Analysis of Credit Growth Determinants in the European Countries

Klejda Gabeshi
University of Craiova, Romania
Logos University, Tirana, Albania
klea.gabeshi@gmail.com

Abstract

The main function of banks is to facilitate the better functioning of lending activity, helping to improve efficiency and rational distribution of resources between different entities. If credit is used to purchase productive resources, this will help economic growth. The overall development of credits is usually based on a combination of factors that simultaneously impact the demand and supply of bank credit. Using a qualitative and quantitative analysis, the main objective of this paper is to establish the analysis of the evolution and determinants of credit activities, especially of the factors that have an impact on credit growth. Also, this paper will analyze the effects that the current pandemic has brought to the European banking sector in general and in particular to the credit activity. The results showed that economic growth, credit quality, financial intermediation rate, along with foreign and domestic funding sources are the main determinants of credit growth.

Key words: credit activity**,** credit determinants, credit growth, European banking sectors.
J.E.L. classification: G21

1. Introduction

The banking system plays an important role in the modern world economy, providing financial assistance to the government and private sectors. The main function of banks is to facilitate the better functioning of lending activity, helping to improve efficiency and rational distribution of resources between different entities. Credit expansion allows consumers to borrow and spend more, and businesses to borrow and invest more. The banking system is the one that prevents the information asymmetry between creditors and borrowers, reduces transaction costs, monitors managers and provides financial resources in an inherently uncertain economic environment.

More than a decade after the global financial crisis of 2008, economic activity and bank lending in Europe have not yet fully recovered, despite the recent developments. The current pandemic has also negatively affected the economy and in particular credit activity, making them go backwards, almost to the levels of the financial crisis. The COVID-19 pandemic brought a sudden negative revision of expectations, indicating the contracting of demand conditions and the poor quality of credit applications.

Using a qualitative and quantitative analysis, the main objective of this paper is to establish the analysis of the evolution and determinants of credit activities, especially of the factors that have an impact on credit growth, making a comparison between Western European countries and Central and Eastern European ones. Lending to the economy is a key function of banks, as well as the main channel through which they influence the activity of the economy.

2. Literature review

In recent years, following the financial crisis of 2008, most credit activity studies have been focused on its evolution, with a particular focus on the key determinants of credit growth. Credit developments are even more essential in the case of developing economies, due to the rapid growth cycle that some of them endured before the crisis and the immediate shrinkage that followed. Much of the research work on lending has focused on determining the level of credit balance and identifying deviations from this balance, empirically assessing the impact of fundamental factors on credit dynamics in emerging countries, in order to understand changes in the importance of credit growth. Studies in this area were dominant before the 2008 crisis, when many developing countries were experiencing rapid credit growth.

Filip's work (2016) focuses on the comparative analysis of the profitability of banking systems and, in particular, their determinants in two major groups of European countries, namely Western Europe and Central and Eastern Europe, given that they have social conditions and significant economic differences that may influence banking. Starting from the scientific literature, the author identified bank-specific, industry-specific and macroeconomic factors of bank profitability, but also considered the manifestation of the economic and financial crisis as an important additional determinant, while bank profitability was determined by ROA and ROE indicators. Using econometric methods for data processing for these groups, each of the 12 countries for the period 2000-2011, concluded that for both groups, economic growth improves the profitability of banking systems, while credit risk and the crisis significantly affect it.

The determinants of bank profitability for Western European countries in the crisis period 2007-2011 were also identified by Messai et.al. (2015). The sample included 322 banks which they subdivided into two sub-sample countries, the countries affected by the crisis (Greece, Italy, Portugal, Spain and Ireland) and the other Western European countries. They opted for several bank-specific determinants, as well as for macroeconomic factors. The results show that the bank's profitability depends on the representations envisaged and the situation in the country. Also, Hempell and Sorensen (2010) examined the impact of supply constraints on euro area bank lending, with a special focus on the crisis period.

Regarding the study of credit activity in Central and South-Eastern Europe, one of the first studies in this field is that of Cottarelli, DellÁriccia and Vladkova-Hollar (2005), who analyzed 15 CEE countries and found that credit developments up to 2002 were in line with key economic factors. Their results suggested that credit to the private sector was driven by the deepening of the financial system, privatizations and the process of global transition of these countries to a market economy.

Boissay, Calvo-Gonzales and Kozluk (2006) assessed the deviations of the credit-to-GDP ratio from equilibrium for 11 CEE countries. Their results suggested that the increase in this ratio is consistent with the performance of macroeconomic factors only in Slovenia and Romania. They also found that credit growth was above the optimum level in countries with fixed exchange rates. On the other hand, using a similar framework, Kiss, Nagy and Vonnák (2006) found no evidence of excessive credit growth in any of the CEE countries, with the exception of Latvia and Estonia.

An IMF study by Aisen and Franken (2010) examines the evolution of credits to more than 80 countries, focusing on the 2008 crisis, concluding that the countries with faster credit growth before the financial crisis, higher levels of intermediation and a higher economic slowdown led to lower post-crisis lending rates. They also note that the countercyclical policies pursued by some of these countries have helped to maintain high lending rates in their economies. The main objective of Zdzienicka's (2011) work was to shed light on the development of private credit in a group of 11 CEE countries, examining whether credit growth before the 2008 financial crisis could be considered "excessive" compared to the level of balance and whether its recent slowdown could be considered a "credit crunch". The results suggest that most of the countries in the sample experienced episodes of excessive lending between 2002 and 2008.

One of the most comprehensive post-crisis studies is that of Guo and Sepanyan (2011), which analyzes the determinants of credit growth in 38 developing countries for the period 2001-2010. The analysis is split into two periods, before the crisis and after the crisis, to identify changes in credit incentives during these two periods. Their results are in line with theoretical expectations.

Recent studies use data on individual banks, in addition to macroeconomic ones. An IMF technical paper (2013), which studies bank-level data on CEE countries, notes that the sharp slowdown in credit since 2008 has resulted in weakening macroeconomic conditions, deteriorating bank indicators and increasing their sensitivity to this deterioration. In another IMF study, Everaert et. al (2015) examines the data of individual banks for 5 CEE countries and finds that supply factors gained importance over demand factors in explaining credit growth after the 2008 crisis.

Note and Suljoti's article (2017) aims to empirically assess the factors that influenced the lending activity of banks in 10 EDC countries before and after the financial crisis. Holzner et. al. (2019) studied lending in five Central and South-Eastern European countries, namely Croatia, Slovenia, Bosnia and Herzegovina, Serbia and Montenegro.

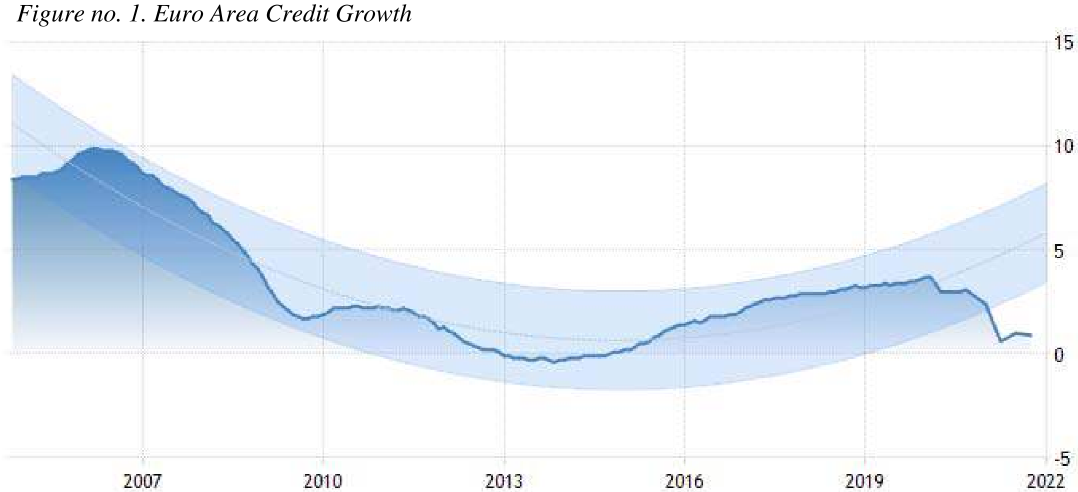
In one of my papers (2019) studying the credit activity in Albania (2019), I found out that developments in the global economy, and in particular the global economic crisis, have had a negative impact on the Albanian banking sector and caused the credit market to shrink.

3. Research methodology

Core banking activities to increase deposits and credits to customers are crucial for European banks. Credit, in particular, is the most important part of the economy. If credit is used to purchase productive resources, this will help economic growth. Using a qualitative and quantitative analysis, the main objective of this paper is to establish the analysis of the evolution and determinants of credit activities, especially of the factors that have an impact on credit growth.

The Figure no.1 shows the evolution of credit growth in the Eurozone, from the early 2000s, shortly after the establishment of the European Central Bank, to the present. Until the outbreak of the global financial crisis (2004-2007), we can see a significant increase in credit in the Eurozone, reaching a value of 10% at the end of 2006. Since 2007, the problems of banks began, some of them they faced large liquidity losses, or even bankruptcy. Many banks have gone bankrupt due to excessive indebtedness and lack of liquidity. Banks have begun to accumulate significant losses in their balance sheets due to the assessment as losses of a growing number of subprime loans granted by banks by obtaining liquidity in the money markets in the short term. Under these conditions, the forecasts regarding the incomes, profits and bankruptcies in the economy worsened as such and the situation of the banks' balance sheets, which needed more and more funds for recapitalization. All countries have experienced a decline in public confidence as well as a decline in lending.

Figure no. 1. Euro Area Credit Growth

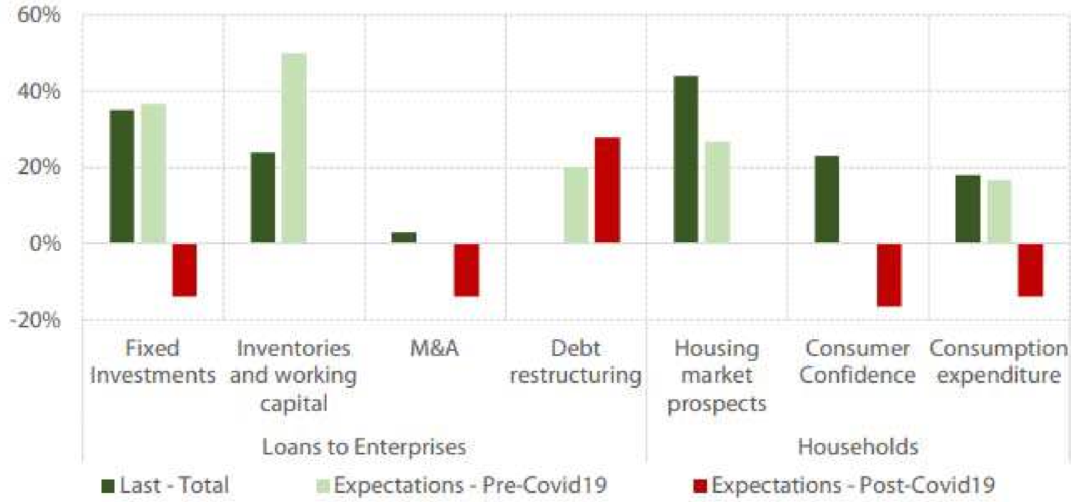


Source: https://tradingeconomics.com/euro-area/loan-growth

The disappearance of cheap credit, so the increase of its cost, led to a sudden decrease in the level of credits, reaching a negative value below 0% by the end of 2014. Subsequently, from the end of 2014 until now, credit growth has returned to positive values, registering a level of 4% until the beginning of 2020. After the pandemic breakout in March 2020 it's seen a decrease in credit growth, expected to continue with this trend in the successive years. Loan growth in Euro Area is expected to be 2.4% by december, according to Trading Economics global macro models and analysts expectations and it's estimateed to stand at 0.9% in 12 months time. In the long-term, the Euro Area credit growth is projected to trend around 0.7% in 2021 and 1.5% in 2022.

Demand for investment loans is expected to decline and demand for working capital is not expected to increase, but will not contract significantly. On the other hand, the demand for debt restructuring is expected to increase for the first time in the last six years. Consumer and household expectations have been significantly reversed. In particular, consumer confidence and consumer spending should contribute negatively to the demand for loans. In Figure no.2 are represented the actual factors affecting the demand for credits, and the expectations pre and after covid.

Figure no. 2. Factor affecting demand for credit



Source: EIB-CESEE Bank lending survey https://www.eib.org/en/publications/cesee-bls-2020-h1

4. Findings

The overall development of credits is usually based on a combination of factors that simultaneously impact the demand and supply of bank credit. Financial turmoil since mid-2007 has had a negative impact on banks' balance sheets, fund costs and profitability, thus negatively affecting their ability to provide new loans. The ability and willingness of banks to provide loans affects bank lending in general and in particular during the financial crisis. Even when the effects of demand are controlled, credit growth is adversely affected by supply constraints. This applies both to loans to households for the purchase of housing and to loans to non-financial corporations. The impact of supply constraints, in particular on disrupting banks 'access to finance for SMEs and their liquidity positions, has also been strengthened since the eruption of the financial crisis and the corresponding adjustments in banks' lending portfolios, mainly oriented at prices, rather than direct quantity restrictions.

In Western European countries, bank profitability is significantly affected by capital adequacy and inflation, but positively influenced by liquidity, while in CEE countries it is strongly affected by unemployment and positively influenced by the mix of activities. Thus, it was considered that Western European banks should in particular take steps to improve capital adequacy and limit credit risk, while in CEE countries banks should focus on reducing credit risk and the government should take action against unemployment.

In terms of supply, the faster growth of foreign debt of banks and deposits promotes the rapid growth of credit. Also, the healthier the banking system, the more loans it grants. In the direction of demand, higher economic growth is reflected in higher demand for credit. Facilitating domestic and / or foreign monetary policies creates the premise for higher credit growth. Findings on CEE countries suggest that the high level of foreign bank lending was the main driver of credit growth in the years before the crisis, followed by economic growth. These two factors were also the most important determining factors in the post-crisis period. Initially, the rapid withdrawal of foreign bank financing led to a rapid slowdown in credit growth and then the economic slowdown explained the lack of lending in these countries. Credit growth has also been further decreased by foreign bank branches as a result of tightening funding conditions by their parent banks.

The results obtained by most studies, showed that economic growth, credit quality, financial intermediation rate, along with foreign and domestic funding sources are the main determinants of credit growth. The reduction in post-crisis lending was largely due to a lack of willingness to take risks and a reduction in banks' external financing, where the latter was to some extent offset by the increased domestic deposits.

Speaking of CEE countries, the region is quite diverse in terms of the performance of the banking sector. The banking sectors in Croatia and Slovenia are growing quite slowly, lagging behind their counterparts in Central Europe and even in many euro area countries, while especially in Bosnia and Herzegovina, Serbia, and Montenegro the banking sectors are much more dynamic. Unsecured retail loans account for the largest share of credits to households in all countries, and their share of total loans significantly exceeds the average level of the euro area. In all countries except Croatia, the accumulation of unsecured retail lending is much faster than rising wages. Combining this trend with very high levels of unsecured retail loans in home loans in these countries means potential risks of overheating and creating bubbles in the markets for these loans. Slovenia is a leader in digital transformation in the region, especially in business digitalisation. To date, Croatia lags significantly behind Slovenia, but performs better than most CEE countries. The other countries in the region have not yet made much progress in digital transformation. In the Albanian banking system, exposure to credit risk is the main risk to which the system is exposed and credits make up the majority of the banking system's assets. In recent years, the quality of the loan portfolio has deteriorated significantly, which can be easily understood from the increase in non-performing loans.

The COVID-19 pandemic brought a sudden negative revision of expectations, indicating the contracting of demand conditions and the poor quality of credit applications. Thus, a first direct effect that commercial banks have already faced is the decline in the value of credits. The emergence of the coronavirus pandemic has led to the identification of a new systemic risk arising from the reduced capacity of credit institutions to contribute to the economic recovery amid a reduced capacity to support financial intermediation. The pandemic has further aggravated real sector balance sheets, increasing credit risk and reducing the banking sector's appetite for lending.

5. Conclusions

Analyzing all the results, I first conclude that for European countries, bank profitability is greatly increased by economic growth and also affected by credit risk and the manifestation of the economic and financial crisis. In addition, profitability appears to be significantly affected in Western European countries by capital adequacy and inflation, but also positively influenced by liquidity. On the other hand, in CEE countries, the profitability of banking systems is mainly affected by the change in the unemployment rate and positively influenced by the mix of activities.

In Western European countries, bank activity is significantly affected by capital adequacy and inflation, but positively influenced by liquidity, while in CEE countries it is strongly affected by unemployment and positively influenced by the mix of activities. Thus, Western European banks should in particular take steps to improve capital adequacy and limit credit risk, while in CEE countries banks should focus on reducing credit risk and the government should take action against unemployment.

The year 2020 is, indeed, the year that turned any predictions upside down and forced us to work in an extremely complicated scenario for both the social sector and the business sector. Compared to 2008, when the crisis started from the financial-banking system, the current crisis generated by the new coronavirus, which produces strong effects both in the financial markets and at social level, puts the banks in a position to react.

Lending to the economy is a key function of banks, as well as the main channel through which they influence the activity of the economy. The immediate cessation of economic activity has caused liquidity problems in some of the businesses and has been accompanied by rising unemployment; consequently, it has affected the ability of bank customers to repay loans.

Concluding, some of the effects of the pandemic are the decrease in the market value of commercial banks, the profitability, the volume of assets and the decrease in the value of government securities portfolios held by commercial banks.

6. References

- Ahlem Selma Messai , Mohamed Imen Gallali & Fathi Jouini, 2015. *Determinants of Bank Profitability in Western European Countries Evidence from System GMM Estimates*, International Business Research; Vol. 8, No. 7;
- Aisen A., and M. Franken, 2010."*Bank credit During the 2008 Financial Crisis: A Cross-Country Comparison.*" IMF Working paper 10/47. Washington: International Monetary Fund;
- Boissay, F., O. Calvo-Gonzales, and T. Kozluk., 2006. "*Is lending in Central and Eastern Europe developing too fast*?" Paper presented at the conference "Finance and Consumption Workshop: Consumption and Credit in Countries with Developing Credit Markets", Florence, 16-17 June 2006;
- Cottarelli, C., G. Dell'Ariccia, I. Vladkova-Hollar, 2005. "*Early Birds, Late Risers and Sleeping Beauties: Bank Credit Growth to the Private Sector in Central and Eastern Europe and in the Balkans*", Journal of Banking and Finance. 29. 83-104;
- Everaert, G., N. Che, N. Geng, B. Gruss, G. Impavido, Y. Lu, C. Saborowski, J. Vandenbussche, L. Zeng, 2015."*Does Supply or Demand Drive the Credit Cycle*?" Evidence from Central, Eastern, and Southeastern Europe. IMF Working Paper No 1515;
- Filip Bogdan Florin, 2016. *A comparative analysis on banking systems profitability between Western European and CEE countries*, Journal of Public Administration, Finance and Law, Issue 9, pp. 168-181;
- Gabeshi K., 2019. *Overview of Credit Activity in Albania*, Scientific Bulletin. Economic Sciences, Volume 18/Issue 2/ EtaEc 2019 Special issue, pp.77-82;
- Guo, K., V. Sepanyan, 2011."*Determinants of Bank Credit in Emerging Market Economies*", IMF Working Paper 11/51. Washington: International Monetary Fund;
- Hempell H., Sorensen C., 2010. *The impact of supply constraints on bank lending in the Euro area crisis induced crunching?*, ECB, Working Paper Series No 1262/November;
- Holzner M., Adarov A., Grieveson R., Pindyuk O., Vidovic H., 2019. "*Unsecured lending in Central and Southeast Europe*", Market Report, The Vienna Institute for International Studies;
- IMF, 2013. *Financing Future Growth: The Evolving Role of the Banking Systems in CESEE*: Technical Notes; Available at: https://www.imf.org/en/Publications/ [Accessed 20 May 2020]
- Kiss, G., M. Nagy, and B. Vonnák, 2006."*Credit Growth in Central and Eastern Europe: Convergence or Boom*?" Paper presented at the conference "Finance and Consumption Workshop: Consumption and Credit in Countries with Developing Credit Markets", Florence, 16-17 June 2006;
- Note S., Suljoti E., 2017. "*Evaluation of bank loan determinants in Central and Southeast European countries.*", Bank of Albania Material Study, 24 (83);
- Zdzienicka A., 2011. "*A re-assessment of credit development in European transision economies*", Dans Ecnomie Internationale, Vol.4, No.128, p.33-51;
- https://tradingeconomics.com/
- https://www.eib.org/