TOO BIG TO FAIL DOCTRINE AND THE FINANCIAL SAFETY NET

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Abstract: The global financial crisis of 2007-2009 has revealed the negative effects of the TBTF doctrine and the need to take measures to limit government intervention in cases of insolvency of systemically important banks. In the EU, such measures were taken mostly in the supervision of systemically important banks, the capital requirements, the capacity of banks to absorb losses by using domestic resources, and deposit gurantee schemes. The study focuses on the development of a financial safety net. Priority is given to deposit guarantee schemes, which are an essential component of the financial safety net. The evolution of deposit guarantee schemes is studied and an analysis of its impact on the TBTF doctrine is made. The survey has shown that the development of deposit insurance has contradictory effects on the TBTF doctrine.

Keywords: systemically important banks, deposit guarantee schemes, financial safety net, TBTF, depositors.

JEL: G21, G28.

Introduction

The global financial crisis brings up the question of the size of banks and the need for measures to constrain the growth of the 'too big to fail' banks (TBTF banks). Despite the 'conventional' assumptions that TBTF banks create conditions for increase of the systemic risk, have less capital, are funded by less sustainable resources (have lower *loan to deposit ratios*), and engage in market operations rather than typical bank operations, these banks still have the advantages of offering economy-of-scale products and services, which cannot be matched and offered by smaller banks. Not a single study, however, gives a specific proposal of what the optimal size of a bank should be. Of course, some additional regulatory measures were taken with respect to the systemically important banks, such as additional capital buffers between global systemically important banks and systemically important banks at a national level (provided for by Basel III), restrictions on the market-oriented operations of banks (the Volcker rule in the USA), the Vickers report in Great Britain, the Liikanen report, as a result of which a draft regulation for the so-called structural reform of banks was developed[1]; additional requirements for global systemically important banks[2] and for instruments to be used to recapitalize banks in their restructuring – TLAC (Total Loss Absorbing Capacity).

The measures taken against systemically important banks focus mainly on increased requirements for transparency and disclosure of information, higher requirements for maintenance of instruments used to absorb losses (TLAC[3]), the establishment of a framework for bank restructuring, and the creation of a European Board for restructuring of systemically important banks in the Euro area. They aim to mitigate the negative effects, arising from the 'Too Big to Fail' doctrine (TBTF) and the use of taxpayers' money to bail these banks out. The measures also aim to reduce the likelihood of systemically important banks to be bailed out by the state, to limit the hidden subsidy[4], and to create uniform rules for restructuring them when their financial situation deteriorates and it is likely to be declared bankrupt. Last but not least, these measures are used to affect the incentives for banks to expand excessively. It should be noted, however, that some of the measures taken, such as the Single Supervisory Mechanism, in fact do not give solution

[1] The Volcker rule is part of the Dodd-Frank Act. It prohibits proprietary trading within a bank holding company. The introduction of the 'Volcker' was scheduled to start in 2015 and finish in 2018. The Vickers report in Great Britain was developed by the Independent Banking Commission, aiming to separate the 'retail' business of the banks from market-oriented operations and from the activities of a bank that are not performed in Europe. The report was adopted by the Parliament in December 2013 and provides that the requirement should be applied from 2019. The Liikanen report is a product of the activities of the so-called Working Group at a high level, established under the European Commission; it provides for a ban on proprietary trading with financial instruments. This prohibition is laid down in the proposal for a Regulation of the European Parliament and of the Council regarding the structural measures to enhance the sustainability of the credit institutions in the EU as of January 2014. The report states that these measures take effect at the beginning of 2017, but given that the Regulation has not been adopted by the EP yet and steps to its agreement have not been made, it is not possible that this measure is applied in the early 2017.

[2] Since 2013, the Financial Stability Board has been drawing up a list of global systemically important banks, which are defined as such on the basis of certain criteria. The list of global systemically important banks is updated on an annual basis and as of November 21, 2016 it includes 30 banks. The list of systemically important banks is preserved unchanged as compared to 2015.

[3] Total Loss Absorbing Capacity /TLAC/.

[4] This subsidy finds expression mostly in reduced costs incurred when financing a bank.

to the TBTF problem and do not eliminate the incentives for banks to be ‘too big’.

The present study examines the development of the financial safety net. It focuses on deposit guarantee schemes, which are one of its essential components. After the peak of the global financial crisis, a number of initiatives have been undertaken aiming to mitigate the negative effects arising from the TBTF doctrine. The evolution of deposit insurance has contradictory effects on the TBTF doctrine, although the initiated changes aim to enhance the credibility and stability of the banking system and to prevent bank panics. The impact of the development of the legal framework for deposit insurance after the peak of the 2007-2009 crisis is discussed, and its effect on the TBTF doctrine is studied.

Problems arising from the TBTF doctrine and measures taken to mitigate the negative effects. Kumar and Lester (2014) point out in one of their studies that price advantages for systemically important banks, related to raising resources, can be attributed to other factors, not relating to the fact that the market perceives a bank as ‘too big to fail’. It should be noted that the above-cited authors based their studies on data for the US banking system as of 2012, i.e. it is assumed that their research takes into account the measures, taken to reduce the problems resulting from the TBTF doctrine (specifically for the USA it is the Vickers report and the unconventional measures taken by the Fed in 2008). An IMF report (2014) indicates that the measures taken to limit the negative effects of the TBTF doctrine affect the market and after the adoption of the Volcker rule and the Vickers report, there was an increase in the credit default swap spreads (CDS spreads) of global systemically important banks and a decrease in the values of ROE, which can be interpreted as not regarding these banks financial institutions with low risk by the market, due to the fact that the state would bail them out in case of deterioration of their financial situation and the likelihood of being declared bankrupt.

Haldane (2010) evaluated the costs associated with providing support to the banking sector during the global financial crisis of 2008-2009, as for the USA these costs were estimated at USD100 bn (<1% of the GDP) and for the UK – GBP20 bn (just over 1% of the GDP)[5]. In view of the profits of the banking sector for the EU, although negative values were observed for some of the largest banks during the crisis of 2007-2009, due mainly to the reclassification of risk exposures and to the raise of additional capital by some banks, the banking sector have made profits in recent years. Despite the tight

[5] Comparing these data with the profit of the banking sector in the USA and in the UK, according to Haldane’s research, the profit of the banking sector at the end of 2009 in both countries was USD60 bn and GBP23 bn.

margins, given the enormous state support provided to the banks, quite logical are the new regulatory requirements for the sector in the area of supervision, restructuring of banks and deposit insurance, although they are associated with increased costs for the sector due to the need of establishing funds to restructure the banks, the contributions to the deposit guarantee fund, the requirements for maintaining certain instruments in bank balances to be used to recapitalize a bank through internal resources (bail-in), and the increase in the supervisory burden.

Logical is the question whether it is necessary to develop special legislation specifically for systemically important banks that were bailed out by taxpayers' money during the crisis, or these banks should be disciplined by the market. Depositors 'discipline' banks with risky behaviour by requiring higher interest rates on their deposits or by withdrawing them from risky banks. However, when a bank is perceived as 'too big to fail', depositors take into account that the state would intervene by providing support for this bank. Demirguc-Kunt and Huizinga (2014) proved that systemically important banks generate lower profits and attract resources at higher interest rates than other banks, so it is not beneficial to shareholders that a bank grows excessively, i.e. according to them, there are internal buffers that limit the excessive growth of a bank. Managers, however, are those who are interested in higher bonuses, and believe that the expansion of a bank has a positive image effect – the so called 'principal-agent' problem. Given the government support provided to systemically important banks in a number of countries during the global financial crisis of 2007-2009, it can be argued that market discipline is not effective enough and does not prevent the creation of risky TBTF banks. This justifies the regulatory measures that were taken and makes them necessary, including those related to the financial safety net – especially in its component regarding the protection of bank depositors, which will be discussed in this study.

After the global financial crisis, three main points related to the change in the regulatory framework in the field of deposit insurance can be outlined – the change in Directive 94/9 on deposit guarantee schemes in 2009, the development of the new Directive 49/2014 regarding deposit guarantee schemes and its transposition into national legislation of the member states in 2015, and the proposal made in November 2015 for establishing a European deposit guarantee scheme, which at the time of conducting the present study is only a draft project.

Deposit guarantee schemes are only part of the financial safety net and their role is regarded in the context of the other components of the net – the central bank as a lender of the highest instance, the supervision of banks and the guarantees provided to users of investment, insurance and pension products[6]. Not all components of the financial safety net[7], however, were equally affected and modified accordingly as a result of the global financial crisis with a view to the effect that respective measures would have to increase the credibility and stability of the financial sector. In view of the financial safety net components, the most significant changes were made in the field of deposit insurance and banking supervision, where the focus was on systemically important banks in the Euro area.

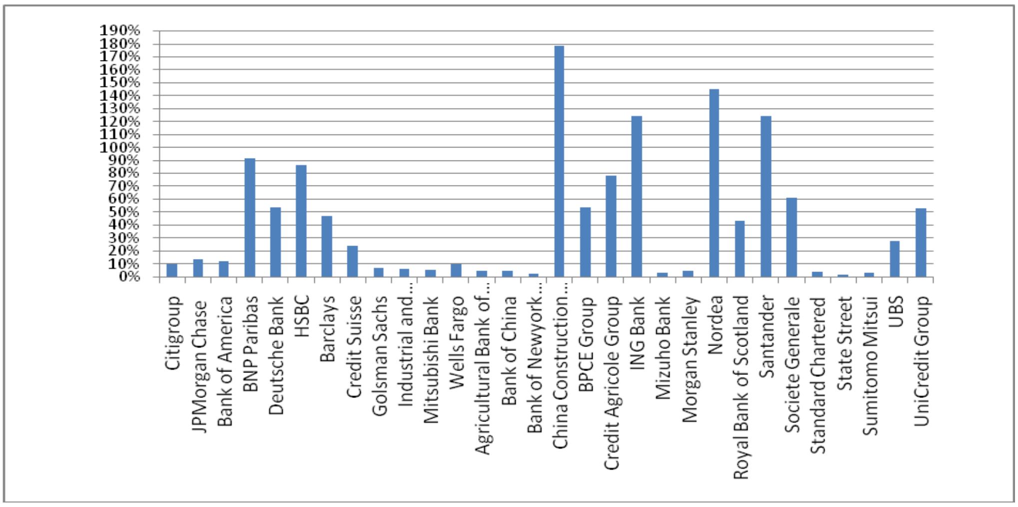
The Financial Stability Board of 2011 prepared a list of the banks that are systemically important at a global level. This list is updated every year. As of November 21, 2016 these banks numbered 29. The chart below shows the share of assets of each of these banks to the GDP of the country where the head office of a bank is located. The higher values of this ratio for the European global systemically important banks give evidence of the need to take measures to limit the growth of these banks in Europe. In support of this statement, indicative are the high values of the 'Total assets to GDP' ratio, exceeding 90% of the GDP in banks with headquarters in France, Great Britain, Sweden, and Spain, unlike the banks of systemic importance globally with headquarters in the USA, Japan, and China. This explicates the adoption of a number of regulatory initiatives, aiming at the banking sector after 2010 – direct supervision by the ECB of systemically important banks in the Euro area (127 as of November 2016), the restructuring of these banks by a centralized European body, which is also expected to accumulate considerable resources, and higher requirements for the instruments to be used to recapitalize banks through internal resources in cases of restructuring (MREL).

Figure 2 shows the distribution of systemically important banks in the Euro area by countries, as I would like to point out that the main criterion for banks to fall under the direct supervision of the ECB is the 'size of the bank'

[6] With regard to investment products, similar protection for deposit insurance exists, governed by Directive 97/9/EC regarding the compensation schemes for investors. This directive was created shortly after the Deposit Guarantee Schemes Directive in 1994 and provides protection of up to € 20,000 of the financial resources and the financial instruments of 'small' investors in cases of bankruptcy of an investment company (a bank or non-bank institution) where the investment intermediary is unable to repay its obligations to customers.

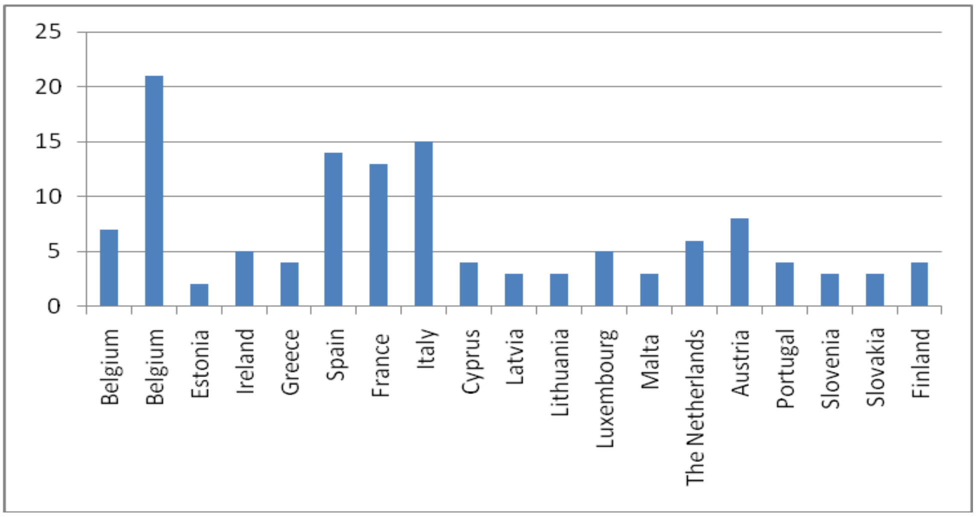
[7] In the summer of 2010, the European Commission submitted a proposal to amend Directive 97/9/EC of the European Parliament and of the Council on compensation schemes for investors, but this proposal has not been developed yet. In 2017, in regard to the REFIT initiative of the EC to eliminate the contradictions and duplications in the European legislation in the field of financial services and to reduce the regulatory burden, it is expected that the Directive will be reopened for discussion, which is mostly forced by the need to harmonize the maximum level of coverage of client assets in an investment company, as at the time of carrying out the present study this level is €20,000 as opposed to the maximum deposit guarantee, which is €100,000.

Figure 1. **Total assets / GDP ratio for global systemically important banks as of 31.12.2015**



Source: 2015 annual reports for global systemically important banks, the World Bank, and own calculations.

Figure 2. **Number of systemically important banks in the Euro area as of November 2016 by countries**



Source: ECB.

criterion – total assets exceeding €30 bn. Other criteria for banks to fall under the direct supervision of the ECB are the criteria for economic significance (the cumulative amount of a bank's assets exceeds €5 bn and the value of its assets is equivalent to at least 20% of the GDP of the country where the head office of a bank is located) and the criterion according to which a bank is among the three largest banks in a member state (this criterion is applicable especially for the new member states of the Euro area such as Slovenia, Slovakia, Lithuania, Latvia, and Estonia)[8].

The role of deposit guarantee schemes is indisputable for the increase in the credibility of the banking system, the prevention of deposit outflows from banks and banking panic under conditions of a financial crisis. There is another aspect, however, namely that deposit guarantee schemes increase the moral hazard, since depositors and banks have been encouraged to take more risks because in announcing a bank insolvent, the scheme starts operating and guarantees the payment of deposits to protected depositors up to a certain level – the maximum guaranteed level of €100,000 and the so called temporary high balances on which the deposit guarantee can exceed €100,000 (in Bulgaria the maximum amount that can be paid under the so-called temporary high balances is BGN 250,000 in accrdance with Art. 10 of The Law on Bank Deposit Guarantee). The availability of a maximum level of coverage and co-insurance limit to a certain extent the moral hazard, associated with the actions of depositors, making them sensitive to the risks that they would take, as at least, they carefully consider the aggregate balances in their deposit accounts in a bank to amount to the maximum level of protection provided by the scheme. On the other hand, banks, in the presence of a deposit guarantee scheme and higher credibility of the banking system, are encouraged to take more risks, including those resulting in increased expansion. Thus, in the context of the TBTF doctrine, the high levels of protection and the elimination of co-insurance stimulate the creation of ‘too big to fail’ banks. Below is the analysis of how changes in the European legislation, related to deposit insurance affect the TBTF doctrine.

Development of deposit insurance and the TBTF doctrine: Directive 94/19 enabled a number of discretions by member states, mostly regarding the maximum level of deposit guarantee, the way of financing the schemes – ex-post or ex-ante, the basis on which the contribution rate is calculated, and the scope of the deposits, subject to protection. Given the information in a Report of the Financial Stability Board from 2010, it should

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[8] I would like to emphasize that the other two criteria for systemic importance of a bank – the direct financial assistance by the European Stability Mechanism /ESM/ and the implementation of significant cross-border activities with a minor application. Actually, there are no banks, receiving direct funding for recapitalization by the European Stability Mechanism and therefore falling, on the basis of this criterion, under the direct supervision of the ECB. In view of the second criterion – cross-border activities – only one Belgium bank and two Austrian banks fall under the direct supervision of the ECB on the basis of this criterion.

be noted that during the global financial crisis, the EU countries (as well as some other countries outside the EU – a total number of 48 jurisdictions worldwide) introduced some kind of higher protection for depositors, taking advantage of the opportunities for discretion, as in the majority of countries where such measures were introduced, they developed into measures of a permanent nature, i.e. they continued operating after the global financial crisis. Despite the timely and adequate expansion of deposit guarantees and the increased protection for depositors, a serious issue faced by policy makers was the question how long to apply the measures of a temporary nature, so as not deteriorating the credibility of the financial system. The table below shows the EU countries that have introduced additional protection for depositors and other measures to increase the credibility of the financial system, undertaken by the financial safety net during the global financial crisis[9]:

Table 1. **Measures undertaken by the financial safety net to counteract the negative effects during the global financial crisis of 2007-2009**

Component of the financial safety net	**Measures undertaken during the global financial crisis 2007-2009**
Measures undertaken by central banks	Decreasing the minimum reserve requirements in order to increase bank liquidity (Bulgaria, Croatia, Lithuania, Romania), decreasing interest rates on discount loans (the Czech Republic, Romania), providing short-term liquidity support for banks (France, Hungary, Poland, the UK) , requirements for banks to increase Tier I capital as a proportion of the total capital of a bank (France, Greece), restrictions on the payment of dividends (Greece), introduction of credit opportunities (Hungary, the Netherlands, Italy).
State guarantees	Creating a public institution that encourages lending (France, Germany), state guarantees on repo agreements of the Central Bank (the Czech Republic, Italy), creating a special institution to guarantee the functioning of the interbank money market (Austria, Ireland, the Netherlands), providing capital support to raise the capital adequacy ratio (Hungary, Great Britain), providing guarantees on loans in foreign currency (Hungary), state guarantees on loans granted by the central bank (Italy) state guarantee on long-term liabilities of banks (Italy), guarantees on newly issued liabilities of banks (Spain), buying up illiquid, highly rated assets of the banks (Spain).

[9] One should take into account that the changes in Directive 94/19 in 2009 in the EU member states eliminate the possibility for discretion at national level, regarding the maximum level of protection provided for depositors.

Capital injections	Capital injections oriented to particular banks experiencing financial difficulties (Austria, Greece, Germany, the UK), increasing requirements for Tier I capital and capital injections to major national banks in order to stabilize the system (France, the Netherlands, the UK), nationalizing banks (Latvia, the UK), stated willingness by the Ministry of Finance to inject capital (Slovakia, Spain).
Deposit guarantees	Unlimited guarantee on deposits of individuals (Austria, Hungary), increasing the maximum guaranteed level of protection for SMEs (Austria), increasing the maximum level of protection for individuals and legal entities (Croatia, the Czech Republic, France, Greece, Italy, Latvia Romania, the Netherlands, Spain, the UK), eliminating co-insurance (the Czech Republic, Hungary), unlimited guarantees on deposits (Germany, Slovenia, Slovakia, Ireland).

The Directive on deposit guarantee schemes, amended in 2009, forced some important changes in deposit insurance in the EU, aiming to ensure that deposit insurance schemes in the EU work well and effectively implement their main functions, related to maintaining the financial stability and ensuring an adequate level of protection for depositors. The global financial crisis of 2007-2009 proved that deposit guarantee schemes are important for maintaining financial stability. The main changes in the Directive on Deposit Guarantee Schemes of 2009 aimed to introduce a harmonized maximum level of protection of €100,000 to be applied by the schemes in the EU as of December 31, 2010, to eliminate co-insurance[10] and to reduce delays in payouts to 20 working days[11]. The introduction of such a harmonized level

[10] Directive 94/19 provided the maximum level of guarantee for depositors up to 90% of the total amount of their deposits in a bank, but no more than €20,000. Co-insurance has a disciplinary effect and reduces moral hazard, as depositors take part of the risk of incurring losses on deposits in announcing a bank insolvent, hence the capacity to absorb such losses makes them more careful when choosing a bank/ banks, in which they deposit their funds and allocate their deposits among several banks.

[11] In my opinion, such harmonization was necessary because Directive 94/19 on deposit guarantee schemes actually introduced a minimum, not maximum harmonization requirements on the maximum guaranteed level of deposits, the way of financing schemes – ex ante or ex-post, and the scope of the scheme since by taking advantage of these minimum mandatory requirements that were introduced by the relevant national legislation, member states applied very different practices with regard to the maximum guaranteed level and the method of financing the schemes. Therefore, some member states created more favourable conditions for depositors' insured funds with banks. Also, in some countries with ex-post funding schemes participants carried less burden in financing the schemes compared to other countries with ex-ante funding, where schemes accumulated considerable resources from participants and were able to ensure deposit payments even in bankruptcies of medium and

aims to more transparency, an increase in the credibility of deposit guarantee schemes and an increase in the credibility of the financial system at a national level by preventing shifts of large depositors between member states as a uniform maximum level of protection does not provide large depositors with incentives to transfer deposits between banks in different EU jurisdictions.

Co-insurance was eliminated in order to increase the credibility of the banking system, which in a period of crisis was severely disturbed. In fact, for the period 2007-2009, 8 of the 12 EU member states which applied co-insurance, practically eliminated it and provided protection to depositors up to the maximum level laid down in the national legislation[12] prior to the introduction of Directive 2009/14 requirements. The high values of the *Per capita GDP/ Maximum level of coverage ratio* are an indicator of the level of protection provided by deposit guarantee schemes in a particular country. The figure below shows the levels of the ratio for 2015, as its greatest dynamics observed in the EU member states (Norway, Liechtenstein and Switzerland which also apply the provisions of the Directive), shows that a similar level in some countries is not sufficient, for example Luxembourg, Switzerland and Norway, where the values of the ratio are respectively 93.43%, 73.87% and 68.81% as opposed to Bulgaria and Romania, where the coefficient is less than 10% (respectively 6.28% and 8.26%), i.e. in the latter two countries the deposit guarantee was excessive. This raises the question whether indeed it is appropriate to introduce harmonized maximum level of protection for depositors in the member states in view of the existing imbalance in their level of economic development which reflects in the levels of GDP and the average levels of deposits. The charts for Bulgaria below show that although the country has tended to increase the average cost of deposits since 2007, the average values are still extremely low compared to the maximum guarantee of BGN196 000 and the average levels of deposits in the EU (at the end of 2015 the average deposit amount in Bulgaria amounted to BGN7205). Figure 4 shows that depositors give an account of the increased values of the maximum level of protection for 2010, because since then there has been a steady trend to reduce the number of accounts, subject to a guarantee.

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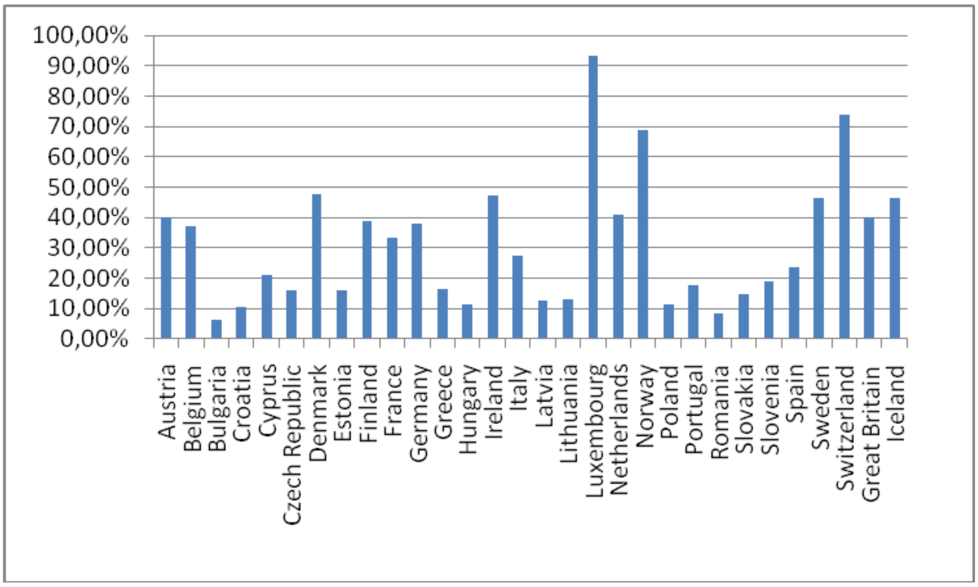
large banks at a national level with the resources raised. The question of how to finance the schemes was not governed by the revised Directive in 2009.

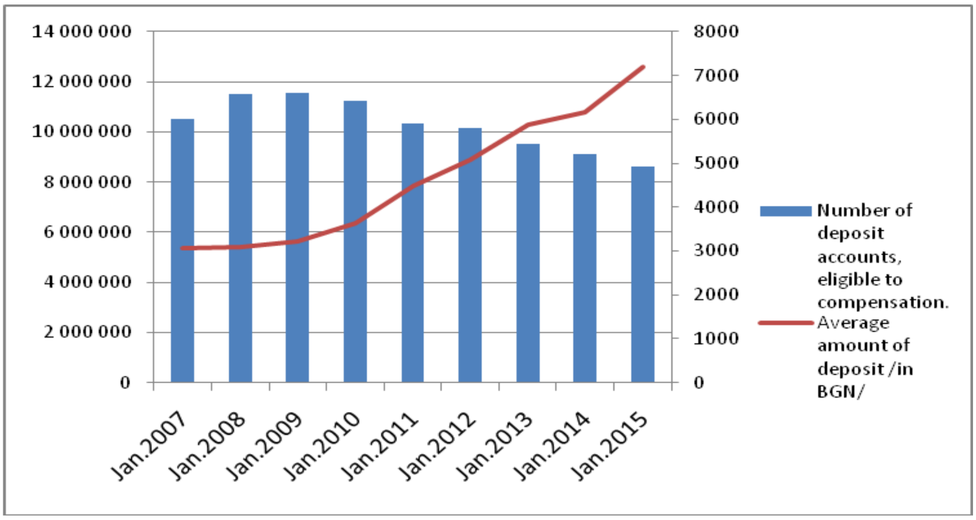
[12] Given the information in the Joint Research Center (JCR) Report to the European Commission made in 2010, some EU countries stopped applying co-insurance in 2007-2009, prior to entry into force of the provisions of Directive 2009/14, namely the Czech Republic, Germany, Estonia, the Netherlands, Latvia, Hungary, Poland, and Slovakia.

Figure 3. **Per Capita GDP/Maximum Level of Coverage Ratio as of the end of 2015**



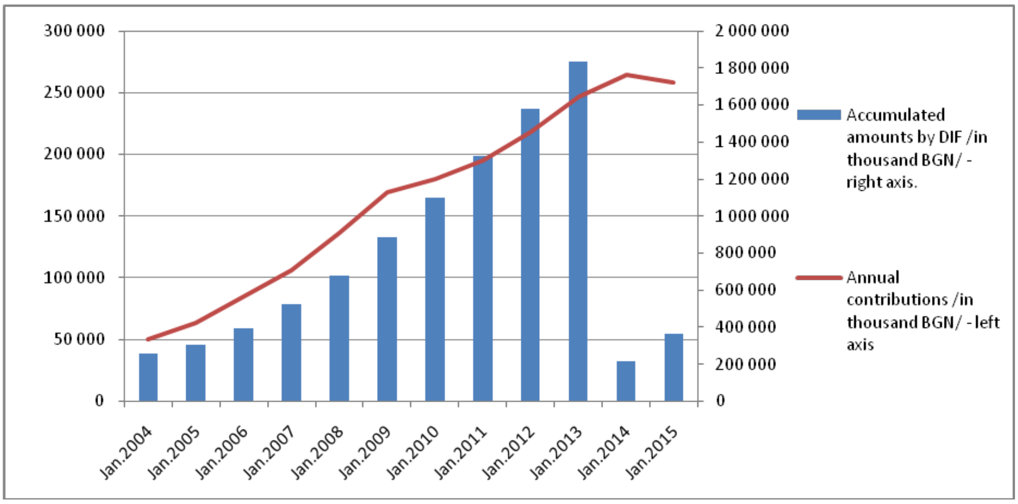
Source: The World Bank, Calculations by the author.

Figure 4. **Number of deposit accounts in Bulgaria subject to a guarantee and average deposit amount**



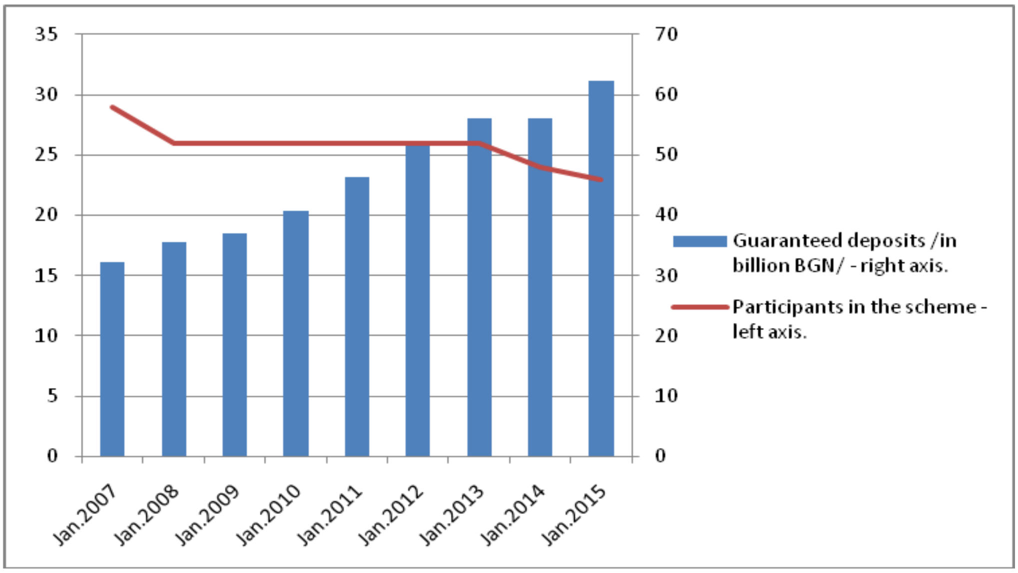
Source: Bank Deposit Guarantee Fund.

Figure 5. **Accumulated funds in the Bank Deposit Guarantee Fund (BDGF) and annual contributions of banks**



Source: Bank Deposit Guarantee Fund.

Figure 6. **Guaranteed deposits and participants in the scheme**



Source: Bank Deposit Guarantee Fund.

The increase in the maximum level of deposit insurance, provided by Directive 2009/14, on the one hand, reflected the real need to increase the maximum level, as 15 years have passed since the adoption of the first Directive in 1994 and a great number of member states have applied significantly higher levels of protection, relevant to the real average income in a country and the average amount of funds deposited in a bank account[13] (this can be seen in the chart above, where the values of the per capita GDP/ maximum level of coverage ratio for the old member states are within 40-50%). At the same time, under conditions of the global financial crisis, the increase in the maximum level of protection was designed to increase the credibility of the banking sector and to prevent the outflow of deposits from banks. The destroyed credibility of the banking sector and the outflow of deposits from the banking system may have a negative effect on the real sector as regards the two channels of influence – credit intermediation and the payment system. It should also be taken into account that increasing the maximum level of deposit protection increases the contributions that banks make to a deposit guarantee scheme, which in turn affects the profitability of banks and is transferred to the cost of credit resources, thus raising the cost of the loan. The higher level of protection increases the likelihood of government intervention in declaring a bank insolvent and activation of deposit guarantee schemes, since the cumulative amount of deposits paid under the scheme can inflate the necessary available resources and it is possible that the scheme creates a shortage that would be covered by a credit, granted by the state. This problem is particularly valid in the bankruptcy of medium and large banks.

The changes imposed by Directive 49/2014 in deposit insurance affect the scheme funding (ex-ante only) and the scope of guaranteed deposits. They also shorten the period of deposit payment in cases of withdrawal of a bank's license within 7 days, reach the targeted level of the funds accumulated by the scheme which is bound by the amount of guaranteed deposits in the banking system, introduce risk-based contributions, and define temporary high balances of depositors in order to provide a higher level of protection. The Directive provides that contributions to the scheme are not only in the form of cash but also in the form of a commitment for payment, and that member states have the option to choose whether to use similar approach. This means that banks in some member states may not actually contribute to the scheme but have obligations to it in the form of commitments. These commitments must be well secured, for example by securities, and are characterized by procyclicality, i.e. they increase with a decrease in the economic business cycle.

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[13] Most major economies in the old member states have implemented a higher level of protection as opposed to the new member states, where the income per capita is significantly less and the maximum level of protection provided by Directive 94/19 is considered adequate and relevant to the average level of income.

The proposal for a Regulation on the establishment of a European deposit guarantee scheme, aims to create a scheme at a Euro area level that will interact with national schemes in the member states operating in accordance with the requirements of Directive 49/2014. The accumulation of funds in the European scheme to be used to pay deposits in cases of bankruptcies of banks in the Euro area is expected to happen gradually over time (in three stages). The first stage includes a phase of reinsurance, during which the European scheme will participate in the deposit payment process, when in announcing a bank insolvent at a national level, the accumulated resources from the national scheme is not sufficient for the payment of obligations to depositors of failed banks. During this phase, however, the European scheme would have accumulated sufficient resources (20% of the targeted level of 0.8% of the amount of guaranteed deposits) and its capacity to secure additional funding in case of resource depletion in the national scheme will be quite limited. However, the opportunity to raise additional funds from the European scheme in case of resource depletion in a national scheme would reduce the likelihood (or at least the amount of state participation) of government intervention in a bankruptcy of medium or large banks and the activation of the scheme (state participation is mostly expressed in the form of granting a credit). The second stage envisages joint participation of the schemes – the European and the national – in deposit payment with failed banks in a member state. The third stage envisages deposit payments to customers of a failed bank in the Eurozone to be made entirely under the European scheme. In creating a European scheme, additional funds from banks will not be accumulated to finance the European scheme. Resources will be redirected from national schemes, i.e. no bank will be loaded further, on the contrary, a centralized European body will accumulate contributions from a much larger number of participants. Therefore, it will be able to accumulate a lot more money than the national schemes and to cover obligations to depositors without government support (granting credits by the government or some other form of state participation), in case middle or large banks in the Eurozone go bankrupt.

The framework for a European deposit guarantee scheme does not envisage obligatory lending between schemes at any stage until 2024, when in cases of failed banks in the Eurozone, deposits will be fully paid by the European scheme. This is so, since evaluating the effects of the creation of a European deposit guarantee scheme based on empirical analysis, conducted by the European Commission in 2016 covering the 3400 EU banks, representing 99.86% of the banking sector in the EU in 2013, proves that providing lending between banks covers at least the shortage of liquidity incurred by any of the schemes. Similarly, in cases of lending between schemes, instead of supplementary insurance by one centralized body, such as the present proposal, the revenues from the collection of additional contributions and the income from national schemes at the time of its entry into subrogation are mainly used for repayment of credit obligations rather than for accumulating resources in the scheme, needed to increase its stability and the credibility of its capacity to guarantee adequate protection for depositors in declaring a bank insolvent.

In fact, a valuable element in the framework, proposed for a European deposit guarantee scheme to be the third pillar of the banking union[14] and to finalize its creation, are the additional resources which in cases of announcing a bank insolvent can be transfered to a particular national scheme, thus avoiding the necessity of obtaining a loan from the state, where the headquarters of the national scheme is located. All the three stages envisaged in the creation of a European scheme to protect deposits have their advantages and disadvantages. For example, the stage of additional insurance preserves the specifics of deposit insurance at a national level since the local scheme plays a leading role in the payment of deposits. However, participation in the European scheme is expected to be limited, as in the early periods of its creation it will not have accumulated sufficient resources. To prevent withdrawals of deposits from banks and the emergence of a bank panic, it is essential that payments of deposits start and are done shortly after announcing a bank insolvent. Directive 49/2014 provides that by 2024, when the targeted level of funds in a national deposit guarantee scheme of 0.8% of the total deposits in the banking system is reached, the term of deposit payments to be reduced to 7 working days. This concept of fast payouts within 7 working days is also laid out in the proposal for a Regulation for establishing a European deposit guarantee scheme.

[14] The banking union is based on single banking supervision of systemically important banks in the Eurozone, uniform rules for the recovery and reconstruction of banks in the Euro area and harmonized rules on the payment of deposits in the EU. ECB is the European body that provides the supervision of systemically important banks in the Euro area. Decisions to restructure these banks are taken by another centralized body at European level – the European Board for Restructuring of banks. At the time of submitting this study for publication, no European body exists for guaranteeing deposits in systemically important banks in the Euro area. Please note that the proposal for a European deposit guarantee scheme provides for the establishment of such a European body and unlike the ECB and the European Board for Restructuring, whose prerogatives are supervision and restructuring of systemically important banks in the Euro area, the European deposit guarantee scheme provides cover not only for systemically important banks in the Euro area (127 as of November 2016), but also it could start operating in cases of failed banks from the Euro area, provided that the requirements of the proposed Regulation for establishing a European deposit guarantee schemes are complied with.

The different treatment of systemically important banks reflects in the target level of funds that are expected to be accumulated in national deposit guarantee schemes in compliance with the requirements of Directive 49/2014. The Directive provides for reaching a target level equal to 0.8% of the amount of guaranteed deposits in the banking system which should be reached gradually by 2024. However, the Directive makes it possible for some banking systems to apply a lower level of accumulated funds in the scheme of deposit insurance, which can be at least 0.5% of the total guaranteed deposits in the banking system. Using such a low level is possible for banking systems, dominated by systemically important banks for which, due to their systematic significance, high requirements for MREL (or respectively TLAC, if a bank is systemically important globally) are envisaged, and it is less likely a deposit guarantee scheme to be activated in those banking systems.

I would like to point out that the framework for bank restructuring allows the use of certain tools to restructure a bank. Thus, the tool for sharing losses (bail-in) envisages restructuring to be done through the internal resources (liabilities) of a bank. To ensure sufficient availability of these tools, the Directive on the recovery and resolution of banks and investment intermediaries (more popular as BRRD) requires the restructuring body (nationally or the European restructuring authority) to define the MREL requirements. These requirements are expected to be higher for medium-sized and large banks, as MREL consists of two components – for absorbing losses and for recapitalization. For small banks, MREL values will be lower and will consist of only one component – for absorbing losses. Small banks do not carry systemic risk, they have a small number of depositors and with the activation of a deposit guarantee scheme it will have sufficient resources to compensate depositors (the footnote gives an example from the Bulgarian practice with the payment of deposits in the ‘International Bank for Trade and Development’ (IBTD) license withdrawal in 2005, the CCB in 2014 and the burden on the national deposit guarantee scheme[15]).

[15] In the summer of 2005, the license of the ‘International Bank for Trade and Development’ AD was withdrawn, which is the 17th largest bank in the second group, according to the classification of the BNB Banking Supervision. In November 2014 the license of ‘Corporate Commercial Bank’ AD was withdrawn, which is the fourth largest bank in the first group. The amount of guaranteed deposits in the bankruptcy of IBTD amounted to BGN25,085, as with the bankruptcy of the bank, the funds accumulated in the Deposit Insurance Fund amounted to BGN300,963, i.e. much more than the necessary resources for deposit payment. The bankruptcy of IBTD created no tension among the public, as the disbursement of funds to depositors was easily made through the intermediation of only one bank. In the case of the CCB the things were radically different. The deposits amounted to BGN3.7 bn., as the accumulated funds in the DIF as of October 2014 amounted to BGN2.09 bn., i.e. there was a shortage of funds in the scheme to cover payments to depositors so it was

Another important point that needs to be analyzed is the participation of deposit guarantee schemes in the restructuring process of banks which is provided by the Directive on the recovery and resolution of credit institutions and investment intermediaries[16] (BRRD). The main function of deposit guarantee schemes is the deposit payment to bank customers in the withdrawal of a bank's license and declaring it bankrupt. At the same time, additiona functions of the schemes are envisaged in relation to bank restructuring (the regulation of this opportunity is laid out in Art. 106 of BRRD[17]), measures to prevent banks become insolvent (Art. 11 of Directive 49/2014) and financial provision for the transfer of a bank's deposit portfolio in order to maintain the access to guaranteed deposits by depositors in the process of a bankruptcy of banks. For large systemically important banks that meet the requirements for restructuring in accordance with the requirements of BRRD, it is possible, with the use of the bail-in tool, due to the size of the losses incurred by the bank, to use guaranteed deposits and the deposit gurantee scheme to cover these losses. We can conclude that the participation of national schemes would be possible with systemically important banks when using the loss coverage tool in cases of heavy losses, covered by depositors' guarantee funds. Under the provisions of the Directive, however, depositors' guarantee funds can be used in the process of bank restructuring only when there is evidence that losses suffered are lower than the losses that would be incurred in declaring a bank insolvent and the activation of the deposit guarantee scheme.

The problem with covering guaranteed depositors' temporary high account balances arises when funding the European deposit guarantee scheme. Temporary high balances are defined in Art. 6 Par. 2 of Directive 49/2014 and include deposits of individuals, consisting of receipts from sales of property, proceeds related to social payments or the occurrence of certain life events, and insurance or social payments. Directive 49/2014 states only that guarantees on temporary high balances could be higher than €100,000 and they are paid for a period of between 3 and 12 months. The cases when proceeds are recognized as temporary high balances are also mentioned. Actually, member states are given the opportunity for discretion in

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covered by a state loan. Fig. 6 above shows the drop in the disposable funds of the scheme and its extreme shortage in the possible occurrence of an event leading to the payment of deposits.

[16] Both legal acts – Directive 49/2014 and Directive 59/2014 have been transposed into Bulgarian legislation in 2015 with the adoption of the Law on Bank Deposit Guarantee and the Law on the Recovery and Resolution of Credit institutions and Investment Firms.

[17] It envisages that a national deposit guarantee scheme would cover the claims of insured depositors if in the process of bank restructuring, guaranteed depositors' funds are used for covering bank losses together with the bail-in tool.

determining the maximum guarantee on these deposits and conditions are created to observe a very different practice. For instance, some member states do not determine temporary high balances so they do not provide a deposit guarantee higher than the maximum guarantee of €100,000. Thus, after 2024, when the payment of deposits in the Euro area will be carried out by the European scheme, it is possible with its activation upon withdrawal of a bank's license to reach a strong reduction in the resources of the scheme in countries, where customers maintain temporary high balances on certain accounts and the provided maximum level of guarantee on them is high (e.g. €250,000). This is especially valid in cases of bankruptcy of large banks, where the number of depositors is essential and considerable resources are paid with the activation of the guarantee schemes.

The creation of a European deposit guarantee scheme should not increase the moral hazard. However, such impression is created, as the European scheme is envisaged to accumulate considerable resources from a multiple number of banks in the Euro area. Therefore, it could start paying off deposits in cases of bankruptcies of systemically important banks with a great number of depositors in the Euro area. It should be taken into account that the establishment of the scheme as a third pillar of the banking union is a precondition for banks, which have undergone evaluation of the quality of their assets and stress tests due to their participation in the single supervisory mechanism, to participate in it. Similarly, the system would be activated for systemically important banks that failed to apply the restructuring tools in accordance with the requirements of Directive 59/2014 and it possibly came to the use of resources from the European restructuring fund for a systemically important bank in the Eurozone. Actually, this means that the scheme would be activated in extremely rare cases, after exhausting all possible mechanisms to prevent the announcement of a bank insolvent.

With regard to the participation of systemically important banks in the European deposit guarantee system, I would like to draw attention to the burden of the contributions which these banks will face. After 2024, the Euro area banks are envisaged to participate with contributions to the European scheme that will be set after taking into account the risk that banks run, and their relationship with other financial institutions, i.e. if banks are evaluated as more risky and their activity is bound up to a great extent with other banks, e.g with systemically important banks that perform multiple transactions of large amounts, these banks should be involved in the scheme with higher contributions. Systemically important banks in the Euro area are subject to direct supervision by the ECB, so they pay supervisory fees in compliance with the Regulation 1024/2013[18] requirements, participate in the European restructuring board and contribute to the European restructuring fund in accordance with the Regulation 806/2014[19] requirements by paying a contribution set on the basis of the risk profile and the size of the bank in compliance with the guidelines of the European Banking authority. Therefore, we can conclude that the participation of systemically important banks in the three pillars of the banking union is associated with more expenses as compared to smaller banks, i.e. systemically important banks pay the price for what that are.

The European deposit guarantee scheme could serve as a distribution channel for spreading the 'contamination' from one member state to another. As mentioned above, an impression is conveyed that the scheme creates preconditions for increasing the moral hazard, especially given that under the proposal to create an European scheme after 2024, the payment of deposits in a member state of the Eurozone[20], in case of withdrawal of a bank's license, is expected to be carried out only with the accumulated funds from the European scheme. Guaranteed deposit payments, made by the European scheme (in which all banks in the Euro area contribute to), rather than by national schemes, dilute the responsibility, for example of the national supervisors, local banks and local depositors, because it is believed that the European scheme will have sufficient resources to pay deposits in cases of bankruptcies of medium and large banks with a great number of depositors. This contradicts to some extent to the concept of the financial safety net – namely, to enhance the credibility and stability of the financial sector.

The scope of the European deposit guarantee scheme includes, unlike the single supervisory mechanism and the single resolution mechanism, not only systemically important banks in the Euro area, but also all banks in the Euro area defined as credit institution by the Capital Requirements Regulation (CRR). It is envisiged the European deposit guarantee scheme to include the credit unions and third country branches. Credit unions are not defined as a

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[18] Art. 30 of Regulation 1024/2013 of 15 October 2013 for awarding the European Central Bank specific tasks, regarding the policies related to the prudential supervision of credit institutions.

[19] Art. 70 of Regulation 806/2014 establishing uniform rules and uniform procedure for the restructuring of credit institutions and certain investment intermediaries within the Single Resolution Mechanism and the Single Resolution Fund.

[20] I would like to point out that simply referring to the Euro area member states is not enough correct, so we should explain that only Euro area member states participate in the Banking Union at the time of finalizing the present research. However, each EU member state outside the Euro area could use the opt-in opportunity, i.e. to join the Banking Union and participate in its three pillars – SSM, SRM and EDIS. By the end of 2016, no member state of the EU outside the Euro area has taken advantage of this opportunity.

credit institution in accordance with the Capital Requirements Regulation, while the third country branches in the EU member states and the national deposit guarantee schemes usually sign additional agreements for participation in the national schemes. Credit unions and third party branches have a small number of depositors and are not of systemic importance[21]. A potential bankruptcy of a credit union or a third country branch would not impede the payment of guaranteed deposits by a national scheme, so I do think that their inclusion in the scope of the European scheme is not necessary.

The proposal to create an European deposit guarantee scheme primarily focuses on the activation of the scheme upon withdrawal of a bank's license in the Euro area, rather than on preventive measures and the possibility that the scheme might interfere with banks, experiencing financial difficulties. The possibility of preventive measures taken by the national deposit guarantee schemes, however, is included in the context of the framework for the recovery and resolution of credit institutions and is mostly reflected in the European Banking Authority guidelines on calculating MREL, namely, that large, systemically important banks and medium-sized banks will be restructured, while small banks would rather apply the procedure of a bankruptcy. The possibility of alternative measures undertaken by national deposit guarantees schemes gives 'a chance' for not systemically important banks to be bailed out rather than be directly declared insolvent. However, funds from contributions of banks to the European scheme will be managed by the European resolution fund, which also collects and manages restructuring contributions, gathered by the banks falling within the scope of the Single Supervisory Mechanism.

Conclusion: The creation of a European deposit guarantee scheme is a natural continuation of the measures undertaken to enhance the credibility of the banking system after the global financial crisis and to prevent the use of taxpayers' money to bail out banks which due to their poor financial situation might be declared bankrupt. The European scheme is envisaged to accumulate much larger resource than the national schemes, formed by the contributions of all banks in the Euro area, thus increasing the level of protection for

[21] As an exception to this rule I would like to point out the case with the branch of the Icelandic bank Landsbanki in the UK, which had accumulated a serious resource by English depositors via the Internet. After the withdrawal of its license the guaranteed deposits of British depositors had to be paid by the Icelandic deposit guarantee scheme. Actually, this did not happen, since the Icelandic scheme did not have enough resources to do so and eventually, deposits of British depositors were paid by the English scheme in compliance with the requirements of the then legislation of the country. Of course, Iceland 'paid' the price, for the UK imposed such restrictions on the small Nordic country that are only applied to terrorist organizations and countries associated with terrorist networks.

depositors, which in terms of the operation of a national scheme might be undermined in cases of insufficient resources in the national scheme, especially in the bankruptcy of a major bank with a great number of depositors.

The global financial crisis of 2007-2009, showed the negative effects of the TBTF doctrine and the need to take measures to limit its negative effects. In the EU, such measures were taken mostly in regard with the supervision of systemically important banks, the capital requirements and the capacity of a bank to absorb losses by using domestic resources in its restructuring. Systemically important banks have already paid a higher price due to the systemic importance they have, and that price finds expression in supervisory charges, performance evaluation of asset quality and stress tests (more stringent requirements for provisioning, audit fees), higher requirements for own funds to absorb losses (MREL and TLAC), higher capital buffers, and higher contributions to bank resolution funds and deposit guarantee schemes.

Despite all these measures aimed to systemically important banks, the financial safety net with its most important component – deposit insurance – plays a key a role in mitigating the negative effects of the TBTF doctrine. Studying the development of the European legal framework in the field of deposit insurance in the EU, we can conclude that changes in the framework for deposit guarantee schemes have contradictory effect on the TBTF doctrine. These contradictions are as follows:

First, the higher maximum levels of protection and the elimination of co-insurance have a beneficial effect on the credibility of the banking system, help to prevent the outflow of deposits and the emergence of a bank panic, but at the same time they encourage depositors to exhibit more risky behaviour. Also, the high levels of maximum deposit guarantees lead to an upward revision of the resources which deposit guarantee schemes must accumulate in order to be able to pay guaranteed deposits. This greatly increases the amount of resources that needs to be accumulated and paid in cases of bankruptcies of systemically important banks, making government intervention unconditional in similar cases of a bankruptcy. The negative effect will be reduced over time by reaching the required levels set as a percentage of the amount of guaranteed deposits in the accumulation of resources by the schemes.

Second, the higher guarantees on temporary high account balances in some banking systems can lead to depletion of the resources in deposit guarantee schemes in the presence of a great number of such deposits which can force government intervention to cover the shortage in the scheme.

Third, the opportunities, provided by BRRD for deposit guarantee schemes to participate with accumulated resources in covering guaranteed depositors' funds, after they had been used to cover particularly large losses in the process of restructuring a bank, mostly when it comes to systemically important banks, increase the possibilities of using the resources of a bank in the process of its restructuring as well as the possibility for bailing it out by domestic resources rather than by taxpayers' money.

Fourth, the creation of a European deposit guarantee scheme will be a precondition for the accumulation of significant resources by an institutional body that will have the capacity to cover the claims of insured depositors even in cases of bankruptcies of systemically important banks.

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