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INTRODUCTION

This special edition of *Bezpieczny Bank* [Safe Bank] is devoted, due to courtesy of Bank Guarantee Fund, to selected issues related to the stability of the financial system, which were discussed during European Financial Congress in June 2015.

The main goal of the European Financial Congress, organised annually since 2010 in Sopot (www.efcongress.com) is financial stability and sustainable development of Poland and Europe. In 2015 the most issues were those relating to the creation of Banking Union within the European Union, especially in the area of bank recovery and resolution.

In 2015 we made an attempt to present a viewpoint of countries outside of the eurozone on the Banking Union (cf. http://www.efcongress.com/pl/czy-i-kiedy-kraje-spoza-strefy-euro-powinny-wstpi-do-unii-bankowej-aktualizacja-stanowiska) as well as the views of Polish experts on the concept of TLAC presented by the Financial Stability Board (http://www.efcongress.com/sites/default/files/analizy/stanowisko_ekf_do_propozycji_rsf_nt_tlac_docx.pdf).

The above-mentioned issues were thoroughly presented in papers of O. Szczepańska, B. Speyer, M. Borsuk, and L.Pawłowicz. Additional issue discussed during the European Financial Congress in 2015 was, presented in the paper by P. Mielus and T. Mironczuk is risk related to the valuation of bank assets based on non-market reference rates such as LIBOR, EURIROR, or WIBOR.

In the special edition of *Bezpieczny Bank* we included also arguments of both opponents and supporters of Poland entering the eurozone, which are the record of the Oxford debate moderated by former Polish prime minister and current head of Programme Council of European Financial Congress – Jan Krzysztof Bielecki, which took place during 2015 European Financial Congress.

Finally, I would like to sincerely thank Professor Jan Szambelański, the scientific editor of *Bezpieczny Bank* quarterly journal for inspiration and giving me the opportunity for publication.

Leszek Pawłowicz

IT IS WORTH BEING PART OF THE EUROZONE – OXFORD-STYLE DEBATE AT THE 5TH EUROPEAN FINANCIAL CONGRESS

On June 22nd this year during the opening session of the V European Financial Congress in Sopot an Oxford debate was held on the thesis "It is worth to be in the eurozone".

The traditional part of an Oxford debate is voting in which all participants, having heard the polemics of the Proposing and the Opposing parties are able to indicate the party which they believe was more convincing. In Sopot the voting was called not only at the end, but also before the debate. In the first voting 336 participants of the Congress opted in favour of the thesis "It is worth to be in the eurozone", whereas 264 persons were against the thesis. In the final voting the proportions changed a little for the benefit of the opponents of the main thesis, but the belief that entering the eurozone is profitable prevailed anyway. 316 Congress participants voted for it and 284 were against it.

The main speakers for the Proposition were prof. Dariusz Rosati, European Parliament Deputy, prof. Dariusz Filar from the University of Gdańsk and dr. Jerzy Pruski, Board President of the Bank Guarantee Fund. The speakers of the Opposition were prof. Zdzisław Krasnodębski, European Parliament Deputy, Professor Andrzej Sławiński from Warsaw School of Economics and Stefan Kawalec, Board President of Capital Strategy.

Record of the debate:

Jan Krzysztof Bielecki: First of all I call both parties to take their places. The party of the Proposition is always the one to start. Therefore let me ask Professor Dariusz Rosati, Professor Dariusz Filar and dr. Jerzy Pruski to take the right side. The Proposition team is made up of a European Deputy, a Professor with the knowledge of economic policy and the PhD with the knowledge of all aspects. The Opposition team has a very similar structure. It is my honour to invite Professor Zdzisław Krasnodębski, Professor Andrzej Sławiński and Mr Stefan Kawalec.

We debate over the thesis "It is worth to be in the eurozone". Therefore we are not searching for a solution, because we already have one, which is the thesis itself. One team believes that it is worth entering the eurozone, the other one claims that it is not. The debate is made up of two rounds. In the first round everyone will share their arguments. In the rebuttal everyone will answer the other team's arguments.

[First voting, result: 336 in favor, 264 against]

We begin with the vote in favour of the thesis. At the beginning of the first round Professor Rosati will take the floor as the Proposition speaker. The next speaker will be Professor Krasnodębski as the first speaker of the Opposition.

Dariusz Rosati: Three minutes to present the advantages, risks and drawbacks of entering the eurozone is like three minutes to talk about the Sienkiewicz Trilogy. Well, the debate is a debate with all its rules. Therefore I will try to present to you the economic argument based on a very tentative account of costs and profits which Poland may face on entering the eurozone. First of all let me talk about the transactional costs, which are connected with two matters: currency exchange costs and risk prevention costs. Based on data for the Polish economy for 2012 and based on more or less realistic assumptions I evaluate the first category of profits on the level of circa 4.5 billion zlotys and the second one connected with the financial risk – on the level of circa 5-5.5 billion zlotys. Please remember these numbers for reference. The third category of profits is a decrease of capital costs and interest rates and it is much more important. Considering the size of debt of the Polish private sector in 2012 and carefully assuming the interest rate decrease by circa 200 basis points, it means that the costs of credit services for the Polish economy will drop by more or less 15 billion zlotys in the annual scale. The fourth category of profits, which may be counted easily, is the operational cost of public debt. Assessing the loan needs of circa 150 billion zlotys annually and assuming the same drop of interest rates by circa 200 basis points we gain profits in the public debt service on the level of 3 billion zlotys. When we sum it all up we receive circa 28 billion zlotys static and directly accountable profits. We should add dynamic profits to this, resulting of course from the extension of horizons, from investment results, new employment vacancies, from the increase in revenues and taxes. Let me support my arguments with the assessments of the National Bank of Poland, which evaluates these dynamic profits approximately on the level of 0.7 percent of GDP, referring to the data of 2012 again, circa 10 billion zlotys. So much on the side of profits. Let me point out that there are many other economic benefits, but my time runs, so I cannot enumerate all of them.

Of course, entering the eurozone is connected with costs as well. The most serious, but a non recurrent position is the cost of introducing the Euro. It is more or less 0.5 percent of GDP. The second serious position resulting from the decrease

of interest rates is a drop in interest rate income for all those who have deposits. These are the basic costs. Of course there are a few adjustment costs as well, not so considerable. Altogether we receive profits minus costs circa 2 percent of GDP.

Jan Krzysztof Bielecki: Thank you so much. Professor Rosati in his first presentation described the net profits resulting from entering the eurozone and estimated them on the level of 2 percent of GDP. This is how we remember the first argument. Now I give floor to Professor Krasnodębski.

Zdzisław Krasnodębski: I will not refer to these numbers, because I am not an economist. I am a sociologist, but let me tell you that I used to believe that economics is an exact science and I had participated in a few conferences of bank associations before the euro currency existed. I heard more or less the same arguments as the ones presented by Professor Rosati today. All the economic advantages that the euro was supposed to bring were enumerated. And almost nothing of what they had said came true. I know that after our debate Minister Jacek Rostowski will take floor and he will talk how to repair the eurozone. Therefore we would have to enter a zone, which needs a recovery already. It is obvious that the effects of the introduction of the euro and the monetary union are completely different than expected. Of course there is a question: where does it come from? Until we reach a common view on this matter, though, as we know, there are many different opinions on this issue – the problem of Greece and no budgetary discipline or maybe it is the matter of the euro itself, which is heard from very prominent economists and I also think this way – we should not enter the eurozone. What promise did we hear connected with the euro introduction? Prince Michael von Liechtenstein, who had a speech before our debate, mentioned chancellor Helmut Kohl, who said that the monetary union is a way to unify Europe. Well, the promise connected with the introduction of the monetary union was also a political promise. It was a promise that the economies of the peripheral states and the central states would converge. Nothing like this happened, actually it was the opposite. Why? The reason is the euro and the fact that it is a currency which is not adjusted to the countries which are in the eurozone. Europe is too diversified, both socially and politically. The euro is a currency which is too weak for Germany – that is why we are facing the obvious political effects in the form of immense increase of economic and political power of this country. Today we can repeat after the leftist sociologist, Ulrich Beck that in this situation we can talk about "German Europe". On the other hand the euro is too strong a currency for the countries of the south. The common currency led to divergence then. In fact, it splits Europe instead of unifying it. We must take this into account before we make a decision on entering the eurozone.

Jan Krzysztof Bielecki: Thank you. Let us then agree on the main counter argument made by Professor Krasnodębski, namely that introducing the euro has not led to the convergence of EU member states' economies, but just the opposite. Now let me ask the other speaker of the Proposition, Professor Dariusz Filar.

Dariusz Filar: When an economist builds a scenario, in general he makes assumptions for the same. If my scenario is based on a thesis that it is recommended for Poland to belong to the eurozone, at the same time I formulate the following assumptions: I am not entering the eurozone today or tomorrow and I am not entering it unconditionally. As a matter of fact I would rather tell you about these assumptions, but my role here and now is to present arguments in favour of entering the eurozone. Maybe I will have time to discuss the assumptions later on. Now let me focus on arguments and put aside the assumptions for a while.

First of all, Europe has been developing a certain unification scenario for several decades and the common currency is definitely a part of this project. If we want Europe to be unified, we also want to have the same currency.

The second argument, which in my opinion is specifically Polish, is the fact already mentioned by Mateusz Szczurek in his opening speech that at present we meet all nominal criteria except the ERM II system. The notion that these criteria should be met was present in Poland – both in the National Bank of Poland and in the Ministry of Finance, so I treat the eurozone as the disciplining factor. It must be admitted that in Poland this disciplining mechanism worked better than in other countries.

The third argument is connected with the fact that Polish companies are braver and braver in entering Europe. We often notice that there are foreign investors in Poland, but Polish companies also go outside. For many companies, especially the smaller ones, such balance uniformity of a company or even its part, which operates abroad, would be a facilitation. The transaction costs mentioned here by Professor Rosati – I see them further, only on the fourth position, because the costs are falling. The mechanism develops so much that it may be cheaper, but of course there are profits here as well.

And the last argument, also raised by Mateusz Szczurek, namely access to the ECB resources, if necessary.

Jan Krzysztof Bielecki: Thank you. Unfortunately I must write down one argument, not several and that is why I propose to record Professor Filar's argument in favour of the debate thesis that the fact of the target obligation to belong to the eurozone had a disciplining function in the economic policies run by various governments over the years. Let us now give the floor to the second speaker of the Opposition – Professor Sławiński.

Andrzej Sławiński: There is nothing more important in economic policy than keeping the economy on the path of balanced growth. What we need in order to do this, and we will need for a long time yet, is a fluctuating exchange rate and autonomous financial policy. In the eurozone it is very easy to lose balance and the costs of return are – as we all see – very high; certainly higher than potential benefits of entering the eurozone, mentioned earlier by the Proposition speakers.

A fluctuating exchange rate is necessary not only during crisis. It constantly helps us in balancing the economy and the balance of payments. No country in our region has such a stable turnover balance as Poland.

Moreover the fluctuating nominal rate allows to stabilize the real effective currency rate, which is crucial from the point of view of competitiveness of the economy. Milton Friedman wrote about it in 1953 already. The Slovakians worry that after the stabilization of the nominal exchange rate (in effect of entering the eurozone) the real exchange rate fluctuation increased.

As far as operational costs are concerned, they dropped radically after moving the currency exchange trade into clearing platforms. Spreads for big companies are two pips now and for small companies – 20 pips, which makes 0.2%. It is hard to talk about any meaningful transaction costs resulting from maintaining own currency.

If the fluctuation of the zloty exchange rate is irrelevant and it is the case here, it means that we maintain the monetary policy autonomy with a very low cost. What is more, the stability of the zloty exchange rate guarantees that when we apply the fluctuating exchange rate, it is no problem for our European partners.

The examples of Latvia, Lithuania, Estonia, Ireland, Spain and Portugal show how big the costs of losing monetary policy autonomy may be. As far as the Baltic states are concerned, when we notice that they were applying fixed exchange rates to the euro for a long time, practically it meant that in fact all these countries functioned in such conditions as if they had already been in the eurozone. In effect they lost control over the size of interest rates with the consequences that we all know.

Of course one can say that once you enter the eurozone, you can apply macroprudential policy instead of monetary policy, but this is an illusion. These are two policies, which may support one another, but they are not fully substitutive. It reminds me of a similar illusion, which used to be a belief a decade ago or so, when they said that after entering the eurozone the fiscal policy may completely replace monetary policy as an instrument of an anti cyclical policy.

At the end let me add that all the Baltic states, even Slovakia, are small economies. The Polish economy is much bigger and that is why we need the fluctuating exchange rate and monetary policy autonomy more than they do. It is much too early to resign from it.

Jan Krzysztof Bielecki: Thank you, Professor. Let us assume that your argument is the autonomy of the monetary and exchange rate policy, which has let us mitigate and is still mitigating the crisis shocks and we have been developing like this for 23 years without interruption. Now the third voice in favour of the thesis, dr. Jerzy Pruski.

Jerzy Pruski: At the beginning let me refer to what Professor Sławiński has said – we have autonomy. It has its dark side and bright side as well. Putting

aside the exchange rate autonomy let me just say that the autonomy of monetary policy led to the fact that we have a big gap between the inflation target, which is to be reached by the central bank, and the real inflation rate. Talking about benefits connected with entering the eurozone, let me begin with the aspect that Professor Rosati mentioned at the end – there are economic benefits and there are a lot of them. They are very well accountable and examples have already been given. A statement appeared that these easily quantifiable benefits should be accompanied by many other profits. In this context let me draw your attention to the series of benefits, which have the nature of crisis actions and crisis prevention. There have never been in Europe such crisis prevention and crisis response solutions as nowadays. These solutions have been developed in accordance with the highest world standards. Most certainly, from the regulatory point of view the European Union, especially the eurozone, are the world leaders. Let me enumerate only several such risk preventing solutions. The European Systemic Risk Council, something that we are developing in Poland, but we have not finished yet, was built in Europe, in the eurozone, a long time ago. We have solutions, which refer to macro economic issues, such as stability package. We have new regulations in the scope of capital and fluidity, but most of all there are solutions which in my opinion, although they have not been tested directly, are beginning to work already and it is visible in the effectiveness of these solutions in the context of the Greek case. Namely, this is a uniform supervisory mechanism and, what is more important, a uniform mechanism of resolution, which was connected in Europe with a full harmonization of functioning of deposit guarantee schemes for the first time ever. Nobody in Europe and probably nobody in the world deals with systems which are so well established in regulatory and institutional terms and which will fight the crisis effects, if it happens. It is even more important, considering that such solutions address the problem, which is unsolvable in the whole world, namely, a cross-border crisis consisting in moving big bank troubles from one country to another. In Poland we feel safe as long as it has not affected us. Nowhere in the world, FSB included, a remedy exists, which would allow for solving the problem of so called cross-border burden sharing. It seems that it works in Europe. A uniform mechanism has been created to allow for resolution of banks and it solves the problems of international cooperation.

Jan Krzysztof Bielecki: Thank you very much. So we can record an argument in favour of entering the eurozone, based on which thanks to being in the eurozone it is possible to use crisis response tools and crisis prevention tools. Now I give the floor to the third speaker of the Opposition, Stefan Kawalec.

Stefan Kawalec: In the introduction of my speech let me emphasise that I believe that the European Union and the common European market are huge achievements of post-war Europe. Poland's safety and successful economic development depends on the maintenance of these achievements. However,

establishing the eurozone appeared to be a serious mistake and it bears a serious threat both for the European Union as well as for the uniform European market.

The basic argument against entering the eurozone is that the resignation of an own currency deprives a country of its adjustment mechanism, which is a change of the currency exchange rate. It is a very effective mechanism and in a critical situation, when this mechanism does not exist, it may have dramatic economic and political consequences for the country. Let us compare two countries with a similar population: Spain, which belongs to the eurozone and Poland, which has its own currency. When the eurozone crisis broke out it was estimated that Spain should decrease salaries by circa 30 percent in order to restore the international competitiveness of its economy. If Spain had had its own currency, the competitiveness improvement in this scale might have been achieved very fast by weakening the currency. Something like this really happened in Poland between 2008 and 2009 when the Polish zloty weakened by 30 percent, which was one of the main factors that made us the only country in Europe with economic growth in 2009. We have been benefiting from the competitiveness improvement so far. Spain has not had such an opportunity and was resigned to the policy of so called internal devaluation, in effect of which nowadays Spain GDP is 5 percent lower than before the crisis, whereas Polish GDP increased in the same time by over twenty percent. Unemployment grew in Spain by more than a dozen pp and even the IMF, which apraised Spain for its determined actions admits that salaries do not decrease there, and economy adjustments were mainly achieved by GDP decrease and employment decrease. Spain is now facing many years of high unemployment and it is reasonable to ask how the political system will bear it and whether democracy and territorial unity of Spain will be maintained.

Jan Krzysztof Bielecki: We can record the third argument for the Opposition team that the internal devaluation, which is an inevitable adjustment mechanism for a country in the eurozone, is very painful for citizens.

We already heard the speeches made by the team of proponents and the team of opponents of the thesis that it is worth being in the eurozone. In accordance with the debate scenario we should now go to the second round, the rebuttal. Let us give the floor to Professor Rosati.

[Before the beginning of the second round the audience aired their opinions and questions.]

Dariusz Rosati: Of course nobody says that we have to enter the eurozone tomorrow or the day after tomorrow. As Professor Filar has noted it should be done after preparations. I heard an argument from the Opposition that we should keep the autonomy of monetary and exchange rate policy. Actually I would like to make a correction here – Poland does not apply an exchange rate policy at all. We have a floating exchange rate. We could not apply an exchange rate policy anyway, if we wanted to maintain autonomy in monetary policy. Second, autonomy in monetary

policy is of course limited. Poland may not freely establish interest rates. We cannot go below 1.5 percent at this moment, nor can we establish interest rates too high, because the exchange rate these days is determined mainly by capital flow, not by what is happening in the current account, most of all in foreign trade. Those, who believe that devaluation is a method for the maintenance of competitiveness should be reminded that the countries of the south of Europe carried out devaluations regularly every 3–4 years, but it did not make them competitive economies. Devaluation is a method for us to be cheaper, but not more competitive. Therefore those countries of the south of Europe joined the eurozone and they counted that they would be able to build their competitiveness in the environment of a stable exchange rate and stable interest rates. The euro is not the reason why this has not happened in many cases. The reason is a bad macroeconomic policy of these countries. Both Greece as well as Portugal to some extent or Italy, entered into excessive debt by using a low interest rate environment. The euro cannot be blamed here, because it was not compulsory to take debts. The counties of the north of Europe resisted this temptation and used the common currency in order to build competitive economies. Finally, I would like to reassure those who are afraid of the negative influence of euro introduction on the relation between the salary and price levels. The purchasing power of salaries, no matter if it is four thousand zlotys, or one thousand euro after conversion, it will not change, because the prices are also counted with the same conversion rate. We will not have any price shock, because as we know from other countries' experience, prices do not increase after entering the eurozone.

Jan Krzysztof Bielecki: Thank you so much. Can we summarize the Professor's speech so that the autonomous exchange rate and monetary policy suggested by Professor Sławiński is in fact a good camouflage for bad economic policy?

Dariusz Rosati: I would put it in other words, namely that such an open country as Poland, with its own currency has two choices: to resign from the exchange rate policy, which we have already done in Poland, or to resign from monetary policy at all. You cannot have both things at the same time.

Jan Krzysztof Bielecki: I understand, so now I give the floor to Professor Krasnodębski.

Zdzisław Krasnodębski: I have the impression that we are discussing something unrelated to political and social reality. It is difficult to foresee the future. Let us rely on facts then, which have shown so far that the monetary union gave more power to the strong and weakened the poor ones. One can expect – the example of Spain is very good here – that certain processes which occurred in the countries of southern Europe, will concern Poland if we enter the monetary union. One can also expect then that the phenomena of peripheralization will enhance. Second, we experience centralization. Today, as we know, five presidents of EU member states announced a program which proposes to deepen the centralization

process. Now there are efforts to rescue the monetary union by further political, fiscal centralization, etc. However, this policy evokes protests. Social and political reality looks different. We see in the European Parliament that the protesting parties are growing, we are threatened by Grexit, wheareas we are talking about a completely abstract situation. It is not sure at all that the eurozone will develop in the planned direction, because social protests will have to be addressed. Let us recall that both Greeks as well as the Spanish, but also the Latvians protested very strongly against entering the eurozone. Ignoring such voices of protest is unfortunately connected with such processes as de-democratization, moving power in the direction of technocratic elites in Brussels etc. I am not an advocate of such a Europe, a Europe of economic inequality, a centralized Europe, a non-democratic Europe.

Jan Krzysztof Bielecki: Professor, in such a case we will record that belonging to the eurozone evokes huge social protests and rejection of economic policy run in the framework of the eurozone. Now Professor Filar will take floor.

Dariusz Filar: Continuing what I have already said, namely that the vision of the eurozone and certain parameters which it consists of, enabled subsequent Polish governments, regardless of their composition, to stick to certain rules and I think that this should not be rejected. In other words, the eurozone, along with all factors which are necessary for its good functioning, may be treated as a kind of motivation to continue policy which is beneficial for the country and which does not allow anyone to bear in mind that public debt may be raised, that huge deficits may be created, that financial policy allows for a vast room to move. We treat the eurozone as a kind of a challenge with a certain direction.

There is another issue as well, namely the aspect of optimum currency area. Many scientific papers are devoted to the analysis of the issue whether Europe is or may be the optimum currency area. This aspect deserves consideration and analysis how much Poland is able to fit in the rules of optimum currency area, if such an area will really appear in Europe.

Jan Krzysztof Bielecki: Thank you so much. The argument is that the perspective of belonging to the eurozone is a perfect motivation for subsequent governments to run good economic policy.

Andrzej Sławiński: Let me start with a short riposte to Professor Rosati's speech. Let me remind you that a variable rate of the Polish zloty basically had an counter-cyclical nature and when I talked about the necessity to apply the floating exchange rate I was not talking about steering the rate, since the National Bank of Poland did not do this except in ad hoc cases.

Whereas my second argument in this debate is that the eurozone was created prematurely. It is now like the conquered bridge in Arnhem recalled in the movie "A Bridge Too Far". The costs of defense of the eurozone, as well as the bridge defense, appeared too high.

I understand the premature creation of the eurozone as establishing it before the formation of a political union. Without such a union all new institutional solutions are – as we see – late and limited.

For example, out of the planned European Banking Union we only have a common supervision now. The system of deposit guarantee does not exist yet and the fund to finance resolution of banks will have (and no sooner than in 10 years time) only 55 billion euro, which is a very small amount when we bear in mind that rescuing only the Anglo-Irish Bank cost the Irish government 30 billion euro.

Waiting for the commencement of quantative easing (QE) so necessary in the eurozone took five years and the costs were immense. Contrary to Great Britain and the United States, the eurozone entered a second recession and several member states experienced so severe fiscal crises that their governments lost their borrowing capacity in capital markets.

The five-year period of waiting for QE was unnecessary and it was not a coincidence. The arguments prepared in the Karlsruhe tribunal in cooperation with Bundesbank against MTO (QE predecessor) were theoretical and not supported with empirical research. Only this year the eurozone commenced QE, but the question is what will happen when QE ends? Will the European Central Bank be able to resist the role of the tender of last resort to governments, which is now taken by all other important central banks? Without a specific form of a political union it will still bear unnecessary controversies. Finally it is something as common as intervention of a central bank in financial markets.

Jan Krzysztof Bielecki: Thank you so much. So the argument here is that institutional solutions in the eurozone cannot catch up with the integration level, which results from introducing the common currency. Now I give floor to dr. Jerzy Pruski.

Jerzy Pruski: Let me try to prove the thesis that the exchange rate stability really matters and it is very important and one should not talk about the exchange rate strategy emphasizing only one dimension of such an exchange rates solution, namely that if the rate is flexible it may serve as a buffer. This thesis is quite obvious. It used to be at the basis of introducing solutions in Poland in 2000, which we now call the floating exchange rate. We know the advantages of such a buffer very well. At the same time I also want to say that it was a period in which everybody strongly believed in the economic argumentation that entering the eurozone made sense due to economic reasons. This argumentation has not depreciated a lot. The argument that I wanted to refer to is connected with the value of exchange rate stability. Several years ago, when the Polish zloty really appreciated by five percent and the trend lasted for several years the worst thing that I experienced was a meeting with exporters and explaining to them the floating exchange rate advantages. A demagogic approach to the exchange rate mechanism is not good, it carries many traps and one of the examples is the strong

appreciation, real appreciation of the currency. It is exactly as Professor Rosati said, namely the exchange rate changes in result of capital flow. What is now the reaction of the countries which have – I do not know, whether it is independent – monetary policy and I do not know if they run an independent exchange rate policy? I am now thinking about the perfect Swiss economy, which – in order to defend itself against capital flows in the framework of independent monetary policy and – one might like to say – floating exchange rate, had to fix it once and recently the Swiss National Bank has introduced negative interest rates as the first bank in the world. It is obvious what happens in case of a sudden depreciation. Please bear in mind another scenario – maybe this is a slightly geopolitical argument – what would happen if the Ukrainian conflict shifted in the direction of the Polish borders? How would financial markets react, what would be the exchange rate stability of financial instruments in the eurozone and elsewhere?

Jan Krzysztof Bielecki: Thank you so much. Dr. Pruski's argument is that higher exchange rate stability, which we would achieve when we enter the eurozone, is a great value, underestimated in this debate. Now I ask for the last argument of the Opposition and I give floor to Stefan Kawalec.

Stefan Kawalec: Let me add another argument to the previous one. I have a very important prerequisite against entering the eurozone, namely it is impossible to exit the eurozone when it appears necessary. The paradox here is that the countries which are in a safe situation would also be able to safely withdraw from the eurozone. If Germany wanted to go out of the eurozone, they can do it without causing a panic in their economy. Whereas such countries like Greece, Spain and others, which dramatically need their own currency, are not able to do it safely. If Spain announced that it introduced its own currency, everyone would expect the currency to depreciate to euro immediately. Depositors would run on banks to withdraw their euro without waiting for their deposits to be converted into the new national currency. It would cause a banking panic and a threat of economic paralysis. It is a trap, which is the reason not only of today's Greek tragedy, but also the problems of such countries as Spain, Finland, Slovenia. The three last mentioned countries, in opposition to Greece or even Germany or France, before the outbreak of the world financial crisis obeyed the fiscal Maastricht rules, but today they are in a dramatic situation. If they had their own currencies, they would have been depreciated a long time ago, which would have resulted in their economic competitiveness and economic growth. Today Spain, Slovenia and Finland have their GDP several percent lower than in 2007 and there are no visible prospects to resolve the situation in the future.

Jan Krzysztof Bielecki: Thank you so much. We are close to the end of our debate. To sum it up, the voices in favour of the main thesis had a strong argument that aiming at entering the eurozone is a good motivation for Poland and that it is not worth being afraid of and that the costs and benefits are accountable and

we can observe a net profit in effect. We had a perfect technical debate on the meaning of our monetary policy autonomy or exchange rate policy and the level of its autonomy. Last, but not least, we had voices against entering the eurozone, which said that the eurozone has not led to convergence, that eurozone is not really thought through and institutional solutions connected with it cannot catch up with the level of currency integration and it bears specific risks, that it is a trap which should better be avoided.

[Final voting, result: 316 in favor, 284 against]

Ladies and gentlemen, thank you very kindly, especially the debate participants – opponents and proponents of the thesis and all the audience. Thank you very much for interesting viewpoints in the debate.

Jacek Rostowski*

HOW TO REPAIR THE EUROZONE? AND WHAT WILL HAPPEN IF WE FAIL?

The economies of the European Union are strongly integrated with each other, and that includes Poland. Although Poland has a relatively low share of exports to GDP, amounting to 49%, it is the highest among the six biggest countries of the European Union. Therefore recession in the eurozone in the years 2012–2013, which was the result of the Eurozone crisis (as a result of expectations that the eurozone might fall apart), translated directly into a Polish slowdown in 2012 and 2013.

It is absolutely obvious to me, and I think also to all economists, that if the eurozone were to fall apart, not only the countries which belong to the eurozone, but also all the others in Europe (including of course Poland) would suffer something akin to an economic catastrophe. Therefore, even if it is true that, as Stefan Kawalec has said, the euro was created too early, it is a fact that it has been created. Europe cannot undo this fact without causing an economic catastrophe for all. A velvet dissolution of the eurozone is impossible. I am absolutely convinced of this.

We are all aware that there is no ideal currency system which would be appropriate for any country at all times, or even at a given time in all countries. Somebody (during an earlier discussion) said that the fact that Poland achieved 2.5% growth in 2009, at a time when the rest of the Western World fell into sharp recession, was the result of our floating exchange rate. In fact, in the very short

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* Former Deputy Prime Minister Jacek Rostowski's speech after the debate on 22 June 2015, 5th European Financial Congress in Sopot.

term the floating exchange rate may indeed have helped Poland. But the Czech Republic also had a floating rate at the time, and it did not protect them from deep recession. If we analyse the situation in the longer term, we see that in the last seven years the cumulative GDP growth in Poland was 24% and in the Czech Republic under 1%. On the other hand Slovakia, which was in the eurozone, and therefore could not benefit from exchange rate adjustment, had 13% cumulative GDP increase. Economics is more complicated than it may sometimes seem during debates. The most important conclusion from the recent economic history of Europe is that we are vitally interested in the recovery of the eurozone, irrespective of whether we are in the euro or not.

Today we are in a situation in which it is quite possible that Greece will leave the euro. Several years ago it was assumed that this would be a catastrophe for the whole of the eurozone. Today we can be less afraid of such a scenario, and there are two main reasons for this. The first is the European Central Bank's quantitative easing, which provides the rest of the eurozone with a firewall against contagion from Greece. This is something that the Polish government pressed for from the very start of the crisis in 2010. The second reason is that – in this particular case of Greece – we do have a political mechanism which allows the euro-zone to decide whether Greece should stay in or leave. That mechanism is the ability (or otherwise) of the members of the zone to agree further rescue programs for Greece. If such programs were to cease, Greece's banks could no longer receive assistance from the ECB, and Greece would have to leave the euro.

However, the fact that there are two mechanisms which would let Greece to leave the eurozone in a way that was safe (for the euro, not necessarily for Greece) is actually an accident. Of course a very fortunate accident, but nevertheless an accident. If Greece leaves the eurozone today, we cannot be sure that in the next crisis such mechanisms will be in place.

To this day the euro does not have a mechanism or a political institution which would allow the eurozone to decide whether a country should stay in or leave. There is nothing on this in the treaties. Nor do we have full freedom for the European Central Bank to undertake quantitative easing in order to keep a given country in the eurozone, until a political decision has been taken on its leaving. Without these two mechanisms, the risk of chaotic, uncontrolled exit (Xit?) by some country in the future is much greater.

This will be particularly the case if it turns out in the meantime that Greece, after leaving the eurozone, has managed quite well on its own. It is possible that Greece will initially have very bad results after leaving. But maybe after five years *Grexit* will not appear that bad at all.

Therefore, I believe that the minimum requirement for a sustained eurozone recovery is the creation of two mechanisms – (1) the option to rescue or secure the presence of a given country in the eurozone by an unlimited purchase of its

government bonds by the European Central Bank; and (2) the mechanism of taking a political decision on a country leaving the eurozone. Both these mechanisms require treaty change, and it is clear that such changes will not be easy to achieve.

Of course these two mechanisms, even assuming they were introduced to the treaties, would protect us against the chaotic collapse of the eurozone as a result of chaotic exits of countries, only in case of relatively small member states such as Portugal, Ireland, Slovenia or maybe – at a stretch – Spain. However there are other countries, and especially one which has such a considerable public debt in relation to the whole public debt of the world, that its insolvency and departure from the eurozone would have to cause a giant shock not only to the European economy, but also to the global one. This country is, of course, Italy. Therefore we can say that a safe eurozone is a eurozone where wise decisions regarding economic policy are made not only in Brussels, Frankfurt or Berlin, but also one in which wise decisions are made in Rome.

Putting this issue aside, the good news in recent months has been the fact that quantitative easing has definitely worked well, not only in terms of securing the stability of the eurozone, but also in boosting its economy. It turns out that the very active monetary policy of the European Central Bank over the last year has been effective in causing the Europe's exit from stagnation.

We could not be sure about this in December of last year, and many people claimed at the time that the eurozone needed not only an active common monetary policy, but also a common fiscal policy. I think that even the recent experience of the effectiveness of monetary policy in the eurozone does not mean that in future stagnations or crises it would necessarily have the same effect in counteracting recession. Therefore, the next step in the improvement of the eurozone should be the creation of the mechanisms of common fiscal policy. Such a policy should consist in the creation of a common policy which would be expansive in bad times and restrictive in good times.

Two more thoughts at the end. One of the recent, so called institutional "achievements" of the eurozone, which Brussels often boasts of, is the creation of a "procedure of excessive macroeconomic imbalances" (which is supposed to protect the eurozone from excessive imbalances between countries). This in fact means nothing less than that one of key assumptions underlying the creation of the euro – namely that macroeconomic imbalances in a common currency area tend towards balance automatically – has simply turned out not to be true! We will see how effective the MIB procedure will turn out to be in achieving the same aim *via* policy. But originally it was assumed that in a common currency area a considerable part of any imbalances between its parts will be eliminated naturally, through the normal working of markets.

And one last thought: the UK's threat of leaving the European Union is also a result – at least in part – of the eurozone crisis. It stems both from the crisis itself,

because the credibility of European integration has been undermined, but it also stems from the fact that containing the crisis required such deep integration in the eurozone, that Britain felt marginalised from the main flow of European policy. We know that if Britain were to leave the EU it would shatter many aspects not only of the economic, but also of the political, balance in Europe. Unfortunately, the eurozone crisis is not over: its destructive effects, both direct and indirect, are not only still evident but in many areas (such as the threat of Brexit) they are actually intensifying.

Problems and Opinions

*Bernhard Speyer**

TLAC: SYSTEMIC RISK ISSUES AND THE IMPACT ON STRATEGIES OF CROSS-BORDER BANKS

INTRODUCTION

In November 2014, the Financial Stability Board (FSB) published a Consultation Paper[1] on Total Loss Absorbing Capacity (TLAC) outlining the capital requirements that globally active and systemically important banking groups, so-called G-SIBs, should meet in order to ensure the orderly resolution of such financial institutions without either disruption of critical functions or the use of taxpayers' money. Given that this has essentially been the last prominent item left on the G-20's agenda for regulatory reform after the financial crisis, the proposed rules had widely been anticipated and, accordingly, market reaction to the FSB's paper has been restrained. However, as analysts, bank managers, and academics have begun to examine the proposals more deeply, it has increasingly become clear that the proposal will probably have significant impact on the institutional structure and the competitiveness of cross-border banking groups. Moreover, the introduction of TLAC may have side-effects on systemic stability that will have to be addressed in the further development of the proposed rules lest they create new sources of vulnerabilities.

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1 FSB (2014a)

I) THE RATIONALE AND KEY FEATURES OF THE TLAC PROPOSAL

Ending "too big to fail" has been one of the key aims of regulatory reforms after the financial crisis. The aim entails two separate, yet closely interrelated objectives: First, to ensure that the cost of the failure will be borne by the owners and creditors of the failed institution and that the resolution of the failed bank does not necessitate the use of taxpayers' money; second, to make sure that the failure of a large and complex financial institution will not have negative repercussions for the rest of the financial system and that critical functions will continue to be provided.[2]

From this dual objective it follows logically that large and complex financial institutions must hold sufficient capital to absorb losses as well as to recapitalise critical activities after the absorption of those losses without recourse to public-sector assistance. Thus, TLAC consists of two components: First, the minimum capital requirements according to Basel 3; second, the new Gone-Concern Loss Absorbing Capacity or GLAC.

According to the FSB's proposal, the TLAC provisions will apply to G-SIBs as identified by the FSB (currently: 30[3]), initially excluding those G-SIBs that are headquartered in emerging markets (which, in effect, would exclude the three Chinese G-SIBs). While the FSB proposes that TLAC be applied to G-SIBs, it is probable that in many jurisdictions TLAC-type requirements will be imposed on domestic systematically important banks, or D-SIBs, too – after all, the logic and objective of the TLAC proposal applies to D-SIBs, too.

In response to regulators' requirements and legal provisions such as the Dodd-Frank-Act and the EU's Bank Recovery and Resolution Directive (BRRD), financial groups, in the context of their resolution planning, have to decide on their structure for resolution. Essentially, regulation allows two models for this: the Single Point of Entry (SPE) or the Multiple Point of Entry (MPE) model of financial resolution.[4] In the former, a banking group would be wound up as a single entity; this model typically applies to banking groups that have a holding structure on top of the organisation. In contrast, MPE strategies tend to be applied by banking groups with separate, legally independent operating units. Frequently, these are banking groups that have historically grown through the acquisition of (often foreign) subsidiaries. For the matter at hand, the differentiation between SPE and MPE strategies is important, because, within any banking group, the TLAC requirement will apply at the level of each resolution entity within the group

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2 In addition, assuming that "too big to fail"-banks tend to be cross-border banks, too, an effective regime for multi-jurisdictional resolution is needed. Cf. Zhou et al. (2014), p. 435.

3 Cf. FSB (2014b).

4 Cf. FSB (2013).

and separate TLAC will have to be placed at the respected level of the group.[5] The FSB points out, though, that the aggregate TLAC requirement should be invariant to the number of resolution entities.

According to the FSB's initial thinking, the TLAC requirement is to be set at 16–20% of group RWA and 6% of total assets; both conditions must be met simultaneously. The additional capital buffers under Basel 3, viz. the Capital Conservation Buffer (CCB), the surcharge for systemically important financial institutions (SIFIs), and countercyclical capital requirements, will be added on top, because they should be available to serve the purposes they were intended for.[6] Considering all of these components, total capital requirements for G-SIBs will exceed 25% of RWA, once TLAC enters into force in, as currently planned, 2019. At least one third of the TLAC requirement will have to consist of debt instruments. TLAC must consists only of liabilities which can be effectively written down or converted into equity without either disrupting critical services or giving rise to legal challenges. In any case, certain types of liabilities, such as insured deposits, covered debt, or liabilities arising from liabilities are excluded from the list of eligible instruments.[7] In addition to the statutory requirements (so-called "Pillar 1"), which will need to be met by all G-SIBs, authorities will be free to impose additional requirements ("Pillar 2") if they deem this appropriate and necessary given the structure, risk profile, and complexity of an individual banking group.

As a multi-jurisdictional agreement, the TLAC requirement must provide both home and host authorities with sufficient confidence that an institution can be resolved in a manner that disrupts critical services in neither the home nor the host jurisdiction. If such confidence did not exist, host authorities would react by ring-fencing local subsidiaries, intensifying the already visible trend for a re-fragmentation of financial markets.[8] Reflecting these concerns, the TLAC proposal introduces the concept of so-called Internal TLAC, which would be applicable to each material non-resolution subsidiary incorporated in a jurisdiction other than the resolution entity. Internal TLAC would be pre-positioned on the subsidiary's balance sheet so that losses are automatically being passed on to the mother company allowing for a recapitalisation of the subsidiary without resolution measures. For the purpose of Internal TLAC, material subsidiaries are defined as those that comprise 5% of either consolidated Group RWA, revenues or leverage exposure, or are identified by the respective bank's Crisis Management Group as

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5 As Gracie (2014, p. 5) notes: "It is worth noting that the resolution strategy governs TLAC, not the other way round".

6 Cf. Gracie (2014), p. 3.

7 See FSB (2014a), p. 16 for the full list of excluded liabilities.

8 Cf. ECB (2014), p. 15–35 for evidence on the re-fragmentation of European financial markets.

material to exercise a group's critical functions. Internal TLAC requirements are scaled in proportion to the size and risks of the material subsidiary; tentatively, the FSB proposes that Internal TLAC is set at 75–90% of the Pillar 1 TLAC requirement that would apply if the local unit were a resolution entity itself. Internal TLAC is thus clearly a compromise between the interests of large, fully integrated cross-border groups, which would, in principle, prefer to exclusively hold TLAC at the group level, and the interests of host authorities, which would prefer fully capitalised, legally separate resolution entities within their jurisdiction.

II) IMPACT ON BANKING SECTOR STRUCTURES

It is interesting to note that analysts do not appear to be concerned about whether banks will be able to meet the TLAC requirements in quantitive terms.[9] Instead, analysts seem to focus more on the implications that TLAC will have on corporate structures, especially those of European banks.

As mentioned above, the TLAC proposal does not prescribe a certain group structure, but is neutral as regards banking strategies and structures.[10] Nonetheless, there is a wide-spread presumption that the TLAC proposal will benefit banks that have a holding-type structure.[11] In the consultation on the TLAC proposal, banking associations from jurisdictions, in which the alternative organisational model without a holding company at the top of the group is more prevalent, have indeed raised this point, suggesting more or less explicitly that the current TLAC proposal is biased in favour of US, UK, and Swiss banking markets.[12] The thinking behind this presumption is that a holding-type structure would enable a bank to issue senior debt at the level of the holding company; this debt would subsequently be passed on as Internal TLAC to the bank operating subsidiaries. The bank thus benefits from the ability to issue relatively cheap debt at the HoldCo level. Moreover, a clear layering of a bank's liability structure will be easier if all TLAC debt is issued at the holding level rather than in a dispersed fashion at the level of several OpCos, especially in light of the fact that banks usually have little to no liabilities at the HoldCo level that are not eligible for a bail-in (such as deposits or derivatives payable). In contrast, a more dispersed issuance at the level of OpCos would make the liability structure more difficult to understand for investors, who would then charge an "uncertainty premium" to banks whose liability structure was more complex.

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9 Cf. e.g. Deutsche Bank (2014), p. 14 or Credit Suisse (2015), p. 15.
10 Cf. Gracie (2014), p. 2.
11 E.g. Deutsche Bank (2014), p. 8, Credit Suisse (2015), p. 33.
12 E.g. German Banking Industry Committee (2015), p. 3 and p. 6.

However, it is not entirely clear that this presumption is in fact valid. It ignores that a subordination of debt can in fact be achieved by means of three mechanisms[13]: First *institutionally* via the corporate structure, where a holding-type structure subordinates debt placed at the level of subsidiaries by definition. Secondly, subordination can be achieved *statutorily* by means of legal provisions. This is in fact the case in the EU, where the BRRD gives resolution authorities the right to bail-in debt issued by any resolution entity of a bank. (To be fair, it should be noted that this option was not available to the FSB as it had to suggest a proposal that could be implemented in the multi-jurisdictional environment of the FSB's membership rather than in the single legal environment that the EU offers.) Thirdly, subordination can be achieved by means of *contractual* arrangements. While these may be difficult to understand for investors, the possibility to achieve the desired structure of seniority and subordination clearly is available even in the organisational model prevalent in Continental Europe.

More importantly, one would expect that investors look through the structure and realise that the prima facie senior debt issued at the holding level is in fact subordinated and will be bailed-in should a resolution become necessary. In this context it is worth noting that Credit Suisse, in an analysis of the TLAC proposal, points out that the advantage of banks that already have a holding-type structure does not lie in the holding structure itself, but in the fact that those banks already have a large amount of senior HoldCo debt outstanding. Compared to banks with newly established HoldCos this gives investors more confidence as there is a broader pool of senior debt to share losses.[14] Empirically, senior debt issued at the holding level has in fact become more expensive following the publication of the FSB's TLAC proposal.[15] Similarly, it should be noted that the rating of bank holding companies in the US tends to be lower than that of debt issued at the level of OpCos of the same companies.[16]

Against this background, it does not appear to be the case that the TLAC proposal will force banks that currently do not have a holding-type structure to move to one. This holds true all the more as moving towards a HoldCo structure is costly and time-consuming. It requires inter alia shareholder approval and an

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13 Cf. Gracie (2014), p. 4.

14 Credit Suisse (2015), S. 33.

15 Credit Suisse, e.g., notes that spreads on senior debt by UK bank holding companies have risen by 25–30bp after the FSB's November 2014 announcement. Credit Suisse (2015), p. 8. Increases of similar size could be observed in the yields of senior debt issued by US bank holding companies, e.g. GS and JPMC.

16 E.g., for Goldman Sachs and Bank of America, HoldCo long-term debt is rated A-, their banking OpCo long-term debt is rated A; for JPMorganChase, HoldCo long-term debt is rated A, that of JPMorgan Bank A+.

evaluation of assets held in the legal entities which, in addition, may have adverse tax implications for the bank.

More importantly, there is an additional consideration which tends to work against a holding-type structure, at least for those G-SIBs that have a material share of cross-border and international business in their total assets: Host supervisors will most likely prefer a corporate structure with local resolution entities. The reason is simple: In spite of the envisaged pre-positioning of Internal TLAC and the right to impose additional local capital requirements, host supervisors are likely to feel uncomfortable with relying on parent companies based in a foreign jurisdiction to absorb losses. Host supervisors, especially those with material subsidiaries, prefer MPE over SPE resolution and will always prefer a local resolution entity that falls unquestionably under the power of the local resolution authority and the locally applicable law.[17] Therefore, it is likely that TLAC will increase pressure from host authorities to designate systemically important local operations as separate resolution entities. This entity would then have to issue external TLAC, raising funding costs and making the firms less competitive in the respective local market and overall.

Indeed, TLAC will most probably make discussion within resolution colleges on the determination of resolution entities even more contentious, as host supervisors will try to impose an MPE-type resolution strategy on cross-border banking groups. Incidentally, from the strategic point of view of a G-SIB, this may open up some room for bargaining with individual authorities. More specifically, it may actually be advantageous for a cross-border group to treat its various foreign subsidiaries in a differentiated fashion:[18] As mentioned, according to the FSB proposal the internal TLAC requirement will be set at a level of 75–90% of the external TLAC requirements. The exact point within that range will presumably reflect not only the risk profile of the respective entity, but also the relative bargaining power of the respective host supervisor. It is not unreasonable to suppose therefore that the percentage of internal TLAC would differ between two otherwise identical resolution entities within a banking group, depending on where the entity is located. For the bank, lower levels of Internal TLAC will always be preferable to higher ones, as Internal TLAC effectively traps capital in subsidiaries, where it will not be available to cover capital shortfalls in other parts of the group and may

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17 Schoenmaker (2013, p. 120), e.g., observes that "(…) supervisors are increasingly adopting a national approach." This includes (informal) requests for local subsidiaries and ring-fencing of assets in the host country.

18 In this context it is interesting to note that the contribution by the European Financial Congress in Poland to the TLAC consultation notes: "It should also be remembered that by allocating to a systemic subsidiary bank the assets earmarked for its resolution, the resolution entity that is the parent of the bank in question gains greater bargaining power in discussions concerning the scope of decisions it may make with respect to that bank.", cf. EFC (2015), p. 8.

lead to a misallocation of capital. The interests of host supervisors and those of the top-level management of G-SIBs are, thus, exactly juxtaposed: While banks have an incentive to lower the levels of Internal TLAC, host supervisors will want to have as high levels of Internal TLAC as possible and to circumscribe managements' ability to transfer capital to other parts of the group.

III) ADDITIONAL FINANCIAL STABILITY CONSIDERATIONS

The TLAC proposal has a bearing on other aspects of financial stability, too.

Investor base

As has been the case with the market for Contingent Convertible ("CoCo") bonds, in a first reaction to the FSB's proposals, traditional bond investors, such as insurance companies and pension funds, expressed only little interest for TLAC-eligible debt instruments.[19] In particular, investors stated that the risk inherent in TLAC-eligible debt and, hence, its pricing was hard to determine.

The lack of interest in the traditional investor base is compounded by the fact that banks themselves, which traditionally have been important buyers of each other's debt, will be discouraged to invest in TLAC debt instruments. The FSB's proposal states explicitly that *"it will be important to strongly disincentivise internationally active banks from holding TLAC issued by G-SIBs"*.[20] Consequently, the TLAC term sheet states that G-SIBs holding TLAC debt issued by another SIB must fully deduct this debt from their capital. It is suggested that a similar provision be enshrined in Basel 3 regulation for non-SIBs. The rationale for this prohibition is that authorities do not want to open a potential channel of contagion in the banking system. However, limiting the TLAC investor base to non-bank institutions such as hedge funds, insurance companies or pensions funds will not only severely limit the investor base (to the extent that these non-banks are interested in TLAC debt at all!), but also has a potential competitive effect: These non-bank investors are more prevalent in some markets than in others. Specifically their role and size is far greater in Anglo-Saxon financial markets than it is in Continental Europe.

This problem will be aggravated by the fact that, as mentioned, financial markets are re-fragmenting along national borders. This entails that the markets for sub-ordinated debt, too, will increasingly be national. If so, the ability to issue, to place, and to price such debt will be a function of the local investor base, which

19 Glover et al. (2015).
20 Cf. FSB (2014a), p. 12.

varies between countries. Banks headquartered in countries with small, shallow and unsophisticated capital markets will therefore face higher costs of funding than their peers incorporated in markets with the opposite characteristics.

Resolution entities with deposit surplus

In the financial crisis, it could be observed that an excessive reliance on volatile, short-term wholesale financing created additional vulnerability for banks and acted as a catalyst for the aggravation of the crisis. As a consequence, regulators have insisted that banks increase their reliance on longer-term and stable sources of funding, including deposits.[21] It is therefore somewhat ironic, that, relatively speaking, the TLAC proposal punishes those institutions that hitherto have heavily relied on deposit funding, because deposits are excluded from the list of TLAC-eligible liabilities. If deposit-heavy entities within a SIB are resolution entities, these entities will therefore have to issue relatively large amounts of TLAC-eligible liabilities. The funding costs of these entities would rise accordingly.[22]

SIBs that have entities with such characteristics will therefore have an incentive to either create a holding-type structure, enabling them to issue (senior) TLAC paper at the holding level, or to merge the deposit-heavy entities into larger resolution entities that are more wholesale funded, so that the share of deposit funding is diluted. As discussed in section II, neither of these approaches is likely to be welcomed by host supervisory authorities in charge of the deposit-heavy entity, as the risk profile of that entity will rise compared to the status quo ante.

Raising TLAC levels for deleveraging banks

Many European banks are still in deleveraging mode and shrink their balance sheets. For these banks, raising the volume of TLAC compliant capital is not possible as part of a process of organic growth where a growing balance-sheet volume is (partly) funded by issuance of TLAC-eligible capital instruments. Instead, these banks will have to actively substitute some hitherto used sources of funding with TLAC eligible capital.[23] While not impossible (assuming that there is a sufficient investor base for TLAC eligible capital, see above), this would require active capital management and may cause higher capital costs if existing sources of capital must be cancelled pre-maturely.

Splitting critical from non-critical functions

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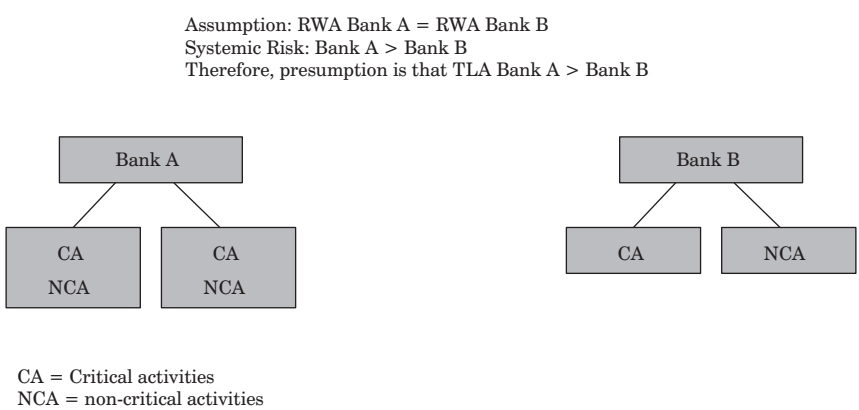
[21] Cf. Basel Committee on Banking Supervision (2014), pp. 1, 3.
[22] Cf. PwC (2014), p. 2.
[23] Cf. Alexander (2015).

The objective of TLAC is to ensure that sufficient capital is available within a group to maintain critical functions that cannot be wound up without disproportionately large negative consequences for the wider economy and / or for systemic stability. The emphasis here is on "critical": It is only for those functions whose continuation is in the public interest that GLAC capital needs to be available. This refers, for instance, to deposit-taking activities or to payment services. In contrast, for non-critical functions the assumption is that these will simply be discontinued and wound up.

Assuming that this is indeed the rationale behind TLAC then it follows logical that it would rational for banking groups, with a view to lowering their overall TLAC requirements, to split their operations in a way that concentrates non-critical and critical operations in separate entities. For the former, no or only little GLAC would be required.



If this were indeed the outcome of the TLAC proposal on the structure of banks, this result would presumably be in the interest of many financial regulators. Many supervisors have argued for a long time that complex large banking institutions need to be split up so that critical functions can be ring-fenced and continued in case of a failure. The Federal Reserve, e.g., has stated that rather explicitly that breaking up complex SIBs is indeed an implicit objective of the TLAC proposal.[24]

[24] "By further increasing the amount of the most loss-absorbing form of capital that is required to be held by firms that potentially pose the greatest risk to financial stability, we intend to improve the resiliency of these firms. *This measure might also create incentives for them to reduce their systemic footprint and risk profile.*" Tarullo (2015), *[my emphasis, BS].*

Also, current regulatory initiative aimed at structural banking reforms such as the Vickers and Liikanen proposals implicitly aim at separating critical from non-critical operations.[25]

Second-round effects

The FSB's proposal presents an elaborate framework for the resolution of a G-SIB. It is consistent with the objective that a resolved operating entity that offers critical functions has sufficient capital after resolution to maintain these critical operations. Implicit in the proposal is the view that the NewCo would be sufficiently capitalised if it met regulatory requirements. Indeed, the indicative range for TLAC capital given by the FSB, viz. 16–20% of RWA, would suggest exactly that, because this range would give the NewCo sufficient regulatory capital even assuming that all capital of the legacy institution was gone.[26]

Thus, the FSB's proposal, in a way, implicitly – and, one is tempted to say, rather heroically – assumes that (i) the firm regains market access after resolution, and that (ii) markets will stabilise after the resolution and that therefore there will be sufficient time to rebuild the corporate structure as well as TLAC to prepare the institution for the next financial crisis. However, this ignores two critical issues: (i) The NewCo will have sufficient capital to meet regulatory requirements, but it will no longer have a HoldCo above it which would provide it with loss-absorbing capital. (ii) In a time of financial market stress – and the period following the resolution of a G-SIB inevitably will be such a time! – merely holding the regulatory minimum capital will not be sufficient for a banking institution. This will hold particularly true for an institution such as the resolved entity which will be a new institution without a track-record. It therefore follows: In order to become a viable institution that can fund itself in capital markets, a NewCo emerging from a resolution will probably have to hold significantly more than the regulatory minimum to establish confidence. Against this background, it seems likely that authorities will push entities into holding TLAC capital towards the upper end of the range currently suggested, in order to have a sufficient margin of error.

Liquidity

The TLAC proposal centres on ensuring that a systemically important banking institution holds sufficient capital to ensure an orderly resolution and the continuation of critical banking functions. In contrast, the TLAC proposal

[25] Cf. Schildbach / Speyer (2013, pp. 141–153) for an overview and a discussion of the Vickers and Liikanen proposals.

[26] Gracie (2014), p. 3.

hardly touches upon the issue of liquidity[27] – even though liquidity is of at least as much if not greater importance to ensure the survival of an institution in times of crisis than capital. The resolved entity (NewCo) will – arguably (see above) – have sufficient capital to at least meet regulatory requirements, but it is far from obvious whether it would have sufficient liquidity. Again it needs to be kept in mind that the NewCo is an institution without a reputation that at the same time carries the negative legacy of the failed parent institutions, which may have caused losses at other banks. Hence, it is not unrealistic to assume that NewCo, in spite of it being declared a healthy and untarnished institution by resolution authorities, will be cut off from money markets initially or will at least find it expensive to tap markets for liquidity. Consequently, in addition to ensuring sufficient capital, some additional private or public sector mechanism to guarantee access to a sufficient amount of liquidity may be needed to make resolution work.[28]

Roll-over of TLAC debt after crisis

Not much thought appears to have been given in the TLAC proposal to the question of whether banks will be able to roll-over maturing TLAC debt in periods of market tension. Based on past experience with the emergence of risk aversion in the aftermath of a crisis, it is not unreasonable to assume that the investor base for TLAC debt will dwindle after the first losses have been realised. In such a situation, rolling-over TLAC debt may become impossible and will certainly become more expensive.[29]

The TLAC proposal addresses this problem by stipulating that TLAC-eligible debt instruments have a residual maturity of at least one year. In practice, authorities will also insist that TLAC-eligible debt be staggered so that in any one period only a fraction of TLAC-eligible debt issued by the institution in question matures.

Yet, while these measures mitigate roll-over risk, none of them will eliminate the fact that G-SIBs will be exposed to another form of prolongation risk. Moreover, from a systemic point of view, the TLAC proposal increases pro-cyclicality in the financial system, as banks' funding costs will increase in times of market tension. Obviously, this stands in contradiction to the general objectives of financial regulation.

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27 Cf. Goodhart (2015), p. 1.
28 Cf. Zhou et al. (2014), p. 445.
29 Cf. Goodhart (2015), p. 3.

CONCLUSION

The FSB's TLAC proposal puts into place the last major building block of the G-20 regulatory reform agenda. TLAC is based on the recognition that ending "too-big-to-fail" requires a framework which allows for an orderly winding-up of complex banking institutions that neither requires the deployment of public money nor threatens the disruption of critical financial services. Fundamentally, the proposal, as presented in November 2014, seems to set the right incentives for achieving these objectives, at least as far as capital requirements are concerned. However, because of a lack of progress in building truly supranational resolution regimes, TLAC, as it currently stands, will be insufficient to avoid negative side-effects on the organisational structure, efficiency, and competitiveness of cross-border banking groups. In addition, since TLAC focusses almost exclusively on capital requirements, it ignores other important aspects that have a bearing on systemic stability, such as liquidity, roll-over risk and second-round effects. These will have to be addressed before TLAC enters into force, if TLAC is to contribute decisively to safeguarding financial stability.

Abstract

The FSB's proposal on Total Loss Absorbing Capacity (TLAC) constitutes the last major building block of the post-crisis regulatory reform agenda for global financial markets. The proposal aims at creating the preconditions for an orderly liquidation of complex banking institutions that would ensure the continuation of critical financial services without the need to use taxpayers' money in the resolution. The FSB's proposals are fundamentally conducive to achieving these aims. However, the TLAC proposal will have considerable side-effects on the organisational structure and competitiveness of cross-border banking groups; specifically, it is likely to disadvantage banking groups with material foreign subsidiaries. Moreover, while the TLAC proposal provides a comprehensive framework concerning capital requirements for too-big-to-fail institutions, the treatment of other aspects which influence systemic stability, e.g. liquidity and rollover risk, are underdeveloped.

Key words: TLAC, systemic risk, cross-border groups, G-SIBs, banking structure

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Olga Szczepańska*

MREL AND TLAC I.E. HOW TO INCREASE THE LOSS ABSORPTION CAPACITY OF BANKS

INTRODUCTION

It seems that the global financial crisis is coming to an end. We have already reached the stage when it is possible to have a preliminary summary of the costs incurred, to formulate conclusions and propose solutions that would be aimed at preventing the recurrence of similar crises in the future.

One of the regulatory initiatives in terms of enhancing the security and resilience of banks is a new prudential requirement concerning the maintenance of the relevant amount on the bank balance equal to the liabilities, so that in case of a crisis they can be converted into equity, serving to cover the losses and recapitalisation. In November 2014, the Financial Stability Board (FSB) published a proposal for a standard of total loss-absorbing capacity (TLAC)[1]. In the European context, a transposition of TLAC is the obligation for the banks to maintain a minimum relevant level of own funds and eligible liabilities (MREL). These standards, although different in some details, have the same purpose and fundamental principles. At this stage, they may still be subject to certain specific modifications influenced by the opinions raised during the public consulta-

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1 FSB, *Adequacy of loss-absorbing capacity of global systemically important banks in resolution*, Consultative Document, Washington, 10 November 2014.

tion[2]. However, the concept itself is advanced and its implementation in the legal order is already a foregone conclusion.

The subject matter of this article is to discuss the main assumptions for the TLAC and MREL, along with an attempt at critical appraisal. In the **first part** of the article, the genesis of new regulatory requirements is recalled by referring to the experience of the last financial crisis. **The second part** is dedicated to the characteristics of the new prudential standards, with particular reference to the standards of MREL, which is to take effect in the European legal order. A brief reference is also made to the differences observed between the TLAC and MREL. **The article finishes** with reflections on the new requirement and preliminary proposals on selected aspects of their implementation.

1. GENESIS OF THE NEW REQUIREMENTS OF TLAC AND MREL

Recently many publications devoted to the post-crisis financial stability architecture begin with a reminder of the volume of public expenditure incurred for the purpose of rescuing banks during the recent crisis. These numbers are usually cited to justify the need for the speedy implementation of regulatory reforms aimed at limiting the risk taken by banks and the increase of their resilience to shocks in the future. Since the new regulations usually entail additional burden for the banks, they produce strong resistance on the part of the latter. Confronting this burden with the costs that taxpayers have suffered to help banks during the recent crisis is justified, because it significantly weakens the argumentation of the banking environment. What is particularly appealing to the imagination is the data related to the EU. Between 2007 and 2014 the European Commission made more than 450 decisions approving state aid for 112 banks whose assets represent more than 30% of the assets of the banking sector in the EU as a whole. Governments spent more than 671 bn euros to rescue the banks in the form of capital and repayable loans (5.4% of the EU GDP in 2008) and 1.3 trillion euro in guarantees for the liabilities (10.3% of GDP)[3]. The amounts were considerable and contributed to a serious increase in the public debt in the EU, and in particular the euro zone, where the crisis was felt most. Public debt there increased from 66% of GDP in 2008 to more than 90% of GDP in 2014. In extreme cases, the banking crisis led the state budget to the verge of bankruptcy. A classic example is Ireland, whose public

[2] FSB consultations on TLAC lasted until 2 February 2015, while the deadline for the consultation of the draft of the technical standards of the European Banking Authority (EBA) for MREL expired on 27 February 2015.

[3] G. Adamczyk, B. Windisch, *State aid to European banks: returning to viability*, Occasional Paper, European Commission, 2015.

debt increased from the lowest level in the euro zone, i.e. 25% of GDP before the crisis, to more than 123% in 2014.

Expenditure on aid intended for individual aid banks reached tens of billions of euros, and the highest amounts were meant for banks with a global scope of business. Many of them were included on the list of global systemically important banks, as announced by the Financial Stability Board (GSIBs).[4]

Table 1. Value of state aid for the banks in the period 2008-2014

United Kingdom		USA		Euro zone	
Bank	**The amount in bn of GBP**	**Bank**	**Amount in bn of USD**	**Bank**	**Amount in bn of EUR**
RBS	45.5	Bank of America	46.6	Dexia	11.9
Lloyds	20.3	Citigroup	45.0	Fortis	11.2
Nothern Rock	20.0	JP Morgan Chase	26.9	Commerzbank	18.2

Source: *Reuters, Bloomberg*, G. Adamczyk, B. Windisch, *State aid to European banks: returning to viability*, Occasional Paper, European Commission, 2015.

The last financial crisis was no exception. Also in the past, the governments of countries all around the world spent taxpayer's money on injecting capital into banks facing the risk of bankruptcy. Paradoxically, it was the expression of helplessness, stemming from the lack of a legal basis for intervention in the operation of the banks at a respectively early stage and from the lack of tools that would make such intervention effective. Legal provisions did not make it possible to provide for mandatory charge on the creditors due to the losses suffered by the bank without prior notice of the bank's bankruptcy. The insolvency law, in turn, was in most jurisdictions universal for all business entities and did not take into account the specific nature of banks. Bankruptcy of a bank in this legal order, particularly in the case of large banks, inevitably entailed negative systemic implications[5]. The contagion effect would make the problem occurring in one bank transfer to other banks and the rest of the financial system, thus causing crisis in the economy as a whole. To avoid this, governments recognised public aid as a cheaper solution. Their decisions were motivated by the need to protect the stability of the financial system, rather than the desire to save a specific bank.

[4] In November 2011, FSB first published a list of 30 banks identified as G-SIBs and since then, it has performed an annual review of this list.

[5] J. Zhou, V. Rutledge, *From bail-out to bail-in: Mandatory Debt Restructuring of Systemic Financial Institutions*, IMF Staff Discussion Note, Washington D.C., 2012.

However, as a result of such policy, shareholders and creditors did not bear the cost of the crisis. Therefore, they did not have the incentive to monitor bank risk and its correct valuation. The prices of the debt instruments of the banks which could count on government aid did not reflect the risk taken by the banks, as the risk was covered by implicit *guarantees*. That's why these banks had a privileged position on the market and the cost of their funding was lower than other actors, which was contrary to the principles of equal competition[6]. This form of protection also caused immeasurable negative consequences, namely the weakening of market discipline and creating moral hazard[7].

With regard to such experiences, the need for a thorough reform of the financial safety net network has become clear. On the global level, an important contribution in the process of initiating these changes came from the Financial Stability Board, which set the Key Attributes of Effective and Resolution Regimes for Financial Institution (*Key Attributes* – KA)[8]. This procedure, also known as *resolution*, consists in the fact that public institutions have the power and instruments that enable the restructuring of a bank at an early stage of a crisis or alternatively, its liquidation, irrespective of its size, while maintaining its critical functions[9] and protecting insured deposits. This procedure implies the lack of involvement of public funds. The cost of this operation should be borne by the shareholders and creditors of the banks, not the taxpayers[10]. In the European context, the KA have been implemented by the Bank Recovery and Resolution Directive (hereinafter BRR Directive)[11].

The idea of the *resolution* process is reflected in one of its key instruments, i.e., debt conversion or write-off, commonly referred to as *bail-in*. It involves writing off

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6 K. Ueda, B. Weder di Mauro, *Quantifying Structural Subsidy Values for Systemically Important Financial Institutions,* IMF Working Paper, WP/12/128, Washington, 2012, p. 4.

7 G. Stern, R. Feldman, *Too Big to Fail. The Hazards of Bank Bailouts*, Brookings Institution Press, Washington, D.C., 2004.

8 FSB, *Key Attributes of Effective Resolution Regimes for Financial Institutions,* Washington, October 2011.

9 A critical function is the kind of activity (service, operation) performed by the bank which is important for the functioning of the real economy and for the maintenance of financial stability, whereas a sudden absence of or disruption in the availability of this feature may have a significant negative impact on third parties, and may be the source of the decrease of general confidence and trust of market participants.

10 O. Szczepańska, A. Dobrzańska, B. Zdanowicz, *Resolution, czyli nowe podejście do banków zagrożonych upadłością,* NBP, Warsaw 2015.

11 Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directive 82/891/EEC, and Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC, 2011/35/EU, 2012/30/EU and 2013/36/EU, and Regulations (EU) No 1093/2010 and (EU) No 648/2012, of the European Parliament and of the Council, Official Journal of the European Union, L 173/190.

capital instruments in order to cover the losses, and if this proves to be insufficient for the bank to regain a stable situation, certain liabilities of the bank are subject to conversion into equity, which can also be used to cover the losses or for the recapitalisation of the bank, in order to meet regulatory requirements.

This instrument reflects the main principle of the resolution process, which has it that the losses of the bank should in the first place be covered by shareholders and creditors. However, for this instrument to be used successfully, provisions must be ensured that give the authorities responsible for the process of *resolution* the right to override the creditors' rights. It is also necessary for the banks to maintain adequate capacity for the absorption of losses in the form of adequate value of liabilities which may be subject to conversion to capital. Too broad a catalogue of obligations excluded from *bail-in* along with the freedom to shape the structure of liabilities by the banks creates the risk that this instrument will not be effectively applied due to the lack of liabilities eligible for conversion from the legal and operational point of view. The liabilities subject to conversion are, as a rule, more expensive for the issuer-bank, due to the higher risk of them being used to cover losses. That's why banks can shape their liabilities so as to avoid the liabilities subject to *bail-in*. In this context, the concept has arisen to introduce a new prudential requirement, obliging the banks to keep a certain proportion of liabilities, which in a crisis situation could be converted into shares, thus becoming an internal source for covering the losses and/or raising the capital in the bank. The ultimate goal of the new regulatory requirement is to increase the internal resilience of banks and to protect public funds (taxpayer's money) from being used to help banks affected by the crisis.

2. TLAC AND MREL-GENERAL CHARACTERISTICS

The Financial Stability Board has proposed a standard for banks concerning the total loss absorption capacity (TLAC). In the European Union, the BBR Directive – the requirement for the banks to maintain a minimum level of own funds and eligible liabilities (MREL). The BRR Directive sets general rules for the MREL requirement, whereas the *European Banking Authority – EBA*) is authorised to develop draft regulatory technical standards (RTS) to narrow down these rules and ensure their harmonization in the EU member states[12]. The following section shows the characteristics of both standards, focusing on selected aspects, i.e. (1) the substantial scope of the impact of the standard, (2) the way of calculating the

[12] *Draft Regulatory Technical Standards on criteria for determining the minimum requirement for own funds and eligible liabilities under Directive 2014/59/EU*, Consultation Paper, EBA, 28 November 2014.

requirement (3) the allocation of the requirement within the banking group, in the case of banks operating across borders), (4) the categories of eligible instruments, (5) the consequences of violating the requirement. These standards have the same purpose and basic principles, but they differ in certain specific solutions.

2.1. TLAC-basic principles

Substantive scope. The TLAC requirement is addressed to global systemically important banks (G-SIBs). The list of these is published by the FSB. The classification of large international banks in the G-SIBs category has been made by the FSB according to 5 criteria. They focus on the quantitative characteristics, i.e. the value of the assets, financial links, participation in market infrastructure, involvement in complex financial instruments, the scale of cross-border activity. Selected global systemically important banks have been broken down into subgroups (*buckets*) and depending on the affiliation to a particular bucket, they have been assigned additional capital requirements as buffers for global systemically important institutions (*G-SIBs buffer*)[13] from 1.0% to 3.5%[14]. According to the FSB, the TLAC requirement is not subject to differentiation depending on the bank's membership to a particular bucket of G-SIBs.

Calculating the requirement. TLAC is expressed in the form of the capital ratio or financial leverage ratio. It is an additional requirement in relation to the Basel capital requirement 3. As a result, the items on the balance sheet included in the capital ratio are also included in the TLAC requirement. The rules proposed by the FSB provide a common minimum requirement for the total loss-absorption capacity, which all G-SIBs will have to observe, regardless of their belonging to the subgroup – this is the so-called Pillar 1 requirement. Under Pillar 1, a minimum TLAC requirement is proposed in the range of 16–20% of risk-weighted assets and at the level of the double leverage ratio, included in Basel 3, i.e. 6%.

The minimum TLAC requirement without additional capital buffers from Basel 3 = max (16% of risk-weighted assets, 6% of the leverage ratio)

Capital buffers introduced under Basel 3 (security buffer[15] and buffer for system institutions) will not be taken into account for the calculation of the TLAC requirement. If capital buffers were to be taken into account, the total, minimum risk-weighted assets ratio required will increase to 19.5%–22% (16% plus 2.5% of the security buffer, plus 1%–3.5% of the buffer for system institutions).

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13 (*G-SIFI buffer*)

14 Maximum buffer level for G-SIBs is 3.5% and it is applicable to subgroup 5 (*bucket*) of the G-SIBs. At this stage, no bank has qualified for this subgroup and the highest buffer used in practice as imposed on G-SIBs is 2.5%.

15 (*conservation buffer*)

It is assumed that the Pillar 1 requirement can be supplemented by a specific TLAC requirement, defined for each bank individually under the so called Pillar 2. Regulatory and supervisory authorities in the Crisis Management Group[16] will be responsible for determining an additional, minimum TLAC requirement under Pillar 2, taking into account the characteristics of the bank, its business model, risk profile and organisational structure. Calibration and the composition of the TLAC requirement for a particular company should be evaluated within the so-called process of evaluating the possibility to carry out the recovery and resolution in a particular institution (*resolvability assessment process*).

Deployment of the TLAC requirement within a banking group. In the FSB concept, the *resolution* process in a banking group is considered holistically. A G-SIB is divided into the main entities, or units subject to *resolution* (resolution *unit*) and dependent branches, which alone are not subject to *resolution* process. A *resolution* unit together with its subsidiaries form a group, which is as a whole subject to the procedure of *resolution* (the so called resolution *group*). G-SIB may consist of several *resolution* groups with a corresponding number of *resolution* units. The minimum TLAC requirement will only refer to the *resolution* unit and will be established with relation to the consolidated balance sheet of each *resolution* group. Furthermore, the requirement must be met on a consolidated basis for the G-SIB. FSB suggests that subsidiaries of the *resolution* unit, significant for the group (*material subsidiaries*) be subject to the internal TLAC requirement. The so-called internal TLAC for a particular subsidiary would be equal to 75–90% of the standard requirement that a subsidiary would have to meet if it operated individually (on a *stand-alone basis*). The criteria for the designation of material subsidiaries proposed by the FSB are designed from the perspective of a banking group, rather than markets in which the subsidiary is established. They are related to quantitative indicators for the subsidiaries evaluated with relation to the values registered for the banking group on a consolidated basis (e.g. 5% of risk-weighted assets in the group, 5% of revenues in the group, etc.).

Instruments included in TLAC. TLAC requirement should consist of equity instruments from the first and second category (CET1, AT1 and T2) as well as other instruments not belonging to the regulatory capital. The Financial Stability Board introduces additional restrictions and requires that in addition to equity instruments, at least 33% of the TLAC requirement should be debt instruments. They must be instruments that can be effectively converted to equity in the course of the *resolution* proceedings, i.e. from the legal perspective, they may not contain

[16] Pursuant to the FSB guidelines, for all G-SIBs, the supervisory authorities from the countries where the banking group is present should create the so-called Crisis Management Groups (CMG). The group is chaired supervisory authority from the country where the head office of the banking group is located (i.e. consolidating supervisory authority).

clauses which constitute an obstacle to conversion. Instruments eligible for the minimum TLAC requirement should be long-term (with more than one year to maturity). Furthermore, the ageing of the instruments included by the bank in TLAC in its balance sheet should be differentiated, so that their maturity is evenly distributed over time. The point is that the maturity of debt instruments should not be cumulating at a certain time and that the bank should not have any trouble with the rollover of the obligations, should there be an abrupt deterioration of the market situation. The main categories of instruments excluded from TLAC are deposits covered by guarantees and liabilities. In order to minimise the risk of contagion, G-SIBs have to deduct eligible liabilities acquired by other global systemically important banks from their TLAC requirement.

Violation of the TLAC requirement. A violation or real threat of a breach of the minimum TLAC requirement by the bank is to be treated as a breach of capital requirements. This means that it can constitute a premise for commencing a *resolution* process.

2.1.1 MREL – basic principles

Substantive scope. The BBR Directive includes all the banks in the EU in the MREL requirement. At the same time, the directive lays down no harmonised size of this requirement. It is to be determined by the national resolution authority for each bank individually, taking into account i.a. its size, business model, funding model and risk profile.

Calculating the requirement. The MREL requirement is calculated as the amount of own funds and eligible liabilities in relation to the total liabilities and own funds of the institution. No common, minimum requirement is stipulated for all credit institutions and investment companies. In the RTS draft, the European Banking Authority specifies the criteria which the national *resolution* authorities should apply when determining the level of the MREL requirement for banks under its jurisdiction. It is important that the institutions with a similar risk profile, similar ability to carry out effective recovery and resolution have a similar level of MREL requirement, regardless of the country of origin. The RTS draft develops 6 criteria listed in the BRR Directive, which should be taken into consideration by the national *resolution* authorities when determining the MREL requirement for banks:

- **The criterion of the ability to carry out the bank *resolution process (resolvability)*** – it requires that a given institution should have sufficient own funds and eligible payables to cover losses and for the recapitalisation of the bank in the event of the implementation of the *resolution* plan.
- **Capital adequacy criterion** – made up of two elements: 1) loss absorption capacity and (2) recapitalisation capacity. The RTS draft defines how the

authorities should compute the necessary amount for each of these elements. When computing the MREL, the *resolution* authorities should assume a loss equal to capital requirements, including capital buffers. On the basis of the so-called *resolvability assessment*, that is, the evaluation of the ability to carry out the recovery and resolution of the institution concerned, the authorities may additionally assess that a higher level of capital is required for the absorption of losses. The other element of this criterion is the determination of the amount required for the recapitalisation process during a scheduled *resolution* process. For banks where it is anticipated that they can be wound up in a normal bankruptcy procedure, the amount for the recapitalisation process may be zero.

- **The criterion for covering the needs related to loss absorption and recapitalisation in case of some groups of liabilities are excluded from *bail-in*.** As a rule, the BRR directive excludes certain liabilities from *bail-in*, and in addition, national authorities also have the right to exclude certain liability groups *ad hoc*, in order to ensure an effective *resolution* process. That's why the MREL requirement for a particular bank should be fixed at a level which will cover the identified and potential exclusion of certain categories of liabilities from *bail-in*.
- **The extent to which the deposit guarantee system could contribute to the financing of the *resolution*** process. In RTS, the EBA proposes that when computing MREL, one should take into consideration the financial means of the Deposit Guarantee Scheme (DGS). The resolution authority should guarantee that MREL is fixed at a level which ensures that the DGS involved in the process of bank resolution is less than 50% of the target level of the deposit guarantee fund (*target level*).
- **The criterion that requires that the *resolution authorities take into account the size, business model, the funding model and risk profile of a particular institution*.** National *resolution* authorities should consider the extent of the difficulty and the possibility to carry out bank resolution (*resolvability*). As a rule, larger banks with more complex structure should maintain a higher MREL level.

Deployment of the MREL requirement in a banking group. The requirement must be determined and maintained both on the individual and consolidated basis. Subsidiaries of banks operating across borders are subject to the MREL requirement, as designated by the national *resolution* authority in the jurisdiction where the subsidiary is registered.

The instruments included in the MREL. Banks should have sufficient own funds and eligible liabilities to cover the losses and for recapitalisation. The BRR directive indicates that the *bail-in* instrument can cover all liabilities of the bank

(and thus they can be included in MREL), with the exception of the following main items[17]:

- guaranteed deposits,
- collateralized liabilities (e.g. mortgage bonds, repurchase agreements etc.),
- liabilities with an original maturity below 7 days, with the exception of entities that are part of the same group,
- liabilities whose residual maturity against clearing houses or their participants is less than 7 days,
- liabilities due to salaries and retirement benefits.

The BRR directive[18] stipulates that in exceptional circumstances, the *resolution* authority may decide to exclude – wholly or partially – certain liabilities from the scope of the *bail-in*, as long as the following conditions are met:

- the conversion or redemption of liabilities cannot be made within a reasonable time,
- the exclusion of the obligation is necessary to maintain the continuity of critical functions and the main business lines of the bank,
- the exclusion is necessary to prevent distortions in the functioning of financial markets, which may have a negative impact on the economy of a Member State or throughout the European Union,
- failure to exclude the obligation would result in greater losses for the remaining creditors.

Violation of the MREL requirement. The BRR Directive and EBA guidelines make no mention of the sanctions for a failure to comply with the MREL requirement. European authorities note that violation of the requirement, besides the reasons related to the activities of the bank, may be caused, for example, by systemic problems in the market. The provisions of the BRR directive provide only for the possibility to impose administrative sanctions by the *resolution* authorities or supervisors for the infringement of the national provisions which implement the rules of the directive. At this stage, this issue remains ill-defined in the legal provisions.

2.2. TLAC and MREL-comparison

The requirements of MREL and TLAC, though identical as to the purpose, differ in the details of the solutions. Table 2. summarises the key differences.

[17] Article 44 (2) of the BRR Directive.
[18] Article 44 (3) of the BRR Directive.

Table 2. TLAC and MREL-comparison

	MREL	TLAC
Purpose	To ensure adequate capacity of the bank to absorb the losses and to recapitalise without the need to involve public funds and without creating adverse effects for the financial system.	
Scope of the institutions (Addressees)	All banks (credit institutions and investment companies)	Global Systemically Important Banks (G-SIBs)
Deployment of the requirement within the banking group operating across borders	*Resolution* authorities have the discretion to determine the size of the MREL requirement individually for each bank, taking into account its characteristics.	All banks should have the same minimum TLAC requirement under Pillar 1. It is possible to add an individual requirement under Pillar 2.
Method of determining the requirement	• MREL is expressed as a percentage of the total own funds and liabilities of the bank. • MREL for the bank is calculated with the consideration of the capital minimum value and capital buffers.	• TLAC is determined by the equity ratio and leverage ratio. • The minimum TLAC requirement does not include capital buffers.
Value	• There is no standard value. The minimum value is determined individually by the *resolution* authority.	• The standard minimum is 16-20% of risk-weighted assets and 6% leverage ratio (Pillar 1). • Possible additional, individual requirement for each Bank (Pillar 2).
The consequences of a breach of the requirement	The issue is not precisely defined in the legal provisions.	• It is treated with the same strictness as a breach of capital requirements. • A breach of the TLAC requirement may constitute a premise for commencing the *resolution* process.

Source: own elaboration on the basis od: *The European MREL: main characteristics and TLAC similarities and differences*, Europe Regulation Watch, BBVA Research, 3 Dec. 2014.

3. REFLECTIONS ON TLAC AND MREL

After analysis of the proposals related to TLAC and MREL, certain reflections come to mind as regards the practical aspects of their implementation, with particular focus on the circumstances of our national financial system. Some of these reflections are presented below:

1. Since half of the banks listed by the FSB as G-SIBs are European banks, in practice, conditions should be created for the MREL implementation to be consistent with TLAC requirements. The RTS draft issued by the EBA seems to provide enough flexibility to the national *resolution* authorities so that they can take into account the specificities of the G-SIB.
2. The banks which will receive TLAC or MREL requirements may expect an increase in the cost of funding, which follows i.a. from the need to introduce changes in the structure of the balance sheet. However, the cost of introducing TLAC and MREL (just like other regulations) should be compared against with the benefits to be expected from the new requirements. One of the positive effects of TLAC and MREL may be strengthening the resilience of banks in a crisis. Additionally, in a situation of crisis they will not take advantage of government aid (at least that's the assumption of the *resolution* process). As a result, banking crises will be less costly for governments and economies. The effect should, therefore, be positive in the long term. One should also bear in mind the fact that the TLAC is one of the mechanisms that can restrict further expansion of global banks, which have so far been considered too big to fail (TBTF).
3. What should be considered right is the approach applied in the EU, pursuant to which the MREL – as a rule – is mandatory for all banks, regardless of their size and systemic importance. Flexibility granted to national *resolution* authorities in terms of determining the MREL requirement individually for each bank is a complementary mechanism, which allows for taking into account the characteristics of individual banks. As a result, it is possible to use a zero MREL requirement in the part allocated to the recapitalisation for very small banks or those not involved in the implementation of critical functions and to use a high level of MREL requirement for banks that create a considerable systemic risk.
4. The rules adopted in the BRR Directive and EBA suggestions of technical standards allow for the possibility of establishing a zero MREL requirement for the purpose of recapitalisation for small and systemically insignificant banks. In practice, however, this option should be approached with caution. On the one hand, we are aware that if the national deposit-guarantee scheme is able to cover the payment of deposits accumulated in the bank and the bank is not involved in the implementation of critical function, then the right procedure in the event of such a crisis is to wind up the bank. Therefore, it is not necessary to build

additional buffers in the bank for its recapitalisation. However, such an approach is rational when we look at the bank as a single case, in the micro-scale. The situation becomes complicated when the issue is examined on the macro level. When a crisis affects a group of small banks, which is not a rare phenomenon, the situation begins to have a systemic dimension. Winding up several banks at the same time means much higher costs for the deposit guarantee system or even poses a threat of depleting to its resources. When a particular function exercised by the bank is not a critical function due to the small scale of its execution, in the situation when a few banks cease to execute this function at the same time, it begins to acquire a critical dimension. Therefore, in the process of defining individual MREL requirement, the *resolution* authority should – in addition to the size of the bank – consider also the structure of the national banking system. When there are many banks and they have similar features, which makes them a homogeneous group, the *resolution* authority should lay down the MREL requirement for the recapitalisation of these banks at a level higher than zero, properly considering the systemic risk created by these banks as a group.

5. In the case of the European solutions, what is interesting is the criterion for calculating the individual MREL requirement, which requires that the share of the deposit guarantee scheme in financing the *resolution* process be taken into account. This means that the higher the target level of the deposit guarantee fund the greater the leeway for the *resolution* authority in terms of the possibility to reduce individual MREL requirements. This is why, paradoxically, it is in the interest of the banks to have a higher target level of the fund mandatory in the country – higher than the minimum. The Directive sets only a minimum requirement, but countries are free to increase it. Meanwhile, the banks can be expected to increase their resistance to the increase of the target level of guarantee funds as this means a higher annual premium. Therefore, the discussion should show that a higher target level of the guarantee fund creates a leeway for the national *resolution* authorities to reduce individual MREL requirements for the banks.
6. While the MREL requirement does not specify the structure of eligible liabilities, in the case of TLAC it is proposed that at least 33 percent of it was kept in the form of debt instruments. This principle seems right because it is supposed to contribute to keeping the risk of the bank currently reflected in the cost of obtaining its funding on the market. This requirement also aims to prevent the practice under which banks would issue only those debt instruments which would include appropriate clauses exempting them from the possibility of conversion into capital.
7. In the European context, for the banking systems dominated by the traditional formula of financing banks through the deposits of retail customers (households

and businesses), the MREL requirement could mean the need to seek new ways of securing liabilities. This challenge will concern, among others, Poland, where in some banks more than 60% of liabilities are retail deposits. Furthermore, even those banks that have so far relied on funding from their parent entities (parent banks), have recently started to change the financing strategy to one oriented towards local sources, the majority of which are own deposits. Meanwhile, deposits are excluded from *bail-in* (this applies to deposits covered with warranties, i.e. up to the equivalent of 100 thousand euros) and may not be included in the MREL requirement. The banks, therefore, have two options to meet the new requirements:

a. maintain a relevant higher level of capital in the first category or subordinated debt, or
b. issue debt instruments.

It should be emphasised that the issuance of debt securities refers to unsecured bonds, because secured bonds, for example mortgage bonds are excluded from the *bail-in* instrument and are not subject to conversion. Issuing unsecured debt securities requires the development of the local market and the demand for such assets from investors. At the same time, however, it has the advantage that it offers the opportunity to look for savings beyond the local market. Meanwhile, the collection of deposits is restricted to the local savings, which are limited, especially in less developed countries. Thus, paradoxically, the MREL requirement may encourage banks to be more active in seeking new sources of funding, other than deposits. At the same time, however, MREL does not impose the obligation on the banks to maintain the proper ratio of liabilities in the form of debt, as does TLAC, so banks will be able to meet MREL requirement only in the form of equity instruments. The choice of instruments included in MREL will be their decision.

8. The FSB proposal and BRR Directive differ in the approach to the issue of the deployment of the loss-absorption capacity requirement within a banking group operating across borders. MREL is supposed to apply to banks on an individual and consolidated basis, while TLAC is to be maintained by the *resolution* authorities and material subsidiaries (in a limited scope, i.e. 75–90%). In addition, it is worth noting that according to the FSB proposal, the evaluation of the materiality of a subsidiary is derived from its significance in the banking group rather than in the financial system of the host country. Meanwhile, from the point of view of stability of the host markets, it is of special importance what share of the local market a particular subsidiary (branch) has and what functions it holds there. A very common phenomenon is in fact the presence of subsidiaries that are relevant to the local market, but do not have so called material importance (*material subsidiary*) in the balance sheet of the entire banking group. This applies particularly to small countries and less developed

financial systems. Then the lack of adequate loss-absorbing capacity at a subsidiary level may have adverse effects for the financial stability of the host country, expose the funds of local depositors to risk and involve public funds. It is very important from the point of view of countries where a large part of the banking sector are the subsidiaries of global capital groups with relatively high independence of their parent entities (e.g. self-financing on the local market). This problem has been limited in the case of banking groups operating in the EU, which are bound by the provisions of the BRR Directive. However, in jurisdictions outside the EU, where global systemically important banks are present, it can be a problem. It is therefore worth proposing a modification to the FSB approach to defining a systemic entity. Not only subsidiaries perceived as important in a group should be treated as systemic, but also those that have important economic functions in the financial systems of host countries they operate in (significant share in the assets of the relevant market or important functions). If the authorities of the host country recognise the subsidiary (branch) as a systemic entity for the local market, these authorities should have the right to impose the TLAC requirement on the subsidiaries (branches) to such an extent as to ensure the ability of the entity to carry out *resolution* without disrupting the financial stability of the local market.

4. SUMMARY

New regulatory requirements, TLAC and MREL, are the next step towards reducing the cost of banking crises for the taxpayer. A common feature that both concepts share is striving to achieve the following objectives:

- ensuring that banks at all times have a minimum level of liabilities in their balance sheets which could be used to cover the losses and recapitalise the institution;
- increased confidence in the fact that big banks can be subject to *resolution* without the need to reach out for public aid;
- abolishing the *implicit* State Treasury guarantees on liabilities, which resulted in lower financing costs (especially for G-SIBs) and interfered with fair competition.
- mobilising investors to improve the monitoring of the banks to which they entrust their funds, which is especially relevant for G-SIBs.

The final shape of the new requirements will be affected by the results of consultations with key stakeholders. However, the underlying principles and objectives will definitely not be subject to material changes. At the same time, it is worth emphasising that the introduction of the TLAC and MREL requirement is not in itself a sufficient condition for carrying out a successful *resolution*. In

order for the new standards to be able to fulfil their role in practice, a relevant law is absolutely required, which will remove the barriers to effective conversion of certain liabilities to equity. The efforts of the *resolution* authority aimed at the redemption or conversion of the liabilities must have guaranteed legal security, which in most jurisdictions will mean the need to make significant changes in the provisions. In the EU, the adjustment of the national law is inspired by the BRR Directive, which should have been implemented by the Member States at the beginning of 2015 and the provisions concerning *bail-in* should take effect as of 2016. Considering the huge impact of the MREL and TLAC requirement on banks and financial markets, it is assumed that the MREL requirement will be introduced gradually until 2020. Similarly, TLAC is expected to be in full force and effect no earlier than in 2019. This provides enough time and comfort to banks and other market participants to adjust to the new regulatory conditions.

Abstract

During the recent financial crises, the cost of the aid provided to banks was mostly borne by taxpayers. This resulted in increased budget deficits and bred moral hazard among banks. The latest reforms introduce regulatory requirements and legal provisions, which in the first place put the burden of the costs related to the bank crisis on institutional shareholders and creditors. The Financial Stability Board has proposed a standard for the total loss-absorbing capacity of banks (TLAC). In the European context, the equivalent of this requirement is the minimum relevant level of own funds and eligible liabilities (MREL). Both standards require that banks maintain an appropriate value of liabilities that, in the event of a crisis, can be converted into capital and used to cover losses. This article describes the new requirements, pointing out the similarities and differences between them. The paper also presents reflections on the practical aspects of the implementation of TLAC and MREL, with particular emphasis on the perspective of the domestic financial system.

Key words: recovery and resolution, global systemically important banks, banking crisis, crisis management

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ADEQUATE LOSS-ABSORBING CAPACITY IN THE RESOLUTION PROCESS

1. INTRODUCTION

Banks function in the surrounding of an institutional safety net, which exists in order to ensure banking sector stability. When the safety net is too strong it evokes positive thinking, which leads to a conclusion that banks will never fail or cause their clients' loss. This approach is the key factor which leads to moral hazard. Banks, with their certainty that they would always receive governmental support, undertake a higher risk intentionally and with full awareness.

Moral hazard, which results from the functioning of banks which are described as "too big to fail" (TBTF) was one of the sources of the financial crisis. The positive belief that systemically important banks are able to privatize profits and socialize loss, encouraged the private sector to undertake excessive risk and this led to huge loss, which was the effect of rescuing the collapsing banks. The TBTF issue is one of the key problems which must be addressed in order to stop the snowball effect of moral hazard[1].

Accounting for global recomendations in the scope of resolution issued by Financial Stability Board, work is carried out worldwide in order to implement

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1 Pawłowicz L., *Hazard moralny w finansach i bankowości*, „Sektor bankowy w Europie. Co zmienił kryzys?", Zeszyty BRE Bank – CASE Nr 126/2013, p. 27.

more reliable mechanisms of resolution, which would be systematized, transparent and effective in[2]:

(i) reducing the systemic risk and limiting the moral hazard phenomenon by enabling a controlled collapse of TBTF banks,
(ii) breaking the feedback loop between insolvent and non-insolvent sovereigns,
(iii) dissuading from undertaking excessive risk and minimize the need to grant support to the banks.

The main purpose of this article is to present recent regulatory initiatives which are expected to enhance the banks' ability to absorb loss in the process of orderly resolution. The other purpose is an assessment of the influence of such regulations on the costs of financing Polish banks.

2. THE RESOLUTION MECHANISM IN CONTEXT OF THE TBTF DOCTRINE

Although politicians agree that banks should not be rescued with public money, the reality verifies this idea in a negative way. This happens because credit institutions play a particular role in the overall economy and their uncontrolled collapse might lead to a loss of people's trust in the whole banking sector. Financial support provided for restructuring and maintenance of critical functions of banks during the financial crisis may be recognized ex-post as reasonable if the dissemination effect is limited and if it adds to the maintenance of financial stability[3]. However, engaging public financial resources for this purpose and no organized mechanism of such intervention evokes many negative side effects and is not optimum from the social point of view.

The public protective umbrella spread over banks which are "too big to fail" is a source of many negative problems, such as: unfair competition, excessive risk taking and high costs for the public sector. What is more, the experimental research shows that the maintenance of insolvent banks (so called "zombie" banks, with almost zero economic value) caused by fears of a credit crunch often leads to even worse economic consequences, such as stagnation of credit actions, anemic economic growth, costs of financial aid, than in case of a fast recognition of loss and reorganization (or possibly liquidation) of credit institutions[4].

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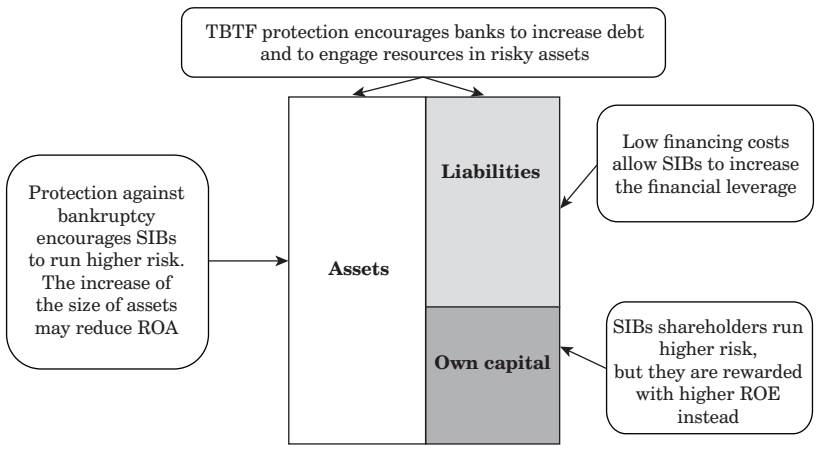
[2] *Adequacy of loss-absorbing capacity of global systemically important banks in resolution*, Consultative Document, FSB, 10 November 2014, http://www.financialstabilityboard.org/wp-content/uploads/TLAC-Condoc-6-Nov-2014-FINAL.pdf (access 28.04.2005).

[3] Laeven L., Valencia F., *Resolution of Banking Crises: The Good, the Bad, and the Ugly, in Financial Crises: Causes, Consequences, and Policy Responses*, IMF, 2014, p. 9.

[4] Admati A.R., DeMarzo P.M., Hellwig M.F., Pfleiderer P., *Fallacies, Irrelevant Facts, and Myths in the Discussion of Regulation: Why Bank Equity is Not Socially Expensive*, Rock Center for Corporate Governance at Stanford University Working Paper 86, 2011, p. 50.

Since bank creditors with systemic importance do not bear the full costs of bankruptcy, they are ready to provide financing without paying enough attention to the analysis of a bank risk profile, which encourages credit institutions to lift financial leverage and take on more and more excess risk. SIBs, with their competitive advantage over banks, which generate smaller systemic risk, may engage more intensely in risky activities and they may increase systemic risk. What is more in such a situation, the TBTF institutions may be more inclined to build their competitive dominance by aiming at a fast increase of assets in order to gain profits through scale of activity and maximize the expected value of implicit public guarantees. In effect, the public financial support granted to rescue SIBs in case of financial difficulties often appears to be huge (image 1).

Image 1. Influence of implicit public guarantees on the TBTF institutions balance



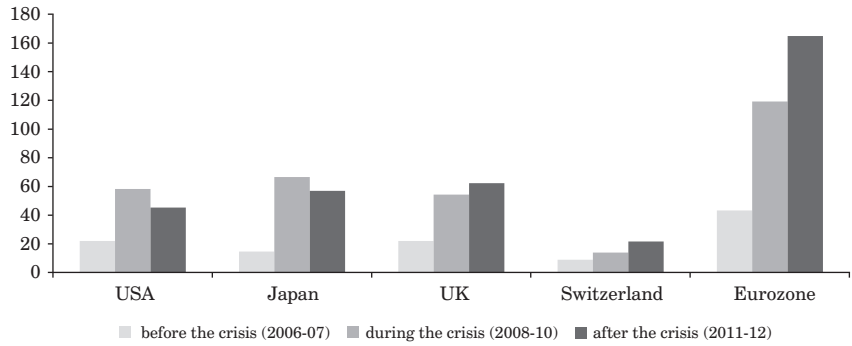
Source: author's conclusions based on: *Global Financial Stability Report*, IMF, April, 2014, p. 103.

The problem of TBTF institutions grew significantly during the financial crisis. In order to support threatened banks and in order to protect financial stability, governments were ready to grant various kinds of support, such as recapitalization, provision of guarantees for various types of assets and liabilities, supporting mergers and acquisitions[5]. The above actions left no doubt that SIBs could count on support from public resources. The countries that managed to get up after the crisis have been left with even more serious problems. In effect of mergers

[5] Stolz p., Wedow M., *Extraordinary Measures in Extraordinary Times: Public Measures of Support of the Financial Sector in the EU and the United States*, European Central Bank Occasional Paper No. 117, Frankfurt, 2010, p. 7.

and acquisitions the banks appeared to grow even more than before the crisis. In certain countries, smaller institutions, highly complex and with many cross-border connections and political importance also appeared to be too big to fail (see Ireland), and sometimes they were too numerous to fail.

Image 2. Implicit public guarantees in relation to G-SIBs (in billions of USD)



Note: the amount of implicit public guarantees has been assessed based on the average of three methods applied by IMF.

Source: author's conclusions based on: *Global Financial..., op. cit*., s. 119.

Extensive empirical research confirms the thesis that if a bank has the status of a TBTF institution it leads to profits in the scope of costs of obtaining financing and it leads to a reflection that the expected public support in case of financial difficulties is a hidden form of public donation for such banks[6]. In this aspect it is worth noticing that the IMF research, which – based on a sample of banks defined as TBTF – quantified the value of implicit public guarantees, which make the banks included in the G-SIBs group generate savings in the form of lower costs of financing (image 2)[7]. The competitive advantage achieved in this way disrupts

6 Tsesmelidakis Z., Merton R., *The Value of Implicit Guarantees*, IMF Working Paper No. 12/128, 2012, p. 1.

7 The size and the direction of shaping the TBTF subventions is diverse and depends on geographic location. IMF estimates that the G-SIBs financing costs in 2013 were lower in relation to an average bank by about 15 bp. in the USA, 25–60 bp. in Japan 20–60 bp. in Great Britain, and in the eurozone by about 60–90 bp. In the analyzed period, in all developed economies apart from EU, the subventions dropped after peaks, which occurred during the financial crisis. An increase in implicit subventions in EU in 2012 may result from a debt crisis in the eurozone. In the USA the subventions dropped considerably during a discussion and after resolving a Dodd Frank regulation and from then on, they have been stable. Nevertheless, the expected value of public guarantees for SIBs, which are in financial difficulties, is higher than before crisis. *Global Financial…, op. cit.*, s. 104.

the market mechanism and influences higher and higher risk accumulation in the balances of these institutions. Undertaking additional efforts appears to be necessary in order to deal with the problem of TBTF institutions and finally to lead to a situation in which the advantage of cheaper financing resulting from implicit subsidies is eliminated. That is why due to the already mentioned incentives to undertake irrational risk it is believed that regulations must admit the option of bank collapse and clients' share in loss, at least partially.

3. TOTAL LOSS ABSORBING CAPPACITY – TLAC

For more years than a decade, the global banking system has evolved in the direction of a specific market structure with a small number of giant banks, high level of concentration, relatively low market entry and exit ratio. This trend has been clearly noticeable in recent years. In 1998 five biggest global banks held circa 8 percent of global banking assets. In 2008 the group doubled its share in the market up to the level of 16 percent.[8]

The EU banking sector is still very big in absolute terms (42,9 trillion euro) and in relative terms (it represents almost 350 percent of the EU GDP) (image 3). The size of the biggest EU banks in the individual perspective corresponds more or less to the GDP of the country of origin, or is close to this value. Such banks remain too big to fail and at the same time too big to be rescued, and too complex from the point of view of reorganization and orderly resolution[9].

The above trend shows that banks continued to build their TBTF status, and at the same time they were enhancing their bargaining position in the context of public subsidies. Therefore, even stronger frames of the reorganization mechanism and orderly resolution may fail when it comes to reorganizing or resolving a bank, which belongs to the group of institutions described as TBTF[10].

That is why FSB started in November a process of consultations over regulations aiming at the increase of capital requirements for global banks of systemic importance. The draft new standards shall oblige global banks of systemic importance to build a capital buffer, the Total Loss Absorbing Capacity[11]. The main

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8 Haldane A.G., *Banking on the state*, BIS, BIS Review 139/2009, p. 5, http://www.bis.org/review/r091111e.pdf (access: 25.04.2015).

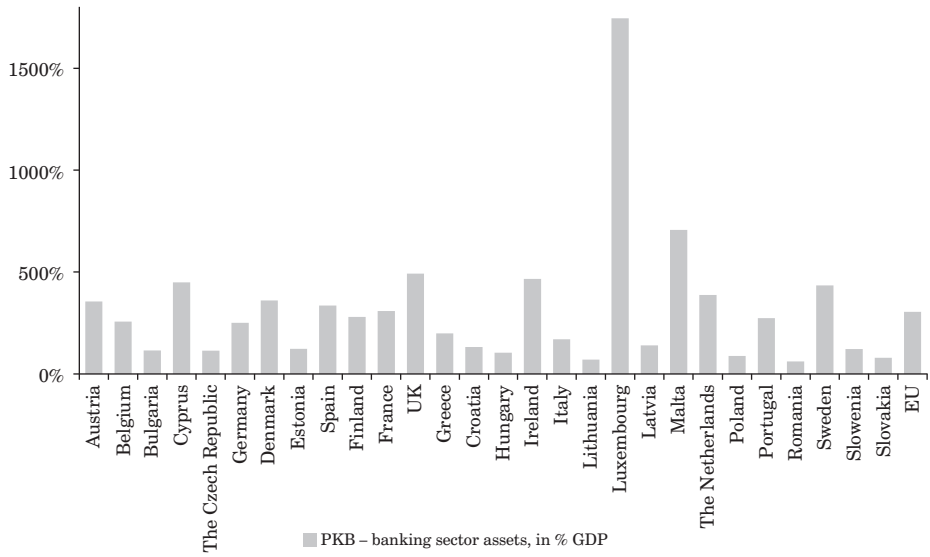
9 *Proposal for a regulation of the European Parliament and of the Council on structural measures improving the resilience of EU credit institutions*, 2014/0020 (COD), http://eur-lex.europa.eu/procedure/EN/1041635 (access: 20.04.2014).

10 *Thematic Review on Resolution Regimes-Peer Review Report*, FSB, April 2013, https://www.financialstabilityboard.org/publications/r_130411a.pdf (access 28.04.2005).

11 *Adequacy of loss-absorbing capacity of global systemically important banks in resolution*, Consultative Document, FSB, 10 November 2014, http://www.financialstabilityboard.org/wp-content/uploads/TLAC-Condoc-6-Nov-2014-FINAL.pdf (access 28.04.2005).

intention of FSB is to overcome the problem of TBTF institutions by a guarantee that G-SIBs have enough loss absorption and recapitalization capacity. Only in such a case the process of reorganization and orderly resolution may ensure continuing financial and economic functions and the institutions and taxpayers' money shall not be used to rescue them.

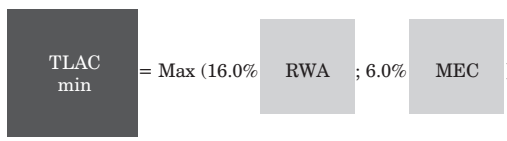
Image 3. Assets of the banking sector in relation to GDP of a given country



Source: author's conclusions based on: Eurostat (http://ec.europa.eu/eurostat/web/national-accounts) i ECB (http://sdw.ecb.europa.eu/browse.do?node=71390).

Following the new proposal, G-SIBs shall be obliged to maintain in the I Pillar capital in the amount of 16–20 percent of risk weighted assets and the leverage ratio at least twice as high as the level of 3 percent proposed by Basel III (image 4).

Image 4. Minimum TLAC level in relation to G-SIBs



Note: TEC – total exposure measure, which is the basis to calculate the financial leverage ratio.

Source: author's conclusions.

The proposed capital reserves and eligible liabilities is supposed to ensure continuity of critical bank functions in its reorganization process and orderly resolution and to protect taxpayers against covering costs of such insolvency by eliminating the necessity to apply the bail-out mechanism by the state or the central bank[12]. Simultaneous reference of TLAC to the level of risk weighted assets and the financial leverage ratio allows for a possible correction of the TLAC requirement in a situation in which appears to be decreased in effect of a risk assessment method which is applied internally by a bank (IRB approach). Thus, the proposal to implement a buffer is a development of the earlier presented idea that the Basel III framework should constitute a lower, not an upper limit in the scope of minimum capital requirements for cross – border bank institutions.

Table 1. G-SIBs at the end of November 2014

Category (Buffer)	G-SIBs in the alphabetical order
5 (3.5%)	none
4 (2.5%)	HSBC, JP Morgan Chase
3 (2.0%)	Barclays, BNP Paribas, Citigroup, Deutsche Bank
2 (1.5%)	Bank of America, Credit Suisse, Goldman Sachs, Mitsubishi UFJ FG, Morgan Stanley, Royal Bank of Scotland
1 (1%)	Agricultural Bank of China, Bank of China, Bank of New York Mellon, BBVA, Group BPCE, Crédit Agricole Group, Industrial and Commercial Bank of China Limited, ING Bank, Mizuho FG, Nordea, Santander, Société Générale, Standard Chartered, State Street, Sumitomo Mitsui FG, UBS, UniCredit Group, Wells Fargo

Note: G-SIBs at the end of November 2014 assigned to particular categories reflecting the required level of additional loss absorbing buffer.

Sources: http://www.financialstabilityboard.org

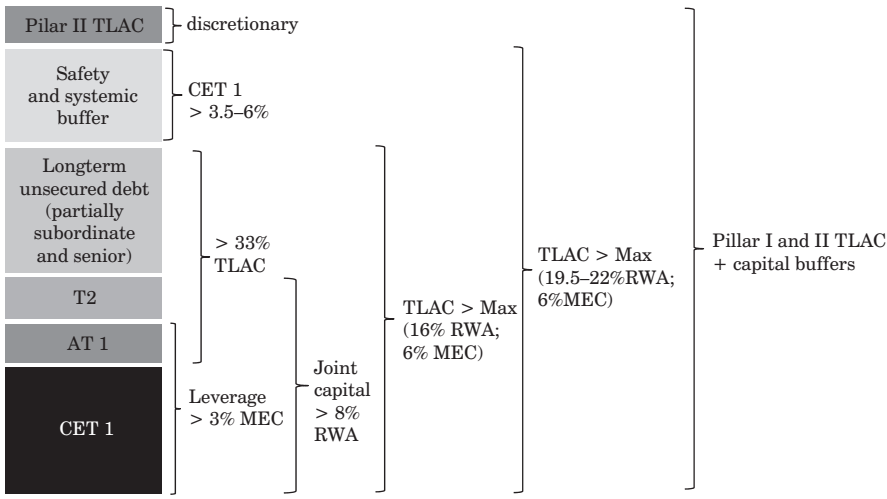
TLAC may be composed of instruments which, in accordance with the Basel III framework, belong to the regulatory capital (among others: stocks, subordinated debt), as well as other forms of obligations, which will have to meet specific conditions. First, it is required that the obligations are subordinate to secured bonds, obligations resulting from derivative instruments and first of all guaranteed

[12] Gracie A., *Total Loss-Absorbing Capacity – the thinking behind the FSB Term Sheet*, BoE, Citi European Credit Conference, December 2014, p. 2, http://www.bankofengland.co.uk/publications/Documents/speeches/2014/speech783.pdf (access 28.04.2005).

deposits. It means that at the moment of a bank resolution, the owners of such debt instruments should take losses without exception. Second, such obligations must have maturities at least one year. Apart from the above, the FSB admits the possibility that qualified obligations shall include unsecured senior debt, but it will have to be contractually, regulatory or structurally subordinate, in a way which ensures that the obligations to such creditors are paid after satisfying the senior debtholders' claims in case if a bank fails[13].

Moreover, the TLAC buffer should be composed in one third of eligible liabilities in order to ensure that the bank which experiences financial difficulties has enough resources to absorb loss and is able to undertake effective recapitalization in the resolution process. If a bank has not enough eligible liabilities, then the CET1 capital will have to be assigned to cover the minimum TLAC requirements[14].

Image 5. TLAC requirement proposed by FSB (Pillar 1 and Pillar 2)



Source: author's conclusions.

The TLAC requirement in Pillar I shall definitely include all global banks of systemic importance. In order to account for the variety within particular G-SIBs, the supervisory authorities and resolution authorties shall be responsible for imposing additional requirements in the TLAC II Pillar. The requirement level in the II Pillar will depend on the recovery and resolution plans, systemic

[13] The maximum contribution is to be limited to 2.5 percent RWA or more if the minimum TLAC requirement exceeds 16 percent of RWA.

[14] Gracie A., *Total…, op. cit.*, s. 4.

meaning of the institution, business model, complexity and risk profile as well as the organizational structure. A threat of the additional TLAC requirement in the II Pillar will be a positive framework of incentives to simplify the structure and will make the institutions act in order to develop possibilities to complete effective resolution.

TLAC is the new prudential measure, which might influence the bank sector in a similar way as Basel III (especially with reference to G-SIBs) in terms of capital, risk and profitability management. Partial implementation of an uncovered privileged debt into the resolution process, as well as introducing high minimum capital requirements in Pillar I, will mean relevant changes in the way in which banks manage their financial structure. As visible in image 5, if capital buffers are binding, the capital requirements will considerably exceed 20 percent RWA.

Based on initial settlements the new capital norm of Pillar I will be enforced as of the beginning of 2019. It should be emphasized that the FSB proposal is a draft and that is why the consultation period and calibration of the ration shall have the key meaning in establishing the optimum TLAC level.

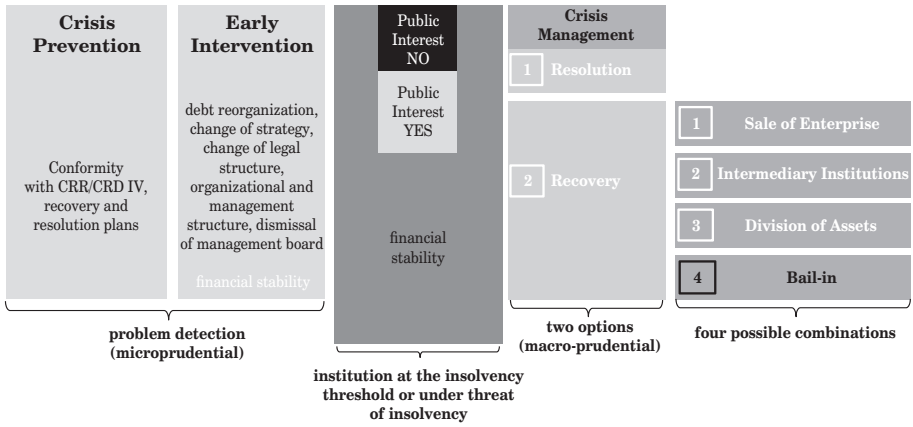
4. THE RESOLUTION MECHANISM IN EUROPE

In the European Union the document, which establishes a common European legal framework of recovery and resolution of banks threatened with insolvency is the Bank Recovery and Resolution Directive (BRRD). It is based on three main pillars, which reflect various planning phases and recovery and orderly resolution: crisis prevention, early intervention and crisis management (image 6)[15].

The Directive equips public authorities with a reliable set of instruments enabling an early and rapid intervention in relation to institutions with financial problems on at the verge of collapse, in order to guarantee continuity of critical financial and economic functions of a given institution, with a simultaneous possibly maximized decrease of the impact of the institution's insolvency on the economy and financial sector. The provisions of the directive are transposed in EU members states based on minimum harmonization rules. In the bank union the supervision over banks and their resolution will be carried out at the same level of competence and based on maximum harmonization rule.

[15] *European Parliament and Council Directive 2014/59/UE of May 15th 2014 establishing framework for the needs of recovery and resolution tasks with reference to credit institutions and investment institutions, Official Gazette* EU 2014 L 173.

Image 6. System recovery and orderly resolution of banks



Source: author's conclusions based on: *European Covered Bond Fact Book,* ECBC, 2014, p. 60.

In this way, irrespective of whether if member states opted for their participation in SRM or against it, they will have to apply the same rules of consolidated prudential supervision and the provisions concerning resolution of banks. The fundamental difference consists in the fact that based on the directive the responsibility shall be given to public authorities, whereas the resolution mechanism will lead to a Single Resolution Board at the EU level and the procedure of transformation of financial institutions on the verge of insolvency[16].

When analyzing the influence of the regulation on the costs of financing Polish banks it is worth paying special attention to:

(i) the resolution mechanism,
(ii) minimum requirement of own funds and eligible liabilities (MREL),
(iii) the influence of the resolution strategy on the TLAC/MREL inside the bank group.

4.1. The bail-in mechanism

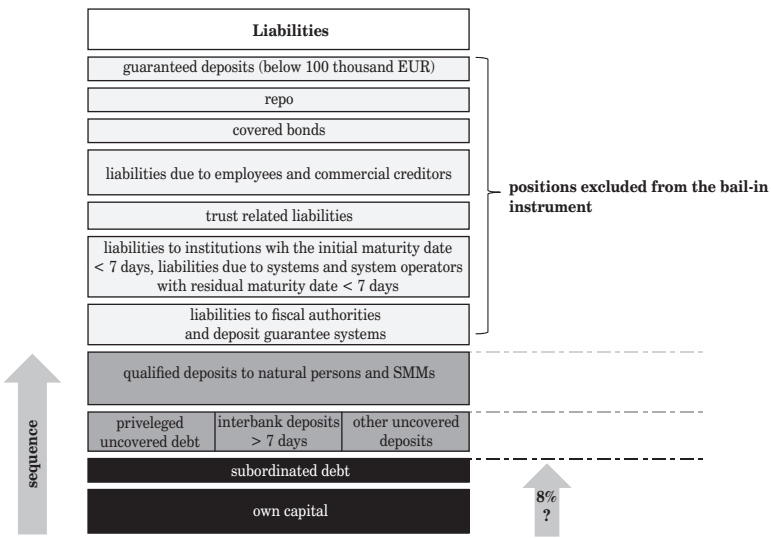
Bail-in is one of the key tools among the resolution toolkit and is based on creditors' participation in public support granted to financial institutions in crisis,

16 *Proposal for a regulation of the European Parliament and of the Council stablishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a Single Bank Resolution Fund and amending Regulation (EU) No 1093/2010 of the European Parliament and of the Council*, 2013/0253 (COD), http://www.ipex.eu/IPEXL-WEB/dossier/document/COM20130520.do (access: 27.04.2015).

which is supposed to restrict the phenomenon of moral hazard[17]. The mechanism is supposed to lead to the fact that costs of bank insolvency shall be first borne by its owners (shareholders), and then creditors, whose debt shall be converted into capital.

Resolution authorities should have proper rights and tools to convert all eligible labilities of institutions into own capital as necessary and with respect to the hierarchy of creditors' claims. That is why the resolution strategies prepared for banks envisage recapitalizations in the form of bail-in, which is supposed to support the process of recovery or resolution of credit institutions in a way which ensures continuity of critical functions of such institutions[18]. The reduction of the scale of obligations of a rescued institution to creditors is supposed to improve the bank's financial condition and the vision of loss is supposed to prevent financing such institutions by lenders at non-market interest rates[19].

Image 7. Categories of liabilities in relation to the bail-in process



Source: author's conclusions based on: *European Covered Bond Fact Book,* ECBC, 2014, p. 61.

[17] *Bail-in* is the opposite to the widely applied mechanism during the last financial crisis – bail-out, which consisted in the protection of credit institutions against insolvency using public resources.

[18] *Key Attributes of Effective Resolution Regimes for Financial Institutions*, FSB, October 2014, p. 9, http://www.financialstabilityboard.org/wp-content/uploads/r_141015.pdf

[19] Bańbuła P., *Polityka makroostrożnościowa: przesłanki, cele, instrumenty i wyzwania*, NBP, Materiały i Studia nr 283, 2013, p. 73.

Shareholders and creditors will have to bear the losses of a failing institution and cover them to the size of at least 8 percent of all liabilities of a bank in resolution. Losses not covered in the above way may be financed from a resolution fund[20]. Creditors are ascribed losses based on the agreed sequence of satisfying claims. Bail-in does not apply to guaranteed deposits up to 100 thousand euro, secured bonds, liabilities connected with trusts, liabilities resulting from inter-bank operations with maturity dates up to seven days, liabilities to employees and commercial creditors, tax liabilities and the deposit guarantee system[21]. Therefore the application scope covering subordinated liabilities is very broad. All other ones, first of all subordinated debt – may be converted. If the law on resolution enters into force as of 1 January 2016, the bail-in mechanism may be applied only a year and a half later.

From the point of view of financing costs, it is worth noticing that the bail-in mechanism influences the profitability of debt instruments. In case of covered liabilities, further decrease of their profitability is probable, because just like guaranteed deposits they will be excluded from the bail-in mechanism, which considerably limits the risk for potential investors. What is more, existing signals flowing from rating agencies indicate to the possibility of raising rating assessments of issues rated below the AAA level[22].

On the other hand, in case of unsecured bonds, the bail-in mechanism proposed in the directive means that lenders will bear higher financial risk, because in the situation of a resolution of a credit institution, the debt shall be written down or converted into shares. Eligible liabilities may be recognized as a kind of a substitute of share capital because their role is supposed to be loss absorption in a situation of a financial institution. If investors assessed correctly the risk connected with such instruments, it is difficult to expect that they are willingly acquired by investors, when profitability is considerably lower than the required return from engagement in shares[23].

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[20] Other rights of public authorities cover the possibility of sale or a merger of the bank during reorganization with another entity.

[21] In accordance with the BRR directive natural persons and small companies with deposits over 100 000 euro shall be treated with preference ("depositor preference"). They will not be charged with losses before other creditors subject to protection, namely in the sequence of bail-in mechanism application they will appear in the last position. Member states in the framework of their flexibility margin may in some situations decide on a full exclusion of natural persons and small companies from this mechanism. Preferential treatment of depositors should influence a higher stability of depositors, which, from the point of view of a bank, will limit liquidity risk.

[22] Marsh A., *Covered Bond Bail-in Benefit Prompts Moody's Ratings Proposal*, 2013.

[23] For an issuing institution an incentive to use such instruments might still potentially be the tax issues, if payments for investors in the period before the bail-in were recognized as costs of gaining income.

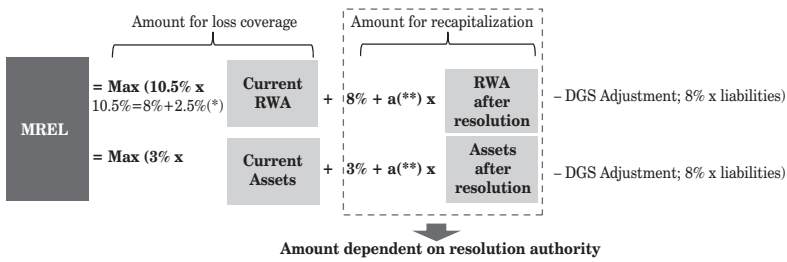
Due to reallocation of risk to creditors, further revision of ratings is expected for the issues of unsecured banks, which is visible by the way, in the changes which external rating agencies undertake in their procedures and rating assessments[24].

4.2. Minimum requirement of own funds and eligible liabilities – MREL

In order to avoid a situation in which institutions reorganize their liabilities in a way which restricts the effectiveness of the bail-in or debt conversion, the banks in the European Union will be obliged to fulfill the so called minimum requirement for own funds and eligible liabilities, MREL). The entities covered by the directive shall be obliged to maintain a minimum size of own funds and eligible liabilities in relation to the joint value of liabilities and own funds in case if the bail-in mechanism is to be applied. Such an approach is supposed to ensure that banks will have enough available capital in order to absorb loss and carry out effective recapitalization.

Based on Regulatory Technical Standards prepared by the European Banking Authority[25], MREL will be estimated for every bank (group of banks) separately, which will allow to account for individual features of a credit institution, namely the risk profile, business model, financing structure, systemic significance, resolution. Considering the fact that the resolution authority will have to deal with harmonized criteria as to MREL calibration, it is worth seeing the most important guidelines specified in RTS (image 8).

Image 8. Sample MREL calibration based on RTS criteria



Source: *EU loss-absorbing capacity requirement: final MREL guidelines*, BBVA, 2015, s. 5.

[24] *How A Bail-In Tool Could Affect Our Ratings On EU Banks*, S&P, 2012, May 10.
[25] *EBA Final Draft Regulatory Technical Standards on criteria for determining the minimum requirement for own funds and eligible liabilities under Directive 2014/59/EU*, (EBA/RTS/2015/05).

First, the starting point to determine CRD are minimum capital requirements, including Pillar 2, the "supervisory floor" ("Basel 1 floor") and capital buffers resulting from the CRD pack IV[26]. It means that resolution authorities must implicitly rely on supervisory assessment of the loss level, which banks should be able to absorb and the capital level indispensable to continue activity[27].

Second, the component connected with recapitalization is supposed to serve two main purposes. After reorganization the bank must meet supervisory requirements in the scope of capital norms accounting for capital buffers and it must be considered reliable in the market. In effect, the bank after reorganization should maintain at least such a level of capital as before reorganization. For big banks, which shall be subject to the resolution process, MREL will be equal at least to a double amount of minimum capital requirements. On the other hand, for smaller banks which may be liquidated in the normal insolvency procedure, the recapitalization buffer will be equal to zero. The amount to carry out recapitalization will considerably depend on the resolution strategy preferred by the authorities.

Third, the resolution authorities must account for the scale in which the deposit guarantee system may participate in financing the resolution (DGS adjustment). The above criterion may appear relevant for banking systems, where the financial structure is based on clients' deposits.

What is more, the resolution authorities, while determining MREL, must account for the fact that resolution plans may entail certain categories of obligations which will be excluded from the resolution process. In such cases MREL should be corrected "upwards" in order to compensate the shortage of eligible instruments. What is more, in case of systemically important institutions (mainly G-SIBs and O-SIBs) the resolution authority should evaluate if the MREL level is sufficient to ensure that the conditions which allow for the use of resources from the resolution fund will be fulfilled (8 percent of shareholders' and creditors' own share). Due to high priority of the border point at the level of 8 percent pursuant to the BRR directive, it may be a benchmark for other credit institutions which are not identified as systemically important institutions.

Accounting for the rule of proportionality the systemically important banks, in accordance with the FSB guidelines, shall be covered with the above requirements. In their case MREL should be compatible with the Total Loss Absorbing Capacity buffer proposed by the Financial Stability Board. Contrary to TLAC, MREL shall

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[26] However, it should be noted that if capital requirements based on risk weighs are less binding for banks than the financial leverage ratio, then the amount absorbing loss shall be the amount resulting from the financial leverage ratio.

[27] In certain circumstances the resolution authorities can decide to correct them on account of the idiosyncratic risk of an institution, namely the size, the business model, the financing model and the bank risk profile. By the way, institutions which may be subject to the resolution process are awarded.

concern all banks acting in the territory of the EU and will be enforced as of 1 January 2016, although a transitional period is planned, which may last until 2020.[28]

4.3. Influence of resolution strategy on the placement of the TLAC/MREL buffer in a group

If the resolution authority states during the planning process that undertaking resolution is in public interest, then one of the key issues is the choice of the target resolution strategy and undertaking a feasibility study. In case of bank capital groups and bank holdings it has a dominating influence on the placement of MREL/TLAC within such structures[29]. FSB guidelines how to prepare effective recovery and resolution strategies distinguish two possible approaches to apply on the cross-border level.

(i) **Single point of entry (SPE)**, in which the powers and tools applied in the resolution process are implemented by the home resolution authority – both with reference to the controlling entity as well as dependent entities. This strategy is based on loss absorption on the highest consolidation level by write down or conversion of debt into capital issued by the home entity. Assuming that there is a sufficient LAC amount on the highest consolidation level in the bank group, dependent entities may continue their activity without the need to be subject to the resolution process.

(ii) **Multiple point of entry (MPE)**, in which the powers and tools applied in the resolution process are implemented by two or more resolution authorities (so also by the host country authorities) to several entities within the group (so also to dependent companies). Every entity within the group should have appropriate external LAC so that the bail-in tool may be applied on the level of every dependent entity.

In the FSB consultancy document concerning the total loss absorbing capacity the so called external and internal LAC are distinguished. The external issue of capital and eligible liabilities debt is undertaken by an entity subject to the resolution mechanism or another recovery mechanism. The internal LAC issue is based on transactions within the group and it is carried out by relevant dependent

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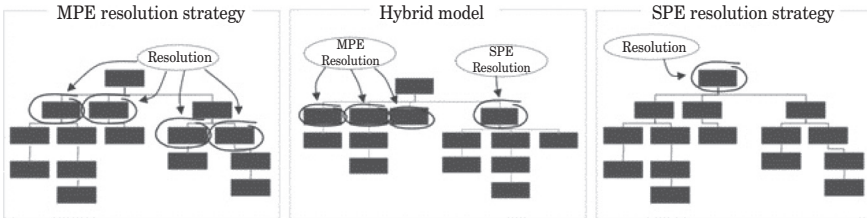
[28] Specifying a minimum standard by FSB (Pillar I) is one of the main differences in relation to the EBA approach. The European authority assumes that supervisory authorities and the resolution authorities are responsible for ensuring equal conditions of work for all entities subject to the regulation by establishing a minimum MREL level separately for every group of banks. That is why MREL in Europe may be fully treated as Pillar II requirement due to the fact that there is no common requirement in Pillar I.

[29] Due to the fact that MREL and TLAC are mostly compatible, further in this work the Author shall use the abbreviation LAC.

companies[30], which are directly subject to the resolution mechanism. The above solution is to serve mutual trust between the home and the host supervisors.

Image. 9. Resolution strategies



Source: http://european-economy.eu

The location of the loss absorption buffer within a group, as well as its form should be fully adjusted to a given resolution strategy (MPE, SPE). The choice of the internal group resolution strategy shall bear considerable consequences for dependent companies. When applying the SPE approach, the external LAC issue will have to be carried out by the controlling entity, which will later on transfer the capital down the organizational structure with the support of balance instruments or secured guarantees (internal LAC). It should be emphasized, however, that the internal LAC should be placed only in dependent companies with a relevant meaning for the group. In the MPE model the external LAC is required from every relevant dependent entity, which is the resolution or sub-group entity, but not at the consolidated level[31]. Nevertheless the "relevance" logic in the MPE model is a little bit different, because it assumes that the dependent companies, which play an important role in the local market (e.g. D-SIBs) should be entities which are directly subject to the resolution process and by the same token they can carry out external LAC issues regardless of their significance in the group. What is more, in the framework of MPE approach the LAC requirement in every point of entry should be based on the rules of the system shaped by a resolution authority from the home country, which also applies in relation to other institutions acting in the local market. Therefore the internal LAC is no more compatible with the MPE model.

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30 The internal TLAC shall cover subsidiares which fulfill at least one of risk or size criteria: more than 5 percent of group RWA more than 5 percent of group revenue, more than 5 percent of the group leverage, significance for performing critical functions of the company.

31 The subgroup is composed of units, out of which one is the unit, to which the resolution mechanism is applied and all direct and indirect dependent entities, which are not subject to resolution or entities depending on a different entity subject to the resolution mechanism.

Table. 2. Differences between SPE and MPE

	SPE	MPE
Point of entry	Controlling company – insolvency of a consolidated group	Dependent company – insolvency of a dependent company
Entity authorized to carry out resolution	Home country resolution authority	Host country resolution authority
Roles of Authorities	Home – global executive authority Host – secondary executive authority	Home – coordinator/local executive authority Host – local executive authority
Loss/bail-in	Losses transferred to the controlling company/obligatory financial support addressed to a dependent company	Losses on a local level – voluntary support of the controlling entity
External LAC	On the level of the controlling company	On the individual level
Legal/ organizational structure	Department/dependent unit	Dependent unit
Operational services	Decentralized, but independent	Decentralized – the units are operationally independent

Source: own work based on the TLAC consultancy document.

The choice between the MPE and SPE approach depends on particular features of cross-border institutions (size, interconnectedness, legal structure and the scope and level of complexity of the activity carried out by the company). The MPE Model fits the institutions whose business model is based on traditional retail banking, which have a big share of deposits in the structure of assets and act in the form of dependent companies with a high operational independence. The SPE model is applicable to strongly integrated entities, with a harmonized risk management system, generously financed in the wholesale market (by the controlling entity) and based on the internal group support. Practically it is possible to apply a combination of such strategies, as much adjusted to the specifics of the group as possible.

5. TLAC/MREL INFLUENCE ON THE COSTS OF FINANCING POLISH BANKS

In relation to organized bank groups acting as local subsidiares it is possible to apply various and independent recovery and resolution strategies by home resolution authorities. What is crucial, the nature and the scope of exposure in the framework or the group is strictly connected with the assumed resolution strategy. In the MPE model the mutual exposures practically do not exist or have a market nature, because their share in the form of a debt subject to write-down would bear a risk of infecting other units within the group. Whereas with the SPE approach, exposures of this type make the strategy pillar, because thanks to the purchase of eligible debt issued by the controlling entity, internal bail-in becomes possible and in consequence it may lead to the reresolution of the controlling entity.

The above solutions naturally beget questions what resolution strategies will be adopted with reference to cross-border bank groups which are composed of Polish subsidiares. As already mentioned the assumed strategies will determine the type (external vs. internal) and LAC locations within the group.

Considering that the Polish subsidiares are covered by BFG guarantees and their main clients are households and enterprises, the liquidity and capital management happens on the local level, the banks are characterized with a high degree of financial independence and the support inside the group is not systemic, the MPE approach seems to be more suitable. The scenario of adjustment of the MPE strategy would also fit in the supervisors' expectations, who perceive the local financing and proper capitalization of dependent entities as more and more important.

The MPE approach bears a lot of consequences in the scope of resolution. Most of all, the MPE strategy basically does not envisage meaningful exposures inside the group, so almost every independent entity within the group which may be subject to the resolution procedure must have an adequate loss-absorbing capacity resulting from its activity. In consequence, the biggest problem with the MPE approach for the banks defined as resolution entity may appear to be the fulfillment of the LAC requirement on the individual level, by a share capital issue or issue of another uncovered debt for external investors. The problem may be particularly troublesome in poorly developed countries, local capital markets and it may refer mainly to deposit banks with relatively lower ratings. It may be assumed that such banks, unable to carry out new issues of qualified debt, will be forced to meet the LAC requirement by the issue of a share capital and/or limitation of a dividend, which will influence the general increase of financing costs. In result it may lead to an increase of systemic risk, because the banks with deficits may try to compensate the financing costs increase by engaging in riskier yield searching strategy.

They account for a very low share of uncovered debt securities in the liabilities of Polish Banks and the shortage of eligible instruments may be disproportionately

higher than the shortage in 128 European banks participating in the research presented by EBA (0.1–0.2% assets)[32].

Although the decentralized MPE model is advantageous from the point of view of financial stability[33] and fits better in the business model of Polish banks, from the point of view of G-SIBs it may appear less attractive than SPE. The decentralized model is recognized as less effective in terms of capital and liquidity management and its application does not require obtaining more capital and debt, which is subject to conversion in the whole group (additionally with a relatively higher cost), which leads to a failure in the use of the synergy effect inside the group. The above factors may lead to a situation, in which the bank transnational groups will be more willing to deploy an SPE type strategy, based on which the parent entities must have the internal LAC in required quantity and quality, because potential losses are shifted to a higher level within the group, whereas the capital and liquidity support is provided to dependent entities by parent entities.

Adopting the SPE strategy by resolution authorities with reference to G-SIBs would mean that the Polish subsidiares would have to fulfill the internal LAC requirement in the amount of 75–90 percent of the minimum LAC requirement of I Pillar (respective division borders will be established based on QIS)[34], because some of them exceed the relevance threshold.

The amount of the internal loss absorbing buffer should be located based on balance transaction, if the home-host agreement between resolution authorities does not stipulate otherwise[35]. Then, in order to distribute funding and the loss absorption capacity in the group, the resolution entity (based on the model – holding company) invests in the internal LAC issued by operational authorities. Next, the resolution entity issues instruments in the market, possibly based on operations consistent with internal group regulations[36].

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[32] *EBA Final Draft Regulatory Technical Standards on criteria for determining the minimum requirement for own funds and eligible liabilities under Directive 2014/59/EU, (EBA/RTS/2015/05).*

[33] The present experience indicates that the potential of the SPE model may be too highly idealized. During the last financial crisis many situations were observed, in which the cooperation between departments and parent institutions mainly accounted for the interest of controlling entities. That is why in many jurisdictions the regulatory authorities were more friendly to the model of foreign bank activity in the form of subsidiares. Home supervisory authorities have little trust in the activity of foreign banks in the form of branches, which leads to doubts if the home authorities will be ready to accept the strongly integrated SPE model, which is based on a deep trust between the resolution authorities of various countries. Fiechter J., Otker-Robe I., Ilyina A., Hau M., Santos A., Surti J., *Subsidiaries or Branches: Does One Size Fit All?*, IMF Staff Discussion Note, 7 March 2011: chapter II).

[34] The real value within the range shall be specified by a resolution authority of the host nation, which will also consult this decision with a home country resolution authority.

[35] *Key Attributes…, op.cit.*

[36] With reservations of specific conditions the home and host authorities, which make up the *Crisis Management Group, CMG*) may undertake a common decision admitting a replacement

When analyzing the advantages of the SPE model from the point of view of its influence on profitability of Polish banks it should be emphasized that it might limit the necessity to carry out huge issues of eligible liabilities with reference to external investors. However, a lot will depend on whether the above mentioned off-balance sheet instruments in the form of secured guarantees shall be applicable in practice. If relevant subsidiares are obliged to issue classical on-balance sheet instruments with reference to controlling entities, savings in terms of financing costs will be low (compared to the MPE strategy). Whereas it should be remembered that with the SPE approach a relevant increase is expected between the controlling entity and the dependent entity, which in consequence may lead to the increase in concentration and systemic significance.

The application of a hybrid strategy may not be excluded either. Then in key jurisdictions, in which G-SIBs operate demonstrate a high level of activity and operational integrity might be subject to resolution with the application of rules resulting from the SPE approach. Whereas operationally independent entities in other jurisdictions might be subject to an MPE based resolution.

6. SUMMARY

New regulatory proposals in the scope of capital buffers which allow for effective undertaking of the resolution process constitute the next solution established on the international level, which is a part of the trend of strengthening banks' capital position. Although the structure of the Total Loss Absorption Capacity is not much different from the proposal presented by EBA (MREL), both initiatives will imply the necessity to issue many eligible instruments, which may be relevant in terms of costs of bank financing.

The structure of the loss absorbing buffers will be the strongest, and by the same, token the most transparent transmission channel of financial effects of the BRR directive on banks. Whereas LAC obliges financial credit institutions to maintain a certain level of financing in the form of eligible liabilities, it should be expected that in case of many institutions it will be necessary to change the financing structure, which may be reflected in the funding costs eventually.

The solutions proposed by FSB are indisputably important for credit institutions acting in the Polish market and they are subsidiaries in relation to cross border bank groups. The banks whose owners are foreign groups had over 60 percent of assets of the Polish banking sector at the end of 2014. The owners of eight domestic

of the internal LAC made of balance positions covered with guarantees. Also in certain specific cases the capital instruments, which are parts of Tier I and Tier II capital acquired by outside investors may be included in the internal TLAC requirement.

banks are controlling entities on the G-SIBs list. It means that certain relevant subsidiaries will have to maintain additional capital buffers. The level and the type of loss absorbing buffer (internal vs. external), will mostly depend on the resolution strategy assumed by the authorities. In case of banks controlled by domestic investors, MREL will be appointed in accordance with indicated risk criteria by the Polish resolution authority, whereas banks of systemic importance can expect that this requirement may amount to 8 percent of liabilities or even double the capital requirement (with respective buffers). Whereas small institutions, which may be liquidated in normal insolvency procedure, will not be subject to resolution and by the same token they will not have to have the loss absorption and recapitalization capacity.

From the point of view of the whole banking sector it should be assumed that the introduction of TLAC/MREL in proposed quantities leads to a considerable increase of demand for capital, both own capital as well as the debt (especially long term) capital in the European market. The LAC requirement in a way penalizes credit institutions which have traditional banking based on retail deposits. For such banks LAC will create a conflict risk between prudential policy and the resolution policy by encouraging deposit based banks to issue debt and artificially increase leverage[37].

Banks which finance their activity with traditional deposits will have to redirect the financing model even more to uncovered debt instruments, which are classified under Total Loss Absorption Capacity. It means a high supply of capital instruments with a limited demand for such instruments, which may impede the ability to obtain capital quickly and at a good price.

Due to the necessity to reorganize the capital structure, this factor in the average period will probably add to the general increase of financing costs for banks, but in the longer run it will have a positive influence on their stability, and by the same on the risk assessment by investors. In case of the Polish banking sector the BRR directive may constitute an additional incentive of a longterm development of the securities market. On the one hand the potential drop of interest rates on mortgage bonds should encourage banks to higher diversification of sources of funding based on these types of instruments. On the other hand the minimum MREL requirement will impose a pressure on the issue of eligible liabilities.

However it should be noted that the practice of resolution is at nascent stage in Europe, whereas in Poland no proper legislative solutions have been introduced

[37] This adverse effect may be mitigated to a certain degree, because RTS enables resolution authorities to reduce MREL by accounting for an estimated contribution from the deposit guarantee system. In case of Poland this factor may appear important, because the main source of financing home banks are guaranteed deposits and the deposit guarantee system belongs to the most capitalized ones in Europe.

so far in this area. It means that until the resolution authority determines MREL, Polish institutions will run their activities with a high level of uncertainty. This is why banks should aim at a maintenance of relatively high capital buffers (also composed of debt instruments) in order to anticipate future trends in the scope of regulatory solutions, as well as to avoid the necessity to undertake a sudden capitalization process at unattractive prices.

Abstract

The recent financial crisis had a turbulent onset when professional institutional investors decided to withdraw their funding from banks, sparked by fear of credit losses and unmanageable capital requirements in, most notably, the investment portfolios of these banks.

In recent years regulators developed a comprehensive set of reform measures aiming to improve the banking sector's ability to absorb shocks arising from financial and economic stress, improve risk management and governance, strengthen banks' transparency and disclosures.

At the same time, steps were taken to better prepare for the event of a gone concern situation: recovery plans and resolution plans were drafted by banks and regulators respectively. For G-SIBs, on top of these plans, additional loss absorbing capacity is needed to ensure that, in case of a default, these financial institutions can be resolved in an orderly manner without taxpayer support.

The purpose of this article is to present recent regulatory initiatives in the field of loss-absorbing capital buffers and their impact on banks' capital structure and cost of financing.

Key words: capital buffers, capital management, TLAC, MREL, bank resolution and recovery, capital requirements, banking regulations, G-SIBs, financial safety net, costs of financing banks

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Internet resources:

http://www.financialstabilityboard.org
http://ec.europa.eu/eurostat/web/national-accounts
http://sdw.ecb.europa.eu/browse.do?node=71390
http://european-economy.e

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Leszek Pawłowicz*

REFLECTIONS ABOUT *TOO BIG TO FAIL* BANKS AND MORAL HAZARD

INTRODUCTION

The main source of the financial crisis which started in 2008 was moral hazard. Both big institutions and populist politicians gambled.

We understand moral hazard analogically to Paul Krugman, i.e. as "any situation in with one person makes the decision about how much risk to take, while someone else bears the cost if things go badly"[1]. This term is a negative one if the costs of the risk borne by third parties is without their consent. Risk transfer which takes place by mutual agreement between parties is not a negative type of moral hazard. Such situations are common on the insurance market, capital market, and especially the options market. The line between risk transfer and immoral moral hazard is a classical legal maxim *volenti non fit iniuria* (Latin: "to a willing person, injury is not done") formulated by Ulpian[2]. In other words, if parties of a transaction agree to possible spending consequences and are aware of the risk taken, there is no immoral moral hazard.

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1 Krugman, P. *The return of Depression Economics and the Crisis of 2008*, WW Norton&Company Inc., 2009.

2 *Volenti non fit iniuria*, wikipedia.org.

The question of moral hazard's morality is of interest to business ethics scholars and depends on the world view of an evaluator[3]. It is often, and erroneously, identified with fraud intention. However, independently from ethical evaluation, moral hazard aids recklessness and carelessness in business decision making, because it creates an environment where profits become private and losses – public.

It is articulated more explicitly by professor Marek Belka: "Stimuli appear to decriminalize excessive risk, and even to take it. Everyone engaged – creditors, shareholders, employees – win. The rest, i.e. the majority, including the proverbial tax payer, cover losses. As a result, there is capitalism of profits and socialism of losses"[4]. There is no doubt that moral hazard causes interference and anomalies in market functioning and, as a consequence, it may lead not only to financial crisis, but also to justified civil disturbances and social conflicts.

Immoral moral hazard on financial markets, unfortunately, accompanies globalisation. Through the so called contagion effect it may cause situations in which crisis in one country triggers disruption in another country and as a result it may not only stimulate anti-globalists, but also lead to tension in international relations and even wars. Internationalisation of costs is accompanied by nationalisation of losses.

Moral hazard is especially dangerous under flawed systematic solutions because it may cause ineffectiveness of corrective and remedial measures (including regulatory actions).

Globalisation of financial markets is accompanied by at least two systemic errors which undermine those markets' credibility and limit the effectiveness of corrective measures and regulatory actions. Those errors are:

- paying rating agencies by issuers,
- paying auditors by the audited.

As a result we deal with a defective market economy and an environment that aids moral hazard, which causes persistent crisis of confidence on financial markets, the phenomena of so-called "short-termism"[5] are accelerating and regulations created may turn out to be ineffective.

The aim of this article is to present several reflections and suggestions connected with implementation of the most important, in the author's opinion, regulations,

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3 Broader: Klepczarek, E. *Czy hazard moralny jest zawsze niemoralny*, ZBP, 2015, http://zbp.pl/public/repozytorium/wydarzenia/images/czerwiec_2015/cosgrove/Praca_Emilii_Klepczarek.pdf, accessed 17/10/2015.

4 Belka, M. *Hazard moralny na rynku finansowym*, public speaking 22nd June 2015 during the 5th European Financial Congress in Sopot, http://www.efcongress.com/pl/materialy/wideo, accessed 17/10/2015.

5 Maciejewski, A. *Short termism* [in:] „Zarządzanie wartością spółki kapitałowej", Bielecki, J.K., Pawłowicz, L. [Eds.], CeDeWU, Warszawa 2015.

which could limit moral hazard of banks counted among TBTF[6], namely: the resolution regime and additional capital restrictions against the group of the biggest global banks (TLAC).

1. WILL *RESOLUTION REGIMES* LIMIT G-SIBS' MORAL HAZARD[7] IN EUROPE?

Recent years showed that Europe is facing an extremely dangerous connection between moral hazard created by *too-big-to- fail* banks (TBTF) and populist politicians. High public debt, which was an expression of politicians' populism, was reflected in deterioration of quality of bank assets which had government bonds at their disposal. When those banks found themselves in a critical situation, their chances to receive public help were getting more and more limited (e.g. Cyprus, Greece, Portugal, Spain).

The results of this disastrous connection, in which increasingly insolvent countries became more and more indebted in increasingly insolvent banks have been held off by the establishing of the European Stability Mechanism, which, in the intention of its creators, should contribute to breaking the connection between the debt of sovereigns and the situation of banks[8]. Finally, ESM has to allocate capital of 700 bln euro (including 620 bln euro of callable capital) and will probably become the largest global financial institution. Until now, Cyprus and Spain have benefited from ESM's help. Without denying reasonableness of establishing of ESM it is worth noting that it constitutes another protection for banks and governments from market risk and threat of bankruptcy. Therefore, it may cause relocation of TBTF bank's moral hazard from a national to European level.

It seems that there are only two reasonable ways to solve the problem.

- The first one is to split TBTF banks into smaller units which can go bankrupt without posing a danger to financial stability. However, this division is hard to implement in European conditions.
- The second option is to develop special procedures of resolution of TBTF banks in such a way that does not destabilises the financial system.

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6 Ben Bernanke (quot.) "*A too-big-to-fail firms is one whose size, complexity, interconnectedness, and critical functions are such that, should the firm go unexpectly into liquidation, the rest of finanscial system and the economy would face serve adrese consequences*", "Bernanke-Causes of the Recent Finanacial and Economic Crisis", Federalreserve.gov, accessed 02/09/2015.

7 G-SIBs – Global Systemically Important Banks.

8 European Stability Mechanism (ESM) was erected in 2012 with the treaty signed by 17 countries of euroland, mainly because of fear of the collapse of the euro area. *Factsheet – European Stability Mechanism*, http://www.eurozone.europa.eu/media/582311/05-tesm2.en12.pdf, accessed 17/10/2015.

As for now, the second option, i.e. resolution, dominated in the regulatory initiatives aimed at solving the problem of moral hazard created by TBTF banks. The Financial Stability Board published a report in November 2011 entitled "Key Attributes of Effective Resolution Regimes for Financial Institutions"[9]. The document contains rules that should be included in the regulations concerning bank recovery and resolution. The rules were used by the European Commission, which developed the BRR Directive aimed at harmonising the legal regulations of EU member states in the area of resolution. The resolution process, according to the BRR Directive, will ensure such restructuring, recovery or resolution of insolvent, systemically-important banks, which will allow for the continuity of a bank's critical functions[10], protection of public finances and protection of depositors covered by the scope of 2014/49/UE Directive.

A unified mechanism of bank resolution serves as an emergency management. Its main aim is to allow for such a resolution of banks threatened with insolvency, that will bear the lowest possible costs for the taxpayers and the real economy. It should, among others, minimise the negative connection between banks and countries through implementing market discipline towards TBTF, which would limit their feeling of impunity.

The BRR Directive contains a couple of significant rules for handling the process of *resolution*. These are, in particular:

- ensuring that the shareholders of an insolvent institution take first losses;
- guaranteed deposit protection;
- treating creditors that belong to the same category in the same way (*pari passu*);
- guarantee that no creditors will bear more losses than those which they would bear if the bank were liquidated (*no creditor worse off*);
- replacement of the Management Board of the institution in *resolution*;
- personal responsibility of the top management for bringing the institution to insolvency.

Adoption of such rules in EU member states will probably strengthen the market discipline and limit moral hazard on the side of some TBTF banks.

However, the Directive does not solve the main problem connected with the real possibility of implementing the *resolution* procedure with regard to the

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9 *Key Attributes of Effective Resolution Regimes for Financial Institutions*, www.financialstabilitboard.org/.../r_111105cc pdf, accessed 17/10/2015.

10 Critical functions are defined as "such type of activity performed by an institution for third parties which is vital for functioning of real sphere of the economy and for maintaining the stability of public finances, and which sudden disappearance or distortion can have a major negative effect on third parties, and can be a cause for loss of a general market trust", Szczepańska, O., Dobrzańska, A., Zdanowicz, B. *Resolution, czyli nowe podejście do banków zagrożonych upadłością*, NBP, Warsaw 2015, p. 23.

biggest financial institutions, the so called G-SIBs. It can be narrowed down to a question: who will pay for insolvency of the transnational financial institutions (G-SIBs). The financial resources provided by the Directive for financing the *resolution* mechanism are small. National resolution funds should be as high as 1% of guaranteed deposits. The European Resolution Fund, so called single fund for bank recovery and resolution will take 8 years to set up and it is estimated that its budget will be approx. 55 bln euro. This amount is far a from sufficient for effective implementation of bank recovery and resolution of even a single G-SIB, not to mention the systemic risk costs in case of insolvency of more than one such institution. It is also worth to note the scale of disproportion between the target budget of the EMS fund (700 bln euro) for saving insolvent banks and target budget of European Resolution Fund (55 bln euro), part of which is allocated for liquidating the TBTF banks[11].

The European Resolution Fund is, from the financial stability point of view, a complement of banks' own capital and those obligations which, during crisis, can fulfil the same role for creditors as own capital. It is a strengthening of safety buffers for some creditors and clients of the banks in case of their insolvency. It undoubtedly increases confidence in the banking sector and, what is most important, it moves some of the responsibility for the decisions from a national to European level and makes the decisions international. The biggest advantage of the solution is therefore an attempt to move competences and responsibilities to the same level of decision-making.

However, the solution brings a different type of risk. Creation of *resolution* funds on a national or international level is an alternative for all more expensive in terms of capital requirements posed on individual banks. The same funds could be used for increasing the individual banks' capital. In such a case the temptation of abuse (moral hazard) would be lower. Creating joint funds that guarantee the safety for the surrounding, especially for the creditors, weakens market discipline and can stimulate the *free rider* effect for some individual banks. *Resolution* funds can be seen in the individual banks not as complement of their own capital but as a substitute of their capital.

Still, it is undeniable that macroeconomic and systemic importance of the *resolution* funds and especially of a bank resolution fund is much bigger than its macroeconomic flaws.

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[11] We cannot forget that EMS fund is created form public money, while European Resolution Fund is created from banks' own money. The basis for calculating the contribution for bank recovery and resolution fund will be banks' liabilities minus bank's own funds and guaranteed deposits, corrected by the risk taken by the bank. The basis for calculating the contribution for the EMS fund is EBC capital, which is arithmetic mean of country's share in the total population and euro area GDP.

2. WILL TLAC REALLY BE THE END OF TBTF?

In a situation of a protracted crisis of confidence on the financial market, the Financial Stability Board (FSB)[12] initiatives focusing on the reduction of the propensity for moral hazard by the biggest transnational financial institutions should be appreciated. Those initiatives are a compliment for the Basel III Agreement (Basel III). Basel III includes also issues regarding additional matters regarding equipping banks with significant own capital and the quality of that capital, their liquidity, and policy of disclosure and supervision, which should limit the systemic risk but does not include any regulation concerning institutions that are systemically important on a global scale.

Moral hazard connected with systemic risk, mainly a transnational one, poses a serious challenge for the stability of the global financial system, therefore it seems reasonable to focus on FSB and G-20 level actions.

In the European Union the problem of TBTF banks is especially important due to a high degree of dependency of the European economy on bank financing and the ratio of bank assets to GDP, which is higher than anywhere else. This ratio is approx. 350% of GDP and is significantly higher than in other well-developed economies[13].

The FSB's proposal assumes introducing new safety requirements for the 30 biggest banks, which will be identified as the most important in terms of systemic risk they generate. Those requirements, named *total loss absorbency capacity* – TLAC, are aimed at increasing the possibility of re-capitalising the banks in a situation of their resolution. In his letter to G20 leaders Mark Carney, Chairman of FSB, used the words "ending too big to fail".

According to the proposal, Globally Systemically Important Banks (G-SIBs) identified by FSB should, starting from 1 January 2019, have a reserve of capital and debt instruments of at least 16–20% of risk weighted assets to be converted into capital during a crisis.

An additional requirement is that the capital reserves will need to be at least on the level of double of the leverage, which is another bank capital adequacy assessment tool, irrespectively of the financial risk level. The proposed reserve should allow for continuous functioning of a bank's critical functions in the process of a bank's resolution, and protect the taxpayers from bearing additional costs of bankruptcy through eliminating the need for using the *bail-out* mechanism.

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[12] *Adequacy of loss-absorbing capacity of global systematically important banks in resolution. Consultating Document 10 November 2014*, www.financialstabilityboard.org.

[13] Broader: Szczepańska, O., Dobrzańska, A., Zdanowicz B. *Resolution, czyli nowe podejście do banków zagrożonych upadłością*, NBP, 2015.

Let us recall that as FSB enumerates as part of its proposition so called external TLAC, which is required from any parent company that can be subject to bank resolution which can be obtained from external sources and internal TLAC applicable to every systemic company registered in different jurisdiction than domineering company. Internal TLAC would allow for recapitalisation of the subsidiaries by the parent company. This solution should be used in order to create confidence for both home and host supervisors that systemically important banks can be resolved in an ordely manner, therefore quieting the concerns of the supervisors about transfering the assets from subsidiaries of the host countries to the parent company in the home country.

According to European Financial Congress experts[14] the TLAC concept can limit moral hazard generated by G-SIBs but it will not eliminate it.

From the research done among Polish expert it can be concluded that the minimum TLAC requirements set at the level of 16–20% of risk weighted assets, but not less than two times the leverage coefficient required in Basel III seems adequate in the present situation. The requirements are not too low, but they may require some simplifying.

The TLAC/MREL should be applied to banks at an individual unit level (to increase safety of specific units) and at the consolidated level (in order to prevent risk transfer to subsidiaries or limit the freedom in using the capital, including creating financial holdings, where the parent entity would be an unregulated institution). The group should have available resources equal to higher of the two amounts: the amount calculated for the group or the sum of amounts calculated for specific banks, allocated at the level of those banks. The manner of determining TLAC should be a derivative of the chosen resolution strategy, and the resolution strategy should be the result of the group's structure and the decision of national resolution authorities from host and home countries.

Polish experts share the FSB's opinion that the financial resources for TLAC should be reallocated from the parent company to subsidiary companies which meet at least on of the risk or size criteria (more than 5% of the group's risk weighted assets, more than 5% of group's profits, more than 5% of the leverage index of the group, or significance for crucial functions of the group). It should be added that the host can choose to extend TLAC requirements on subsidiaries which do not fulfil the above-mentioned criteria, but are systemically important in the host country. TLAC funds distribution method should be accepted by panel of

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[14] *Koniec zasady „too big to fail"*, Rekomendacja Europejskiego Kongresu Finansowego 2015, http://www.efcongress.com/pl/koniec-zasady-too-big-fail and Pawłowicz, L., Broniewski, R. *Nowe propozycje tylko ograniczą moralny hazard w bankach,* http://www.obserwatorfinansowy.pl/tematyka/bankowosc/nowe-propozycje-ogranicza-moralny-hazard-ale-go-nie-wyeliminuja/, accessed 17/0/2015.

home and host supervisors similarly as when using advanced methods for capital measurement.

The price for introducing TLAC will most likely be an increase of costs of obtaining financing. The benefit, on the other hand, a chance to liquidate market ineffectiveness in the form of assumed support from a public institution. In such a situation the rise in costs of financing should not be interpreted as a negative situation.

Professor David Mayes from the University of Auckland, while agreeing with most recommendations prepared by the European Financial Congress, highlights that there is not enough room in TLAC proposition devoted to the question of whether TLAC actually diminish the costs of financial crisis for the public. If pension funds are to be an important part of resources constituting TLAC, then solution suggested by the FSB could mean moving the problem from to big to fail banking sector institutions to the pension fund sector. As a result the risk from financial institutions that are too big to fail for the public will not be eliminated, but it can be significantly reduced.

From the point of view of limiting moral hazard, there are two key things in the TLAC proposal:

1) will it be practically possible to implement the bail-in concept as part of the resolution process,
2) will the regulatory solutions (TLAC, MREL) stimulate the division of TBTF banks.

The bail-in concept, as opposed to bail-out, assumes that in case of insolvency of bank it will be possible to eliminate or at least dramatically diminish the amount of public funds used. In case of insolvency of the bank, the key point of bail-in is to exhaust the own capital, and if that is not enough for the bank to regain liability, then more and more of a bank's obligations will be converted to capital, which can be used for covering losses or as a capital injection to meet the regulatory requirements. The problem lies in the fact that the share of own capital in a bank's liabilities is very small (few per cent) and most liabilities are guaranteed liabilities, which are, according to the BRR Directive[15], excluded from the bail-in tool. Among others, guaranteed deposits and pledged liabilities (including mortgage bonds) are some of the excluded liabilities.

The wide scope of liabilities excluded from bail-in procedure give rise to concerns whether this instrument can be applied effectively. That is why a necessary condition for bail-in effectiveness is to ensure that the bank is able to absorb losses through maintaining a high level of liabilities that can be converted to capital. On the other hand, limiting the scope of liabilities excluded from the bail-in procedure may increase systemic risk and increase the costs of financing banks significantly.

[15] http://eur-lex.europa.eu/legal-content/PL/TXT/?uri=CELEX:32014L0059, accessed 17/10/2015.

It is worth noting that traditional credit and deposit banks finance their activities mainly though the retail deposit market. This market, as opposed to the interbank market, is generally considered a stable source of financing. But the deposits (up to the equivalent of 100.000 euro) are excluded from bail-in. Therefore, those relatively safe banks will be obliged by the TLAC requirements to issue more dangerous debt instruments, and as a result to change their structure of liabilities to a less stable one.

In the end, it is worth noting that the TLAC solutions seem very restrictive in order to stimulate the mechanism of division of banks identified as TBTF, which are burdened with additional capital requirements. The competitive position of those banks in relation to other banks will become unfavourable. In theory the aim of the TBTF banks burdened with additional capital requirements should be to leave this group as soon as possible. The quickest way out of the "nasty thirty" is by division. The division of a TBTF bank will not interfere with the shareholder structure but it can cause a loss of the benefits of scale. Generally speaking from the moment of TLAC introduction it can be expected that some portion of banks will be dividing in order to avoid additional capital requirements. However, if FSB will be announcing the TBTF list annually, the banks on the list should be smaller and smaller with time. This would create an evolutionary limitation of the number of TBTF banks on a global scale.

Such a mechanism will mostly likely not be started by the MREL project, which burdens with regulatory restrictions all banks, not only the Globally Systemically Important Banks (G-SIBs)[16].

CONCLUSION

To sum up, the genesis of the TLAC project was to allow for effective implementation of the resolution process, especially using the bail-in instrument. Implementing additional regulatory restrictions described in TLAC to the group of thirty G-SIBs will probably start the mechanism of division of G-SIBs. Their division would increase the possibility of actual use of relatively small resolution funds (including European Resolution Fund) for countering moral hazard. New regulations bring hope for limiting moral hazard in the banking sector. However, it should not be expected that moral hazard will be eliminated completely in a relatively long period of time. It is important to limit first the most immoral moral hazard.

[16] Broader: *EBA Final Draft Regulatory Technical Standards*, 3 July 2015, www.eba.europe.eu

Abstract

Several reflections and suggestions concerning the planned regulations aimed at limiting moral hazard done by TBTF banks were presented in this article. The scope of reflection is mainly the effectiveness of implementation of a resolution regime. To allow effective implementation of the resolution process probably the TLAC (Total Loss Absorbing Capacity) mechanism will be used. The mechanism will, according to the author, probably start the division of TBTF banks due to additional capital restrictions. If the division mechanism of two banks from the G-SIB group were to start it would be enough to be moderately optimistic when it comes to limiting moral hazard in banking.

Key words: TBTF, resolution regime, moral hazard, European Resolution Fund, European Stability Mechanism

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STRUCTURE OF THE COST OF DEPOSITS IN SELECTED EU COUNTRIES

version: *April 2015*

INTRODUCTION

The financial crisis in the years 2007–2009 was one of the factors of structural changes in the financial market whose consequences we feel to date. One of the changes is the permanent growth of relative financing costs of the banking sector. For the purpose of this article, a relative cost is measured on the basis of the deviation of actual deposit prices from money market benchmarks, because money market benchmarks are not important reference points only, but they are mainly used as a basis for the valuation of various financial products. For example, a three-month USD LIBOR is an index that determines the amount of flows in derivative instruments of USD 100 trillion in total[1], while WIBOR (for all terms) is used as an index for approximately PLN 6 trillion of interest derivatives and over PLN 400 billion of loans[2].

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1 Amount equal to 10^{14}, see: Duffie D., Stein J., Reforming LIBOR and Other Financial Market Benchmarks, Working Paper no 3170, Stanford University, September 19, 2014, p. 18.

2 Own calculations of IBnGR based on NBP data and annual reports of domestic banks.

The purpose of this article is to examine the impact of the crisis on relative cost of deposits in selected EU countries both in and outside the Eurozone. Empirical data relates to deposit prices in the retail and corporate segment in two countries from the Eurozone: the country of least risk (Germany) and the country of the most serious risk (Greece) and in two countries from outside the Eurozone: a mature country (Sweden) and an emerging country (Poland). The analysis is based on evidence for material structural changes in these markets and the separation of key differences between particular countries and types of instruments. The purpose of the analysis is to verify whether the crisis contributed to the change of actual deposit prices in relation to money market benchmarks as the literature shows that the present money market benchmarks have stopped reflecting the marginal price of money.

The article is a part of the ongoing discussion on the reform of money market benchmarks. The process of changes was initiated by the Wheatley commission's report (2012)[3], which was followed by a document prepared by a task force at the Bank for International Settlements (2013)[4], recommendations by EBA/ESMA (2013)[5] and IOSCO (2013)[6]. The European Parliament prepared a proposal for a "Regulation on indices used as benchmarks in financial instruments" (2013)[7], and the Financial Stability Board published a comprehensive report (2014)[8] based on the work of the Market Participants Group[9] and IOSCO[10].

Financial market participants attempted to reform the benchmarks for two purposes. The first goal was to make them more resistant to manipulation, which distorted LIBOR and EURIBOR many times in the past. The other goal was to make the rate more representative and adequate so that the benchmark could be commonly applied in relation to balance-sheet and off-balance-sheet products. The reformers agreed that a change in the nature of the benchmark from declarative to transactional, i.e. based on actual deposit prices, was a remedy for both of the potential weaknesses of the benchmarks.

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3 The Wheatley Review of LIBOR: final report, HM Treasury, September 2012.

4 Towards Better Reference Rates Practices: A Central Bank Perspective, BIS, March 2013.

5 ESMA-EBA Principles for Benchmark-Setting Processes in the EU, ESMA/2013/659, June 6, 2013.

6 Principles for Financial Benchmarks Final Report, OICU-IOSCO, FR 07/13, July 2013.

7 Proposal for a Regulation of the European Parliament and of the Council on indices used as benchmarks in financial instruments and financial contracts, Brussels, 18.9.2013.

8 Reforming Major Interest Rate Benchmarks, Financial Stability Board report, 22.07.2014.

9 Market Participants Group on Reforming Interest Rate Benchmarks, MPG Final Report, March 2014.

10 Review of the Implementation of IOSCO's Principles for Financial Benchmarks by Administrators of Euribor, Libor and Tibor, International Organization of Securities Commissions report, July 2014.

As proven by Brousseau, Chailloux and Durré (2013)[11], banks have created a significant risk of discrepancies between the published LIBOR rate and the real cost of financing, which makes the management of assets and liabilities ineffective. The divergence between the reference rate and the actual cost of balance-sheet and off-balance-sheet instruments generates an economic risk, which increases the uncertainty of the future value of assets and net interest income.

This analysis reflects the scope and time volatility of the divergence, as well as the diversity of the scale of the divergence in particular countries.

ANALYSIS OF EMPIRICAL DATA

We collected data related to an average monthly notional-weighted interest rate of bank fixed-rate term deposits in the retail and corporate segment (so called customer data, hereinafter referred to as B2C)[12]. The data comes from reports of central banks: the National Bank of Poland[13] for PLN, Riksbank[14] for SEK, Bundesbank[15] for EUR in Germany and Ethniki Trapeza Ellados[16] for EUR in Greece. Time series were supplemented with data concerning local IBOR-like benchmarks[17] and OIS contracts[18] published by Thomson Reuters and Bloomberg. The analysis covers the years 2005–2014[19].

For the Polish deposit market, the data of IBnGR is also used[20]. It refers to prices of negotiable deposits based on transactional data which is sent every day by domestic banks to the Money Market Monitoring System (SMRP). This data covers the period from November 2012, i.e. the first full month of the system's operation. Contrary to other data related to the B2C market, these are rates based

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11 Brousseau V., Chailloux, A., Durré, A., Fixing the Fixings: What Road to a More Representative Money Market Benchmark?, IMF Working Paper No. 13/131, May 29, 2013, p. 7–8.

12 For interest rates for which a yield curve was available, we presented the rates as an average of key 3M and 6M terms. For the B2C market, we used an average price in the corporate and retail market.

13 http://www.nbp.pl

14 http://www.riksbank.se/en

15 http://www.bundesbank.de

16 https://www.nbg.gr

17 IBOR – Inter Bank Offered Rate, a benchmark related to the cost of interbank loans which is calculated on the basis of declarations made by key banks in the financial centres (e.g. WIBOR for the PLN market, STIBOR for the SEK market).

18 OIS – Overnight Index Swap, a derivative which reflects an average expected cost of overnight loans during the term of the contract.

19 Data on Sweden come from the years 2006–2014.

20 www.smrp.pl

on actual transactions[21]. Therefore, time series for PLN include some data coming from the SMRP.

The data is presented from different points of view. Firstly, we present the course of the volatility of average interest rates with regard to three different classes of risk:

1. B2C customer deposits, which determine the actual cost of financing banks' balance-sheets in the short run;
2. IBOR-like benchmark theoretically related to the prices of interbank deposits on the assumption that unsecured short-term funds are lent to banking institutions with the highest credit rating in a given market;
3. Prices of OIS contracts representing an average expected ONIA-like overnight rate[22] during the term of the contract in which liquidity risk and credit risk are at a minimum.

Secondly, we converted the above time series related to variable levels to show the volatility of a spread between deposit rates and OIS contract prices and the base IBOR benchmark. The analysed curves are presented in Charts 1–8 in Appendix 1.

The volatility analysis of the above variables indicates that the analysed period was characterised by price shocks, which contributed to a change in the structure of prices in the money market. The first price shock occurred in 2007, when the first symptoms of the subprime crisis appeared, including the bankruptcy of funds operated by Bear Stearns and the withdrawal of BNP from securitisation funds. Earlier, IBOR rates were very close to OIS prices and the cost of customer deposits was below IBOR. Therefore, the OIS-IBOR spread was close to zero, while the B2C-IBOR spread was negative. What did such a price relationship reflect? It meant that the money market before the middle of 2007 perceived liquidity and credit risks as very limited. At the same time, IBOR was the marginal cost of funds and banks generated interest margins on deposits kept for non-financial entities.

The situation changed radically after the outbreak of the global financial crisis. The crisis had several phases, which resulted in different volatilities of asset prices because of various reasons for price instability. In the first phase preceding the fall of Lehman Brothers (from August 2007 to September 2008), the OIS-IBOR

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[21] The Money Market Monitoring System (SMRP) is used by most domestic banks to verify their price policy in the deposit market and estimate the financing cost of the banking sector. The SMRP collects data of the daily distribution of interest rates of negotiable term deposits for 7 maturities and 5 customer segments. The data comes from banks whose balance-sheet total constitutes 93% of the local banking sector. In the first quarter of 2015, an average daily volume of transactions recorded by the SMRP was PLN 23 billion and 7,500 transactions.

[22] ONIA – Overnight Index Average, a benchmark applicable to the cost of overnight loans, calculated on the basis of transactions in the interbank market (e.g. POLONIA for the PLN market, EONIA for the EUR market).

spread was strongly negative, while the B2C-IBOR spread did not change. This proved that banks noticed the growth of liquidity and credit risk (which is proven by increasing divergence between OIS and IBOR rates), but they did not report any liquidity problems (thus they did not overpay the customers to collect stable deposits).

The following most severe phase of the crisis was initiated by the bankruptcy of Lehman Brothers. The effect of that was a significant drop in the credibility of the banking sector and liquidity deterioration caused by the disappearance of the interbank term deposit market[23] and the abrupt growth of financing costs. In consequence, we observed record negative OIS-IBOR spreads and the cost of customer deposits exceeded IBOR rates for the first time in most markets. Credit and liquidity risks were perceived as very high. Facing the loss of stable sources of funding, banks started a price war in order to acquire funds from non-financial customers.

That situation lasted several months, but with the improvement of sentiment the spreads were slowly decreasing and the cost of customer deposits slowly returned below the IBOR reference rate, while OIS prices approached the quotations of interbank deposits.

From 2010, a different type of uncertainty which was not connected with the private sector, but with the public sector, increased. Greece and other peripheral economies of the European Union were on the verge of bankruptcy as a result of the increasing and non-financeable public debt. The unrest reached its peak in December 2011, when the OIS-IBOR spread widened again and customer deposit prices exceeded the reference rate.

In March 2012, Greece was declared insolvent[24], which, given fiscal instability in the EU countries, strengthened the above phenomenon. At present, IBOR is between the average prices of customer deposits and the OIS contract prices for all the countries in question. This may be connected with structural changes in the money market, which may have serious implications for the future IBOR benchmark.

The following table summarises an average spread for the four periods which are discussed above by country and market segment.

[23] The disappearance of interbank deposits applies to transactions exceeding 1 week and results from mutual limitation of credit limits to market participants in unsecured loans.

[24] On 9 March 2012, ISDA formally announced a credit event connected with the restructuring of Greece's debt.

Table 1. Deviation of B2C[25] prices and OIS from IBOR in percentage points

Period	Germany B2C	Greece B2C	Poland B2C	Sweden B2C	EUR OIS	PLN OIS	SEK OIS
Before AUG07	–0.38	–0.23	–0.79	–0.66	–0.05	–0.16	–0,01
AUG07-AUG08	–0.52	–0.25	–0.98	–0.79	–0.51	–0.31	–0.33
SEP08-DEC11	–0.24	1.60	0.28	0.07	–0.51	–1.06	–0.36
After DEC11	0.14	3.09	0.37	0.51	–0.20	–0.43	–0.31

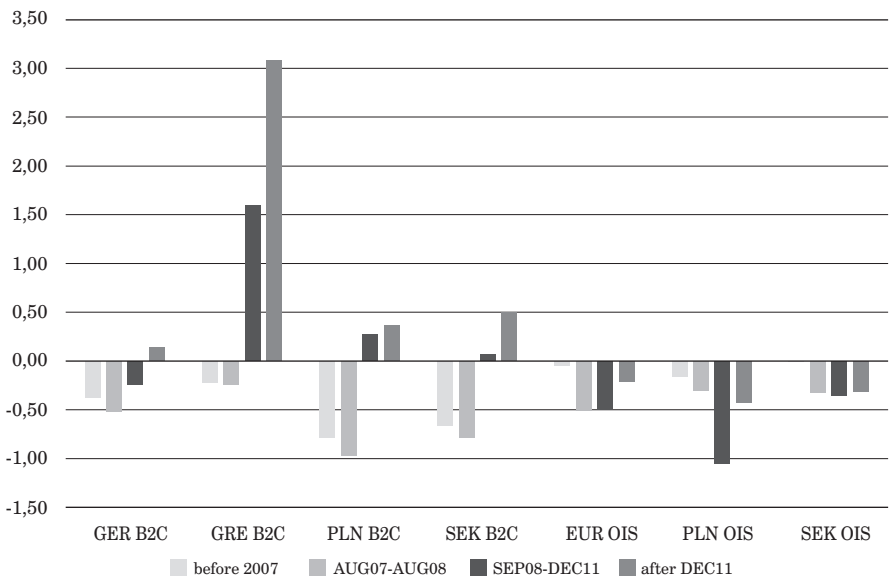
Source: own calculations based on data from Thomson Reuters, IBnGR and central banks.

The deviations of market rates from the benchmark may be analysed on the basis of two criteria:

1. the change in spreads for a given instrument in particular periods;
2. the change in spreads in a given period for various underlying instruments.

Both criteria are presented in the charts below[26]:

Chart 1. Average spread of deposits and OIS vs IBOR in the periods

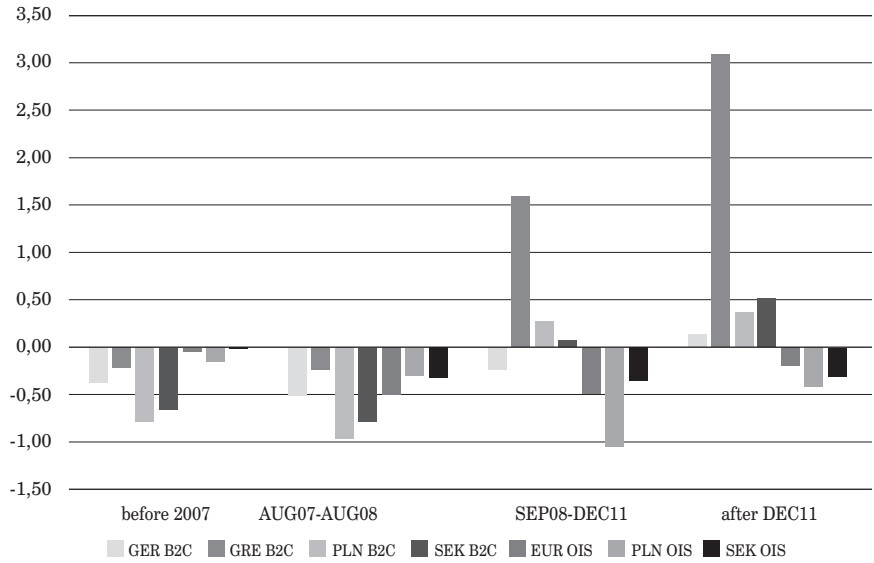


Source: own study based on data from Thomson Reuters, IBnGR and central banks.

[25] B2C (bank-to-client) – the market of customer deposits including corporate and retail segments.

[26] In the analysis of EUR rates in the EU countries, the following abbreviations are used: GER – Germany, GRE – Greece.

Chart 2. Average spread of deposits and OIS vs IBOR by country/product



Source: own study based on data from Thomson Reuters, IBnGR and central banks.

Based on the analysis of the above charts, we may draw the following conclusions:

- In the first two periods (i.e. from September 2008), customer rates were below IBOR, which meant that the rate constituted the banks' actual funding cost and the banks recorded a positive interest margin on their customer deposit portfolio. It is worth pointing out that the relative cost of deposits was smaller for countries from outside the Eurozone, which may indicate that the competitiveness of those markets in that period was lower.
- After the collapse of Lehman Brothers, customer deposits in all countries were more expensive than IBOR, except for Germany, where the barrier of the IBOR rate was exceeded only after the liquidity crisis in December 2011. A change in banks' relative funding cost meant that IBOR stopped constituting the marginal cost of funds and banks recorded interest losses on customer transactions in comparison to the IBOR benchmark. That effect was visible in particular in Greece, where the financing cost of banks from the non-financial sector grew up to 300 basis points over EURIBOR (it is obviously connected with the low creditworthiness and related liquidity problems of Greece).
- From August 2007 OIS rates were much below IBOR, but in Poland we observed a strong widening of the spread after the collapse of Lehman Brothers, which could be connected with global risk aversion felt in particular in the emerging

economies. The spread was relatively smallest for the Eurozone after the announcement of the insolvency of Greece, which was connected with loosening of monetary policy by the ECB, which decreased liquidity tensions in the money market.

Let us also note the scope of the monthly instability of rates representing various asset classes. This is depicted in the following table.

Table 2. Standard deviation of monthly differences in B2C, OIS, IBOR in percentage points

Period	EURIBOR	EUR OIS	Germany B2C	Greece B2C	WIBOR	PLN OIS	Poland B2C	STIBOR	SEK OIS	Sweden B2C
Before AUG07	0.06	0.05	0.06	0.07	0.18	0.18	0.15	0.05	0.09	0.15
AUG07-AUG08	0.19	0.06	0.09	0.11	0.13	0.11	0.11	0.13	0.07	0.08
SEP08-DEC11	0.27	0.25	0.23	0.29	0.23	0.33	0.23	0.36	0.32	0.24
After DEC11	0.07	0.05	0.05	0.12	0.14	0.13	0.14	0.09	0.07	0.05

Source: own study based on data from Thomson Reuters, IBnGR and central banks.

At the beginning the unstable rates were created by market tensions. After 2008, the fluctuations were mainly caused by the monetary policy of central banks, which modified reference rates in response to the global economic situation. The biggest volatility of prices was observed in the period between the collapse of Lehman Brothers and the apogee of the crisis connected with the insolvency of peripheral economies of the Eurozone. The reduction of the volatility in 2012 proves that the analysed processes stabilised and suggests that relations between individual yield curves in the money market after the period of strong fluctuations are permanent and are connected with structural changes in the banking sector.

CONCLUSIONS

The authors collected interest rates for three classes of risk (customer deposits, IBOR-like benchmark and OIS contracts) and for four selected EU countries (Germany, Greece, Sweden and Poland). The analysis of the rates during the four phases of the development of the crisis (periods: to 2007, 2007–08, 2008–11 and after 2011) reflects permanent trends in relations between particular yield curves.

Before the financial crisis in the years 2007–2009, IBOR was the marginal cost of funds. The average financing cost of banks was smaller than the rate offered in the interbank market. The crisis of reliability contributed to the deterioration of liquidity in the financial market and the disappearance of the market of unsecured interbank deposits because of the mutual lack of credit limits. Therefore, the role of funding based on secured deposits and the retail (customer) market increased. In the other market, interest rates on term deposits from non-financial customers substantially exceeded IBOR. Thus, IBOR does not constitute a benchmark for the marginal cost of funds any more.

Banks fund their long-term assets with short-term liabilities. The mismatched time structure of both sides of the balance-sheet is one of the risks which banks are compensated for by their net margin (the other risk is the credit risk secured with a credit margin). The disparity between the profitability of assets and liabilities forms a systemic risk which may impact the bottom line.

Banks manage the price and liquidity risk of instruments indexed to IBOR (which represents the theoretical cost of interbank term deposits) and ONIA (which represents transactional prices of interbank overnight deposits). IBOR is used to define cash flows in loans and variable-rate bonds, while ONIA is used for OIS contracts, which at present form the main source for the valuation of interest-bearing derivatives[27].

Observations presented herein show that IBOR-like rates permanently deviated from prices representing actual money market transactions as a result of the subprime crisis in the years 2007–2009 and the PIGS crisis in the years 2010–12. We observe this phenomenon in the developed countries which form the core of the single monetary area (Germany), in the peripheral economies (Greece), in a developed country from outside the area (Sweden) and in an emerging economy which is converging with the Eurozone (Poland). Consequently, there appeared a permanent difference between the benchmark and the two series of prices representing balance-sheet and off-balance-sheet transactions. For the purpose of this article, to exemplify balance-sheet transactions, we chose (retail and corporate) customer term deposits, while off-balance-sheet transactions are exemplified by OIS contracts. The time series are based on actual transactions and reflect the actual relationship between demand and supply (opposite to IBOR, which is declarative in practice).

After the period of the high volatility of interest rates applicable to the aforementioned asset classes, the following price relationships were established:

- the rates of customer deposits used by banks to finance their activity from unsecured sources are above corresponding IBOR benchmarks; the spread between the cost of deposits and IBOR depends on liquidity and creditworthiness of a given country (it is the greatest in Greece, and the lowest in Germany);

[27] Whittall Ch., The Price is Wrong, Risk Magazine, March 2010.

- ❖ the prices of OIS contracts representing a rate close to a risk-free rate (i.e. deprived of material credit and liquidity components) are below corresponding IBOR benchmarks. The OIS spread to IBOR is determined by the ongoing liquidity situation of the banking sector.

Thus, IBOR, which theoretically reflects the cost of unsecured interbank loans, is located in a channel between customer deposit rates (as the top limit of the channel) and OIS contract rates (as the bottom limit of the channel). The limits of the channel are the prices of balance-sheet and off-balance-sheet transactions, while IBOR fluctuates at differing distances around actual transaction prices. For IBOR rates, it is a problem that there is no trading in interbank term deposits, which were practically completely replaced by secured deposits. Therefore, in practice, only the prices forming the limits of the channel are based on the actual transactional turnover.

The above phenomenon generates the following risks:

- ❖ if part of the assets are based on an IBOR-like variable interest rate, the interest income of the banking sector may differ from the interest cost of liabilities, which is generated mostly by customer deposits;
- ❖ the portfolio of derivatives indexed to IBOR is valuated on the basis of OIS curves, which results from the mass collateralisation of the presettlement risk, which is deepened by the enforcement of obligatory central clearing for certain types of transactions. In consequence, basis risks may have a material impact on the market risk and portfolio valuation[28].

As proven by Brousseau, Chailloux and Durré (2013), reference rates are less and less representative for banks' financing costs and are becoming more and more important for the valuation of derivative contracts[29]. This brings about particularly critical implications if the share of variable-rate assets based on an IBOR-like index or derivatives indexed to IBOR (including currency basis swaps) is substantial. Thus banks acquire liquidity, make investments and manage their liquidity gap without control over or the ability to secure the cost of those operations.

The Financial Stability Board postulates that two money market benchmarks should be selected for each currency[30]:

1. IBOR+ based on actual transactions made in the market of unsecured term deposits, which will be used to measure balance-sheet assets which are subject to credit risk;
2. RFR (Risk Free Rate) based on the expectations of market players as to the shape and location of the yield curve which is not burdened with a liquidity

[28] See: Bianchetti, M., Two Curves, One Price: Pricing & Hedging Interest Rate Derivatives Decoupling Forwarding and Discounting Yield Curves, Risk Magazine, August 2010.
[29] Brousseau V. et al, op. cit., p. 6.
[30] Duffie D., Stein J., op. cit., p. 14–15.

risk or a capital credit risk, which will be used to measure off-balance-sheet instruments (derivatives).

The analysis of the possible solutions shows that IBOR+ would have to be based on transaction prices, while RFR would be based on interest rates arising from OIS contracts. Duffie and Stein (2014)[31] rightly notice that it will not be possible, however, without the regulators and supervisors' decision because the change is not easy and the market prefers segments with the greatest liquidity.

At present, the database of transaction prices is available for the Polish market under the Money Market Monitoring System (SMRP). If similar databases are developed in other countries, it would be possible to analyse the actual cost of liquidity coverage by unsecured deposits on an ongoing basis and could support the definition of new benchmarks of the money market in accordance with the assumptions of the draft Regulation of the European Parliament. The development of the transaction databases is one of IOSCO's guidelines aimed at the effective verification of IBOR-like rates[32].

Abstract

As a result of the crisis of confidence in the financial markets caused by events that took place in the years 2007-2008 and later fiscal problems in the peripheral countries of the European Union, banks lost their ability of refinancing based on unsecured interbank deposits. This contributed to the growth of the importance of deposits from non-financial customers whose cost started differing significantly from money market indices based on the interbank market. Moreover, strong divergence between the rate applicable to off-balance-sheet items (OIS) and the price of cash applicable to balance-sheet flows appeared. This article presents an analysis of changes in the structure of interest rates in various segments of the market in four selected countries of the EU: two countries from the Eurozone and two non-Eurozone countries. Observations from the money market indicate that it is economically justified to create separate benchmarks for balance-sheet and off-balance-sheet items.

Key words: money market, financial crisis, funding cost, deposit interest rate, financial market indices

[31] Ibidem, p. 27–28.

[32] Review of the Implementation of IOSCO's Principles for Financial Benchmarks, op. cit., p. 3–6.

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APPENDIX 1

Chart 1. Interest rates in Germany

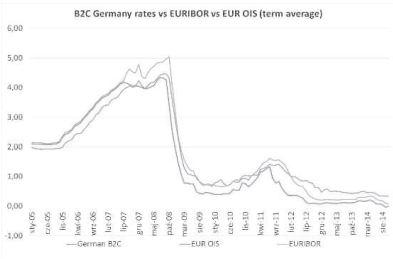

Chart 2. Interest rates in Greece

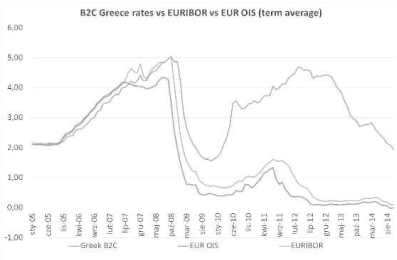

Chart 3. Interest rates in Poland

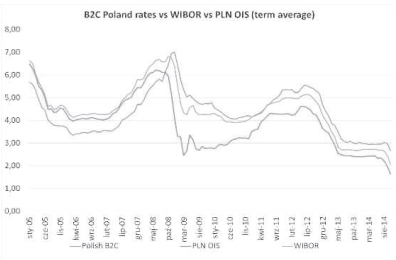

Chart 4. Interest rates in Sweden

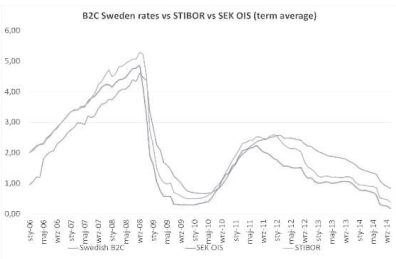

Chart 5. Spreads in Germany

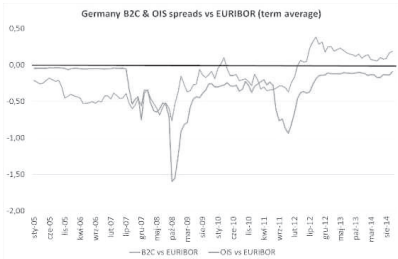

Chart 6. Spreads in Greece

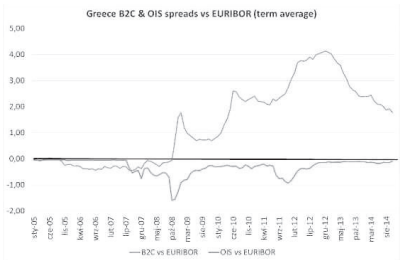

Chart 7. Spreads in Poland

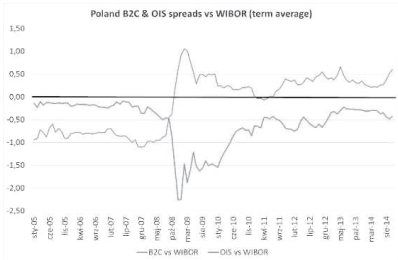

Chart 8. Spreads in Sweden