

DEBTORS' PERCEPTION OF INTEREST RATES CHARGED BY BANKS DURING THE COVID-19 PANDEMIC. CASE STUDY - DEBTORS FROM CĂLĂRAȘI COUNTY

Florentina Moisescu¹
Nechita Daniela²
Răgălie Constanța³

Abstract

The COVID-19 pandemic has had a strong impact on all states globally. As a result, many people who had ongoing loan agreements lost their jobs and became unable to pay their debts to banks. Noticing these problems in different markets, the banking units changed their strategy and offered debtors the opportunity not to pay the instalments for a certain period of time, until they obtained the financial resources they needed. All this has led in time to the change in interest rates charged to banks. The objective of this paper is to determine the debtors' perception of the facilities offered by banks during this period as well as the interest rates charged by them. In order to fulfil the purpose of this paper, we conducted a quantitative study among debtors in Calarasi County. The research took place between 26.05.2020 - 15.06.2020, on a sample of 140 respondents. A questionnaire was used to collect the data and was posted on online platform Marketing4Today, using the Drag & Drop Editor. The study found that some respondents are not satisfied with the interest rates charged by banks, considering that the facilities offered during the COVID-19 pandemic have the role of supporting their interests more and less those of borrowers. In addition, due to labour market problems, they expect to intensify credit policy measures which would automatically lead to a reduction in demand for credit.

Keywords: *interest, interest rate, bank loans, COVID-19, financial policies, banking system, debtors' perception.*

Introduction

The coronavirus epidemic is currently underway in Romania. This epidemic is based on the SARS-CoV-2 virus that causes the development of COVID-19 infection. According to medical tests conducted worldwide, infection with this virus can have mild, moderate or even severe manifestations. Previous studies have shown that many people have been asymptomatic, which has led to the rapid spread of this virus globally. In Romania, the first case of COVID-19 was registered on February 26, 2020. By June 3, 2020, more than 19300 confirmed cases were registered at national level (ms.ro).

According to the latest data provided by the Ministry of Labour (mmuncii.ro), during this period, over 1,000,000 employment contracts were suspended in the country, of which over 290,000 people worked in the manufacturing industry, over 196000 worked in wholesale as well as retail and over 100,000 people worked in hotels and restaurants. The unemployment rate reached 5.2% in June 2020, 1.2% higher than in June 2019. The number of active employees in the economy was 4897000 in June 2020, the last month for which there are data, by 83000 less than in the same month last year and by 79300 less than in March of this year, the month in which the COVID-19 pandemic started in Romania.

The major impact of the COVID-19 pandemic was also felt at the level of banking units. Because their incomes have been profoundly affected by changes in the labour market, many people have been unable to pay their debts to banks. Thus, the Ministry of Public Finance agreed with the Romanian banks to offer certain financial facilities on the market to help borrowers get through this difficult period. In March 2020, the decision was made to postpone the payment of instalments for all customers who were affected by the spread of COVID -19.

¹ Faculty of Economics and Business Administrations, University "Dunărea de Jos" of Galați, România, fmoisescu@ugal.ro

² Faculty of Economics and Business Administrations, University "Dunărea de Jos" of Galați, România, dananechita2002@yahoo.it

³ Faculty of Economics and Business Administrations, University "Dunărea de Jos" of Galați, România, ragaliec@yahoo.com

If they wanted to postpone the payment of the instalments, they needed to submit a statement saying that their income had been affected by the spread of this virus.

Suspension facilities were offered for all types of loans, including real estate loans. Thus, the request for suspension could be made only once, for a maximum period of 9 months, but not later than December 31, 2020. Among the reasons that debtors could invoke in the request for suspension are: technical unemployment, reduction of the debtor's salary or a family member, his or her quarantine, dismissal or illness (mfinante.gov.ro).

Analysing from the point of view of the way of paying the interests related to the suspension period, it was decided that this should be done in stages, starting with the first month after the end of the suspension period. The decision was for this to be done in 60 equal monthly instalments, without the collection of certain interest for this component of the loan. Another important aspect that has been foreseen at the level of these changes refers to the interest rates that are related to those loans at the level of which there are variable indices. In their case, the value of the letter of guarantee is determined based on the banks' estimates of how the variable indices will evolve.

Knowing the strong impact that the COVID-19 pandemic had on both the labour market and on the banking units in Romania, we considered it necessary to conduct a quantitative study to study the perception of debtors regarding the fiscal facilities offered during the pandemic and how which has left its mark on the interest rates charged by the banking units. The study was conducted at the level of debtors from Călărași County who have a loan agreement with a certain bank. In order to better understand the impact that the COVID - 19 pandemic had on lending activity; in the next part we analysed a series of theoretical notions present in the literature. Subsequently, we presented the practical study mentioned above, through which we illustrated the way in which borrowers perceive all the measures taken during this period at the level of credit policy. In the last part we studied the results obtained as well as their impact on the financial market.

Review of the scientific literature

The Covid - 19 pandemic greatly affected the banking system both in terms of allocated loans and deposits created by customers. Banks had to change their existing policies and revise the interest rates initially set, precisely to support customers and give them a chance to pay off the loan. Previous studies on this subject have illustrated the fact that this pandemic has left a strong mark on both financial companies (Goodell, 2020) and non-financial companies (Akhtaruzzaman, et al, 2020) in terms of view of the liquidity they hold.

In addition, it has been observed that this pandemic has not only affected certain countries, it has left its mark on all countries globally (Warwick and Roshen, 2020). The ability of companies to access certain loans was very limited, which affected to a large extent the activity they carried out (Baker, et al 2020). In order to better understand the financial impact of the COVID - 19 pandemic on economic agents, we must observe how the main financial instruments are defined in the literature.

The bank loan is seen as that operation through which the immediate takeover of certain resources takes place, all based on the promise of a certain future repayment, these being permanently accompanied by the payment of interest. On the other hand, it is also defined as a certain present value that is transmitted from a certain creditor to a debtor who has the obligation to repay it after a certain period of time under certain conditions that are specified in the credit agreement. It also mentions the interest rate on the loan, which must be paid by the debtor.

Previous studies in this area have shown that the expansion or reduction of the number of loans in a country has a strong influence on the economy as well as on existing market prices. It was thus observed that the intensification of loans granted on the market

automatically determines the increase of prices, thus influencing economic processes. If we analyse from the point of view of the activity of the companies, the granting of credits among them has a positive effect on their performance, contributing to their development and to the intensification of the degree of innovation (Klapper, et al 2006). However, studies have shown that companies in different countries act differently when it comes to accessing credit.

Loans granted to economic agents can be of two types: medium-term (a period of less than 5 years) as well as long-term loans (granted for a period of more than 5 years) (Dăneț, 2002) . The behaviour of firms in different markets differs depending on the interest rate charged in each country, the credit conditions allocated as well as the other fees charged when deciding to take out a particular loan (Koeda and Dabla-Norris, 2008). In view of all these aspects, it can be seen that the factor that has the capacity to influence the evolution of loans granted on a given market is the interest rate.

According to GEO 13 of 2011 (cdep.ro), the remunerative interest is defined as that amount of money that the debtor of the obligation must return at a set time and which is identified based on calculations for a period prior to the end of the maturity of the obligation. On the other hand, in the Explanatory Dictionary of the Romanian Language, the interest rate is defined as that amount of money that is paid as a result of a loan and which represents a certain percentage of the amount that has been borrowed. If we analyse how this concept is defined in the literature, (Barbu et al 2009) mentioned that interest can be seen as the price that is set for a particular capital that has been borrowed.

The interest rate is the quantification of interest, which is the one that has the ability to influence the demand and supply of loans in the market. Thus, if there is a low interest rate on the market, the demand for loans is high, while for a high interest rate, the demand is low.

In literature there are two types of interest that can be applied at the level of loans: fixed interest (fixed amount that was initially set will be maintained throughout the loan period) and variable interest (it will have different values, set according to of contractual aspects). Depending on the method of payment for the subject, the interest can be: active interest (it is paid by the debtor) and passive interest (it is paid by the creditor).

Research methodology

Given the importance of market interest rates and how economic activity was influenced by the COVID-19 pandemic, we considered it necessary to conduct a quantitative study to identify the perception of economic agents (individuals currently holding a loan) regarding the banking facilities offered by banks (at the interest rate level) during this period. We started this study because lately, many individuals who had a bank loan were left without a job and thus became unable to pay their debts to the bank.

The banking units took into account the problems encountered by these people and came to their aid, giving them the opportunity not to pay the instalments for a certain period of time (until they get the amount needed to pay them).

However, many people were dissatisfied with the decisions taken at the level of the banking units, because in most cases, after the end of the period in which they were exempted from paying the instalments, the value of the interest rate increased. In many cases, people who had loans during this period preferred to obtain financial resources from other sources in order to be able to pay the monthly instalments and to keep the initial interest that was negotiated when the contract was concluded. Given the strong financial impact that the COVID-19 pandemic has on banks as well as on people who have a loan agreement at this time, I considered it necessary to conduct a quantitative research (Cătoi, 2009) to give me an overview on the analysed subject.

The purpose of this study was to observe how the banking facilities offered by banks during this period were perceived by customers. In order to collect data on this topic, a

questionnaire was completed which was posted on the online platform isondaje.ro and subsequently distributed to respondents.

They had the opportunity to access the permanent questionnaire, regardless of the time. If they did not have time to complete the entire questionnaire at a certain time of day, they could complete it later.

Analysing from the point of view of the way in which the request was made, it took place between 26.05.2020 - 01.06.2020, in Călărași. The research was conducted on a sample of 140 respondents. The subjects of the analysis were people aged between 18 and 40, who made a loan in the last 3 years at a bank in Calarasi County. In order to carry out this study, data were used both from primary sources (these were collected using the questionnaire that was posted on the online platform) and from secondary sources (data obtained from statistical bulletins or previous analyses on this topic).

Through this study I wanted to identify on the one hand the perception of the interviewees regarding the initial lending conditions as well as their opinion on how the COVID - 19 pandemic affected their financial situation. Thus, I wanted to analyse how the banking units in Călărași County provided them with all the information they needed and whether they provided them with certain advantages to overcome the financial problems encountered during this period.

Results

All 140 respondents who participated in the study currently have an ongoing credit agreement. One aspect that I set out to analyse in this paper refers to the banking units at the level of which the analysed subjects currently have a loan agreement. Following the analysis, we noticed that 37.86% of those who participated in the research have a loan at Banca Comercială Română (BCR), 32.14% of them have a credit agreement with BRD, while 2.86% have a loan at ING. 27.14% of those who participated in the study stated that they currently have a loan agreement with other banks, including: CEC Bank, Raiffeisen Bank or Banca Transilvania.

Table 1 - Banks to which respondents currently have a loan agreement

	Frequency	Percentage
ING	4	2.86
BRD	45	32.14
BCR	53	37.86
Other Bank	38	27.14
Total	140	100.0

Source: Study conducted by the author

Another objective of this study was to identify respondents who suspended payment of instalments during the COVID-19 pandemic. After analysing the data, we noticed that 70% of those who participated in the study had to postpone their payments for a certain period of time, while 30% of them did not need a period of suspension, they have the necessary financial resources to pay them each month.

Table 2 - Respondents who suspended their payment of instalments during the COVID-19 pandemic

	Frequency	Percentage
No	42	30.0
Yes	98	70.0
Total	140	100.0

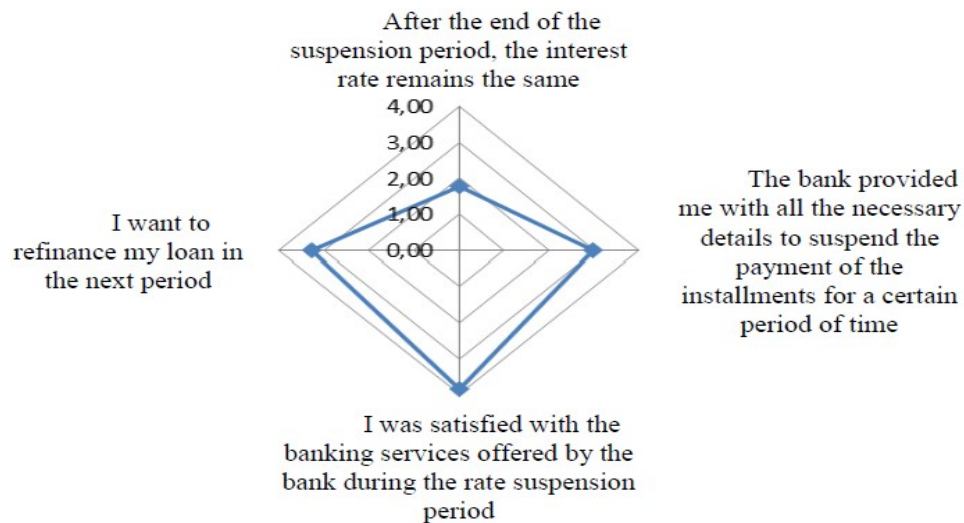
Source: Study conducted by the author

Another objective of this quantitative research was to determine the perception of the interviewees regarding the services offered during the period when they had suspended rates. From the figure below it can be seen that they did not agree with the statement that, after the end of the period of suspension of instalments, the amount of interest remains the same. This is due to the fact that, after the suspension period, many borrowers will have higher interest rates. This will happen especially in the case of those who are in the first part of the repayment, because the deferred interest will be calculated at a higher value.

On the other hand, the respondents were satisfied with the behaviour of the bank's employees, considering that they provided them with all the details they needed to postpone the rates during the period when they did not have the necessary financial resources to achieve this. From the results below, it can be seen that, in total, the interviewees were satisfied with the lending services provided during the suspension period.

An important issue to be considered at this level concerns the desire of some respondents to refinance the loan in the next period. This is because many people who have lost their jobs at this time need extra income to be able to pay off the debts they have accumulated during the pandemic. In addition, some respondents need additional income to improve the activity of the companies they manage or to support certain family members financially.

Fig.1 - Respondents' opinion on the facilities offered by banks during the COVID-19 pandemic



Source: Study conducted by the author

Another objective of this paper was to identify the respondents' opinion on the interest rates charged by banks both at the time of concluding the credit agreement and after the period of suspension of rates. After analysing the data, we noticed that, in total, the interviewees were satisfied with the interest they initially negotiated for the amount they borrowed. They consider that the interest rate has been affordable, better compared to other interest rates on the market.

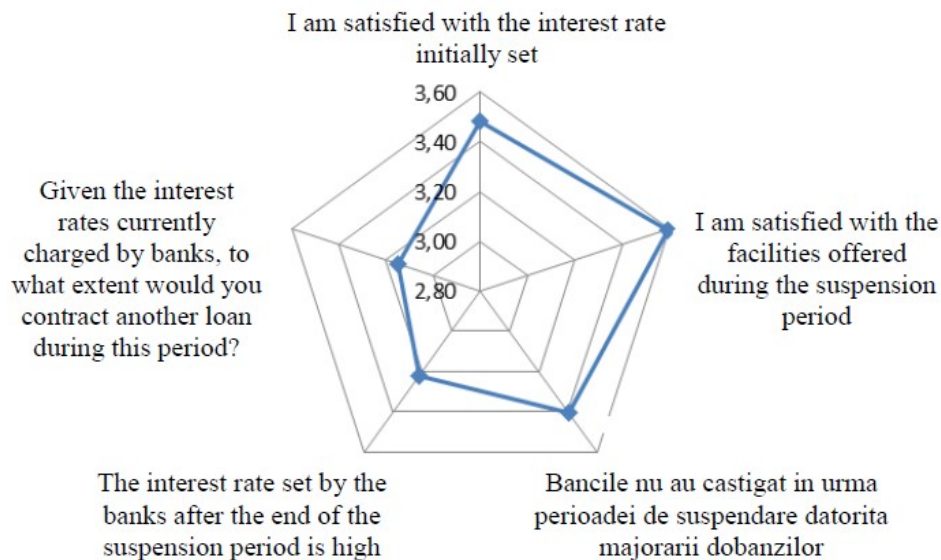
Analysing their perception of the value of interest after the period of suspension of rates, we noticed that they were totally satisfied with the fact that the banking units offered them the possibility to suspend their rates for a period of time, until they are in possession of the necessary financial resources to be able to pay them. In comparison with the results obtained previously, it is noted that they were satisfied both with the information received

from the operators and with the procedures they followed in order to be able to suspend the rates for a certain period of time.

However, following the analysis of the data, it was observed that those who participated in the study consider that the interest rates set after the end of the suspension period are higher, which causes them to be dissatisfied. Given this aspect, individuals consider that following the pandemic and the new procedures implemented, the banking units have a lot to gain, due to the increase of interest rates as well as due to the implementation of other taxes related to the suspension period. Thus, even if initially this facility is beneficial for the debtors, because they have the possibility to postpone their rates until they recover financially, later, it is considered as a disadvantage because they have to bear higher rates, which means a much greater financial effort.

From the analysis it can be seen that if they had the opportunity to take out a new loan at this time (given the interest rates charged by banks during this period) most respondents stated that they would not make such a loan. This aspect is due on the one hand to the intensification of the legislative aspects at the level of the credit policy but also to the fact that, during the COVID-19 pandemic, the banks increased both the interest rates and the advance necessary to access a loan. In these circumstances, the respondents refuse to turn to such sources of funding, as they turn to other external sources.

Fig. 2 - Respondents' opinion on interest rates charged by banks during the COVID-19 pandemic



Source: Study conducted by the author

Another aspect that we studied at the level of this study relates to the extent to which the respondents would recommend to the relatives the realization of a loan agreement during this period, considering the interests that are currently practiced at the level of the banking units. Following the analysis, we noticed that 80% of those who participated in the study said that they would not recommend to relatives to take a bank loan during this period.

This is primarily due to high interest rates but also to the contribution they have to make (especially in the case of mortgages). Uncertainty in the labour market is another factor that causes respondents not to recommend taking out a bank loan during this period. Moreover, respondents are reluctant to take out a loan due to the uncertainty in the financial market.

Thus, the evolution of interest rates and lending conditions cause them to be reluctant to recommend accessing a bank loan during this period.

Table 3 - Respondents who would recommend to friends / relatives to take a bank loan during this period, taking into account the interest charged by banks

	Frequency	Percentage
Yes	28	20.0
No	112	80.0
Total	140	100.0

Source: Study conducted by the author

Analysing from the point of view of the demographic characteristics of the respondents who participated in this study, it can be seen:

Table 4 - Gender of respondents

	Frequency	Percentage
Men	10	8,57
Women	128	91.43
Total	140	100.0

Source: Study conducted by the author

Studying from the perspective of the distribution according to the age of the respondents, it can be observed (Table 5) that the largest share has the interviewed persons aged between 36-45 years, followed by those aged between 26-35 years, and then the interviewees over the age of 45, while only 5% of the respondents fall between the ages of 18 and 25.

Table 5 - Age of respondents

	Frequency	Percentage
18 – 25 years	7	5.0
26 – 35 years	39	27.86
36 – 45 years	59	42.14
Over 45 years	35	25.0
Total	140	100.0

Source: Study conducted by the author

Analyzing the respondents in terms of distribution by area of residence, it can be seen (Table 6) that most of them live in urban areas, while respondents living in rural areas have a low share.

Table 6 - Residents' environment of residence

	Frequency	Percentage
Urban	115	82,16
Rural	25	17,85
Total	140	100.0

Source: Study conducted by the author

If we study the respondents who participated in the quantitative research in terms of distribution according to their net monthly income, it can be seen (Table 7) that the largest share of individuals had net monthly income between 1001-2000 RON, followed by

respondents who receive monthly between 2001 - 3000 RON, and then by respondents with a monthly net income between 3001-4000 RON. Again, it is observed that the respondents have the lowest share with a net income of less than 1000 RON per month.

Table 7 - Net income collected monthly by respondents

	Frequency	Percentage
Under 1000 RON	7	5.0
1001- 2000 RON	77	55.0
2001- 3000 RON	39	27.86
3001- 4000 RON	17	12.14
Total	140	100.0

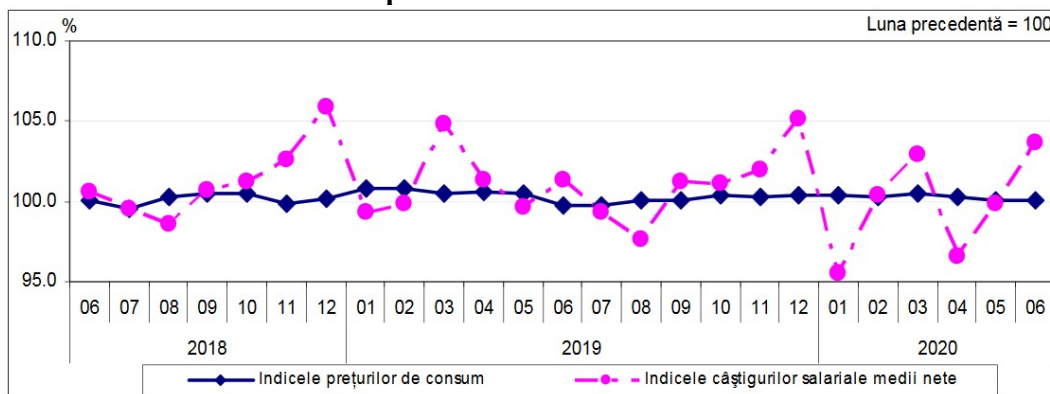
Source: Study conducted by the author

Discussions

In the context of the COVID-19 pandemic, the number of employees in Călărași County at the end of May 2020 was 44380 people, registering a decrease of 0.3% compared to the previous month (-130) and 1.4% compared to the same period of the previous year. By branches of activity, the number of employees was 4674 people in agriculture, forestry and fishing, 15025 people in industry and construction and 24681 employees in services.

The average gross nominal earnings in Călărași County in May 2020 was 4393 RON and the average net nominal earnings were 2673 RON. The lowest values of the average net nominal earnings were registered in industry and construction (2221 RON), in agriculture, forestry and fishing (2415 RON), and the highest in services (2980 RON).

Fig. 2 - Evolution of consumer price indices and average net earnings indices, in the period June 2018 - June 2020



Source: National Institute of Statistics, Calarasi Regional Directorate of Statistics, <http://www.calarasi.insse.ro>

Following the study conducted at the level of this paper, we identified the respondents' opinion on the evolution of interest rates during the COVID-19 pandemic. As expected, the respondents were dissatisfied with the fact that the value of the instalments after their suspension period was increased, and for the loans that are at the beginning, the interest rate will also increase. Although, these aspects were communicated to them from the beginning of the submission of the suspension documents, the interviewees considered that the banks benefit from this pandemic, only they being the ones who benefit due to the increase of interest rates and implicitly the monthly instalments paid by customers.

This paper provided an overview of how loan agreements have been affected by the COVID-19 pandemic. In addition, the research carried out at the level of this paper analysed the opinion of the interviewees regarding the interest rates charged by the banking units both during this period and after the end of the period of suspension of rates.

Conclusions

The results obtained at the level of this research provide valuable information both to those who work in the banking system and to individuals who were thinking of taking out a loan in the next period. Those who work in a banking unit have the opportunity to better understand the perception of customers about the services offered but also how they perceive the facilities offered during a pandemic. Thus, starting from these data, they can create an emergency plan that includes a series of measures that can be taken in another epidemic.

If in the first part of the paper we provided a series of theoretical information regarding the impact that the COVID-19 pandemic had on the Romanian banking system and more precisely on the customers of the banking units, in the second part we studied the main theoretical concepts literature on lending policy or interest rates.

In the last part of this paper we conducted a quantitative study that aimed to identify the perception of borrowers regarding lending facilities offered during this period and how changes in interest rates have the ability to influence their activity. Following the study, we noticed that the respondents were satisfied with the facilities offered and the fact that they had the opportunity to postpone their rates for a certain period of time. However, they were dissatisfied with the fact that after this period the value of the rate they have to pay will be higher. In addition, they specified that, after the suspension period, the interest rates that will be charged will be higher, which will automatically lead to an increase in monthly instalments.

After analysing the data, we noticed that the interviewees would not recommend to friends or relatives to take a bank loan during this period due to high interest rates that are charged by banks, but also due to certain restrictions that have begun to be implemented by them. On the other hand, the interviewees believe that, as a result of this pandemic, banks have to gain from the interest they charge, those who lose being the customers.

For potential customers, this paper is important because after the research they can observe the perception of other individuals about how they were treated during the pandemic and the interest rates that banking units practiced both before and after the period. suspension of bank rates.

The quantitative study carried out at the level of this paper also presents some limitations. Thus, a first limit refers to the number of people who participated in the research (140 respondents). The small number of individuals does not allow us to extrapolate the data on the entire researched community. Therefore, I believe that further studies should be carried out in the future on a larger number of respondents to illustrate their perception of interest rates charged by banks during the COVID-19 pandemic and how they can be adjusted to needs and requirements existing on the market. In addition, such a much larger study would help those in the banking system to understand their customers' perceptions and decide on the types of measures they can take to enable them to pay their rates.

Another limitation of this study refers to the fact that it was performed only on the clients of the banks from Călărași County. In order to have a global image on the analysed subject, other studies should be carried out at the level of the other counties of the country. By conducting such research one can better understand the way in which borrowers perceive the interest charged by banks.

Another limitation encountered in this study refers to the variables considered in this analysis. As previously mentioned, the research carried out at the level of this paper was limited. Other variables that have the ability to better describe the subject under analysis should be considered in future work. Moreover, the variables that will be taken into account in the future may provide much clearer details about the credit offers that can be launched in the next period on the market so that the results obtained are much better.

In the context of the situation caused by the COVID-19 pandemic, infra-annual, operative statistical data may present a lower degree of reliability, accuracy, completeness and comparability, as a result of the difficulties arising from the application of economic and social measures determined by the establishment of the state of emergency. / alert on the entire territory of Romania. These difficulties were mainly determined by the difficult access

to financial-accounting documents, caused by the often sudden closure of certain economic and social units, by the non-finalization of these documents on time, by the relaxation of the legal deadlines for submitting documents. at the institutions with attributions in the field, by the temporary suspension of the activity of a significant number of economic-social units or even by the cessation of the activity of some of them.

Bibliography

1. Akhtaruzzaman, M., Boubaker, S.,& Sensoy, A. (2020). Financial contagion during COVID-19 crisis. *Finance Research Letters*, 101 - 106. Doi: [10.1016/j.frl.2020.101604](https://doi.org/10.1016/j.frl.2020.101604)
2. Baker, S.R., Bloom, N., Davis, S.J., Kost, K.J.,& Sammons, M.C., Viratyosin, T. (2020). *The Unprecedented Stock Market Impact of COVID-19*, Cambridge: National bureau of economic research, <https://www.hoover.org/sites/default/files/research/docs/20112-davis.pdf>
3. Barbu, T. C., Dardac, N., & Boitan, I. A. (2009). The Effects And Cost Of Bank Recapitalization In The Context Of Financial Crises. *Finance and economic stability in the context of financial crisis*, 274 https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2584060#page=274
4. Cătoi, I., & Vegheș, C. (2009). Marketing competencies of the trade personnel. *Amfiteatru Economic*, 29-40.
5. Danet, D. (2002). L'intelligence économique: de l'Etat à l'entreprise. *Les Cahiers du numérique*, 3(1), 139-170
6. Goodell, J.W. (2020). COVID-19 and finance: Agendas for future research. *Finance Research Letters*, 1- 5, doi: [10.1016/j.frl.2020.101512](https://doi.org/10.1016/j.frl.2020.101512)
7. Klapper, L., Laeven, L,& Rajan, R.. (2006). Entry Regulation as a Barrier to Entrepreneurship. *Journal of Financial Economics*, 82, 591-629 [http://www.sciencedirect.com/science/article/pii/S0304-405X\(06\)00093-6](http://www.sciencedirect.com/science/article/pii/S0304-405X(06)00093-6)
8. Koeda, J., & Dabla-Norris, E. (2008). *Informality and Bank Credit: Evidence from Firm-Level Data (EPub)*. International Monetary Fund <https://www.imf.org/en/Publications/WP/Issues/2016/12/31/Informality-and-Bank-Credit-Evidence-from-Firm-Level-Data-21885>
9. Sok Heng Lay (2020). Bank credit and economic growth: Short-run evidence from a dynamic threshold panel model. *Economics Letters*, vol. 192, issue C 192, 109- 231, [10.1016/j.econlet.2020.109231](https://doi.org/10.1016/j.econlet.2020.109231)
10. Warwick McKibbin & Roshen Fernando (2020). The global macroeconomic impacts of COVID-19: Seven scenarios, CAMA Working Papers 2020-19, Centre for Applied Macroeconomic Analysis, Crawford School of Public Policy, The Australian National University, [19_2020_mckibbin_fernando.pdf](https://www.cama.crawford.edu.au/wp-content/uploads/2020/06/2020_mckibbin_fernando.pdf)
11. Ministerul muncii și protecției sociale, Informare de presă 26.06.2020, <http://www.mmuncii.ro/j33/index.php/ro/comunicare/comunicate-de-presa/6003-situatia-contractelor-individuale-de-munca-suspendate-la-data-de-26-iunie-2020>, accessed on 30.06.2020
12. Ministerul Sănătății, Buletin informativ 03.06.2020 http://www.ms.ro/2020/06/03/buletin-informativ-03-06-2020/?utm_source=rss&utm_medium=rss&utm_campaign=buletin-informativ-03-06-2020 , accessed on 03.06.2020
13. Guvernul României, Programul de convergență 2020, https://www.mfinante.gov.ro/static/10/Mfp/pdc/ProgramdeConvergenta2020_20052020.pdf accessed on 03.06.2020
14. Institutul Național de Statistică, Direcția Regională de Statistică Călărași, <http://www.calarasi.insse.ro> accessed on 22.08.2020