentage data on financial health indicators for the region. These data are based on the state of financial systems at the end of 2019. Graphs alongside the values show the changes of the historical standard deviation from the averages of the last three years.

In a study conducted by a number of researchers, among others Ruvejda, Keler, Blerta Qerimi and others at the request of the Albanian Banking Association on the impact of Covid 19 on the banking system in this graph are presented data in % of indicators of financial health for the region. These data are based on the state of financial systems at the end of 2019. Graphs along the values show the change of the historical standard deviation from the averages of the last 3 years. Report of capitalism at the end of 2019 was on average 18.3% much higher than the regulatory minimum. The ratio of liquid assets to total assets was on average 29% Credit report to deposits is below 100 in each case. ROA, profitability measured as return on assets ratio have decreased slightly to 1.6%. ROE or return on equity has been and continues to be in an upward trend with an average of 12.82%. The ratio of substandard loans has decreased in all countries with an average level of 5.3% where Kosovo has the lowest level and Albania the highest.

**TABLE 1.** Trend of financial health indicators of the banking system in the Western Balkans, compared to the averages of the last three years (%).

| The economy | Report of Capitalism | Liquid assets / total assets | Credit / Deposit Report | Return on assets | Return on equity | Sub-standard loan ratio |
|---|---|---|---|---|---|---|
| Albania | 18.3 | 35.7 | 54.0 | 1.5 | 13.4 | 8.4 |
| Bosnia and Herzegovina | 18.1 | 29.6 | 88.7 | 1.4 | 11.1 | 7.4 |
| Kosovo | 15.9 | 28.9 | 77.6 | 2.1 | 18.4 | 2.0 |
| Montenegro | 17.7 | 20.8 | 88.1 | 1.3 | 10.0 | 5.1 |
| Northern Macedonia | 16.3 | 24.0 | 83.8 | 1.3 | 13.5 | 4.6 |
| Serbia | 23.4 | 36 | 91.6 | 1.8 | 10.5 | 4.1 |

Source: Albanian Association of Banks

As a result, our country is writing-off loans from balance sheets or selling old substandard loans. It also adopted a framework for the voluntary out-of-court restructuring of large substandard loans. During 2020, total outstanding loans increased by an average of 9.4% for households and 7% for businesses. In general, we say that the banks of the region have sufficient capital and the indicators have been improving over time. However, although the national banking financial sectors of the region enjoy stability, it is necessary to closely monitor lending and liquidity developments as COVID 19 poses the greatest risk since 2008.

The banking system faced with several risks, among them it is worth mentioning the problems with the cash flows of firms affected by the pandemic and the change in public demand for cash led to tightening of financing and liquidity conditions for banks, thus affecting lending to the private sector. The increase in demand for foreign currency instruments could cause a real liquidity crisis. Transitional financing from the banking system and the restructuring of loans to borrowers who have experienced liquidity shortages have mitigated the effects of the crisis and contributed to the recovery. Public partial credit schemes, credit lines provide a recovery of credit flows to strengthen investment.

In a reflection of the latest developments in our country, prevail two events that have hit the economy hard, the devastating earthquake of 2019 and the pandemic COVID-19. At a time when Albania had begun the reconstruction phase, the outbreak of the virus forced the government to decide to close key sectors of the economy, causing a strong contraction of the economy by 10.2% in the second quarter of 2020. Among the first to be hit by this situation were the travel and tourism services sectors. Sales, profit and loss of jobs disproportionately affect small and medium enterprises (SME). It is too early to feel the effects of this pandemic emergency but over time, declining profitability, declining asset quality and slowing credit growth may have a second-round effect on the real economy and may jeopardize the financial stability.

This pandemic emergency expected to bring a prolonged financial stress; its escalation constitutes a crisis, both in supply and demand. The duration of this pandemic, the extent of the shocks it may cause, and the financial, budgetary and social consequences are not yet clear, hence the need to develop preventive policies.

Private and public enterprises here are excluded those businesses that provide vital basic services such as pharmacies, have suffered damage to the chain of trade relations and have experienced on average a sharp decline in sales of goods and services, and consequently a decline in revenue and difficulty in meeting the financial liabilities of the activity related to fixed and variable costs.

The very serious situation is also reflected in the employees and in general on the income of the families, as the reduction of the income or the interruption of the salary, weakens their consumption and brings difficulties in fulfilling the financial obligations. Precisely these consequences lead to difficulties in repaying loans taken in financial institutions, leading to a decline in credit quality and a negative impact on the financial result.

During the recovery phase, the financial sector measures to support the real economy, the more comprehensive, flexible and transparent they are, the more they will maintain balance with concerns about financial stability. It is very important that governments undertake clear and efficient strategic plans to deal successfully and get out of this difficult situation as quickly as possible. Among the strategies that can be followed are: the creation of capital space for banks to resume lending, the release of countercyclical capital shock absorbers, through the temporary suspension of additional bonuses given to executives, the release of conservative shock absorbers, allocation of dividends and repurchase of shares. Another strategy that can be undertaken is to allow banking institutions to carry out their activity below the levels of capital adequacy. This can be achieved, for example, by approving temporary moratoriums on loan repayments, which should be clearly defined.

A number of other measures that the government or relevant entities should monitor on a case-by-case basis are the suspension of credit classification and provisioning. These measures can pose a serious risk to both banks and customers. Crisis management by central banks and supervisory authorities will mitigate the consequences and relieve financial stress by ensuring continued lending in support of the economy and preventing the accumulation of financial stability risks.

By closely monitoring liquidity and lending developments, based on growing concerns about financial stability, oversight agencies in Albania have suspended dividend distribution and remuneration. In terms of monetary policy, the central bank has lowered rates, removing the ceiling on loans to second banks. It has stated that it could use quantitative easing, for example through the purchase of government securities and the use of reserves within legal limits, if there are further liquidity constraints.

It has also announced direct financial support to businesses through loan and credit schemes, which will be distributed through development financial institutions, new guarantee funds and the banking system.

Based on the data so far, we see that the measures taken by the relevant entities have given a positive effect in dealing with the severe consequences of COVID-19, thus leading to the mitigation of negative impacts on lending activity.

## 3. Econometric methods and models

### *Model 1*

The study period for the first model is from the first quarter of 2009 to the fourth quarter of 2020. Normally the impact of COVID-19 is only these last two years, but the reason for the expansion in time is firstly the more surveys taken in the study the smaller the error in the results, secondly looking at the performance of the level of lending across years as after the 2008 crisis, during the earthquake and most recently COVID-19, i created a clearer picture of the behavior of indicators and their impact on the level of lending. Classical econometric analysis is largely based on regression models. Model 1 is presented as follows:

- Description of the variables to be used in the first model

Table 2. Variables of the first model:

| **Variables** | Description | **Symbols:** |
|---|---|---|
| Net credit stock | dependent variable | |
| Gross domestic product level | independent variable, is expected to have a positive impact on the performance of the lending level. | |
| Inflation | independent variable, is considered a problem of concern for any economy, the objective of any macroeconomic policy is to achieve sustainable economic growth with a low inflation rate. | |
| Unemployment | independent variable, is expected to have a negative impact on the performance of the lending level. | |
| Return on assets | independent variable, is expected to have a positive impact on the performance of the lending level. | |
| Capitalization | independent variable, is expected to have a positive impact on the performance of the lending level. | |
| Non-performing loan rate | independent variable, is expected to have a negative impact on the performance of the lending level | |

| | | |
|---|---|---|
| COVID-19 | Dummy variable indicating the impact of the pandemic crisis on the level of lending. The inclusion of this variable will serve the purpose of comparing the economic situation between periods.<br>This variable takes two values<br>o 0 = period before the crisis<br>o 1 = period during the crisis | DUMMY |

Source: Author

**TABLE 3.** Submission via e-views of the multiple evaluated model:

Dependent Variable: LOGKN
Method: Least Squares
Sample: 1 48
Included observations: 48

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| LOGPBB | 0.325986 | 0.053079 | 6.141508 | 0.0000 |
| INF | -2.078303 | 0.672670 | -3.089632 | 0.0036 |
| NPL | 0.008562 | 0.001482 | 5.779210 | 0.0000 |
| PAP | -1.976650 | 0.456908 | -4.326140 | 0.0001 |
| RMK | -0.015910 | 0.005272 | -3.017966 | 0.0044 |
| ROA | 0.030295 | 0.011979 | 2.528932 | 0.0155 |
| DUMMY | 0.124274 | 0.020503 | 6.061385 | 0.0000 |
| C | 9.369419 | 0.692963 | 13.52081 | 0.0000 |
| R-squared | 0.891632 | Mean dependent var | | 13.12220 |

| | | | |
|---|---|---|---|
| Adjusted R-squared | 0.872667 | S.D. dependent var | 0.087888 |
| S.E. of regression | 0.031362 | Akaike info criterion | -3.935437 |
| Sum squared resid | 0.039343 | Schwarz criterion | -3.623570 |
| Log likelihood | 102.4505 | Hannan-Quinn criter. | -3.817582 |
| F-statistic | 47.01600 | Durbin-Watson stat | 1.469916 |
| Prob(F-statistic) | 0.000000 | | |

Source:Authors

The equation of the econometric model is presented in the following form:

$$log_{KN} = 9.3694 + 0.32598 \cdot \ log_{PBB} + 0.008562 \cdot \ NPL - 2.078303 \cdot \mathrm{INF} \quad - 1.97665 \cdot \mathrm{PAP} \ + 0.030295\,\mathrm{ROA} \ - 0.0159 \cdot \mathrm{RMK} \ + 0.12427 * DUMMY$$

Determinability coefficient:

From table 3 we find that $r^2 = 0.891632$. This coefficient is close to one so the equation found expresses well the relationship between the variables. 89.16% of the variance of the net credit stock level is explained by the model, ie by the variables GDP, inflation, NPL, RMK, ROA, unemployment and the impact of the financial crisis COVID-19.

Testing the significance of the model:

Hypotheses are formulated:

Ho : $\beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = \beta_6 = 0$ ( the model is not important)

Ha :at least one of the coefficients ≠ 0 ( the model is important)

Ho rejected if

From the table I find that = 47.016

I find from Fisher distributiont

Because , Ho drops down with an alpha security level 0.10 . So the model is important.

*Model 2*

In the second model we study the new loan 'flow-n' as a dependent variable and as independent variables are taken the total liabilities, regulatory capital to risk weighted assets (in%) and the variable Dummy, the crisis of COVID- 19.

The relationship between these variables in this study are treated based on a sample of time series data from T4_2016 to T4_2020, provided by the Central Bank of Albania.

**TABLE 4.** Second model variables

| Variables | Description | Symbols |
|---|---|---|
| New loan | dependent variable | |
| Gross domestic product level | independent variable | |
| Total liabilities | independent variable | |
| Regulatory capital on risk weighted assets (in %) | independent variable, indicator of the financial health of the banking system | *KAPR* |
| COVID-19 | o Dummy variable indicating the impact of the pandemic crisis on the level of lending. This variable takes on two values<br>o 0 = pre-crisis period<br>o 1 = periods during the crisis | DUMMY |

Source: Authors

The reason why the total liabilities is taken, as a whole variable in itself, is that based on data from recent years there is an increase. The two most basic elements of this variable are the level of deposits and 'equity funds'. The latter usually account for about 8-10% of total liabilities, while deposits occupy the largest share over the years.

Based on the studies conducted, an increase in the level of deposits during the pandemic period has been confirmed because of measures taken by governments and central banks. In these conditions, it is thought that even in Albania the increase in total liabilities is a result of the increase in the level of deposits.

**TABLE 5.** Submission via e-views of the second multiple evaluated model

| | | | | |
|---|---|---|---|---|
| Dependent Variable: LOGKR | | | | |
| Method: Least Squares | | | | |
| Sample: 1 17 | | | | |
| Included observations: 17 | | | | |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
| LOGPBB | 2.529960 | 0.326931 | 7.738505 | 0.0000 |
| KAPR | -0.178364 | 0.023456 | -7.604332 | 0.0000 |
| DUMMY | -0.246332 | 0.103063 | -2.390101 | 0.0341 |
| LOGTP | 4.016565 | 1.301935 | 3.085074 | 0.0094 |
| C | -76.76856 | 18.15915 | -4.227543 | 0.0012 |
| R-squared | 0.880393 | Mean dependent var | | 9.674613 |
| Adjusted R-squared | 0.840524 | S.D. dependent var | | 0.173104 |
| S.E. of regression | 0.069128 | Akaike info criterion | | -2.265784 |
| Sum squared resid | 0.057344 | Schwarz criterion | | -2.020721 |
| Log likelihood | 24.25916 | Hannan-Quinn criter. | | -2.241424 |
| F-statistic | 22.08211 | Durbin-Watson stat | | 2.491324 |
| Prob(F-statistic) | 0.000018 | | | |

Source:Author

The equation of the econometric model is presented in the following form:

$$log_{KR} = -76.76856 + 4.016565 \cdot \ log_{TP} + 2.529960 \cdot log_{PBB} - 0.178364 \cdot \mathrm{KAPR} \quad - 0.246332 \cdot \mathrm{DUMMY}$$

Determinability coefficient:

From table 5 we find that $r^2 = 0.880393$. This coefficient is close to one so the equation found expresses well the relationship between the variables. 88.04% of the variance of the level of new credit is explained by the model, ie by the variables GDP growth, regulatory capital to risk weighted assets, the level of liabilities and the impact of the financial crisis COVID-19.

Model significance testing:

Hypotheses are formulated:

Ho : $\beta_1 = \beta_2 = \beta_3 = \beta_4 = 0$ ( the model is not important)

Ha : at least one of the coefficients $\neq 0$ ( the model is important)

Ho rejected if $F_f > F_{kr}$

From the table I find that $F_f = 22.08211$

Find from the Fisher distribution

Because, Ho drops down with an alpha security level 0.10 . So the model is important.

Based on the tests performed we conclude that these models are not good models for predicting the behavior of variables in other time periods, except in the periods in which they are taken into study.

**Working restrictions**

This study is limited due to several factors listed below:

1) Disadvantages of the multiple linear regression method. Like any statistical model, this model is limited by:
    - Analysis of only linear relationship between variables, while there are links in other forms;
    - Data abnormality negatively affects regression analysis;
    - Abstraction from reality, data are assumed to be independent of each other, while in reality there is a reciprocal relationship between independent variables especially in the economic field.
2) Limited number of independent variables. This study examines a limited number of independent variables and a dummy variable, which should explain the dependent variable. But logically it is known that there are a number of other variables, which are not included in this study that have an impact on the level of lending.
3) The small number of surveys to consider in the second model, as a result of the scant data that have been published in official sources regarding the level of new credit.

Despite the modest results and recommendations of this study, where there is always room for improvement and change, I hope it will serve as an impetus for the development of more in-depth empirical studies in this regard.

## 4. Conclusions and Recommendations

Until the completion of the worldwide vaccination process, restrictions on tourism and travel are thought to be likely to continue. Gross Domestic Product is projected to grow by 4.4% during 2021 as a result of the partial recovery of exports, consumption and investment.

Factors that are considered key to economic recovery are the services sector, led by tourism, and construction, where investments in the reconstruction process will predominate. Among the important efforts to improve the business climate is the undertaking of reforms to encourage the making of as much private investment as possible, as the latter are a key factor in economic growth. Government spending is projected to decline next year due to limited fiscal space. During this year we are expected to have a narrowing in the current account deficit by 8.8% GDP. This contraction is expected to continue to decrease to 6.5%, as a result of the improvements that are foreseen in the trade balance. We can say that these forecasts are a line of pre-crisis trends. The narrowing of the trade deficit in the medium term is a result of the rapid growth of exports of services, including business processes and tourism. But also on the other hand, the level of imports is projected to increase to 13% during 2021, as a result of numerous investments in infrastructure in a short period.

If everything goes as planned and economic activity will resume, it is expected that in the period from 2022 to 2025, revenues will have an increase of up to 27.6% of GDP and the country's public debt will continue to gradually decrease in the period medium term.

From many studies conducted, various analysts have always tried to link the level of lending directly with microeconomic and macroeconomic factors as well as banking factors. For this reason I took the initiative to study these relationships of variables for our country. In relation to the studies conducted on the basis of the two models these conclusions were reached:

1) COVID-19 has had a positive impact on the level of net credit stock. The stock of net credit has increased during the pandemic as a result of deferral of payments but this growth is at a lower rate compared to a year ago.
2) The largest positive impact among the variables taken in the study was given by GDP but this impact is a bit significant as the growth rate has been declining.

3) The biggest negative impact was given by inflation. Fiscal and monetary policies as well as the continued growth of national debt has produced and will continue to produce significant inflation.
4) Adjusted = 0.891632 of first model, implies that 89,16 % of the variance of the net credit stock level is explained by the model, ie by the independent variables GDP, inflation, NPL, RMK, ROA, unemployment and the impact of the financial crisis COVID-19.
5) COVID-19 has negatively affected the level of new credit. Uncertainty and increased control measures by the banking system have made them more cautious in granting new loans.
6) Adjusted = 0.880393 of the second model, means that 88.04% of the variance of the new credit level is explained by the model, ie by the independent variables GDP growth, regulatory capital to risk weighted assets, the level of liabilities and the impact of the financial crisis COVID-19.
7) Based on the analysis of multiple linear regression, it is concluded that since Ff > Fk, consequently the models turn out to be significant at the level of 10%.
8) Banks have managed through their good management to make it possible to maintain satisfactory levels and the level of non-performing loans. The forced off-balance sheet, sales and their out-of-court settlements enabled the reduction of the NPL.
9) The Bank of Albania as a regulatory authority has monitored, analyzed and adapted in a very timely manner the regulatory framework enabling commercial banks to better manage the situation in which the entire banking system found itself.

*Recommendations:*

1) Improving lending conditions would serve as a powerful mechanism of structural adjustments that have a direct impact on the economic development of the country. Lending to the economy is considered as a key factor in improving macroeconomic indicators.
2) To support the production and services sector as a whole because here our economy is more concentrated. Through supportive policies in these sectors, without excluding others, would give a positive impact on the economy.
3) Risk Management means identifying, classifying, measuring and minimizing the risk of a loan. Thus, priority and great importance is given to bank executives, who must constantly create and review all policies and strategies to protect themselves from unwanted risks.

4) In the conditions of a global crisis caused by the pandemic and a continuous increase that could lead to the growth of bad loans, the Bank of Albania should orient the commercial banks to implement combined technology systems with human resources, which enable the identification and analysis of credit risk before this turns into a weakness for the banking system.
5) To improve the quality of the loan portfolio, through re-imagining the loan portfolio by enriching them with new and sound products. Make a good distribution of them to the target groups of customers according to clear criteria. Banks also need to spend more on increasing the training of credit employees to increase their professional level and performance at work.
6) In order to increase the level of lending and reduce the level of non-performing loans, the establishment of collective guarantee companies can be effective. The establishment of these companies can increase the level of credit by helping those firms, which present a high credit risk, and which find it impossible to lend to banks.
7) Another strategy that can be undertaken is to allow banking institutions to carry out their activity below the levels of capital adequacy. This can be achieved, for example, by adopting temporary moratoriums on loan repayments which should be clearly defined.

What we can say is that banks need to review strategies and improve lending policies. Despite the negative situations that the country may face, lending activity in banks should not be curbed.

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