THE RESILIENCE OF CENTRAL AND EASTERN EUROPEAN BANKING SYSTEMS DURING THE COVID-19 CRISIS

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ABSTRACT

The Covid-19 crisis has severely affected Central and Eastern European (CEE) states, causing major economic activities to be blocked during the pandemic, shrinking domestic demand and investment. The aim of the research is to analyse the impact of the pandemic event on CEE banking systems, in the light of the most relevant indicators of banking stability. Both qualitative and quantitative research methods were used to achieve the goal. The results of the analysis revealed that the pandemic crisis did not affect the quality of banking assets in the CEE, the rate of non-performing loans remained at a fairly low level in the most of the states. At the same time, due to major reforms that followed the international financial crisis of 2008, banks have a sufficiently high level of capitalization and a reasonable level of indebtedness, reflecting a high resilience to shock of CEE banking systems. However, extremely low level of interest rates in the pandemic have determined a deterioration in asset performance in most banking systems in the CEE. Moreover, the outlook regarding the CEE banking systems remains quite uncertain. Considering the large-scale measures to reschedule credit rates, through moratoriums on bank loans, but also the financial support schemes initiated by central banks and governments, the CEE region is facing high risk costs, which manifest mainly through the migration over time of credit risk exposure. In this context, non-performing loan ratios are expected to increase in the near future. Moreover, the widespread shift to lower interest rates will exert pressure on lending margins.

Keywords: *Covid-19 crisis, CEE banking systems, return on assets, return on bank capital, bank capitalization, leverage ratio*

Criza Covid-19 a afectat grav statele din Centrul și Estul Europei (CEE), provocând blocarea activităților economice majore în perioada pandemiei, diminuând cererea și investițiile interne. Scopul cercetării este de a analiza impactul evenimentului pandemic asupra sistemelor bancare din CEE, în contextul celor mai relevanți indicatori ai stabilității bancare. Pentru atingerea scopului au fost utilizate metode de cercetare atât calitative, cât și cantitative. Rezultatele analizei au relevat că evenimentul pandemic nu a afectat calitatea activelor bancare în ECE, rata creditelor neperformante s-a menținut în majoritatea statelor la un nivel destul de scăzut. În același timp, datorită reformelor majore care au urmat crizei financiare internaționale din 2008, băncile au un nivel suficient de ridicat de capitalizare și un nivel rezonabil de îndatorare, manifestând o rezistență ridicată la șoc a sistemelor bancare din CEE. Cu toate acestea, nivelul extrem de scăzut al ratelor dobânzilor în pandemie a determinat o deteriorare a performanței activelor bancare în CEE. Totuși, perspectivele privind sistemele bancare din CEE rămâne destul de incertă. Având în vedere măsurile de amploare

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de reeșalonare a ratelor creditelor, prin moratoriile la creditele bancare, dar și schemele de sprijin financiar inițiate de băncile centrale și guverne, regiunea CEE se confruntă cu costuri ridicate ale riscurilor, care se manifestă în principal prin migrarea în timp a expunerii la riscul de credit. În acest context, se preconizează că ratele creditelor neperformante vor crește în viitorul apropiat. Mai mult, trecerea pe scară largă către rate mai reduse ale dobânzilor va exercita presiuni asupra marjelor de creditare.

Cuvinte-cheie: *criza de Covid-19, sistemele bancare din CEE, rentabilitatea activelor, rentabilitatea capitalului bancar, capitalizarea bancară, gradul de îndatorare*

Кризис Covid-19 серьезно затронул страны Центральной и Восточной Европы (ЦВЕ), в результате чего во время пандемии была заблокирована основная экономическая деятельность, что привело к сокращению внутреннего спроса и инвестиций. Цель исследования - проанализировать влияние пандемии на банковские системы в ЦВЕ в свете наиболее актуальных показателей банковской стабильности. Для достижения цели использовались как качественные, так и количественные методы исследования. Результаты анализа показали, что пандемический кризис не повлиял на качество банковских активов, процент неработающих кредитов в большинстве стран сохранился на достаточно низком уровне. В то же время, благодаря крупным реформам, последовавшим за международным финансовым кризисом 2008 года, банки имеют достаточно высокий уровень капитализации и разумный уровень задолженности, что отражает высокую степень устойчивости банковских систем ЦВЕ к шокам. Однако крайне низкий уровень процентных ставок привел к ухудшению показателей банковских активов в ЦВЕ. В то же время перспективы банковских систем в ЦВЕ остаются довольно неопределенными. Принимая во внимание масштабные меры по изменению графика выплат по кредитам посредством моратория на банковские ссуды, а также схемы финансовой поддержки, инициированные центральными банками и правительствами, регион ЦВЕ сталкивается с высокими издержками по рискам, которые проявляются в основном в переносе кредитного риска в будущее. В этом контексте ожидается, что в ближайшем будущем показатели проблемных кредитов вырастут. Более того, повсеместный переход к более низким процентным ставкам окажет давление на кредитную маржу.

Ключевые слова: *Кризис Covid-19, банковские системы ЦВЕ, рентабельность активов, рентабельность банковского капитала, капитализация банков, степень задолженности*

INTRODUCTION

The Covid-19 pandemic caused an unprecedented economic and health crisis. Despite the financial turmoil that took place in 2020, banks have been a significant source of resilience. Due to major reforms that followed the international financial crisis of 2008, banks were much better capitalized and more liquid this time. According to Giese and Haldane (2020), banks were actually part of the solution to the crisis, rather than part of the problem. Moreover, considerable fund injection from central banks, along with strong preshock bank capital, explain why banks were able to accommodate increased liquidity demands (Li et al., 2020). However, given the close link between the economic situation and the banks' health, the economic consequences of the Covid-19 crisis will be felt in a short time by banking systems as well. The extent and impact of this erosion on the stability of banks is yet to be known, mostly because many of the granted loans have been deferred through moratoriums or restructured for a longer period of time. In addition, unprecedented fiscal and monetary support offered by governments and central banks has helped maintain the flow of credit to businesses and population, thus alleviating the economic and financial shock. However, experts believe that banks could face a substantial increase in non-performing loans (NPL) when fiscal and monetary support programs will be abruptly withdrawn, but also due to an increased insolvency of the population and businesses (OECID, 2021). In addition to the adverse effects induced by the

Covid-19 crisis, there are a number of important challenges that affect the traditional business model of banks, i. e. persistent low interest rates, changes in the regulatory framework, but also increased competition from shadow banks and new digital market participants (Carletti et al., 2020).

However, the impact of the current crisis on banking systems will be different from that of the international financial crisis, as the financial resilience of banks has significantly improved since then, with revised capital requirements for commercial banks and new shock-absorbing buffers (BIS, 2017). Since 2015, international banking regulations have improved the quality of the banking capital, by changing the definition of equity and increasing the requirements for the minimum level of the Tier 1 and Common Equity Tier 1 capital ratios. Moreover, several novel countercyclical macroprudential tools have been introduced, i.e. the capital buffer, the countercyclical capital buffer and the buffer for systemically important institutions. In addition to these three buffers, EU Member States have also applied the systemic risk capital buffer at their discretion. Furthermore, in order to prevent the excessive accumulation of debt, which was one of the weaknesses of the pre-crisis financial system, a minimum level of leverage has been introduced (that must at least equal 3%). In addition, the new macroprudential framework has set minimum liquidity standards for credit institutions, through the liquidity coverage ratio and net stable funding indicator. Under these conditions, banks significantly increased their capital and liquidity reserves.

To overcome the challenges posed by the pandemic crisis, banks will have to increase their loan-loss provisions that will affect bank capital. Therefore, financial authorities need to consider additional measures to improve credit quality oversight and resolution and recovery regimes, in order to provide means to address the challenges of a potential deterioration in the quality of banking assets.

LITERATURE REVIEW

The Covid-19 crisis has spurred financial research related to the impact of the pandemic event on bank performance and business models, but also to different scenarios regarding the resilience of banking systems in the post-Covid-19 period. Moreover, considering the unprecedented monetary and fiscal support in stabilising the economy and the financial system in 2020, many studies have approached the impact of this support on banks (Demirguc-Kunt et al., f.a.). Found that liquidity support, borrower assistance programs and monetary easing lessened the negative impact from the pandemic crisis, but it varied across banks and countries. According to OECD scenarios (2021), extending the deadline for monetary and fiscal support measures would reduce the severity of the impact of the Covid-19 crisis on the NPL ratios, keeping them below the levels reached during the 2008 financial crisis in most countries. On the other hand, the premature withdrawal of this support would cause a substantial increase in NPL, exceeding the levels recorded during the previous crisis in a number of economies. At the same time, the same study reveals that banks could face Tier 1 equity cuts in both developed and emerging economies, despite broad monetary and fiscal support measures.(Kasinger et al., 2021) emphasizes the importance of an early and realistic assessment of credit losses in the context of the Covid-19 crisis, in order to mitigate the negative effects on European banks. According to the authors, with the cancellation of moratoriums and other support measures in the context of the crisis, European banks will face a wave of NPL. The empirical analysis of Kasinger et al. (2021), on a sample of 15 European countries, notes the existence of a sufficiently high level of aggregate bank capital to absorb the potential losses generated by NPL, even in the possibility of an adverse scenario. However, the results of the study show a substantial heterogeneity between countries, both in terms of the potential amount of NPL and the ratio between NPL to bank capital. In this context, in order to avoid a potential banking crisis, regulators need to ensure that banks realistically assess current lending volumes, through effective asset quality review, stress tests and appropriate accounting rules. Another study, which looked at the performance of US banks, suggests that the effect of the Covid-19 crisis is less obvious from the analysis of bank balance sheets, considering the impact of easing regulatory requirements on credit classification and provisions creation (Beck and Keil, 2021). The authors identified an increase in the volume of loans meant to support the US economy, driven mainly by government support programs, as well as a tightening of credit conditions.

As for banking systems in CEE, according to a report by Raiffeisen (2020), they will experience a significant deterioration in the quality of assets in 2021, generated by additional risks from retail loans and those granted to SMEs. In general, the non-performing loan ratio is expected to increase to 4-8% in Central Europe and to 7-10% in South-Eastern Europe according to this report. Moreover, the significant presence of foreign banks in CEE and their pro-cyclical credit behaviour (Niţoi et al., 2021) could exacerbate the situation in CEE.

Data sources and methods

The article aims to analyse the impact of the Covid-19 crisis on the stability of the CEE banking system.[1] First, the authors evaluate the economic environment in CEE, using three main macroeconomic indicators, i.e. GDP growth, budget balance and change in exports of goods and services. Second, the paper investigates CEE banking systems from the perspective of the most relevant indicators of banking stability, i.e. the non-performing loans ratio, return on assets, return on equity, Tier 1 equity ratio, Common Equity Tier 1 ratio, and the leverage ratio.

In order to achieve the goal, both qualitative and quantitative research methods were used. The data for performing the analysis were extracted from two databases, i.e. the IMF World Economic Outlook database, for the analysis of macroeconomic indicators, but also the European Banking Authority database, for the analysis of performance and banking stability indicators in CEE countries.

The macroeconomic environment in the context of the Covid-19 crisis

The banking systems in CEE experienced a remarkable stability in the period 2017-2019, which was characterized by high levels of capitalization and profitability, determined mainly by the favourable macroeconomic environment in the region. The quality of bank assets in this group of states has significantly improved over these three years, as a result of the decrease in the non-performing loans rate, but also as a result of increases in the rate of return and adequacy of bank capital. The growth of lending activity, fuelled by the intensification of economic and investment activities, has generated high levels of bank profits in almost every country in the region (Raiffeisen, 2020).

However, this positive trend was disrupted by the Covid-19 pandemic, which had major negative repercussions on the CEE economies, blocking important economic sectors. To avoid an economic collapse, the governments and central banks of these states have taken a number of fiscal, monetary and regulatory measures, which have mitigated the negative effects of the pandemic crisis. Despite these measures, the pandemic caused GDP fall offs in all CEE countries, declines in domestic demand and investment, rises of budget deficits and significant declines in exports.

The most severe GDP contractions in 2020 were recorded in Croatia (-9%), the Czech Republic (-5.6%), Slovenia (-5.5%), the Slovak Republic (-5.2%) and Hungary (-4.9%) (IMF, 2021). At the same time, the economies of Romania, Bulgaria and Latvia fell by an average rate of only -3.7% in 2020. The most resilient states in the face of the crisis caused by the pandemic were Estonia, Poland and Lithuania, which experienced an economic decrease of -2.9%, -2.7% and -0.8%, respectively, in 2020 compared to the previous year (Figure 1).

[1] According to the OECD classification, the group of Central and Eastern European states includes: Albania, Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania, Slovakia, Slovenia, Estonia, Latvia and Lithuania. As Albania is not a Member State of the European Union it was excluded from the research sample.

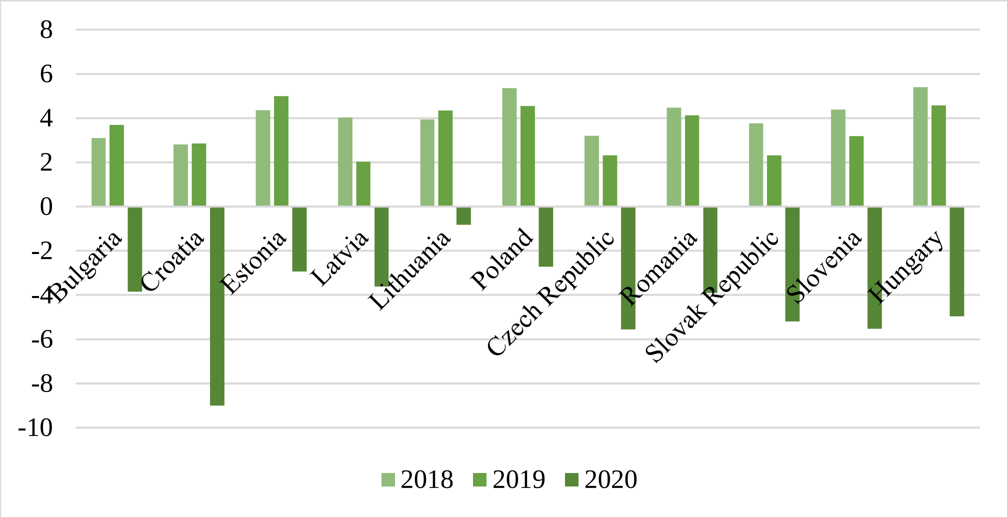

Figure 1. GDP growth rate in CEE countries, 2017-2020 (%)
Source: authors, based on IMF (2021a)

In this context, fiscal measures have become widespread in all CEE countries in 2020. These have taken the form of temporary tax exemptions for the most affected categories of people and businesses, the reduction of value added tax on certain products and services affected by pandemic, increases in unemployment benefits and other social benefits, granting subsidies to companies in the sectors affected by the pandemic, increased spending in the health and public administration sector, etc. (IMF, 2021). As a result, budget deficits have risen significantly in all CEE countries, in most cases exceeding the levels reached during the global financial crisis. The most severe fiscal imbalances were registered in Romania, Hungary, Slovenia, Poland and Lithuania, all exceeding the -8% of GDP in 2020 (Figure 2). Croatia and Slovakia reached -7.8% and -7.3%, respectively, while the rest of the sample countries experienced fiscal deficits below -6%. Bulgaria performed best in this regard, with a budget deficit of only -3%.

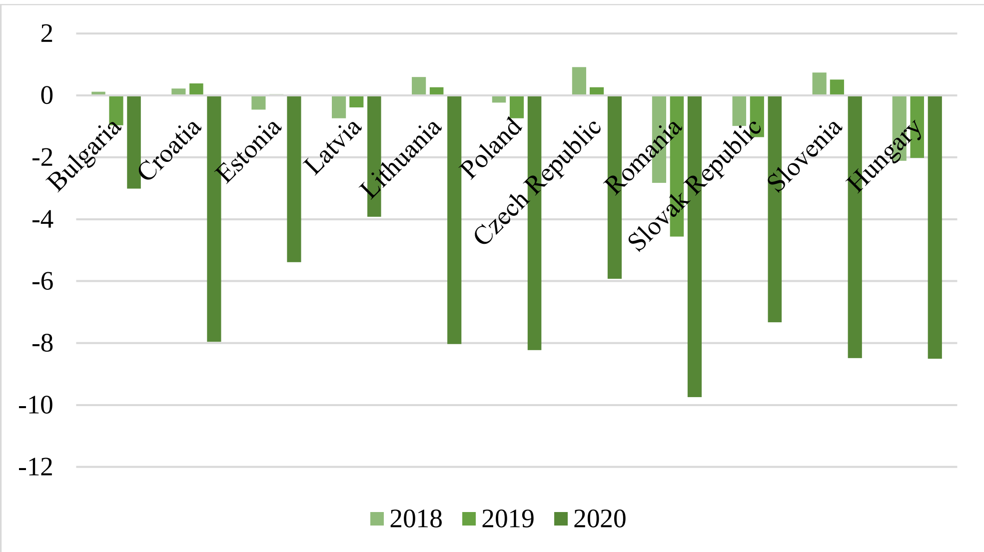

Figure 2. Budget balance in CEE countries, 2017-2020 (% of GDP)
Source: authors, based on IMF (2021a)

Moreover, in the context of the disruption of global value chains and the decline in global external demand in 2020, exports of goods and services have plummeted in CEE countries (Figure 3).

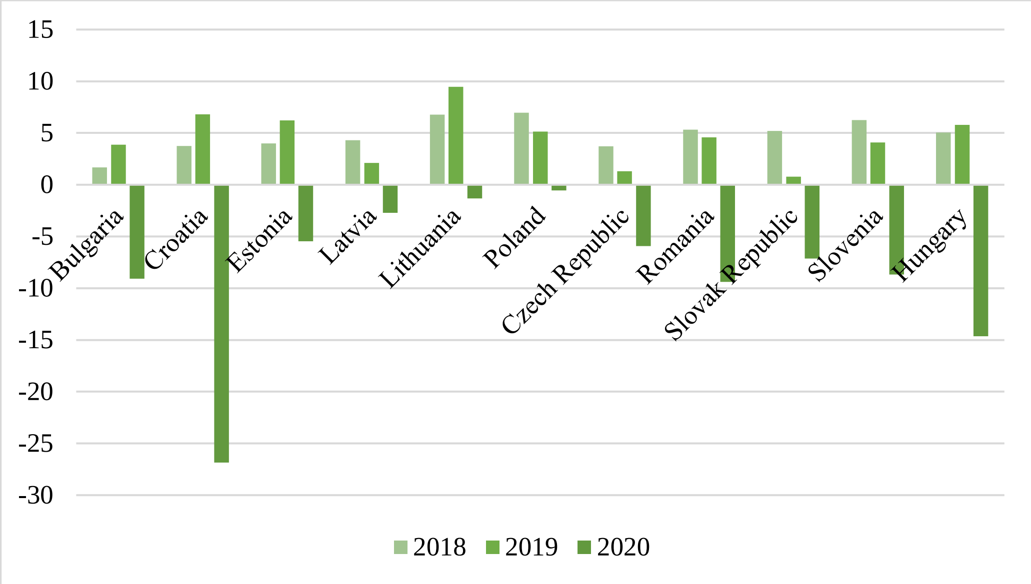

Figure 3. Change in exports of goods and services of CEE countries, during 2017-2020 (in %)
Source: authors, based on IMF (2021a)

All the states in the sample, without exception, experienced a major decrease in the volume of goods and services exported. The most affected by the pandemic were Croatia and Hungary, which recorded decreases of -26.8% and -14.6%, respectively, in 2020 compared to the previous year. Romania, Bulgaria, Slovenia and Slovakia experienced contractions between -9% and -7%, while Latvia, Lithuania and Poland suffered less compared to other states, reaching rates below -3% compared to 2019.

CEE banking systems during the pandemic event

Following the severe deterioration of the macroeconomic environment, CEE banks have faced a declining demand for loans for the first time in five years, especially in investment lending (EIB, 2020). In the light of this development, the CEE central banks have initiated monetary policy rate cuts, significant liquidity injections, but also regulatory measures, to mitigate the economic and financial shock. For example, the Czech National Bank reduced the base rate from 2.25% in February 2020 to only 0.25% in December 2020, Poland facilitated lending by lowering the base rate from 1,5% in February 2020 to 0.1% at the end of the year, while Romania experienced a decrease in the monetary policy rate from 2.5% to 1.5% in the same period. Moreover, central banks injected unprecedented volumes of liquidity through repo operations and purchased government bonds on the secondary market, thus expanding their assets several times. The largest increase in assets in the pandemic year was registered by the National Bank of Hungary, with 64% compared to the previous year, followed by the National Bank of Poland, with 40%, and the National Bank of Romania, with 20% (Clichici et al., 2020). In addition, central banks have implemented new instruments of unlimited lending to banks, eased minimum reserves requirements, relaxed the prudential requirements for mortgages, introduced the moratorium on loans in pandemic conditions, etc.

In addition, to reduce the growing exposure to credit risk caused by the increasing default of debtors, and to avoid rising non-performing loan ratios, CEE banking systems have tightened lending standards in 2020 for both companies and households (European Investment Bank, 2020). These actions have contributed to maintaining a rather low level of non-performing loan ratio, similar to that of 2019 in most countries. The non-performing loans ratio increased moderately only in the case of the Czech Republic, from 1.3% in 2019 to 1.5% in 2020, and in the case of Poland, from 4.8% in 2019 to 5.1% in 2020. Generally, we notice an improvement tendency of this indicator in most CEE banking systems, starting with December 2018 (Figure 4).

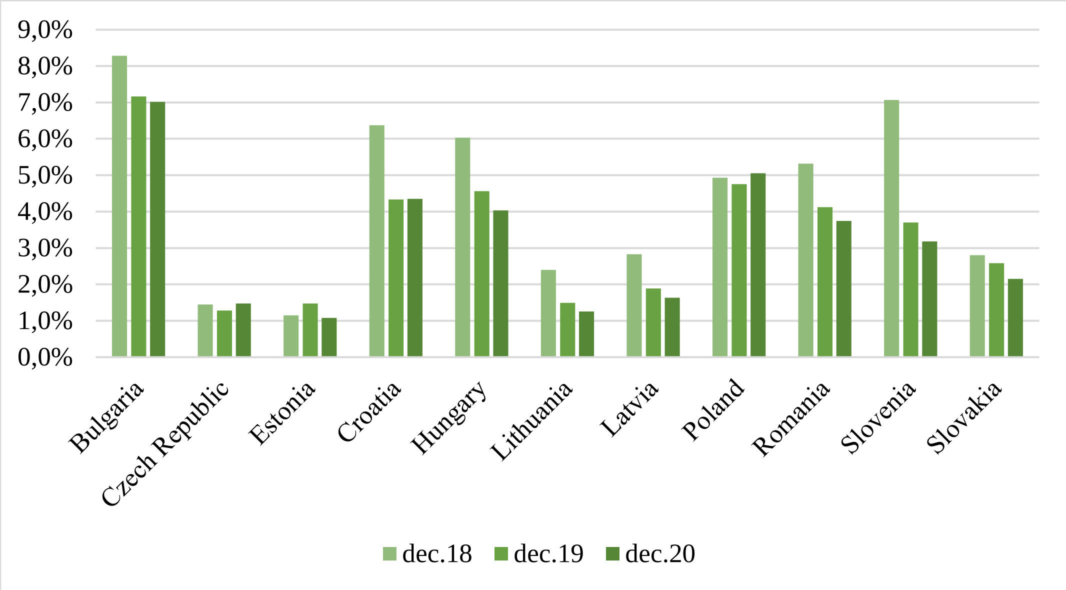

Figure 4. Non-performing loans ratio in CEE countries, 2018-2020 (%)

Source: authors, based on EBA (2021)

Despite the maintenance of credit risk at a relatively similar level to that of the pre-pandemic period, and the increase in domestic credit to the private sector, most banking systems in CEE have experienced a deterioration in asset performance (Figure 5). This evolution was determined by the extremely low level of interest rates in the pandemic, which further decreased bank revenues collected from the lending activity.

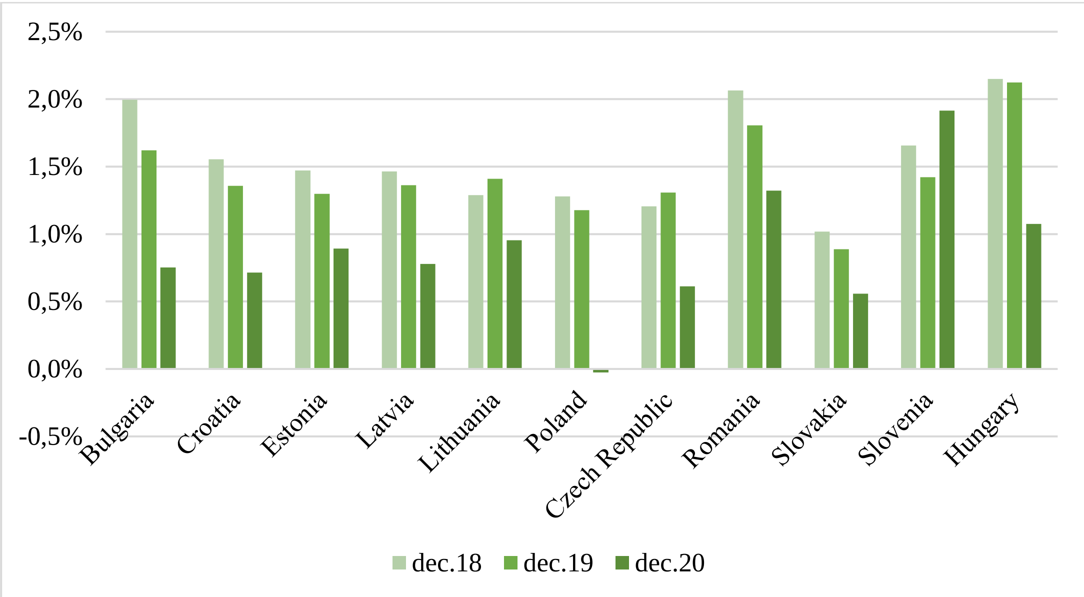

Figure 5. Return on assets of the banking systems in CEE countries, 2018-2020 (%)

Source: authors, based on EBA (2021)

Also, the return on equity decreased in all states during the pandemic, with the exception of the Slovenian banking system, which saw an increase in this indicator from 10.6% in 2019 to 16.6% in 2020 (Figure 6).

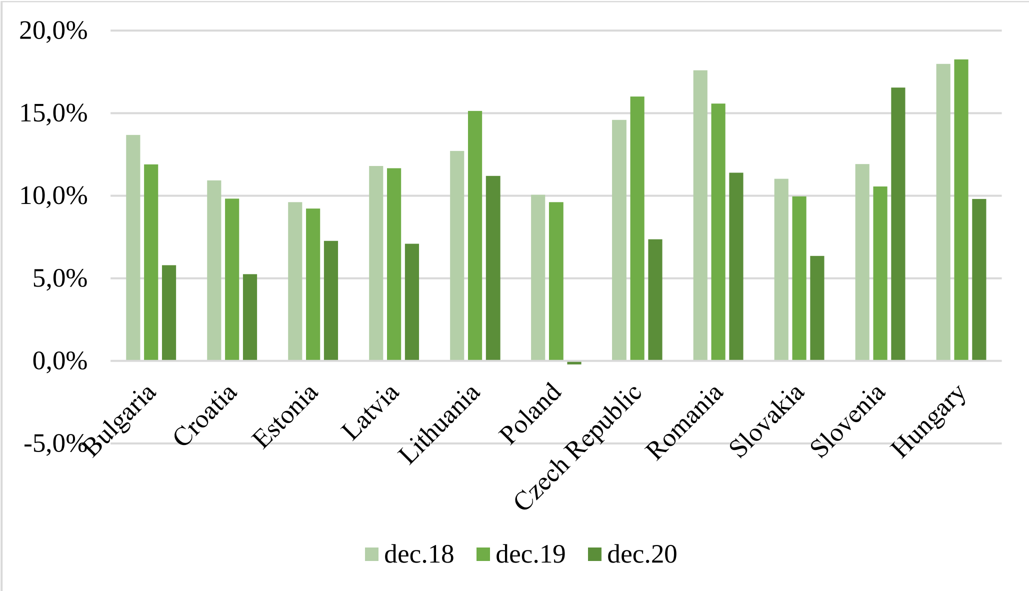

Figure 6. Return on equity of the banking systems in CEE countries, 2018-2020 (%)
Source: authors, based on EBA (2021)

We will further analyse the Tier 1 equity ratio, the Common Equity Tier (CET1) ratio and the leverage ratio in the EU Member States. The Tier 1 equity ratio[1] has increased in most CEE banking systems. This indicator is above the minimum level set by the new Basel III regulatory framework (6%), reflecting a high level of shock resilience of CEE banking systems. Moreover, most states have values above 20%, except for Hungary, Poland, Slovenia and Slovakia (Figure 7).

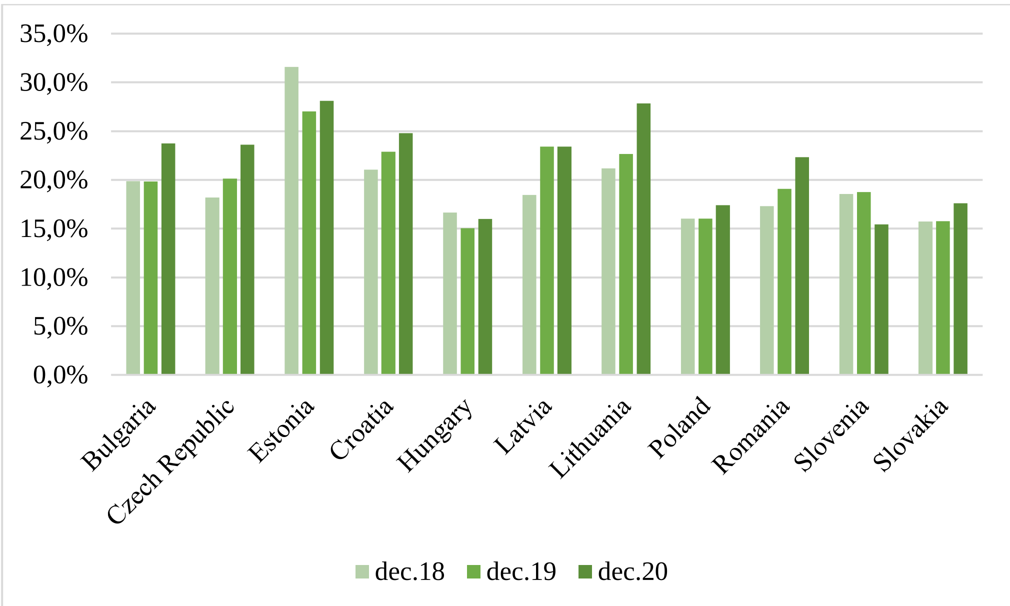

Figure 7. Tier 1 equity ratio of the banking systems in CEE countries, 2018-2020 (%)
Source: authors, based on EBA (2021)

[1] The Tier 1 ratio is the share of the institution's basic Tier 1 own funds and additional Tier 1 capital in risk-weighted assets (Source: http://eur-lex.europa.eu/ legal-content / RO / TXT / PDF /? uri = CELEX: 32013R0575 & from = en).

Apart from Poland, the CET1[1] ratio is above the minimum requirements set by the Basel III framework (at least 4.5% since 2014). The most capitalized banking systems are found in Slovakia (16.6%), Romania (11.4%) and Lithuania (11.2%) (Figure 8).

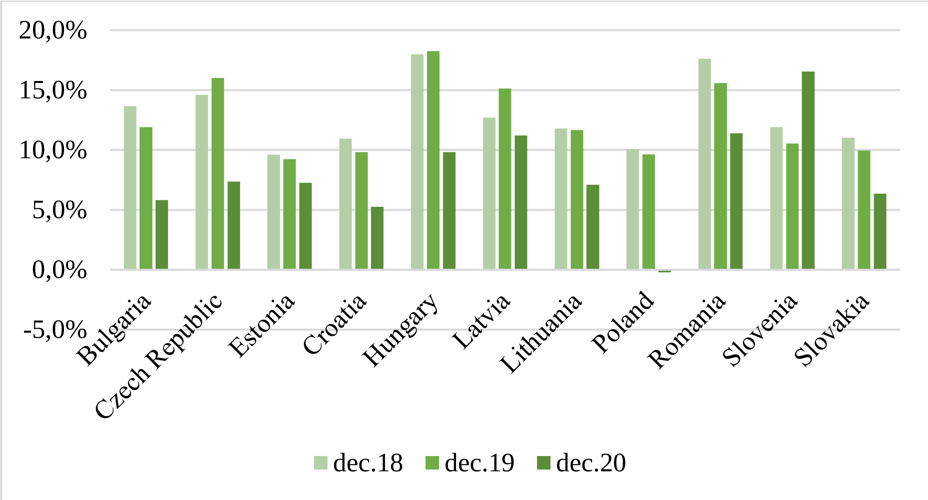

Figure 8. Common Equity Tier 1 ratio in CEE countries, 2018-2020 (%)

Source: authors, based on EBA (2021)

Currently, leverage ratio of banking systems in the CEE countries, measured by the banks' equity to assets ratio, varies between 12.5% in Croatia and 6.8% in the Czech Republic. In all CEE states the minimum leverage ratio requirement of 3% is met (Figure 9).

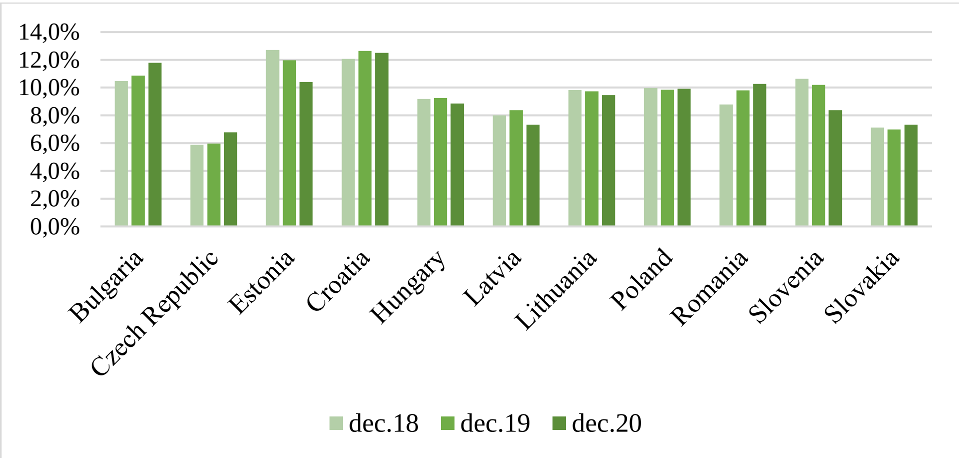

Figure 9. Leverage ratio of the banking systems in CEE countries, 2018-2020 (%)

Source: authors, based on EBA (2021)

The equity to assets ratio has increased mainly due to the decrease of total assets and the consolidation of the capital base. These data suggest the existence of a sufficiently high level of aggregate bank capital to absorb potential losses from non-performing loans in CEE countries.

CONCLUSIONS

CEE banking systems have been clearly affected by the pandemic event in 2020. Despite maintaining credit risk at an approximately similar level to that of the pre-pandemic period, CEE banking systems experienced a deterioration in profitability indicators. This evolution was determined by the extremely low level of interest rates in the pandemic, which further decreased bank

[1] The Common Equity Tier 1 ratio (CET1) is the share of CET1 equity in risk-weighted assets (Source: http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013R0575&from=en).

revenues collected from the lending activity. At the same time, banks have a sufficiently high level of capitalization and a reasonable level of indebtedness, reflecting a high degree of CEE banking system shock resilience.

However, considering the large-scale measures to reschedule credit rates, through moratoriums on bank loans, but also the financial support schemes initiated by central banks and governments, the CEE region is facing high risk costs, which manifest mainly through the migration over time of credit risk exposure. On the one hand, the support policies offered by states have played a crucial role in stabilizing the quality of banks' assets, on the other hand, a premature withdrawal of monetary and fiscal support could cause a sharp rise in default rates in the coming period. Based on these arguments, non-performing loan ratios are expected to increase in the coming months. Moreover, the post-Covid environment has revealed a widespread shift to lower interest rates, which will exert pressure on lending margins. Given the pressure on banks' revenues, smaller banking institutions will face challenges related to low levels of profitability and capital, which requires for the initiation of consolidation actions within the CEE banking sector in the coming years.

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