

# THE EFFECT OF THE COVID-19 PANDEMIC ON SAVING BEHAVIOUR: CASE OF ROMANIA

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Received 23 September 2022; Accepted 13 December 2022

## Abstract:

*In contemporary society, at the macroeconomic level as well as at the individual level, of person or society, economies play a key role with a direct impact on the behaviour of the population. In the context of the COVID-19 pandemic, this study systematically explored whether and why the health crisis stimulates consumers' preference for savings (over spending). The purpose of this paper is to analyse the preferences of the population but also of the economic agents regarding the investments in bank deposits, investments made by them both at European and national level. The analysis consists in the analysis of the evolution of savings in Romania but also in other European countries and is based on the data published by the Central Bank of Romania in the NBR statistics, FGDB statistics but also the data published by Eurostat. Savings are also analysed by institutional sectors, with a focus on the household sector and non-financial corporations. The results of the study show that in order to better cope with future uncertainties and risks, individuals can reserve resources and increase their saving behaviour. It is also observed that individuals facing a pandemic save more than in periods of stability.*

**Key words:** saving, savings bank products, FGDB, bank deposits.

**JEL classification:** E21

## 1. INTRODUCTION

Saving is a frequently debated topic in the economic literature because saving conditions contribute to economic growth. The author Dănilă Nicolae argues that the prospect of good economic growth is given by the present feature of a saving process, because the present economies can be a source of financing “both innovations to increase capital productivity and public debt service”. At both national and European level, the savings rate is closely monitored by specialists through a set of specific indicators in order to maintain a balance in economic life.

Recent studies [14] indicate that the severity of the pandemic has a significant positive impact on the population's willingness to save (rather than spend). Risk perception plays a role in mediating between the severity of emergencies and consumers' willingness to save (against spending). One of the most typical behaviours during the COVID-19 pandemic is panic (Arafat et al., 2020a), which results from individuals fearing lack, loss of control and exacerbation of anxiety (Arafat et al., 2020b; Yuen et al., 2020).

*The purpose* of this paper is to analyse a current issue, regarding the saving behaviour in the current context, with direct implications on the economy, but also on people because it is very important to know how to save “correctly”. The paper aims in particular to analyse the behaviour of the population but also of the Romanian economic agents regarding the investments in deposits made by them, being followed an analysis both at European and national level, analysis based on the data reflected in the aggregate balance sheet of the institutions and reported to the NBR and FGDB, *but also on data published by Eurostat.*

Based on these considerations, this paper is structured as follows: introduction, in the second part we presented a series of approaches to the saving process as we identified them by studying the literature, followed by a brief presentation of Romanians' reasons for choosing to limit consumption and save money. The third part begins with the analysis of the saving process at European level, followed by an analysis of the structure and quantitative evolution of deposits

attracted by credit institutions in Romania from the population, financial companies, state administration, etc. The paper concludes with a section on the conclusions of the research conducted.

## 2. LITERATURE REVIEW

Economically, savings can mainly take the form of increases in bank deposits, purchases of securities and even increases in cash. The extent to which people save is influenced by their preferences for future consumption, their expectations about future income, and to some extent the interest rate.

To understand the saving process, you need to know the difference between the terms saving and savings. An etymological difference can be seen between the words “saving” and “savings”. On the one hand, “saving” refers to the act of not consuming one’s goods while “savings” refers to the many opportunities to reduce costs. On the other hand, “saving” refers to an activity that takes place over time, a flow variable, while “savings” refers to something that exists at a given time, a stock variable [13].

There are numerous studies that examine the determinants of the saving process at both country and group level countries (Yong et al., 2008; Masson et al., 1998; Loayza et al., 2000; Wan et al., 2003; Cohn and Kolluri, 2003; Bhandari et al., 2007; Horioka and Hagiwara, 2011; Zhou, 2014) [10]. The reason why the conditions of saving are analysed is that saving has been considered as a substantial factor for investments and subsequently affects economic growth.

Researcher Axel Börsch-Supan (1995) aims to assess, in a research, the relevance of the various channels through which population aging affects savings and investment in OECD countries. The results of the study show that in the long run, an increase in the labour force due to an aging population is likely to weaken the return on capital in aging OECD countries, reducing economies, and at the same time tempting governments to increase demand for funding for social spending.

Thus, Masson et al. (1998) show that in countries where per capita income is lower than in the USA, per capita GDP growth ensures the growth of savings, while in countries where per capita income is higher. This leads to a reduction in savings.

Cohn and Kolluri (2003: 1207) investigated the saving behaviour of households for the G7 countries in the years 1960-1999 and found that when real interest rates are higher and higher, they positively affect household economies, and when there is a decrease in social security, this government measure also supports the increase in household savings.

In a 2011 study, Horioka and Hagiwara looked at trends in domestic savings rates in developing Asian countries between 1966 and 2007, and found that overall domestic economies had grown, but there were significant differences in each country, differences due to the age structure of the population, the level of income, but also the level of development of the financial sector. They also estimated future trends for the years 2011-2030 and conclude that Asia will maintain its economies at least at the level of 2007, even if the population is getting older.

In a 2015 study [10], Kivanç Halil ARIÇ examines the determinants of saving in APEC countries for a number of 16 countries in the period 2000-2013 and concludes that income, age dependency, youth, rural population and urban population affect positively the savings, and inflation and the elderly do not have a significant effect on savings.

Gazi (2016) examines the relationship between the savings rate and real GDP for Australia for the period 1971–2014 using three econometric techniques. Each of the three models confirms, to varying degrees, the long-term relationship between the dependency ratio, the savings rate, and real GDP. The overall result implies that changes in the age structure of the population have had a significant impact on real GDP per capita. Thus, the aging population will generate changes in real GDP and solutions will have to be found in this regard, such as increasing immigration of skilled labour.

Marta Pascual-Saeza, David Cantarero-Prietoa, José R. Pires Manso (2020) examines in their work the effect of population aging on economies and uses a panel of data from a sample of

selected European countries, collected from the World Bank (WB, 2016) - database World Development Indicators (WDI), 1990-2013. They show that longevity and dependency rates both have a significant impact on economies, they also say that the results are influenced by the way data is managed.

In his studies, Keynes identified a number of reasons for saving, which are in line with current savings requirements. Thus, the Romanian Institute for Evaluation and Strategy conducted a survey entitled "Romanians and Their Money - Perceptions, Behaviours and Financial Projections" on a sample of 972 individuals between January 7-10, 2019, finding that money is the main source of concern of the Romanians.

Following the research study conducted by IRES [9] and the survey conducted by FGDB [4], it was found that the savings of Romanians and their behaviour to save is quite low compared to the entire sample. This is directly proportional to the level of education of the respondents and inversely proportional to the age, the data highlighting the fact that young people aged 18-35 have a tendency to save much higher compared to the rest of the population. The results indicate that less than 50% of those surveyed (32%) have a saved amount of money for future needs. The results of these surveys confirm the evolution of the life cycle of the propensity to save described by Pond Keith in his work Retail banking, a cycle that highlights the evolution of saving according to the life stages of the individual. Thus, it is found that the children and adolescents save the most until the age of the student, after which the interest for saving decreases, and increases again after the age of 50 to the retirement age, reaching a maximum again. The general public has different motivations when it comes to saving, such as [3]: the prospect of large future expenses, unforeseen situations, financial support of family members, tradition, to create a good banking history in terms of contracting a loan, to increase ventures during the retirement period.

Banking companies play a particularly important role in shaping individual financial wealth through the various banking products and services offered in a wide range depending on the needs of each person. Major banking products offered by credit institutions to save on bank deposits, savings accounts, certificates of deposit and other financial savings products such as structural deposits, private pensions, insurance products, mutual funds and capital brokerage services. However, the analysis shows that the preferred form of saving is in the form of deposits.

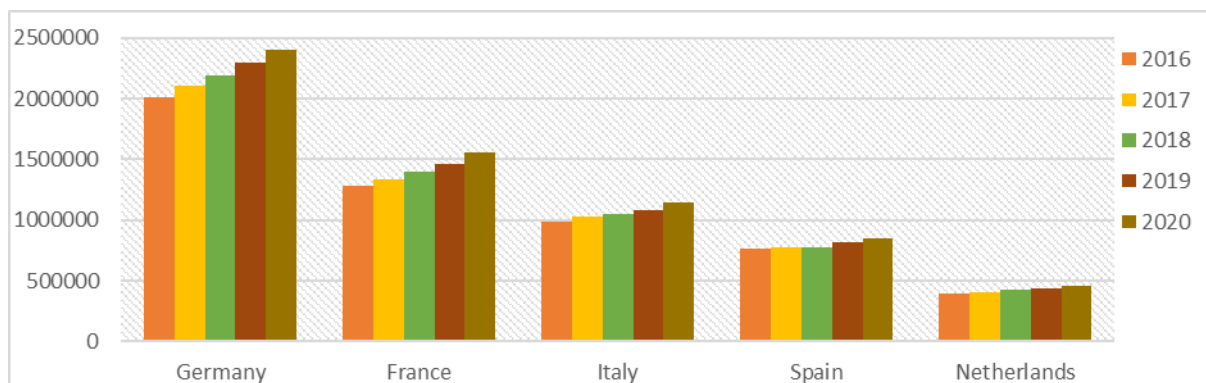
Thus, banks have become an essential part of the daily life of the population, most of them turning to them for services or even advice on their own savings. This reluctance of the population to save in the form of deposits is also due to the coverage ceiling per depositor-individual which is 100,000 euros, the compensation being in proportion of 100% of the value of those insured deposits.

In Romania, the Bauspar System was designed to help the population save and at the same time reduce consumption. Thus, according to the newspaper Adevărul, "after almost three years of non-functioning, the Bauspar savings-lending system for homes has restarted, and Romanians can save money to buy or modernize a home, being encouraged by the state with an annual premium. Also, through this system, they can take out real estate loans with a fixed interest rate". The Romanian state has an important role in the Bauspar System because "for your savings you will benefit from the State from the state premium, amounting to 25% of your annual deposits, but without exceeding the lei equivalent of 250 euros / year / client. The state premiums are requested from the implementing authority after the end of the calendar year in which the saving was made".

### **3. ANALYSIS OF THE EVOLUTION OF THE PROCESS OF ATTRACTING DEPOSITS BY CREDIT INSTITUTIONS AT EUROPEAN AND NATIONAL LEVEL**

Thus, at the international level we analysed 3 types of deposits attracted by credit institutions, namely: attracted deposits of households, attracted deposits from companies and attracted deposits of other financial institutions. For this analysis we used the data published on Eurostat which we centralized, we analysed their structure based on specific indicators taking into account different institutional criteria for grouping deposits such as: population deposits, corporate

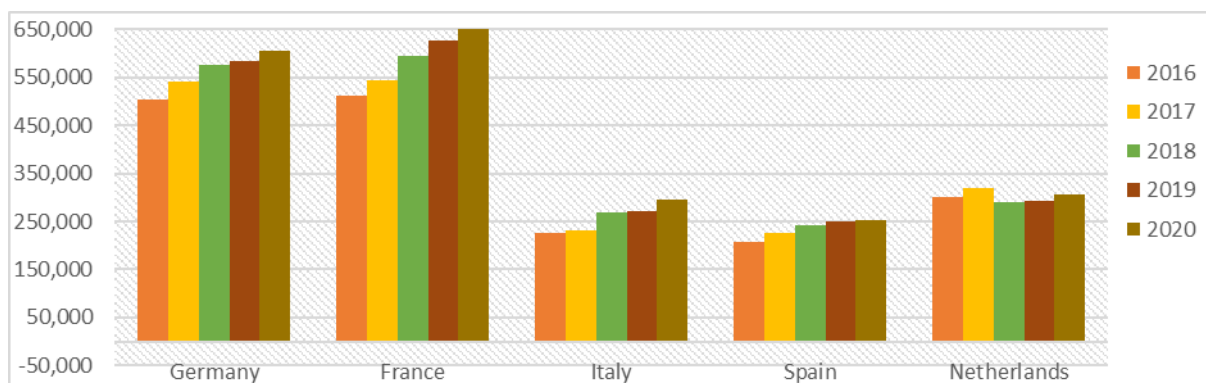
deposits but also government institutions. The period under analysis was January 2016 - January 2020. Based on statistics at European level, we selected the countries with the highest level of attracted deposits. As can be seen, Graph 1 shows in terms of the level and share of household deposits in total deposits attracted by credit institutions, 5 countries, namely: Germany, France, Italy, Spain and Netherlands. Thus, Germany is in the first place being the country with the highest level of attracted deposits, which is in an increasing trend during the analysed period. Also, France, Italy and Spain with the Netherlands have an upward trend, increasing from one year to the next, which means increasing the saving rate of the population.



**Graph no. 1. Evolution of the level of deposits attracted from the population by credit institutions of the top 5 EU countries**

Source: Developed by the author

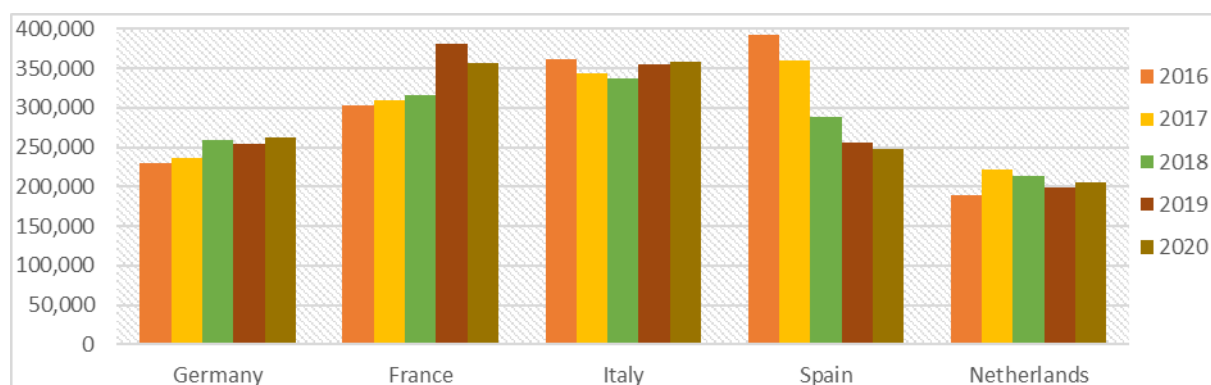
In terms of the level of deposits attracted by the companies, in terms of level and weight, France is in first place, surpassing Germany, followed by the Netherlands, Italy and Spain. The highest deposit value recorded by France in 2020 was 679,593 million euros, ie 26.3% of the total attracted deposits of euro area countries. This may be due to the improvement in France's economic situation by increasing per capita income.



**Graph no. 2. The evolution of the level of corporate deposits attracted by the credit institutions of the top 5 EU countries**

Source: Developed by the author

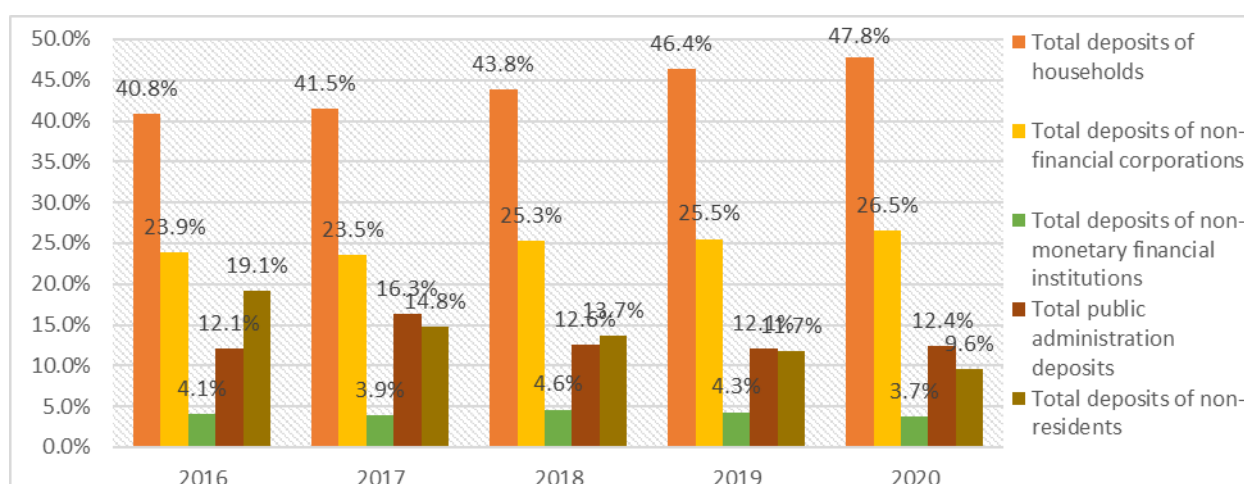
In terms of deposits attracted from other financial institutions, Italy was marked by the level of deposits attracted and also by the steady increase in the value of deposits currently registering (2020) 358,261 million euros, ie 19.3% of total deposits placed by the countries of eurozone. France is relatively close to Italy, while Spain has seen steady declines in attracted deposits, although in 2016 it had the highest level of deposits, currently accounting for 13.4% of total deposits placed by euro area countries. The causes of the decreases but also of the fluctuations can be influenced by several factors such as: the imbalances in the national economy of these countries, the inflation out of control, the insignificant interest rate on deposits or even the inadequate policy of banks, etc.



**Graph no. 3. The evolution of the level of deposits of other financial institutions attracted by the credit institutions of the top 5 EU countries**

Source: Developed by the author

At national level, we analysed the evolution of the structure of deposits attracted by types of institutional sectors in the Romanian banking system on January 1 for the period 2016 - 2020. The research is based on data extracted from the NBR interactive database for the period 2016 - 2020. The results of the calculations after the application of the structure indicators were synthesized and represented with the help of graphs. Graph 4 shows a structure of the deposits attracted in the analysed period according to the institutional sector.



**Graph no. 4. The evolution of the structure of total deposits attracted by credit institutions**

Source: Developed by the author

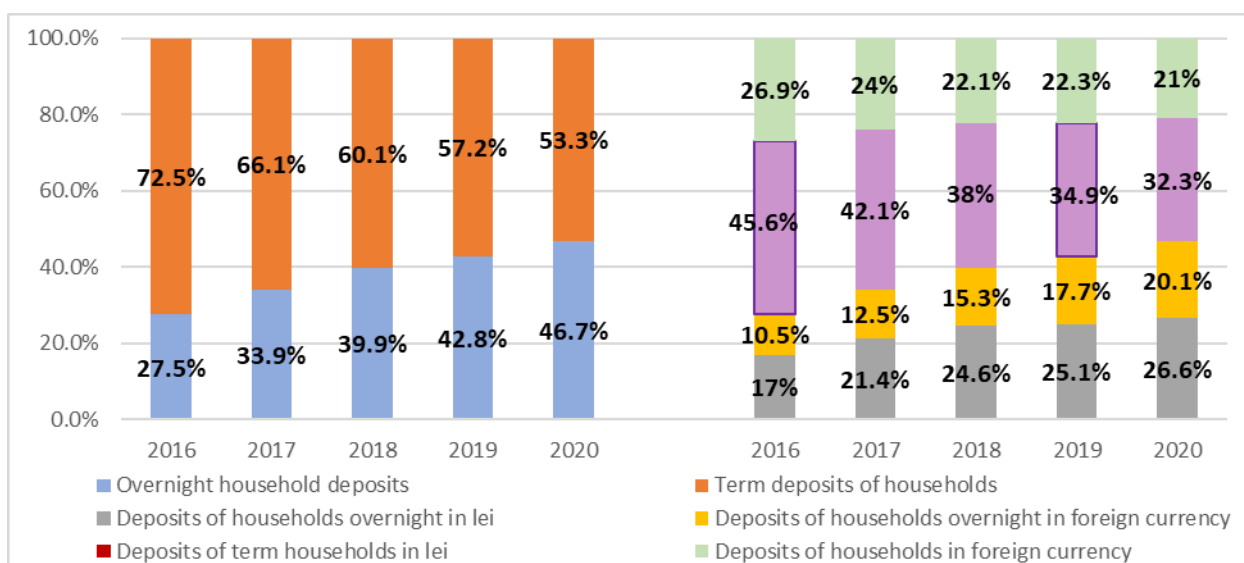
The main source for banks to make investments in the form of loans is bank deposits. Regarding the level of deposits attracted from Romania, during the analysed period the deposits of households registered the highest value. However, it should be noted that “the inequalities highlighted in the banking savings of the population have increased, the number of individual depositors with deposits above the coverage ceiling of FGDB has increased in the analysed period. A similar evolution was recorded in terms of value, with the amounts above the hedging ceiling advancing by 13%, while the deposits in the ceiling increased by 10%.”[15]. Also, the deposits of non-financial companies with a value of 124,061.5 million lei are noted. Apart from the deposits of non-residents, the trend is increasing for each category of deposit, which is beneficial for the Romanian economy. Non-residents’ deposits show fluctuations in values that may be due to economic instability, rising inflation, unattractive interest, etc. However, the level of total deposits attracted is constantly increasing, the level of total deposits in 2020 is 103,552.2 million lei higher than in 2016.

In terms of structure, in Romania at present, the largest share in the total volume of deposits attracted, a share of 47.8% is that of household deposits, which represents almost half of the total

volume, followed by the share of deposits non-financial companies of 26.5%, the share of general government deposits of 12.1%, the share of deposits of non-residents of 9.6% and last but not least the share of deposits of non-monetary financial institutions of 3.7%.

Attracted deposits of households have a positive evolution so that they represent almost half (Graph 4) of the total level of attracted deposits in Romania and their upward trend is due to the improvement of living standards in the country which encourages the population to place their savings in banking deposits.

Thus, we will further analyse the evolution of household deposits, analysis based on structural indicators for which we took into account two major criteria, namely the placement term (sight, term) and the currency of saving (lei, currency). From the point of view of the structure, it can be seen in Graph 5 that the Romanian population prefers to save in lei and in the long run, not overnight.

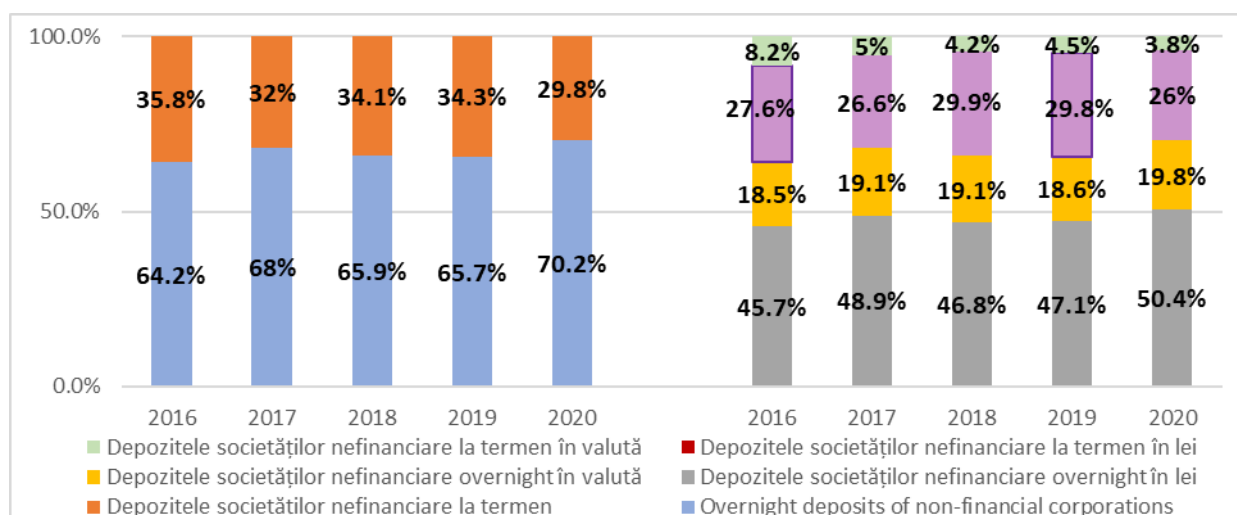


**Graph no. 5. The evolution of the structure of overnight deposits of households in lei and foreign currencies and the evolution of term deposits in lei and foreign currencies**

Source: Developed by the author

With regard to the attracted deposits of non-financial corporations, the trend is also upward. The highest level was registered in 2020 of 124,061.5 million lei, ie 26.5% of the total deposits, increasing compared to the previous year where a level of 110,979.9 million lei was registered, the increase being of 13,081.6 million lei, by 11.8% higher, being also the largest increase compared to the previous years of the analysed period. In the case of this type of deposit, overnight deposits predominate to the detriment of term deposits, as was the case with household deposits (Graph 6). The level of overnight deposits is growing steadily from year to year while term deposits show fluctuations in values. The difference between the two types of deposits is very large so it can be deduced that non-financial companies do not risk to immobilize their money through term deposits but prefer those with low maturity insuring against the lack of liquidity.





**Graph no. 6. Evolution of the structure of overnight deposits of non-financial corporations in lei and foreign currencies and evolution of time deposits in lei and foreign currencies**

Source: Developed by the author

The Deposit Guarantee Fund in the Banking System (FGDB) was created to save credit institutions in “exceptional situations” and “is a major social concern because the bankruptcy of a bank means the collapse of credit relations and the loss of a significant part customers, in particular depositors, who are no longer able to fully recover their deposits” [7].

Thus, based on the statistics published by FGDB, we completed the analysis at national level and with an analysis of the evolution of the total value of bank deposits attracted by the participating credit institutions (FGDB), followed by a structural analysis by various criteria: according to the type of beneficiary, according to the constitution currency. The period under analysis is 2016-2021.

Following the analyses performed on the basis of the data reported by all participating credit institutions, the number of depositors and implicitly of bank deposits is constantly changing, the values fluctuating from one semester to another as can be seen in the table below:

**Table no. 1. Annual evolution of the number of depositors at credit institutions participating in FGDB in the last 7 years**

Period	Total deponents
2015	15,204,965
2016	15,174,616
2017	15,057,982
2018	15,183,072
2019	15,304,226
2020	15,358,039
2021 T2	15,160,064

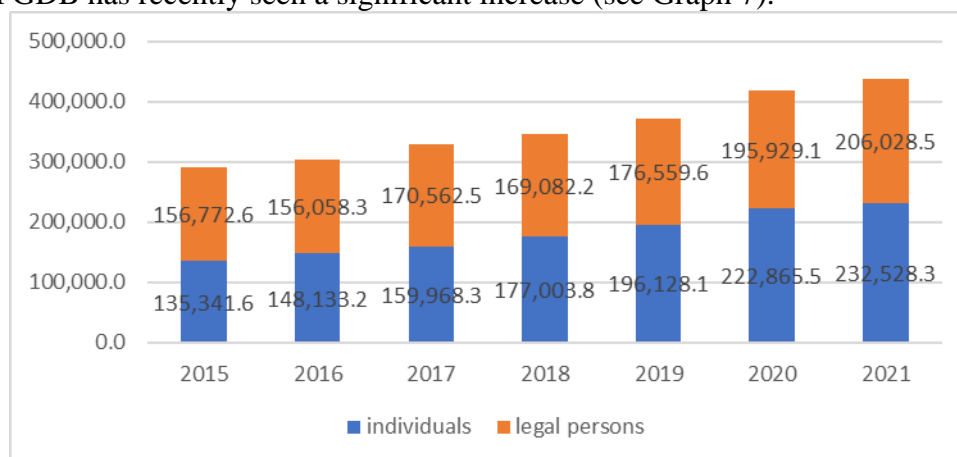
Source: developed by the author according to statistics made by FGDB, see <https://www.fgdb.ro/pagini/statistici>

As can be seen in the table above, the number of depositors is increasing from year to year, except for the year 2021 for which the analysed data are at the level of the second quarter. This has a positive impact on credit institutions as it encourages them to increase the number of loans granted to individuals and legal entities. At the same time, this has the effect of increasing confidence in the banking system and thus banks will diversify their offers in terms of investments in bank deposits.

In the Romanian society there are a series of predominant factors that differ from individual to individual as a result of some particularities related to the behaviour of each person but also to

the social situation in which they live. The ability of individuals to save results from the evolution of the gross domestic product relative to the inhabitants, and the quality of financial behaviour is determined by many factors, of particular importance being their own income, knowledge and financial skills. The saving trend can be determined through social factors (desire for consumption, purchase of goods) but also through economic factors that are closely related to economic development (inflation, taxes, interest, income net, economic profitability rate, etc.).

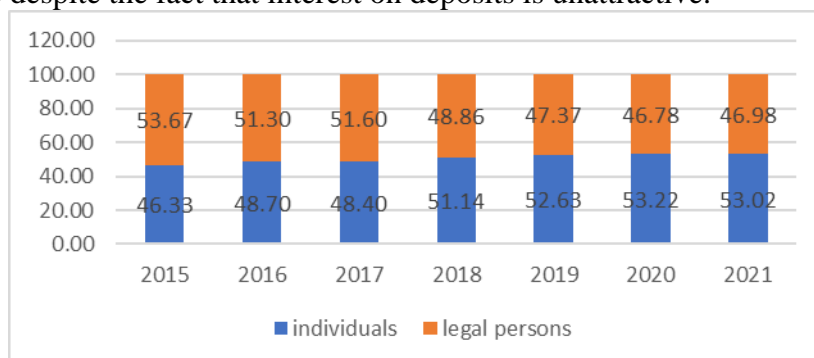
The evolution of bank deposits in terms of value attracted by credit institutions participating in the FGDB has recently seen a significant increase (see Graph 7).



**Graph no. 7. The evolution of bank deposits attracted by credit institutions participating in FGDB**

Source: Developed by the author

It can be observed that the deposits related to the credit institutions participating in FGDB are constantly increasing, reaching from the value of 292,114.2 million lei registered in 2015 to the value of 438,556.8 million lei registered in 2021 (second quarter). The growing value of deposits attracted by credit institutions participating in FGDB means that both the population and companies tend to save more despite the fact that interest on deposits is unattractive.



**Graph no. 8. The structure of deposits on beneficiaries**

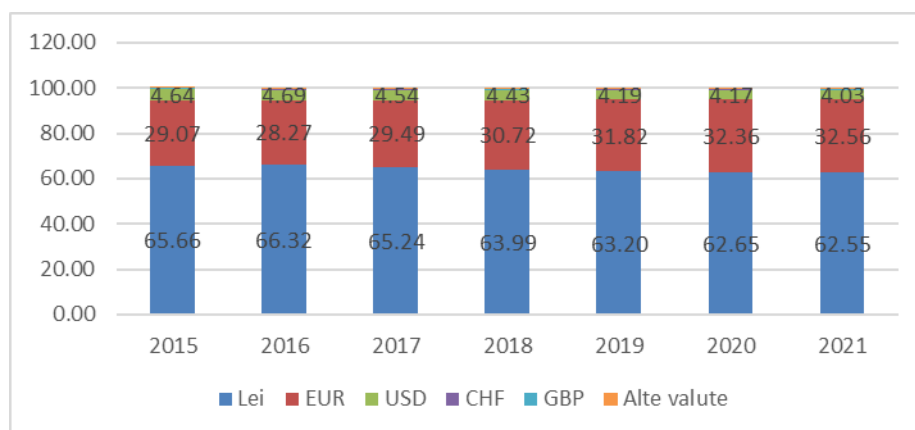
Source: Developed by the author

Graph 8 shows the increasing tendency of the population to save even in the context of the COVID-19 health crisis. The causes of these increases are many, but one of the most important with a strong impact on the determination of the population to make investments is the increase of income of the population by 25% of the difference in salary by the Salary Act entered into force on January 1, 2019 and is valid for public employees. The average net nominal earnings increased in December 2019 by 5% reaching 3,340 lei. The unemployment rate, which recorded one of the lowest levels in recent years of 3.7% in December 2018, also contributes to the increase in the level of deposits. This is due to the evolution of the favourable labour market climate in Romania.

Another cause of the increase in deposits is the existence of the guarantee scheme which provides coverage of up to 100,000 euros. This scheme avoids the behaviour of a panic-driven behaviour of possible savings losses as this behaviour would contribute to the generation of the



domino effect which consists in massive withdrawals of cash from credit institutions. This could also lead to a liquidity crisis and a lack of funds for credit investments.



**Graph no. 9. Structure of deposits by saving currency**

Source: Elaborated by the author following the calculations of the structure indicators

From the analysis of Graph 9 we can see the preference of depositors to save both in the national currency (on average 63%) and in other currencies, being preferred the euro currency (30%), preference justified both by the stability of this currency and confidence in it because in the future it will be introduced in circulation in Romania as well.

#### 4. CONCLUSIONS

Credit institutions play a particularly important role in shaping individual financial wealth through the various banking products and services offered in a wide range depending on the needs of each person.

Based on the analysis of statistics at European level, it was found that the level of savings varies from one country to another depending on the behaviour of the population but also depending on the cost of living. At European level and in Romania, the saving process has the same growth trend and is distinguished by the degree of financial education of depositors and is influenced by either internal or external factors such as: inflation, interest, economic gaps, household income, factors social, demographic, political, etc.

Although the interest rate on investments in sight or term bank deposits is not encouraging, the researcher has shown that the level of deposits attracted by credit institutions is constantly increasing both internationally and nationally. In this respect, the profitability of banks has seen the largest increase in recent years due to the difference between interest on loans and interest on deposits.

This increase can be noticed by analysing the evolution of the total deposits attracted at the level of the euro area countries and by analysing the evolution of the deposits attracted at the level of the Romanian banking system. At European level, household deposits and corporate deposits rose, while deposits in other financial institutions fluctuated. At the level of the Romanian banking system, the deposits attracted by credit institutions have been constantly increasing due to the improvement of living conditions based on salary increases, the decrease of the unemployment rate and also the improvement of Romania's economic conditions. The total value of attracted deposits increased considerably during the analysed period, an increase of 28%. A study conducted by ING shows that Romanians lead in the European ranking which indicates the trend of saving from the population in the pandemic context, with a percentage of 83% compared to 66.5%, the European average, being followed by Poles (82%), Turks (80%) and Czechs (71%). At the beginning of the pandemic, saving was unintentional for many as a result of the imposition of mobility restrictions. After almost a year, the number of those who set out to actively save has increased substantially.

The conclusion of the research is *that individuals, but also companies facing a pandemic save more than in periods of stability* and highlights the fact that saving in a country is a basic pillar even in the context of the COVID-19 pandemic, being considered at the same time “the fuel needed for economic growth”.

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