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THE EUROPEAN BANKS AFTER THE SOVEREIGN DEBT CRISIS: SUSTAINABILITY, REGULATIONS AND CHALLENGES

The peculiarities of the impact of the global financial crisis on the state and behaviour of European banks in the post-crisis period are revealed. The changes in the structure of the bank balances and how the priorities in their activity change under the influence of the difficult economic environment after the crisis are analysed. In the context of changes in globalisation, the European banks face a number of challenges in relation to the need to introduce financial innovations and the competition between the major international banks and the FinTech companies.

JEL: F15; F36; G2; G28

Keywords: EU sovereign debt crisis; restructuring of European banks; bank balance sheets indicators; prospects and challenges for the European banks

In recent decades, the European banks have diversified and expanded their operations, facilitated by the favourable macroeconomic environment in the EU and around the world until the onset of the global financial crisis (GFC). In Europe, the main financial structure of the Economic and Monetary Union (Eurozone) are the large European universal banks, which dominate and are interconnected through their correspondence relations, offering a wide range of banking, insurance and investment services. In order to maximize the benefits and increase the profitability, they carry out mergers with banks in other EU Member States, and/or acquire equity, while also actively participating in structured finance securities transactions in the capital markets.

However, the global financial crisis (2007-2008) and the European sovereign debt crisis show that European banks have underestimated the need to comply with a number of important financial indicators such as the ratio of own capital to attracted funds, the ratio between the bank deposit base and the granted credits, the clearing of credit portfolios of dubious quality, etc. It also turns out that the central banks of the EU Member States have failed to exercise sufficient control over the monetary institutions, further worsening the banks' liquidity and payment status during the crisis.

That is why, in the post-crisis period, European banks are beginning to restructure their activities and look for more efficient business models, they are rethinking their overseas expansion projects and limiting any dubious credit operations, and so on. In this regard, the European Central Bank (ECB) and the European institutions are introducing a number of measures aimed at strengthening the banks' liquidity base and improving the supervision and the regulatory framework in this area.

The impact of the global financial crisis and the European sovereign debt crisis on European banks

Up until the start of the GFC, the European banks were launching extensive operations in order to maximize their profits and to withstand to the strong competition

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from non-EU banks. However, in many cases, this activity was accompanied by risky operations that deteriorate the quality of the financial instruments of the banks' balance sheets. The banking standards for granting credits to households and companies proved to be inconsistent and non-transparent, often resorting to short-term capital market financing. Banking supervision by the Central Bank did not always take into account the increased risk factor for some monetary institutions, especially when it came to short-term operating transactions that generated fast profits. The Central Bank's policy was primarily focused on the long-term sustainability of the return on assets.

The global financial crisis began with the decline in mortgage prices in the US housing sector, which led to a sharp depreciation in the value of the structured debt securities linked to mortgage loans. With the bankruptcy of the Lehman Brothers Investment Bank (15.09.2008), through the banks' correspondent relations, the financial crisis began spreading to other developed economies and gradually became international. Banks with high levels of exposure to structured securities of this type were particularly vulnerable. It turned out that the management in a number of banks had not been strictly adhering to the requirement for sufficient own capital and the capital buffers.[1]

Between 2003 and 2007, the average annual growth of the banking systems of the Committee on the Global Financial System (CGFS) at the Bank for International Settlements (BIS) in Basel (Switzerland) was about 12% as compared to 4% since 2008 (*see Bank for International Settlements, 2018*). The crisis put an end to the period of rapid growth of the banking sector. The banks in the United States, the United Kingdom and continental Europe began experiencing acute shortages of liquidity and were experiencing difficulties in accessing funding sources. The banking supervision and the prudential policy of the Central Bank were not able to effectively influence the expansionary banking activity. The drop in liquidity was the result of the decapitalisation of banks, the deterioration of the fixed capital/ risk-weighted assets ratio, and the decline in the prices of bank assets on the capital market. Therefore, during the initial period, in order to "resolve" the problems of the banks in the US and Europe, the main task was to stop the leakage of liquid assets and their recapitalisation. The banks on the emerging markets remained somewhat isolated from this turbulent turmoil because their operations were concentrated in the domestic banking market. Ever since the 1995-1996 Asian crisis, they had been meeting higher requirements and regulations, which severely limited banking policies aimed at securing financing for local companies.

It has been proven that one of the major reasons for the vulnerability of banking and financial systems is the multiplication of the new financial instruments – the

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[1] The capital buffer is the availability of mandatory capital that financial institutions must hold in addition to other minimum capital requirements. The regulations concerning the introduction of capital buffers are intended to reduce the pro-cyclical nature of crediting by encouraging the introduction of counter-cyclical buffers, as outlined under the regulations of Basel III by the Banking Supervision Committee at the Bank for International Settlements.

derivatives and the securitisation of the debt instruments. The deepening of the GFC is caused largely by the so-called *shadow banking system* which is developing under the influence of two main factors – financial liberalisation and the development of financial innovations. The investment banks, the speculative funds and other financial institutions trading with securities are the main participants in this system.[2]

The crisis has had an extremely negative impact on the economic growth of the European countries and has disrupted their banking and financial stability. The GFC overturns the notion of the international economic and financial community that banks are too big to fail and that the deregulation of the banking system is the surest way to overcome external and internal shocks and to restore the stability of the banking system. The changing economic environment raises a number of serious challenges for European banks – they have to cope with the lack of liquidity, the accumulation of non-performing (bad) loans, the decapitalisation, the lack of access to the interbank market and the capital market. The rapid overcoming of the turmoil in the banking sector is of particular importance for the universal European banks, which are the most vulnerable during a crisis, and their possible bankruptcies threaten the functioning of the economy.

Attempts to stabilise the European banks after the GFC

During the initial phase of the GFC, similar monetary policies were implemented in the USA and Europe in order to deal with the aggravated situation, with the official monetary authorities financing the banks that were experiencing liquidity shortages, and thus they were restricting the spread of the crisis. The US Federal Reserve System, known as Fed, and the ECB were trying to limit the "contagion effect" in the international monetary system by:

- Providing secured lending to commercial banks in order to restore their liquidity, as well as through the implementation of other arrangements;
- Supporting short-term wholesale money markets in order to finance commercial banks (CBs);
- Strengthening the guarantees on retail deposits and other liabilities;
- Purchasing relatively low-quality securities which are not in demand on the capital markets;
- Recapitalising the banks and restoring their liquidity in order to alleviate the immediate pressure from the reduction of their ability to obtain liquidity due to the highly selective interbank market or the lack of rapidly convertible securities. In some cases, official government bodies buy minority shares in banks that are experiencing liquidity shortages, while other banks declare bankruptcy and become nationalised.

During the second "restrictive" phase of the spread of the crisis, the central banks provided liquidity to the commercial banks and applied conventional and unconventional monetary policy mechanisms in order to ease the crisis pressure on

[2] In many cases, banks set up similar financial houses in order to expand their sources of profit through their active participation in the capital markets.

the capital markets and curb the decline in bank assets prices. During this period, characterised not only by the banks' liquidity problems, but also by the downturn in the developed economies, the official monetary measures taken by the US and the EU differed. Banks in the United States issued new shares in order to stabilise vulnerable bank balances, and the banking supervision responded more effectively than the national supervisory mechanisms within the EU Member States. In the US, the resource mobilisation and the recapitalisation of the banks was faster than in Europe, where there was no coherence between the financial and monetary policy measures aimed at stabilising the banking sector.

Despite the efforts of the official monetary authorities, the economic crisis was deepening – followed by corporate bankruptcies, rising unemployment, lack of sufficient credits to finance the economy and a lack of fresh investment. The governments of the advanced economies were faced with a double dilemma – on the one hand, the need to stabilise the banking sector and curb the economic downturn and, on the other hand, the need to resume the economic activity.[3]

In 2009-2010, European governments implemented financial measures totalling EUR 200 billion (1.5% of the EU's GDP) in an attempt to stimulate the economy. In parallel, the central banks used conventional monetary policies such as open market policy and interest rate reductions. By the end of 2008, in order to infuse additional liquidity in the Eurozone countries, the ECB lowered the bank refinancing rate from 4.25% to 3.75%. The threshold for insured deposit for individuals of up to EUR 50,000 was raised. The Economic and Financial Affairs Council (ECOFIN) allocated an additional EUR 50 billion to the Eurozone countries (2009) to help them finance their balance of payments and overcome their economic imbalances. These measures were aimed at reducing non-performing loans and high-risk assets against the banks' own capital (see ECOFIN).

As the crisis extended to other regions of the world, the coordination of the measures for the prevention of its negative effects (the restrictive phase) was improving internationally compared to those during previous banking and currency crises, such as the 1994-1996 Asian crisis (see Laeven and Valencia, 2013). The EU Committee on Banking Supervision and the European Banking Authority (EBA) conducted two rounds of stress tests, the main purpose of which was to restore the confidence towards the banks which had not restructured their business model of management or the organisation of their banking activities. In 2009, the unsatisfactory results showed that the stress tests were not conducted properly, which in turn prevented the identification of the risks of non-fulfilment of the banking obligations of the state institutions and the identification of the sovereign risk.

In May 2010, the European Commission (EC) established the European Financial Stability Fund and the European Financial Stability Facility to assist countries on the verge of a financial failure, where EUR 750 billion was collected. In 2012, these

[3] Bankruptcies in France reached 20% in 2008-2009, while in the United States 8 million jobs were lost between early 2008 and 2010, with unemployment rising from 4.8% to 9.5% of the active population.

two instruments were replaced by the European Stabilisation Mechanism (ESM), whose capital amounts to around EUR 500 billion and is raised through contributions by the Eurozone countries. Germany, France and Italy are the main contributors. In the same year, the ECB launched a program for practically unlimited sovereign debt repurchases in order to reduce prices and to decrease the costs for the countries during the servicing of sovereign debts.

The financing of the European banking sector and the economic activity led to an increase in the government budget deficit. The contraction of the EU countries' GDP due to the economic crisis reduced the tax revenues and fees, which also exacerbated this negative trend. The accumulated private debt was transferred to the public sector on the principle of docked vessels and, in accordance with the effect of the financial "twin crises", to the economy. The banks and the state fell into a "vicious circle", due to the higher indebtedness of the Eurozone countries and the increased costs for the European banks during the crisis. The banks accumulated government bonds in their portfolios, whose value fell in times of crisis. Thus, the losses increased because the cost of bank financing depended on the prices of the government bonds. Subsequently, the "thinner" liquidity in the interbank market was further exacerbated by the Eurozone debt and the economic crisis. These combined negative processes further complicated the "clearing" of the bank balance sheets of non-performing loans and their stabilisation.

The private debt was transferred to the state budget and the government debt was increasing in a number of countries (Ireland, Spain, and Portugal).[4] The decrease in purchasing power due to the austerity policy measures introduced in order to diminish the public spending further increased the private debts, which in turn exacerbated the budget deficits of Spain, Ireland and the United Kingdom. The high government debt in Greece (175% of the GDP in 2013, compared to 107% in 2007), Spain (92% of the GDP, compared to the three times lower debt in 2007), Portugal (128% of the GDP, compared to the two times lower debt in 2007) and Italy (128% of the GDP, compared to 100% in 2007) threatened the functioning of the EU's Economic and Monetary Union (EMU).

The European banking sector received substantial financial assistance. An EU and IMF rescue package of EUR 85 billion was provided to Ireland in November 2010, of which EUR 35 billion was for the recapitalisation of the Irish banks. In April 2011, Portugal lost access to direct financing from the international capital market and received financial assistance from the EU and the IMF. Greece and Portugal's respective government debt securities on the capital markets were declining, which led to a downgrade of these countries.

In mid-2011, the ECB purchased government debt securities, mainly Italian and Spanish, through open market operations, with the aim of halting the fall in debt prices. A second rescue plan for Greece (July 2011) worth EUR 109 billion was also granted, as well as EUR 49 billion raised by private creditors. In October

[4] In the Eurozone, public debt increased from 66% of the GDP in 2007 to 88% of the GDP in 2011.

2011, private creditors erased about 50% of the Greek debt accumulated in private banks, insurance companies and pension funds in exchange for the obligation to recapitalise Greek banks. In November 2012, the Greek debt was restructured on the basis of lower interest rates charged on Greek debt securities.

In order to overcome of the debt crisis and the recession, by 2014, the countries with higher debt to GDP (excluding Greece and Cyprus) began implementing economic and financial recovery programs recommended by the EU and the IMF. As of December 2013, Ireland was the first to exit the special supervision, followed by Spain (January 2014) and Portugal (May 2014). Ireland was the only country to recover its economy and in 2014 it achieved an annual economic growth of 5%. Portugal registered a 1.5% growth and the Spanish economy reported positive economic growth after 2013. Although Ireland and Portugal have reduced their domestic debt to 120% of the GDP during their respective recovery programs, their unemployment rates remain quite high. In Greece it amounts to 23% of the active population and in Spain it accounts for about 23%, while the youth unemployment rate is close to 50%. In March 2012, 25 EU countries (with the exception of the UK and the Czech Republic) signed the Fiscal Stability Treaty,[5] pledging to observe budgetary discipline within the EU.[6]

In this respect, the Liikanen Report is one of the major milestones that mark a new stage in the reform of the European banking system (see The Liikanen Group, 2012). On this basis, on 3 July 2013, the European Parliament drew up a report on "Reforming the structure of the EU banking sector", which set out measures for reforming the large universal European banks, which are 'too big to fail". In January 2014, the proposals were published in the form of recommendations entitled "Regulation on structural measures to improve the resilience of EU credit institutions".

The sovereign debt crisis caused uncertainty and turmoil in the Eurozone, which in turn had a strong impact on the EU's financial and banking system. Clearly, the Eurozone is subject to systemic risk, and the crisis itself was defined as "systemic". Stock indexes collapsed twice – in the spring of 2010 and in the summer of 2011. The debt crisis and its relationship with the banks have led to serious turmoil in the European monetary institutions. According to the Bank for International Settlements (BIS), at the end of the first quarter of 2011, the French banks held USD 1.543 billion in Eurozone countries debt, of which USD 317 billion was public debt. They held USD 106 billion in Italian sovereign debt securities, which is 10 times more than the accumulated Greek debt bonds. If the Italian government debt was added to the Italian private sector debt, the French banks' total exposures to Italian debt would be USD

[5] Also known as the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union (TSCG)

[6] A so-called "golden rule" is introduced to observe the budgetary discipline and to balance the budgetary accounts. When the budget deficit to GDP exceeds 3% of the GDP, severe penalties will automatically come into force.

416 billion. The French banks held Belgian government bonds worth a total of USD 230 billion, with the Belgian government debt in relation to the country's GDP being 94%. The German banks were also at significant risk due to the accumulation of government bonds in other Eurozone countries – they held USD 177.5 billion in Spanish government bonds, while the UK banks held USD141 billion in Irish domestic debts (see Banque des réglements internationaux, 2011).

The large banks bought local government securities from the country in which their headquarters are located. In 2013, Spanish banks held 42% of Spanish government bonds, compared to 25% at the beginning of 2008. The accumulation of government bonds by the Italian banks amounted to 3% in early 2008 and reached 17% in mid-2013. The French banks were also increasing the share of government bonds – from 7% at the end of 2007 to 13% in October 2013.

In order to maintain the medium-term price level in the Eurozone, in 2014-2015, the ECB took measures against the sovereign debt crisis by increasing the government securities purchases, with its monetary policy taking on different forms. The interest rates in the Eurozone reached their lowest levels – the ECB lowered the recapitalisation rate of the European banks to 1% and gradually dropped it to levels bordering 0%. This meant that conventional monetary measures had exhausted their impact on the economy and the financial system. The ECB was introducing *unconventional monetary measures* in order to support the abovementioned policies. The first one was the so-called *quantitative easing,* whereby the Central Bank buys securities (government securities and corporate bonds) to provide liquidity in the money market, thereby reducing the long-term interest rates. The debt securities issued by CBs were purchased in an attempt to stabilise the balance-sheets and to enhance their credit potential in the conditions of a prolonged period of very low economic growth and a risk of deflation. However, the ECB recognised that the results of these actions were not visible in 2014-2015. Therefore, Targeted Long-Term Refinancing Operations (TLTROs) were introduced in order to support the CBs, through which they gained access to favourable loans from the Central Bank. These operations provided banks with liquidity, so long as they delivered credits to the real sector.

If the CB adheres to the ECB's policy, it may use a favourable interest rate, charged on the repayment of the central bank loan (*facilitating interest rate*) – otherwise it must pay higher interest rates. The facilitating interest rate encourages the credit to the real sector, aiming to eliminate and curb speculative transactions that generate higher profits for banks. The negative interest rates are also aimed at reducing the CBs' interest rates on deposits in the Central Bank and releasing cash money to push up the banks' credits.

The decrease in the interest rates on the refinancing of the CBs is directly influenced by the Fed (USA) monetary policy, which is why the ECB is taking measures to strengthen the future benchmarks of its monetary policy (forward guidance). However, the introduction of the unconventional monetary measures raises doubts about the benefits of pouring liquidity into the economies of the Eurozone countries, due to the uncertain economic environment and the weak demand for credits in the real sector. In this sense, an important element of the banking system's recovery is the clearing of the commercial banks' balance-sheets by consolidating the capital of the banks with more than EUR 200 billion (Draghi, 2015).

Targeted credit financing has a positive impact on the banks' credit policies, as the competition for bank credit between the borrowers increases. The previously broad margins between interest rates on credits and deposits are becoming narrower, leading to a reduction in the banks' interest rates credits, which in turn increases their demand among first-class clients. The changes in credit policy are most visible in those banks which use targeted long-term refinancing operations, regardless of whether they are located in countries with low or high government debt, which approximates the level of interest rates on bank credits in the Eurozone countries. The debt crisis management measures hinder the deepening of the crisis to some extent, but the restrictive economic and budgetary policies applied in the highly indebted countries limit the fast recovery.

Towards the end of 2019, the ECB continued to apply a monetary policy characterised by a negative interest rate on CB deposits with the Central Bank (-0.50% in September 2019). The interest rates on the basic refinancing operations and on the facilitation of the marginal loans remained at 0.00% and 0.25%, respectively. The main objective of the negative interest rates is to keep the annual inflation in the Eurozone below 2%. The Asset Purchasing Program (APP) is also aimed at balancing the ECB interest rates. As of 1.11.2019, the purchase of securities worth EUR 20 billion per month continues. The reinvestments (which represent reimbursements of securities at maturity, repurchased under the APP) will continue in order to maintain favourable conditions for securing liquidity in the interbank market and for the monetary support of the economy. In this respect, targeted long-term refinancing operations (TLTRO III), which are carried out every three months, contribute to the granting of favourable bank credits, as well as to the achievement of a predictability of the monetary policy.

The various aspects of the impact of financial crises on the real economy are the subject of a number of theoretical economic researches, pointing out that the speculative growth of the "financial bubble" is followed by the sudden collapse of the financial indicators, which negatively affects the economic cycle and growth. Arguments have been made that the economic recovery is difficult to reach because banks are wary of lending to the real economy and the private investment is stagnant (see Abiad et al., 2009; Reinhart et al., 2016; Chiappori, Yanelle, 2015). The post-crisis economic and financial recovery in Europe is characterised by a prolonged period of weak economic growth, low inflation and interest rates that are close to zero, or even negative. The long-term stagnation in fixed capital investment and the insufficient lending to companies and households by the CBs is also due to the European banks' attempts to get rid of non-performing loans and long term liabilities.

Post-crisis restructuring of the European banks

The European sovereign debt crisis is complicating the post-crisis recovery of the European economies, and especially those with high government debt, and as a result the economic convergence between the EU Member States is slowing down. The fact that France and Italy were not able to cope with the budget deficits, even in 2015, is indicative. After the crisis, the total assets of the banking sector in the Eurozone contracted significantly, as in 2008-2016 they decreased in absolute terms by 15% to the GDP of these countries. The indebtedness of banks is declining, including in the countries where the leverage had been higher. While the indebted countries seek to restore the CBs' liquidity and to attain economic sustainability, Germany's macroeconomic situation remains stable.

Following the GFC, the European banking industry has undergone a restructuring in two main directions:

The first structural change concerns the regulations of the European banking sector – not only are they increasing, but also mechanisms are being introduced to oversee their activities. The requirements regarding the capital base of banks and the ratio between the own and the borrowed capital are increasing, transactions of securities which lead to debt increases are restricted, and strict conditions for the level of liquidity of banks are set. The aim is to minimise the risks for the systemically important European monetary financial institutions, in order to eliminate the likelihood of insolvency (default) of the monetary institutions and their financing by the state. Targeted measures are also being implemented in order to strengthen the banks' resilience to external crisis shocks. When a large universal bank is likely to go bankrupt, the banking and financial systems must be prepared to prevent it. These measures oblige the banks to comply with the regulations and to exempt countries with high public debt from their non-performing loans and debt securities. A new crisis management framework is currently being adopted.

A European Financial Stability Fund (EFSF) was set up in connection to the change in the institutional structure of the EU, which provided potential capital assistance by selling bonds and financing the Member States, and not the banks directly. The EFSF was subsequently replaced by the European Stability Mechanism (ESM), whose immediate task is to finance the European banks, provided that they implement a program for the stabilization of their finances. With the introduction of unified supervisory mechanisms and unified solutions, the European Banking Union (EBU)[7] was set up; however, its third pillar, the European Deposit Guarantee Scheme, has not yet entered into force and there has been little progress in relation to the other initiatives. Nevertheless, the structural restructuring of the supranational banking and financial bodies of the EMU is underway and there is an aspiration for a supranational regulation of the European financial integration.

[7] The construction of the EBU is based on 3 pillars, which are gradually introduced step by step when the goals set in the previous period are achieved. The first pillar (effective from 01.03.2014) is the Unified Banking Supervision. The second pillar achieves common crisis management. The third pillar provides for the entry into force of the European Deposit Guarantee Scheme. An end is put to the practice of financing major European banks through public funds, which leads to an increase in the debt of the indebted countries, to a downgrading of the concerned country, to the implementation of restrictive economic policies and ultimately to a recession.

Following the GFC and the sovereign debt crisis in the Eurozone, the European banks underwent a number of structural changes, strictly complying with the requirements of the European Commission under Basel III. The European financial institutions apply structural economic and financial approaches for reducing the non-financial sector' debts to banks and for their recapitalization. However, due to the differences in the banking and financial basis, the same legal procedure is not followed when the different banks declare bankruptcy. In the Eurozone Member States from continental Europe, the indirect financing of companies prevails, i.e. they depend more on obtaining a bank loan, whereas in countries with developed capital markets, which follow the Anglo-Saxon banking model, the financing of companies is directly linked to the capital market.

In this regard, the regulators seek to obtain the most accurate information on the state of the bank capital and the bank balance sheets by tracking the recapitalisation of large monetary institutions by the central banks. The annual monitoring of the credit activity of the banking system shows the restoration of the European banks' balance sheets under the supervision of the quality of the assets by the EC under the Single Financial Mechanism (SFM).

The *second dimension* of the structural change concerns reaching an agreement between the universal banks and European financial authorities in order to clear the banks' securities portfolios of dubious quality, to organise and manage their operations without taking particular risks, to deploy innovative technologies and to evaluate the indirect financing of banks. These requirements reflect the tightening of the regulations related to the functioning of the European banking system by the official government bodies. The aim of the European financial institutions is to create supranational regulatory authorities for the banking system and to establish full financial supervision of the banks in the EU Member States and especially in the Eurozone.

However, the results of the specific steps aimed at deepening the European banking and financial integration are controversial, because the developed EU economies, where the headquarters of major European banks are located, are likely to protect, albeit indirectly, the interests of these banks. Although the large European banking groups are obligated to comply with the banking regulations, if they are excessive and directly affect their operational objectives, they are very likely to focus on the transfer of assets through offshore financial operations in offshore centres and expand their shadow banking operations, which are not subject to supervision and regulation by the European financial authorities. There exists the well-known practice in which, in order to avoid excessive regulation, the banks assume higher risks, which would offset their additional costs caused by the regulatory requirements.[8]

The stress tests were initially introduced as a crisis management tool in 2011. They are gradually becoming a regular and flexible tool for the competent financial

[8] After the UK leaves the EU, a new stage of restructuring of the European banks is soon to follow. The relatively lower profits of the European banks as compared to the US banks (one of the main competitors in the international banking market) will force the European monetary institutions to seek ways of offsetting the lower profits by pursuing a more aggressive banking policy that would clash with the ECB provisions.

authorities in Europe to determine the banks' resilience to crisis shocks and the "residual areas of uncertainty", which also require the implementation of certain measures.[9] The extended stress tests have evolved over the years, following the development of the financial markets, the reforms in the financial and banking sector and the change in the architecture of EU financial supervision. In anticipation of the reforms of the Basel Committee on Banking Supervision, the European methodology is conservative in determining the capital, which is an important indicator of the reliability of the relevant research. In 2014, the stress test tools were not only fundamental to the introduction of the Single Supervisory Mechanism, but they were also a component of the evaluation that began before its entry into force (i.e. the transfer of the supervision from the national level to the ECB). The goal is to quantify the capital shortage and the corresponding recapitalisation of the banking system.

In 2016, the EU banking sector is recovering and the focus of the research is shifting – the emphasis is placed on identifying the potential weaknesses rather than on resolving the problem with the shortage of capital. Although the results of the ECB's 2016 annual stress test on the condition of Europe's largest banks are relatively positive, they are quite contradictory because they do not reflect the real financial difficulties which some of these monetary institutions face. It turns out that the European banks do not have enough resources to compensate for the capital losses, which indicates that the negative effects of the sovereign debt crisis have not been fully overcome. Banks continue to experience the impact of macroeconomic imbalances that have accumulated in the developed EU economies during and after the crises,[10] which means that they are at risk in the event of a future banking and financial crisis. In other words, the systemic risk inherent to the international financial system is permanent and unmanaged.

The model recommended by the ECB for the assessment of banks starts from the bottom and ends at the top. *First*, it assesses how banks apply their internal models, which are focused on the performance of their operational activities. The bank's balance sheet is considered as a static value, at a certain date, without the management of the bank interfering with the management of possible crisis events. *Then*, the solvency stress tests are introduced to check whether a decrease in the bank's liquidity affects the price of its securities.

In 2018, the banks' stress test included the International Financial Reporting Standards (IFRS), which set an additional requirement – the banks were required to set aside provisions against possible overdue credits. The risks that have emerged over the years are also reported in the bank's solvency assessment model. Other requirements, (such as an uncertainty parameter) which eliminate the risks for financial

[9] The publication of specific data on the status of banks improves the transparency of the European banking system.

[10] The financial and liquidity situation of Italian banks, for example, raises doubts, as they are experiencing difficulties in obtaining financing from the capital market.

instruments that are not quoted on the capital markets in advance, are also included.[11] The testing of adverse scenarios is done for a period of three years (2018-2020) and reflects the assessment of the important risks in the EU financial sector.[12]

The results of the stress test conducted on 51 European banks in October 2018 (in accordance with the Fed methodology)[13], indicate that the total capital shortfall of banks assessed in a positive and negative development scenario amounts to EUR 123 billion. For example, at Deutsche Bank, Germany's largest monetary institution, the shortage amounts to EUR 19 billion. However, the result of the stress test conducted by the EBA reveals that the bank's capital base is good and that it can withstand adverse crisis events. This difference between the bank's own capital stock and the market evaluations of its financial instruments indicates that the bank's exposures in structured financial instruments continue to be of unclear quality, with the non-transparent financial instruments being higher than expected. Deutsche Bank's market capitalisation is lower than EUR 17 billion. This stress test also showed a shortage of capital in Société Génerale (EUR 13 billion) and BNP Paribas (EUR 10 billion) – with the two banks having a market capitalisation of EUR 26 billion and EUR 55 billion, respectively, above the permissible theoretical difference in capital.[14]

Although the EBA confirms the positive results of the stress test on the recovery and resilience of the large European banks, the results demonstrate that banks need to improve their proper capital/risk-weighted assets ratio and comply with the financial indicators that guarantee their stability.

The structural reforms in the European banking system surpass the temporary resolution of the crisis – their goal is to create a comprehensive macro-prudential system that eliminates the danger of systemic risk threatening the banks and the financial integrity of the EU.

The banking and financial indicators that characterise the activity of the European banks

Consolidation and concentration of the European banking system

The shrinking European banking sector is the result of the structural changes in the organisation of the banking industry. During the period 2008-2016, the number

[11] Level 2 and Level 3 financial instruments are financial assets and liabilities that are not quoted in active capital markets. In accordance with IFRS 13, the value of financial securities is classified based on the return on those assets.

[12] The unfavorable scenario includes indicators such as the deviation of EU GDP of up to -8.3%, a fall in the prices of the financial assets by 26%, accompanied by a fall in the prices of real estate and commercial securities.

[13] The stress test methodology was first introduced by the Fed and subsequently adopted by the EU as a crisis management tool in 2011. The FRS' approach to stress testing proves to be more secure than the ECB's proposed model, which was used for assessing 51 European banks.

[14] According to a study by Sascha Steffen of the ZEW Research Center in conjunction with the University of Business at New York University and the University of Lausanne which examines the results of the European banks' stress tests carried out by the Fed in 2016 and by the EBA in 2014 in order to compare the differences in the banks' capital base and leverage.

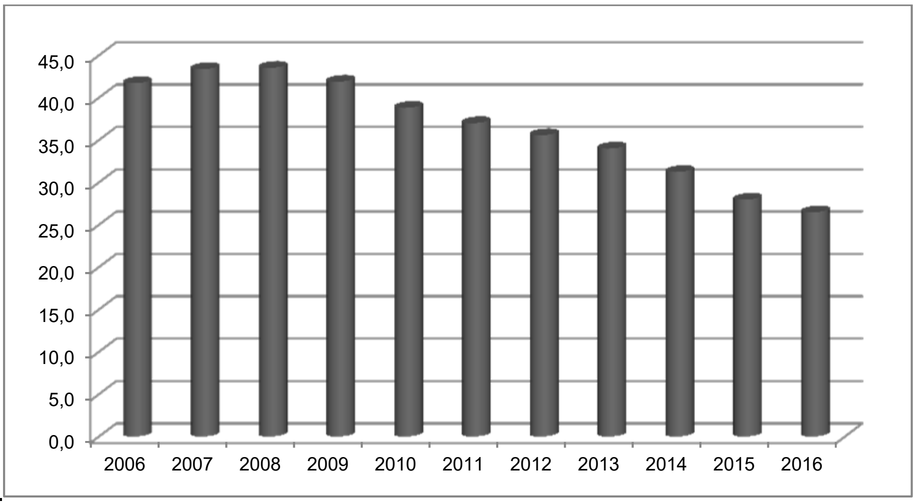
of Eurozone banks decreased by about 25%, and after the crisis, the banks' branch networks and the number of bank employees in several European countries decreased in order to use resources more efficiently *(see Visco, 2017).* This is more clearly outlined in the banking systems of countries where banks play a significant role in the economy, such as Italy and Spain. A prominent trend is that, following the crises, smaller-sized banks close more branches than the large ones, and that some European banks restrict their participation in certain segments of the international capital markets.

Active and passive operations of the European banks. Asset quality

In 2006-2011, the total assets of the banks in the Eurozone increased (Figure 1). At the end of 2016 they amounted to EUR 24.2 trillion on a consolidated basis, and by the end of 2018 they were EUR 29.9 trillion. Over the period 2015-2016, the total banking assets increased slightly by 0.5%, but at the end of 2016 they decreased by 14%, as compared to 2008. Their growth varies by country, with the banks in Estonia, Malta and Slovakia registering double digits in growth, while those in Cyprus, Greece, Ireland, Portugal and Slovenia continue to strengthen their capital base through the relief of their debt financial securities (see ECB, 2017).

Figure 1

The assets of the Eurozone banking system; the share of the total assets of CGFS member banks in the BIS for the period 2006-2016



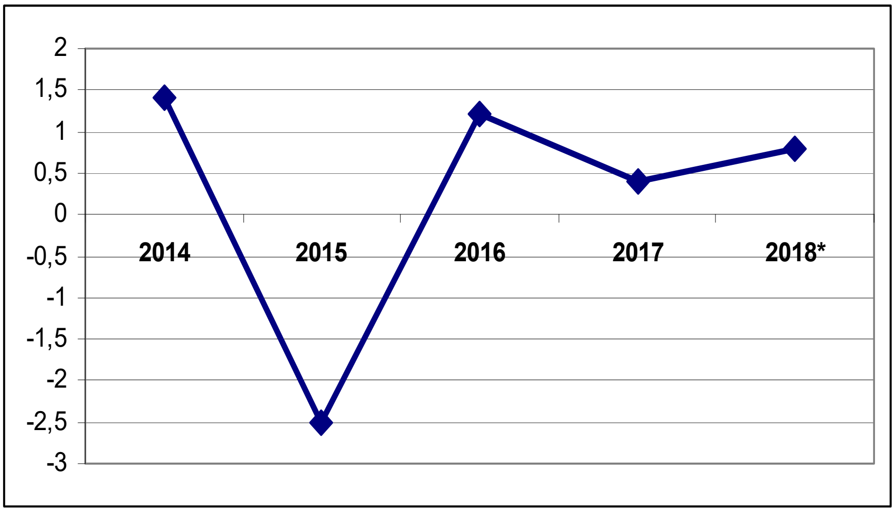
Source: https://www.bis.org/publ/cgfs60/cgfs60_metadata.xlsx

One of the reason for the decline in the banks' total assets in 2015 and for their weak growth in 2017-2018 in general is the relatively low profitability of the banks' operating activities driven by the decline in credits to the non-financial sector (by more than EUR 10 billion a year on average), to which the bulk of the credits are directed. The asset structure of the European banks whose headquarters are located within the EMU consists mainly of credits to Eurozone residents.

The growth rates of the assets of the European monetary institutions are mainly influenced by the macroeconomic indicators of each Member State, as well as the economic stability of the Eurozone and the EU as a whole; however, they are also affected by the movement of the US financial indicators (Figure 2).

Figure 2

Growth rate of the assets of the banks in the Eurozone, by year (2014-2018, Second Quarter)

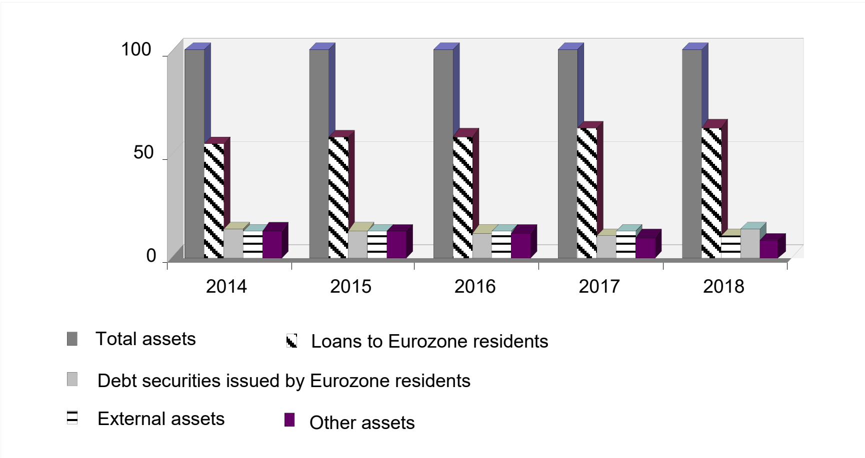


Source: ECB, 2018a.

In recent years, the asset structure has changed due to the restructuring and the contraction of the EU banking sector. The part of the aggregated balance of the Eurozone monetary institutions by year for the period 2014-2018 shows that after the decline in 2014 the credits increased by a little over 2%. During this period, the credits granted to banks amounted to over EUR 5 billion per year on average, while the credits granted to the government fluctuated around just over EUR 1 billion per year. Loans to other monetary financial institutions increased from 7.1% in 2016 to 12.4% in 2017, and then increased again by 3.9% in the second quarter of 2018 (see Figure 3). As of June 2018, loans and advances accounted for approximately 63%, debt securities accounted for 13%, cash balances stood at 9%, and derivatives accounted for 8% of the European banks' total assets.

Figure 3

Loans to residents, debt securities issued by Eurozone residents, external assets, and other assets as a relative share of the total assets of the Eurozone banks



* The data for 2018 are from the Third Quarter.

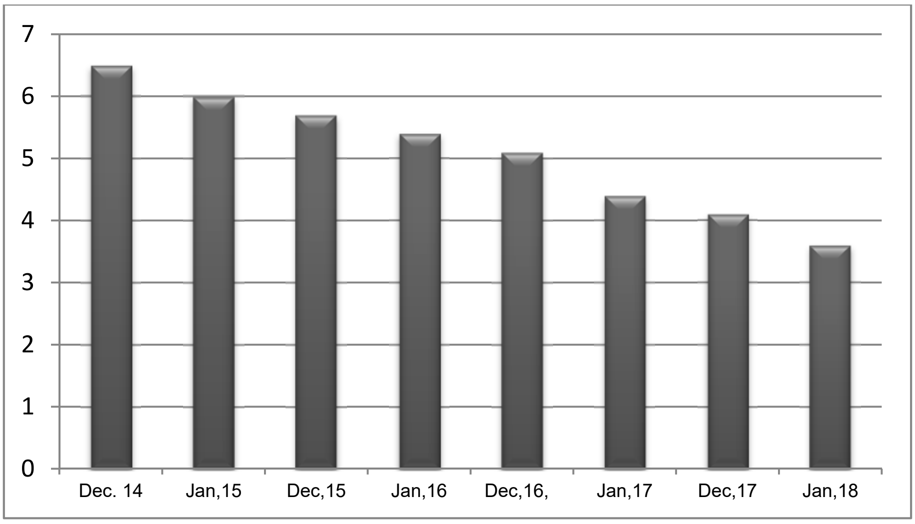
Source: ECB, 2018a; own calculations.

The quality of the assets of the European banks is improving. After the GFC and the sovereign debt crisis, the share of the non-performing loans in the Eurozone in the total loans has grown sharply. According to IMF data, in 2015, the European banks' non-performing loans amounted to nearly EUR 1000 billion, i.e. they have increased twice since 2009. In this context, the IMF proposes reforms affecting the debt restructuring regimes and the insolvency of debtors, combined with stringent banking supervision, which would allow for the development of a secondary debt securities market. In 2017, the total amount of the non-performing loans of the Eurozone banks did not decline significantly – it reached EUR 921 billion. The slow decline in their level is due to the low corporate profits and the low household incomes, all of which were affected by the shocks in the European banking system. *In the years following the crises, the gradual decline in non-performing loans is due to the contraction of bank lending to the non-financial sector and the stagnation in the macroeconomic and financial environment. Non-performing loans remain higher in countries with severe debt, such as Italy and Spain.*

Non-performing (bad) loans continue to be problematic and hamper the real assessment of European banks. The IMF, the ECB, the EBA and the ESM hold the opinion that the harmonization of the bankruptcy regimes in the Eurozone would give a clearer notion of the national economy and the finances of individual Member States. According to the EBA, the clearing of the banks' bad credit balances will take about ten years. During the period 2014-2017, the European banks placed non-performing loans worth EUR 200 billion to investors or directly to banks, or used special financial vehicles, as was the case with Ireland and Spain. In the third quarter of 2018, the gross amount of non-performing loans to banks was 3.6% (the lowest level since 2014); with the highest one being that of the small and medium-sized enterprises – amounting to 9.8% on average in the EU in June 2017. The average coverage ratio for the non-performing loans is 46.0% (weighted average for June 2018) and the coverage increases by 1% annually. Higher coverage ratios give banks more opportunities to reduce non-performing loans through the sale of debt securities (Figure 4). The banks with questionable loans are heavily restructuring their balance sheets by selling overdue debt to clients on the secondary capital market and by placements of securities among their investors.

Figure 4

Non-performing loans as a % of the total assets of the EU banks at the beginning and end of the year (December 2014-January 2018)



Source. ECB, 2018a.

At present, the Eurozone countries are not achieving specific results in resolving the non-performing loans problem, and this is due to the fact that the large European banks are still struggling to overcome the effects of the sovereign debt crisis. The proportion of the non-performing loans of six Member States (Greece, Italy, Cyprus, Ireland, Portugal and Slovenia) to the total amount of loans exceeds 10%. In other Eurozone countries, this issue is insignificant – for example, bad loans account for 3.5% of the total loans of French banks and 2.5% of the total loans of

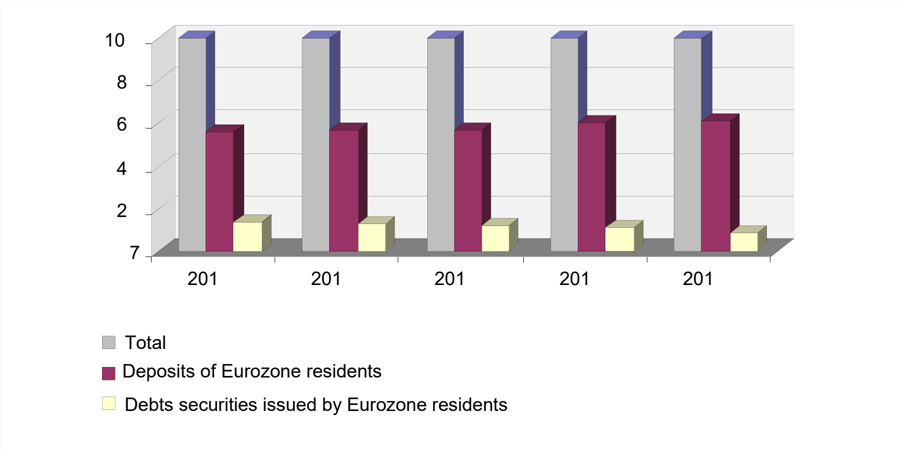
German and Dutch banks. Non-performing loans are a greater problem for small and medium-sized banks than for the systemic participants in the interbank market.[15]

The post-crisis economic recovery of the Eurozone countries has a favourable effect on improving asset quality and contributing to a reduction in the banks' outstanding debt. In Italy, which is one of the countries where the problem of non-performing loans is the most acute, the flow of new unpaid loans to their total amount fell to the pre-crisis levels, as this decrease was positively influenced by the sale of debt securities by the Italian banks in 2018. In such cases, the deletion of these debts from the credit portfolio should be considered in such a way that the selling market price of the non-performing loans permits the recovery of money resources. The sales at very low market prices for the sake of higher returns for the banks adversely affect the banks' balance sheets, which limits the ability to grant fresh credits to the real economy. In Italy, the non-performing loans in the banks' portfolio are high due to the fact that there are very lengthy court procedures for the repayment of the funds. To this end, reforms, oriented towards the acceleration of the recovery of the non-performing loans, are being introduced in the country as a permanent measure (including in the future).

The structure of the passive operations of the EU monetary institutions consists mainly of deposits from Eurozone residents and debt securities issued by Eurozone residents, which have declined slightly over the period 2017-2018 (see Figures 5 and 6).

Figure 5

Banks' passive operations (in EUR billion)



Source: ECB, 2018a.

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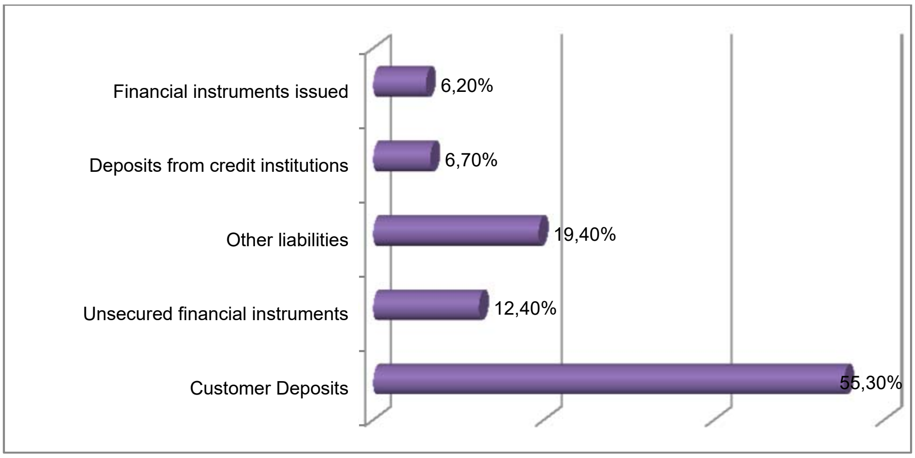
15 A systemic bank is one whose banking and operating activities are significant and diversified, and whose eventual bankruptcy will have a negative impact on global finances.

Figure 6

Structure of the liabilities of the EU monetary institutions' bank balance sheets as at June 2018



Source. ECB, 2018a.

The governments and the non-financial sector are the largest contributors to banks, with deposits increasing by 1.5% in 2014, by 3.2% in 2016 and by 3.6% during the second quarter of 2018. In 2014-2016, the interbank lending movement was negative (at about -3% on average), rising up to 6.4% in 2017 only to fall again to 0.3% during the second quarter of 2018. Over the 2014-2018 period, the issuance of debt securities is negative, while in the 2014-2017 period, the banks' capital security and reserves are positive and amount to about 4%, but in the last quarters of 2017 and 2018 they are just over 2%. During the separate periods, the European banks' external liabilities fluctuate between a growth of 0.7% in 2014 to a fall of -5.3% in 2015, after which they increased by 10.2% in 2016 and again decreased to 1.7% in 2017. This shows that banks refrain from borrowing from monetary institutions outside the Eurozone, as well as outside Europe.[16]

Trends in banking structure and results. Capital positions

In recent years, European banks have restored and increased their capital and its ratio has been stable (see Table 1). Following the financial crisis in 2008, the BIS Basel Committee introduced international standards for reviewing and monitoring the capital adequacy of banks, known as Basel III. According to these

[16] However, it should be noted that that the systemic banks are interconnected in correspondence and operational activities with the international banks outside Europe. Therefore, it is possible that part of the cross-border transactions is recorded off-balance sheet, which makes it difficult to assess the external liabilities of the European banks in real terms.

standards, in order to determine the sustainability of the bank capital in the event of a crisis, the bank’s assets are compared with its capital. The goal is for the banks to be able to overcome the financial losses in their operating activities. Basel III tightens capital requirements by limiting the inclusion of additional funds in different capital levels and structures.

Table 1

Indicators of the equity status of the European banks. The banks in the Eurozone and in Europe as a whole (in %)*

Capital	Total Europe	
	2015/12	2016/06
CET1* transition period	13.54	13.64
CET1 implementation	12.95	13.15
TIER1** transition period	14.73	14.81
Total capital	17.7	17.79
Profits and losses		
Net income from interest rates (as % of the total operating income)	57.31	56.96
Incomes from net taxes and commissions (as % of the total taxes and commissions)	26.8	26.64
Asset Quality		
Non-performing loans and advances (as % of the total loans and advances)	5.72	5.43
Net overdue loans and advances (as % of the total loans and advances)	3.22	3.05
Accumulated impairment of the assets from non-performing loans (as % of the total overdue loans)	43.69	43.85
Accumulated impairment of the assets from fully serviced loans (as % of the total serviced loans)	0.4	0.38

* Asset review period – December 2015 and June 2016.

** CET1 – Common equity Tier 1 capital, which includes mainly common shares accumulated in a bank or other financial institution. The CET1 ratio is the fixed capital/risk-weighted assets.

*** TIER1 includes CET1 + Tier 1 Additional Capital (AT1), i.e. endless securities that are easily converted to equity when a certain need arises for their completion.

Source. EBA, 2016a.

Following the GFC and the sovereign debt crisis, the reaction of the financial market and the European supervisory authorities requires a stronger capitalisation of banks as an essential element in coping with the crisis shocks. The higher capital buffers are aimed at improving the capital base of the systemic banks and reducing the risk of spreading the “contagion” amongst the monetary institutions.

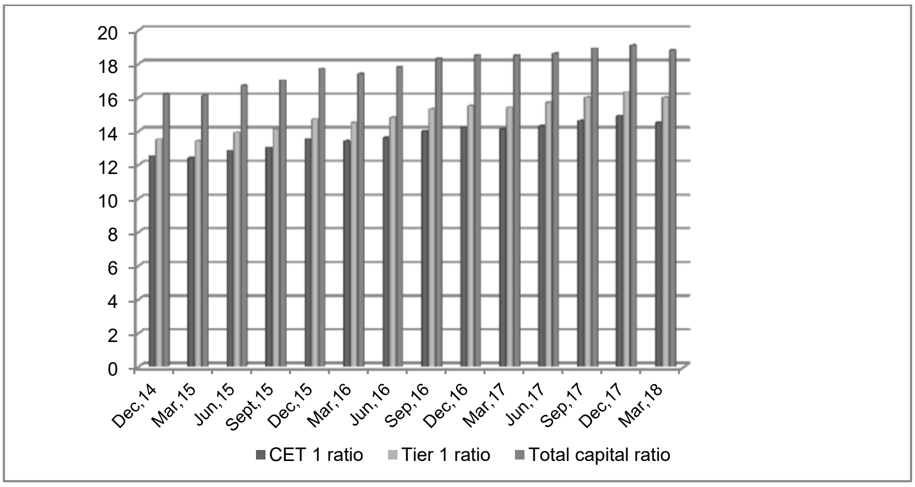
The common equity Tier 1 capital (CET1) was introduced in 2014 as a means to protect the economy from the financial crisis. As of 2019, all banks must meet the minimum required capital ratio of 4.50%.[17] As of June 2018, the average CET1

[17] Tier 1 capital is calculated as the sum of CET1 capital plus Tier 1 additional capital (AT1). The Tier 1 total equity includes the bank’s share capital, ordinary shares, surpluses resulting from the issuance of ordinary shares, retained earnings, ordinary shares issued by subsidiaries and held by third parties, and other accumulated income (AOCI). Tier 1 capital is not total capital, but is eligible to be included in that line. (AT1 capital is a provisionally convertible or hybrid security that can be converted into equity in the

ratio for EU banks has increased to 14.5% and the total capital ratio fluctuates between 18.8% and 16%. However, despite the improvement in common equity Tier 1 capital, the differences in the capital ratio of the EU banks remain large. Some banks in Central, Eastern and Northern Europe have a fixed capital ratio (CET1) that is well above the EU average, while for a number of banks in Southern European countries this ratio is below the EU average (Figure 7).

Figure 7

Equity ratios (transitional) as of December 2014 - March 2018 (in %)



Source: ECB, 2018a.

The review of the banks' capital and the ratio of the fixed capital to the risk-weighted assets (CET1) by country show that this ratio varies greatly between the different European countries. The data in Table 1 and Figure 7 demonstrates that by complying with the Basel III norms since 2013, the European banks are reaching a relatively good level of capitalisation. The tendency of the downward trend of the non-performing loans, attributable to all loans and advances, is decisive. However, the accumulated depreciation of assets on non-performing loans remains high as a result of the crises.

The 2018 EU-wide banking transparency assessment evaluated the capital positions, the risk exposures, the leverage exposures and the asset quality of 130 banks in 25 EU countries and the European Economic Area (EEA). Since 2011, the EBA has been examining the transparency of bank balances at a pan-European level on an annual basis, as part of the measures to enhance the market discipline in

event of a crisis.) The conversion of securities into equity occurs when the CET1 capital ratio falls below a certain threshold.

the EU financial market and complement the data of the banks under Pillar 3 of the EU Capital Requirements Directive (CRD). In addition to the data set, the EBA also offers a wide range of interactive tools that allow to the consumers to make comparisons over time and across countries, as well as across the different banks. The results of the assessment show that the capitalisation of the commercial banks and the universal European banks, which have been hit hard by the crisis, is improving. The reduction of the average risk weights contributes to the increase in the capital positions of all banks with a different business profile. Measured as a proportion of the banking system's assets held by the five largest banks in the Eurozone, the concentration of bank capital is increasing (with some exceptions), while the average concentration ratio between the separate Member States remains unchanged (with some differences between countries).

In recent years*, the sustainable funding for banks* has been extremely important because of the uncertainty of the capital market and the pressure exerted by the banking supervision and the ECB regulations. In the face of the volatility and increased demands, the banks' financing model is changing – they are gradually narrowing down the direct capital market financing, seeking ways to expand the traditional forms of financing (such as the deposit lending operations), mainly through the attraction of deposits in order to increase their liquidity. In this respect, the ECB also exerts a stimulating effect through the flexible monetary policy mechanisms, and by continuing to apply monetary policy measures which affect the banking activity. A number of banks are reducing the proportion of wholesale financing, limiting short-term financing and interbank liabilities. Some European banks are diversifying their international investment base by attracting funds from other investors such as cash-rich corporations, hedge funds and more. The tendency is to avoid financing from the capital market. After the crisis, the pressure exerted by the markets and the supervisory bodies has been focused on achieving a sustainable capitalisation of the banking system, which is a key factor in the banks' ability to cope with the adverse external and internal shocks. In this regard, the capital buffers are important not only for the individual bank, but also at the systemic level, because they reduce the danger of spreading the crisis in the banking system.

In financial product trading (an activity that was rather risky in the pre-crisis period), the bank capitalisation is improving across all types of universal bank business models in the developed European economies. The decline in the average risk weights contributes to the reduction of higher risk capital positions for all banking business profiles except for the commercial banks, which have a high percentage of granted credits and have to meet stricter regulatory capital requirements in relation to market risk and the trade in complex financial products.

Profitability of the European banks

The decade after the GFC has been characterised by the maintaining of low interest rates for refinancing the universal banks and those charged on the deposits of their clients. This is due to the impact of various factors – both cyclical, such as low inflation, and structural, such as labour productivity, demographics and other changed macroeconomic indicators. In some European economies, incomes are gradually recovering, but they are expected to increase slowly and to stabilise at less favourable levels than in previous periods. The low profitability of banks is one of the major risks for the financial stability of the Eurozone because it has a negative impact on the economic growth. At the same time, the long periods with higher than the average bank profitability have a negative effect on the economy due to the maximisation of profits observed in the years preceding the GFC. That is why, in the post-crisis period, the EBA requires banks to strictly apply measures to identify and highlight any potential risks arising from their enhanced credit activity.

The measure that is used to adjust the risk of the return on assets is the return on risk weighted assets, i.e. the net profit as a percentage of the average risk assets. It is improving, which has a positive impact on the profitability of the banks. The *net interest margins* (NIM), i.e. the banks' net interest income as a percentage of the average interest-bearing assets, remain stable for most the European banks, influenced by the very low and even negative interest rates in the Eurozone, due to the increase in the liquid assets and the stabilisation of the bank financing. The net interest income as a share of the bank's average assets is stable in the large European banks and, to a lesser extent, in the smaller monetary institutions. The cost/income ratio (C/I) is also an important financial indicator for determining the bank's profitability. It shows the cost of current operations relative to the operating incomes of the bank – a lower C/I ratio means that the bank is operating more efficiently and a higher C/I ratio means that its operating costs are significant. Following the crisis, the large European banks have improved the efficiency of their operating costs, and the staff costs usually remain stable as a proportion of the operating costs (Table 2).

Table 2

Profitability of the banks in the Eurozone: return on risk-weighted assets, net interest margin, cost/income ratio (2007-2016)

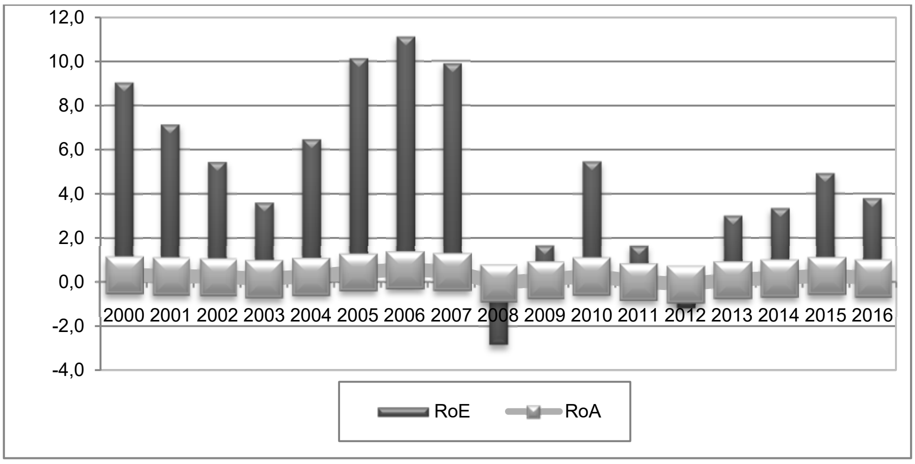
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Return on risk-weighted assets	1.2	-0.3	0.2	0.7	0.1	-0.2	0.4	0.5	0.8	0.6
Net interest margin	0.8	0.9	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
C/I	68.0	85.3	67.1	65.7	67.3	69.8	68.6	67.5	68.2	70.4

Source: https://www.bis.org/publ/cgfs60.metadata.xlsx

The determination of the banks' profitability depends not only on the market realisation of their financial instruments, but also on their policies (how effectively they use their assets and equity to generate profits). In this regard, the profitability ratios: the net interest income, the return on the banks' assets (net profit as a percentage of the assets – RoA) and return on equity (the net profit as a percentage of the average level of capital – RoE) show the valuation of bank shares (Figure 8).

Figure 8

The profitability of banks: the return on assets and the return on equity of banks in the Eurozone



Source: https://www.bis.org/publ/cgfs60.metadata.xlsx

The data in Figure 8 shows that the banks' return on assets (RoA) is characterised by a smaller decline after the crisis, but it is less noticeable due to the relative changes in the banks' leverage. The return on equity shows the extent to which the bank's management uses its assets to make a profit. Before the crisis, the total return on equity (RoE) ranged between 10% and 15% – a value that is historically high and, in many cases, supported by unsustainable levels of leverage and risk-taking operations. During the GFC and the European sovereign debt crisis, the European banks realised strong capital losses, and in the post-crisis period their profitability declined significantly. As of March 2019, the Romanian equity sector has the highest return on equity in Europe at 17.2%. During this period, the European banks restructured their banking business by focusing on profitability based on low-risk operating activities and shifting to profit based on net interest income. However, it should be emphasized that, contrary to some claims, according which most of the banks' profits come from net fees and commissions, the realised interest incomes as a percentage of the total operating income is almost twice higher than the fees and commissions incomes.

The European banks are not yet in a position to realise larger enough profits because of the relatively low revenue of the financial securities. The return on equity of the banks in the Eurozone declined below 5%, which hardly covers the expected capital expenditures (see Figure 8). In connection with this trend in the development of the European banks' profitability, the BIS and the ECB emphasise that commercial banking revenues are based on deposit operations and credit intermediation, while the revenues from investment banking and other non-traditional financial sources are declining. Nonetheless, in the post-crisis period, some banks with higher capitalisation expanded their incomes. The main explanation is that the ECB's low interest rates aimed at supporting the economy may lead to the opposite result over time. This is due to the fact that banks undertake credits renegotiations, as their private and/or corporate clients seek better conditions for obtaining credits. In 2017, this process led to an increase in the costs of the renegotiation transactions charged to the client, which increased the bank's revenues. However, over time the creditors will have to manage their loan portfolios full of low quoted debt obligations. Banks will probably be forced to increase their costs, and the revenues will be lower. Such developments may lead to the widening of the liquidity gap between the banks, which are highly dependent on interest rates in the process of crediting, while the other monetary institutions will have the opportunity to earn commissions (consultations, structured finance, etc.).

Bank mergers and the acquisitions of the share capital of the European banks

In the post-crisis period, the activity of the international banks changed, with their total consolidated bank claims on foreign financial markets falling by about 16% in the 2007-2016 period. The global decline in foreign banking is likely the result of the shrinking share of European banks in cross-border banking operations – the total foreign currency claims of European monetary institutions (except only those in Spain) have fallen by about 40% during this period. Most of the European banks reports even lower holdings in foreign institutions to the Bank for International Settlements. The decline in the majority of the European banks' claims on foreign monetary institutions is due to the limitation of claims to the countries in the Eurozone which were affected by the debt crisis. The European banks are also withdrawing from other regions of the world, including from the USA. An important reason for the narrowing of their overseas operations is the need to devote considerable resources to cover domestic deficiencies, as well as to invest additional funds for the recovery of the local economies. In search of a greater security in the operational transactions, lower-risk activities and transparency of financing, the European banks are targeting the European banking markets. *In this regard, it can be said that the post-crisis banking business models are aimed primarily at achieving a higher consolidation of the European banking system, rather than participations in international investment markets.*

Prospects for the development of the European banking sector

The changes in the European banking institutional management framework, in which the EU regulators are involved, the banking supervision authorities in the Member States' and European banks themselves show that the deep structural reforms are achieving their objective of achieving sustainability and transparency of the European banking sector. However, a number of issues must still be addressed in relation to the removal of vulnerabilities, which also defines the European institutions' further activities to stabilise the European banking and financial sector.

The low interest rates charged by the ECB for the recapitalisation of banks are aimed at recovering the economy. *At first*, this monetary measure had a positive influence on the banking sector because it helped in maintaining the credit and the prices of the debt securities on the bond market. However, at present, the situation is different, and such a monetary policy leads to a mechanical reduction in the ability of the banks to realise profits. They become more vulnerable to external or internal shocks, as well as supply shocks. This destroys the value – the activity of the banks does not contribute to the extension of the credit, which affects the economic and financial stability of many European companies, especially those of small and medium-sized enterprises, which are definitely in need of financing.

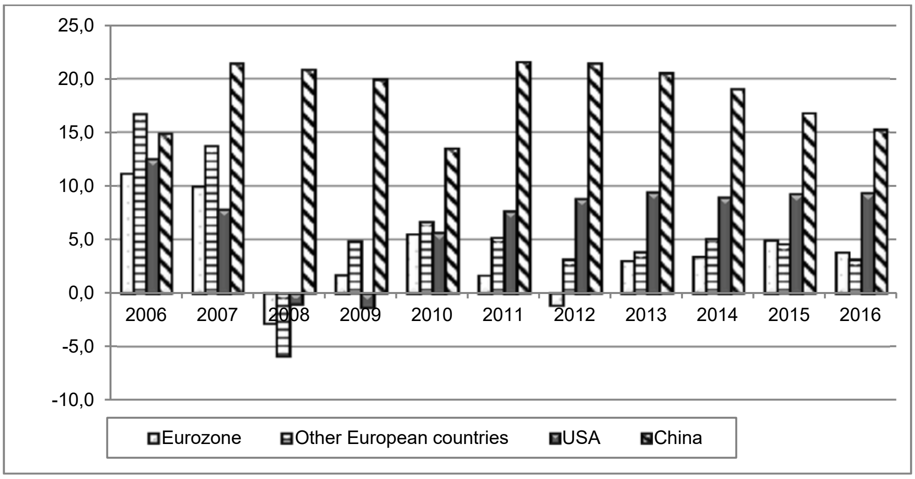
As mentioned above, the European banking sector is not making significant profits. The main reason for the limited profitability of the European monetary institutions is the still low profitability of their operating activities. The return on equity of the Eurozone banks has not yet recovered following the financial and sovereign debt crises and it remains low compared to previous periods and when measured against international standards. There are also significant differences between the banks. Those with a smaller scope of activity and offering a smaller range of financial services have difficulties in meeting the capital requirements and decreasing the non-performing loans in their balance-sheets, while the larger and more powerful financial intermediaries recover quickly. In 2017, the net interest income of the universal banks improved, but the revenues from various fees and commissions also increased as a result of the more efficient management of the bank assets.

In practice, it can be assumed that, after the transitional period in the construction of the new regulatory European banking mechanism in the face of the Banking Union and the European Deposit Guarantee Scheme, the European banking system will be more stable and predictable for investors. Although, the investors may reduce their participation in banking transactions, due to the expectation of lower return on their investments on the part of the banks. The European regulatory framework, which obligates the banks to comply with the increased requirements affecting the level of equity and the expected dividends of their business, may adversely affect the market valuation of the banks' equity. Indeed, the estimates of the cost of the capital of European banks show a decline by the beginning of 2018, although it remains higher than the average in Italy and Spain, which have been hit especially hard by the financial crisis.

Increasing structural profitability contributes to overcoming low profitability. It is particularly important for banks facing financial difficulties as well as for those currently implementing stabilisation programs to improve asset quality. In this case, it is recommended that banks adopt the business model of the most profitable European monetary institutions, which would decide the optimal allocation of their costs and revenues. In terms of banking revenues, the focus is placed on the greater diversification of the sources of income in favour of high quality financial services, which can help offset the continued contraction in interest margins due to low or negative interest rates. Although the European banking authorities are working in this direction, the diversification of higher-yielding banking operations is lagging behind its main competitors in the global financial market (Figure 9).

Figure 9

RoE of banks for the period 2006-2016 (net profit as a % of the average capital)



Source: https://www.bis.org/publ/cgfs60.metadata.xlsx

The expansion in non-bank financing and financing based on the provision of financial services through the new IT devices requires banks to implement related and complementary financial services in the areas of corporate finance and asset management in order to increase their revenues and improve their profitability. To this end, the bank capital consolidation is stimulated through mergers of companies and the acquisition of share capital, which allows the use of the economies of scope and scale and facilitates investment and the access to the capital markets. The cross-border banking operations across Europe would also increase profitability while contributing to an EU-wide banking and financial integration.

The European financial institutions are encouraging banks to apply business models that improve the operational efficiency of their transactions. As mentioned above, since the beginning of the GFC in the EU, the cost/income ratio has been deteriorating and, as a result, the income per unit of bank assets has decreased and the costs for some banks have increased to unbearable amounts. In Spain, for example, great efforts have been made to optimize branch networks, with the number of branches falling by almost 40% since 2008. In Italy, the number of bank branches has fallen by 15%, but it is likely that the expenditure side of the balance sheet has not been cut enough, as evidenced by the financial turmoil which the Italian banks have been experiencing over the last two years.

The policies of the European banks are beginning to move towards more significant cost optimization and, in addition to limiting the number of bank branches, the staff costs are also being reduced. The goal is to transfer the money resource freed up by the reduced costs to investments in technology and innovations in the banking industry.

In the future, the European banks' business strategy in their operational activities and the risks that accompany them will be geared towards implementing a range of financial instruments that could counteract the external uncertain and unpredictable economic and political environment, especially in the face of new regulatory requirements and low interest rates. Unlike the period before the GFC, the European banks are now actively involved in financial transactions on the capital market and play the role of financial intermediaries, by borrowing resources from the capital markets and redirecting them to the non-financial sector. After the crisis, the non-banking financial institutions and the capital markets began to play an increasing role in the financing of large non-financial corporations and the real sector in general.

In the post-crisis period and ten years after the GFC, the European economies are in a phase of economic recovery, but the uncertainty in the international economic and political relations presents significant economic and geopolitical challenges. They have for a long time failed to overcome the effects of the crises, which has had a direct impact on the condition of the European banks. Some major banks (such as Deutsche Bank) continue to need structural changes because they have not cleared their loan portfolios after the GFC. These payment problems create the risk of a new banking crisis. For example, the implementation of unjustified economic policies by the Italian governments of Mario Monti and Matteo Renzi, which lead to the impoverishment of the population, contributes to limiting the activity of the small and medium-sized enterprises, increasing unemployment and respectively increasing the non-performing loans in the balance sheets of the banks. Unlike France, where most of the banks' borrowers are institutional investors, in Italy the non-performing loans are liabilities of individuals and SMEs. The collapse of the Italian banks and their possible bankruptcy will lead to the insolvency of the vast majority of Italians.

The recommendations and the measures for the harmonization of the banking sector and for the strengthening of the banking supervision introduced by the European authorities are useful, but they have a real effect when there is a positive economic growth and an improvement in the key macroeconomic indicators of the country. However, in many regions of the world, the economic policies of countries are increasingly focusing on domestic economic and trade-oriented strategies and interests, which raise concerns that protectionist tendencies are spreading in the international economic relations. The EU also faces significant challenges, one of the most important being Brexit. This raises a number of concerns about the increased risks of sudden shocks, which will affect the European economy and finances and cannot be ignored by the European institutions. That is why the international economic organisations, and especially the IMF, argue that the European national and supranational official bodies should help balance the fiscal imbalances, implement structural reforms and deepen the financial integration of the EMU.

In the decade after the start of the GFCs, significant structural transformations have taken place in the European banking sector. The crisis has had a profound effect on the economic development and growth of the advanced countries and on the financial stability and the performance and profits of the European banks in particular. The GFC also reveals the significant weaknesses of major international banks, whose practice in the past has been associated with excessive credits and risk-taking, which are not backed by adequate capital and liquidity buffers. However, compared to US banks, the European monetary institutions do not generate higher revenues due to the still unfavourable macroeconomic environment, although the European economy has been recovering since after 2016-2018. The supranational prudential supervision is increasing and the creation of the European Deposit Guarantee Scheme is accelerated by the establishment the European BU.[18] The progress in the development of the ICT sector has had a strong impact on the structure of banks. On the one hand, the new technologies lead to changes in the supply of the traditional banking activities, meaning that the jobs in the banking sector are disappearing. On the other hand, the competition is increasing – the new financial bodies (non-banking financial firms) are entering the market, offering a wide range of financial services and competing with banks. The changes in the financial sector as a result of globalisation lie ahead, and the European banking sector will likely be faced with even more challenges in the future.

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The global financial crisis reveals a number of significant weaknesses in the European banking system. An analysis of the banks' activity, with their excessive crediting and risk-taking in the pre-crisis period, shows that the supervisory framework of the European banks was inefficient and did not comply with the maintenance of the adequate capital and liquidity buffers. In the post-crisis period, the prudential policy (supervisory standards) affecting banks has changed. Non-performing loans in the European banking sector are down due to the capitalisation of banks and the strengthening of their balance sheets. Along with improving the banks' capital base, the foundations of the integrated banking supervision are being laid and the European BU is being built as a higher form of banking and financial integration.

Despite rising trends, the profitability of banks remains a very serious problem. Key factors for the low profitability are the competition (including from FinTech companies), the low margins in the core business of banks (driven by still low interest rates in many legal systems), and the increased costs. At the same time, technological changes in the banking sector have intensified non-banking competition.

[18] A separate issue altogether is the fact that the initially excessive supranational regulation of banking activities was faced with the peculiarities of the national banking systems of the countries in the Eurozone, the vague predictions about the ability of the European banks to increase their profitability despite the increased cost of maintaining the requirements for banking stability, and the evidences of changes in the European financial area in relation to Brexit.

However, the changes in globalisation are much larger. Due to the increasing economic, political and financial risks, the European banking system faces many different challenges. One of them is related to the fact that protectionist tendencies are increasing in the world economy, which exacerbates questions about national trade and economic interests. Another problem is competition from major Southeast Asian banks, which leads to a comparatively narrower position of the European banks in cross-border transactions and to the penetration of the Asian bank capitals in Europe. And last but not least, the UK's exit from the EU will trigger the restructuring of the European banking sector.

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7.01.2020