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EVOLUTION ANALYSIS OF CREDITS BY SECTORS ACTIVITY IN ROMANIA

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Abstract:
The role of credit in the economy is concretized by the results obtained through the manifestation of credit relations or by the contribution of credit to the achievement of certain economic policy objectives, the credit having a particular importance in the modern economic system. If business financing is concerned, credit plays a vital role. The overall objective of this paper is given by the analysis of the evolution of credits in Romania during the period 2010-2017, this analysis being carried out by sectors of activity.

Key words: naturalistic theory of credit, expansionist theory credit, the theory of regulated credit, bank credit

JEL Classification: G20, G21

1. INTRODUCTION

One of the main causes of stagnation of the economy from Romania is representing by poor lending. It is well-known that any economy, no matter how advanced, it can not grow without credit.

The term of credit comes from the latin word "credito", which translates into trusting. Trust is needed in the loan relations, as without it the sale of goods with deferred payment would not take place. In order for the credit relationship to manifest itself, the creditor must have confidence in the debtor's moral qualities, be convinced of his creditworthiness, his financial ability to make payment at term, his solvency. [Sandu, G., 2001, p.35].

The notion of "credit" is characterized by the chronological gap that separates a benefit from its contraption. This definition covers two big assumptions in practice: that of the money loan and that of the synallagmatic contract in which the borrowing part benefits from a term. In both cases, the creditor provides an immediate benefit, and he will receive his contraption at a later date. [Albu-Cîrnu, I., 2002, p. 36].

Loan in general is *"... the exchange of a present monetary value against a future monetary value."* [Dedu, V., 1996, p. 24] So a defining feature of credit is the obligation to pay, usually on a certain date, and usually at a certain interest rate.

Another definition presents credit emphasizing its role in the redistribution, creation and amplification of the monetary mass, as follows: *"..the credit is the expression of the relations of redistribution of the latent cash availability in the economy to both the non-financial and the financial agents, by replacing the passive currency with active currency,, as well as strengthening and amplifying money capital and increasing monetary mass (money) in circulation."*[Turlic, V. et al., 2005, p. 124].

The theoretical literature on credit market friction highlighted the importance of credit in shaping the links between the financial market and the real economy. The expansion of the open economy has shown that credit market friction can play an important role in transmitting shocks between countries, through balance sheets links between investors and financial institutions.

From an empirical perspective, many have studied the relationship between finance and development and have found that better functioning of financial intermediaries accelerates economic growth. Several authors examined the link between credit and business cycles, for example, based on empirical evidence of the monetary policy credit channel (Braun and Larrain, 2005 and Jacobiello and Minetti, 2008) and the role of global banks in transmitting liquidity shocks Cetorelli and Goldberg, 2008, 2010). However, little empirical effort has been made to quantify the importance of credit in shaping and forecasting the dynamics of the economic cycle and analyzing the international transmission of credit shocks within a global framework that incorporates both emerging economies and advanced economies. [TengTeng Xu, 2012].

2. THE CHARACTERISTICS OF CREDIT

Theories on credit characteristics are different, noting the following theories known in the literature:

- *naturalistic theory of credit*, according to which credit is only a means of transferring money from one holder to another, identifying the capital of the loan with the productive capital;
- *expansionist theory credit*, which attributes to the credit the role of capital creator and, at the same time, a leading factor in the development of the market economy, this theory being abandoned in the last decades because it has been noticed that unlimited money creation is not beneficial but has negative effects for economy such as inflation or bankruptcy of banks.
- *the theory of regulated credit*, starts from the idea that in the market economy the cyclical crises and chronic unemployment could be limited by regulating credit in the sense that it generates an increase in demand for goods in the economy.

3. CHARACTERISTIC RISKS TO BANKS

Lending can be profitable, but it also involves risks. Profits come from the collection of interest income and commissions from loans. As far as possible, banks and other lenders are trying to charge borrowers with higher risk, interest rates higher than borrowers with low-risk. Therefore, creditors have an incentive to take greater risks while waiting for higher earnings.

When we talk about risks, we have to make a difference between the risks in general and the risks to banks. Among the typical risks banks are [Trenca, I. I., Bolocan, M.-D., 2011, p. 50]:

- financial risks (interest rate risk, liquidity risk, risk on variable income securities);
- signature or counterparty risks (inter-bank risk, country risk, customer risk).

As Caouette et al. (1998) mentioned, the oldest form of risk on financial markets is credit risk. It would have existed at least since 1800 b.C. because this type of risk is as old as the lending activity itself. Since then, the concept has evolved a lot and credit risk management has become the main concern of traditional banks. However, lately they have been forced to turn to banking relationships, being more focused on customer relationship than on loan returns. This has led to poor results in terms of credit risk management, and if we look at the history of financial institutions, it can be observed that credit risk was the cause of the biggest bank failures. [Pichereau L., 2016, p.3].

Credit risk is represented by the risk of recording losses or the risk of not realizing the estimated profits, as a result of the counterparty's non-performance of contractual obligations. This type of risk refers to all market players, whether they are banks or random people who borrowed and/or lent. In other words, credit risk occurs whenever a person wants to get a product or service without paying for it immediately. Therefore, the danger is the failure to make any promised interest and / or principal payments.

In addition to credit risk, country risk is associated with the economic, social and political conditions of the debtor's country of origin. Aa a component of country risk, the transfer risk arises if the debtor's obligation is not expressed in its local currency. [Mihai I., Velicu I.C., 2008, pp. 14-15]

Market risk is the result of changes in market variables such as exchange rates or interest rates. In the specialized literature is defined [Gangreddiwar Aboli, 2015] the market risk as the risk of losses of the bank's trading portfolio due to changes in stock prices, interest rates, credit rates, foreign exchange rates, raw materials prices, and other indicators whose values are established in a public market. Market risk is predominant among banks from banking sector, as they are active in capital markets.

Systemic risk and moral hazard are two types of risks faced by banks, but they do not cause losses quite often. But if its cause losses, these can cause the decline of the entire financial system from a country or globally. We can note that the global crisis from 2008 is the best example of loss for all financial institutions that occurred due to systemic risk. Systemic risk is the risk that does not affect a single bank or financial institution but affects the entire industry. Systemic risks are associated with cascade failures where the failure of a large entity can cause the failure of everyone else in the industry. The moral hazard is a risk that occurs when a large bank or large financial institution takes risks, knowing that someone else will have to deal with these risks.

In the paper *Risks in the Banking Industry Faced by Every Bank* in 2015, Gangreddiwar presented the moral hazard from the perspective of economist Paul Krugman, who described it as *"any situation where a person makes a decision as to how much to risk in while someone else supports the cost if things go wrong. "*

The decision-making process on the possibility of granting credits is based on knowledge and customer information. Credit score means the customer's solvency analysis. It is the result of a statistical model that, based on the information on the borrower, allows to distinguish between "good" and "bad" credits and to provide an estimate of the probability of default [Deloitte, 2016, p.5] This is an instrument commonly used in the decision-making process of accepting or rejecting a loan.

Classification of good and bad credits it is of fundamental importance and is, indeed, the objective of a credit model. The need for an appropriate classification technique is thus obvious. But what determines the classification of a new applicant? From literature analysis [Hussein A. Abdou, John Pointon, 2011, p. 10], characteristics such as age, marital status, dependents, educational level or occupation are widely used in building scoring models. The time at the current job, the amount of the loan, the duration of the loan, the owner of the house, the monthly income, the bank accounts, the possession of a car, the mortgage, the purpose of the loan, guarantees and others have also been used in building scoring models. In some cases, the list of variables has been extended to include the spouse's personal information, such as age, salary, bank account, and others.

In terms of lending to legal entities, the credit score can be achieved by identifying other variables such as the main business activity, business age, business location, credit value and different financial rates, for example, profitability, bank credits and leverage effect.

The credit decision is based on an assessment of the borrower's financial position and future prospects, in a process known as credit risk analysis. More from a technical point of view, credit risk analysis consists of estimating the probability that a borrower will not return the loan according to the agreed terms (probability of default).

4. THE EVOLUTION OF CREDITS IN ROMANIA BY ACTIVITY DOMAINS

The evolution of lending in Romania is the consequence of intensifying business relations with the European single market and access to a market with a lower interest rate after joining the European Union in 2007. The global financial and economic crisis has negatively influenced the Romanian economy and the banking system by deteriorating both of the offer and of the loan application, by reducing the lending activity with major concessions on the debtor-creditor relationship. In this context, after the crisis, credit offer and demand for credit (credit application) was influenced by the following factors and brief situations presented in Table no. 1.:

Table no. 1. Situations that influenced supply and demand for credit

Credit Offer	Credit Application
asymmetric competition between government and companies regarding the access to funding sources as a result of accelerated public debt growth;	reducing corporate debt due to financial blockage;
a high level of non-performing credits that led to an increase in banks' provisions;	the deterioration in the creditworthiness of companies as a result of restrictions on both domestic and export markets;
a relaxation of the monetary policy of the NBR through the reduction of the minimum required reserves and the reduction of the monetary policy rate;	a decrease of the companies profitability and incomes of the population;
a tightening of credit standards for both household and non-financial companies;	a volatility of the exchange rate of the national currency against the major international currencies.
an increase in banks' prudential measures, driven by worsening economic and financial conditions, increasing the risk of adverse selection and reassessing the risk profile of clients.	

As regards the activity of the companies that contracted loans in 2017, the highest share is occupied by the services sector (45%), followed by the industry by 31% and the constructions by 11% over time the lowest share held by agriculture by 8% and the activities of financial intermediation and insurance (5%) (Figure no 1).

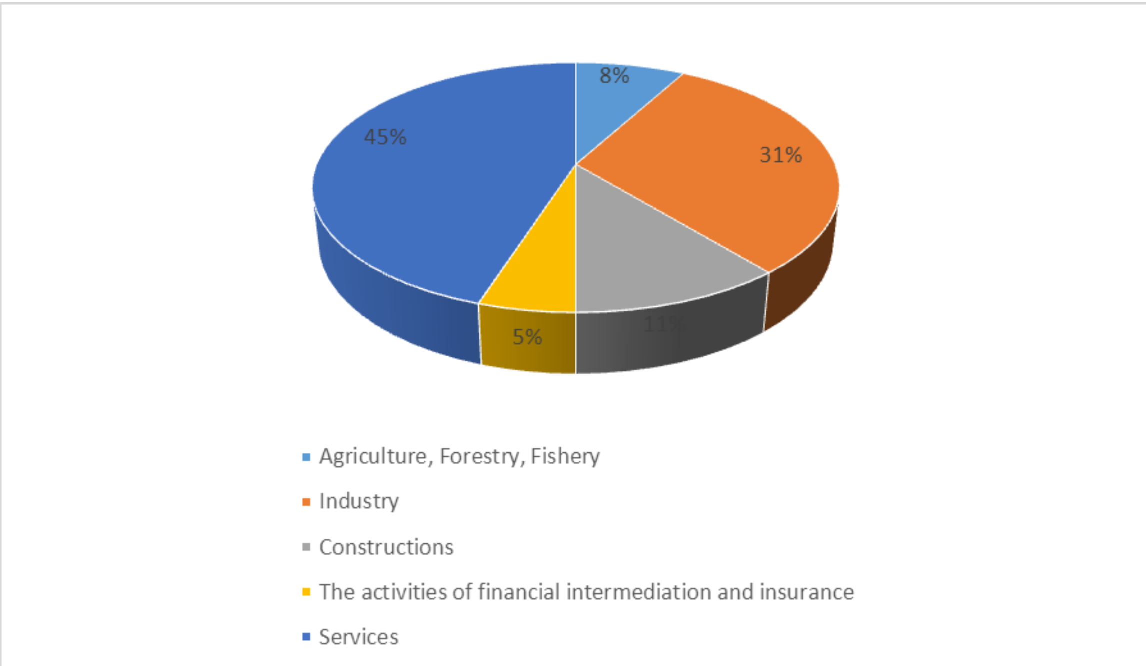

Figure no. 1. Share of the loans granted to commercial companies, by sectors of activity, 2017
Source: processing by authors after www.bnro.ro

Regarding the evolution of credits granted to companies on different types of activities, during the period 2010-2017, it can be noticed that the most pronounced increase is recorded in the services sector. However, in 2017 loans for financial intermediation and insurance activities increased by 21.17% compared to 2016, while loans (credits) for services rose by only 4.8%. A decrease compared to 2016 is registered in the construction sector by -2.93% (Figure no. 2)

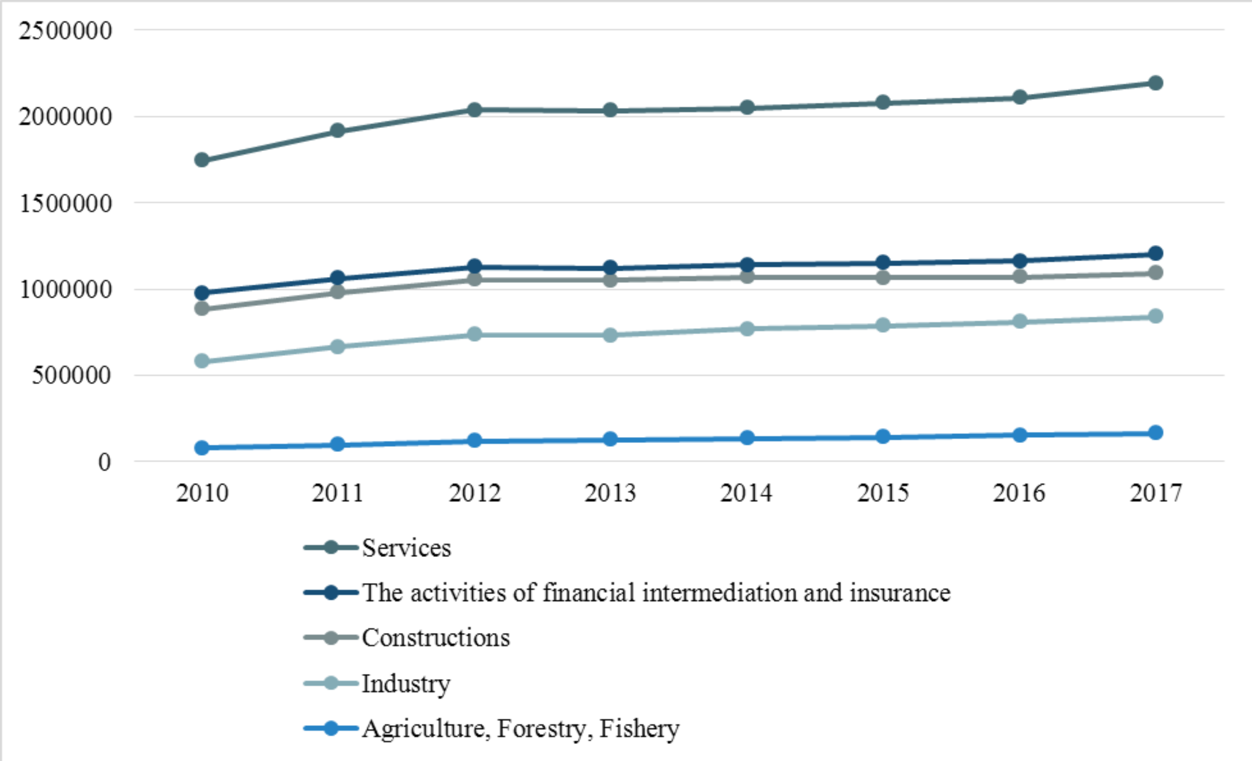

Figure no. 2. Evolution of credits to granted to companies in different sectors of activity, 2010-2017

Source: processing by authors after www.bnro.ro

In the period 2012-2017, companies have contracted credits for various activities, including treasury loans (credits), with the most significant increase of 6.1% in 2017 compared to 2016, equipment credits, which in 2017 increased by 4 6%. On the other hand, in 2017, loans (credits) for stock financing fell by 6.94% compared to the previous year (Figure no. 3).

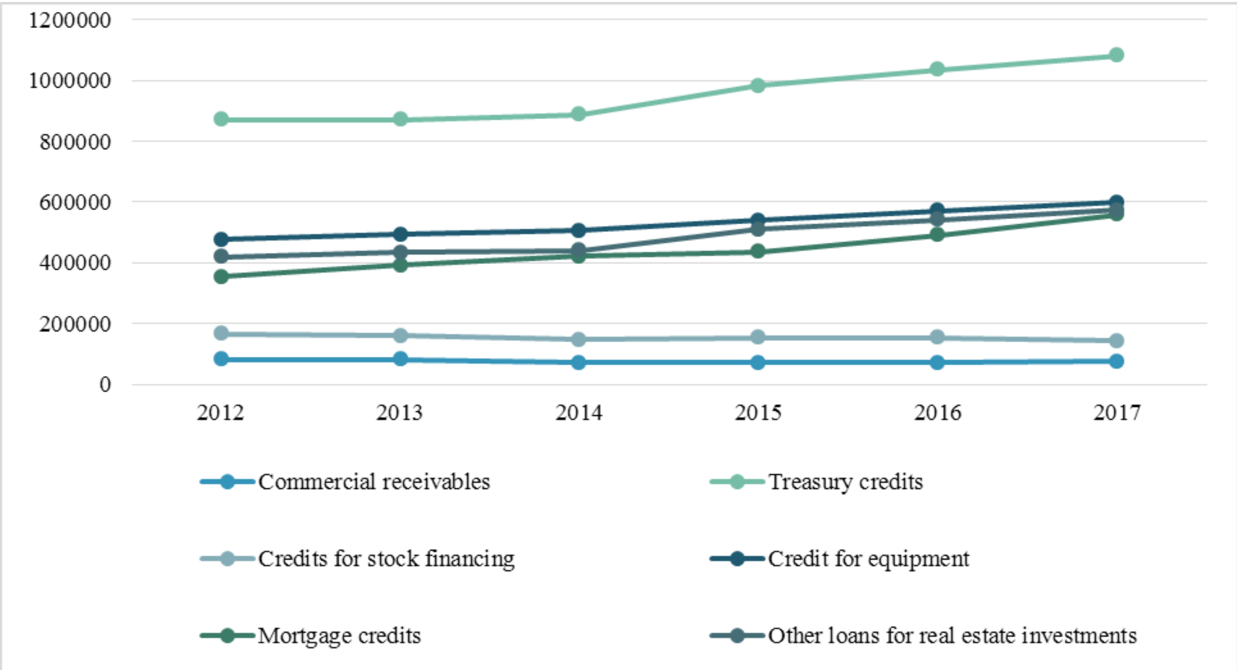

Figure no. 3. The evolution of credits granted to commercial companies by destination, 2012-2017

Source: processing by authors after www.bnro.ro

In 2017 commercial companies borrowed loans in particular to cover their liquidity needs for operating activities, treasury credits having a weight of 32.95% in total loans to enterprises. Companies also invested in the acquisition of equipment (18.20%) and in real estate (17.45%). At the opposite end, there are credits for financing foreign trade operations, with a share of only 0,02% (Figure no. 4).

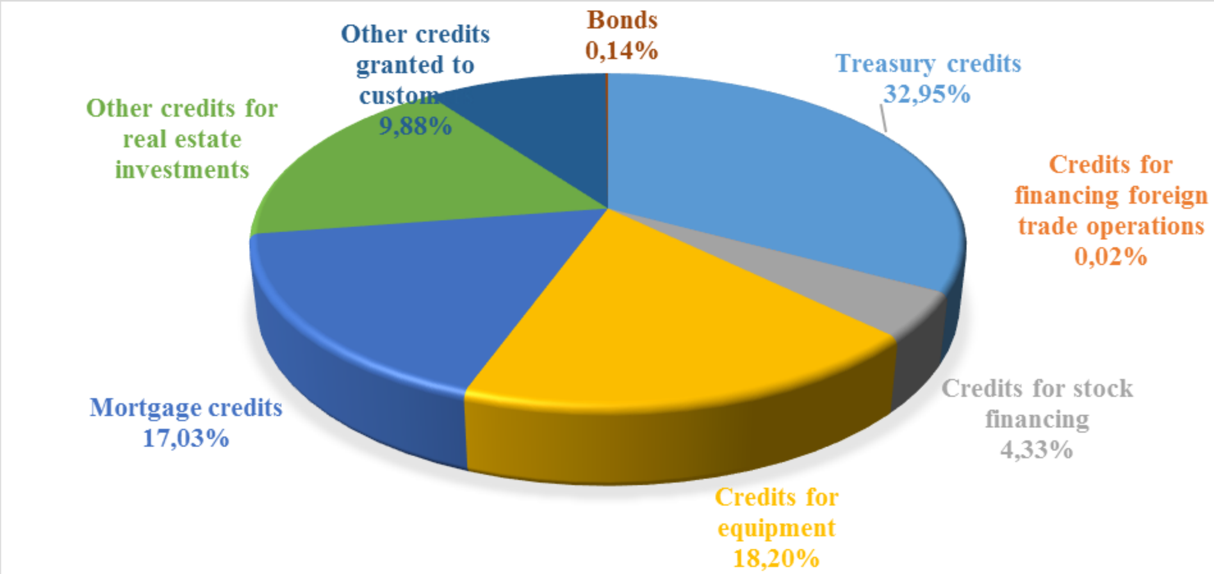

Figure no. 4. Share of credits granted to enterprises by destination, in 2017
Sourse: processing by authors after www.bnro.ro

5. CONCLUSIONS

Lending has both advantages and disadvantages. The credit can be good when used wisely. It can improve the standard of living of a family or help develop your business. But it is important to remember that this loan is not free of charge. Buying "on time" means paying interest and taxes in the future.

Banks face a multitude of risks that can be caused by various factors. We have to look at banking risks as a set of risks, often interdependent, having common determinants or producing a risk generating other risks, in the form of domino effect. Thus, relationships of interdependence or dependence may arise between the types of risks.

As regards the activity of the companies that contracted loans (credits) in 2017, the highest share is occupied by the services sector (45%), followed by the industry by 31% and the constructions by 11%, while the lowest share is held by agriculture by 8% and the activities of financial intermediation and insurance (5%).

Regarding the evolution of the credits granted to the companies on different types of activities, during 2010-2017, it can be noticed that the most pronounced increase is registered in the services sector. However, in 2017 loans for financial intermediation and insurance activities increased by 21.17% compared to 2016, while loans for services rose by only 4.8%. A decrease compared to 2016 is recorded in the construction sector by -2.93%.

The last years were characterized by the growth of credit in the private sector, especially for households, and the fact that lei loans are the main driver of credit growth in Romania.

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