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In Search of Ways for Financing the Bank's Liquidity in Resolution

Abstract

The article concerns the issue of maintaining the liquidity of a bank subject to resolution procedure. The legal framework relating to this process focus mainly on meeting the capital requirements of a bank in resolution. Nevertheless, one of the crucial conditions for achieving the goal of resolution is to maintain the bank's liquidity throughout the process. The establishment, method of establishing and the value of accumulated funds dedicated to resolution in individual countries or a group of countries (e.g., the banking union) implicates that their ability to meet the needs of banks may be insufficient. Especially when the demand for liquidity support is high due to a sudden outflow of funds from customers' accounts. A circumstance that highlights the significance of the problem of maintaining liquidity is usually the difficult situation of the bank in resolution, limiting or even preventing from obtaining external financing from the market. All the above-mentioned issues is a premise for establishing special solutions or methods for supporting a bank's liquidity in resolution, the more so as the possible use of operations with a central bank – as a lender of last resort – is conditioned by the fulfillment of a number of requirements that may be difficult or even impossible for such a bank to meet. Against this background, the article reviews and systematizes the solutions that create opportunities for the bank in resolution to obtain external financing from financial system entities, with particular emphasis on financial safety net entities, in order to secure its liquidity position.

Keywords: resolution, liquidity, resolution fund, deposit insurance fund, central bank, financial markets

JEL: G01, G10, G18, G21, G28, G33

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Introduction

The legal provisions on planning and executing the resolution process of a bank concern primarily its capital problems. At the same time, the issue of uninterrupted service of current liabilities is underestimated. The problem of ensuring bank liquidity in resolution has already been raised in the literature as one of the most important determinants of the credibility and effectiveness of this process¹. Despite that, in practice of implementing the resolution in many countries, no adequate solutions have been developed in this regard (e.g., this applies to countries belonging to the banking union in the European Union).

In the systemic context presented above, the aim of this study is to identify and systematize potential sources of liquidity for the bank under resolution, based on the analysis of the literature and practical examples. It should be clearly emphasized that only solutions directly related to liquidity are considered. The anti-crisis instruments that stabilize the capital position of banks, although indirectly positively influencing their liquidity, have been ignored. In particular, the subject of the analysis are such methods of obtaining liquidity that can be used in a situation where the resolution procedure has already been initiated, but the bank experiences an outflow of liquidity.

The study is divided into six parts. The first one deals with the liquidity problem of a bank undergoing resolution. The second one describes the guidelines of the Financial Stability Board (FSB) regarding the provision of liquidity for a bank in resolution. The third part focuses on the regulations in force in the European Union in this area. The fourth part analyzes the solutions applied in the banking union countries. The next part was devoted to the analysis of possible solutions to strengthen access to liquidity during resolution. In the summary, the activities aimed at better securing the bank's liquidity in resolution are listed and divided into three main groups.

1. The problem of bank liquidity in resolution

Due to the specific nature of their activities, banks are entities particularly exposed to the liquidity risk². The sources of their financing are usually scattered and short-

¹ E.g., M. Kozińska, *Przymusowa restrukturyzacja banków w Unii Europejskiej* [Forced restructuring of banks in the European Union], CeDeWu, Warsaw 2018, p. 43–68, 171–186; M. Demertzis, I. Goncalves Raposo, P. Huettl, G. Wolff, *How to provide liquidity to banks after resolution in Europe's banking union. In-depth analysis*, Economic Governance Support Unit, European Parliament, Brussel, 2018, p. 5–16; R. Amamou, A. Baumann, D. Chalmandaris, L. Parisi, P. Torstensson, *Liquidity in resolution: estimating possible liquidity gaps for specific banks in resolution and in a systemic crisis*, ECB Occasional Paper Series No. 250, November 2020, p. 4–41.

² E.g., M. Kozińska, *Przymusowa restrukturyzacja...*, *op. cit.*, p. 13–24; P. Niedziółka, *Ryzyko płynności* [Liquidity risk], [in:] Zaleska M. (ed.), *Świat bankowości* [Banking world], Difin, Warsaw 2018, p. 322–344; A. Stopczyński, *Zarządzanie ryzykiem w banku* [Risk management in banks], [in:] Jajuga K. (ed.), *Zarządzanie ryzykiem* [Risk management], PWN, Warsaw 2019, p. 281–288; J. Koleśnik, *Bankowe*

term, even being payable on demand³. This makes banks vulnerable to a banking panic.

Due to the specificity of bank financial intermediation, the set of fundamental factors of its stable operation includes the trust of creditors, especially depositors, which is sometimes assigned the feature of intangible assets. The loss of depositors' confidence exposes the bank to the massive withdrawals (the bank run)⁴, with the deposit guarantee system being an important factor mitigating depositors' panic. Moreover, information about the crisis situation of a given bank limits its chances for obtaining financing from other market sources or the cost of such financing increases the risk of the bank's insolvency. The general opinion on the situation of the banking sector and the ability of the deposit guarantor to protect funds are of great importance – not only in a troubled bank, but also in other banks, especially those with capital or organizational links or operating in the same area. The loss of trust may be systemic and take the form of the contagion or domino effect known in literature and practice⁵.

The risk of a temporary drop in confidence in a bank may be particularly high when a bank's crisis situation culminates, i.e. when its situation is so bad that it requires more decisive actions to be taken by financial safety net institutions, especially if such actions involve the need to pass losses incurred by the bank to its stakeholders⁶. Also, access to the sources of liquidity from financial safety net institutions (e.g., the central bank) may be limited due to the necessity to meet the conditions for such a support⁷.

Ryzyko Systemowe. Źródła i instrumenty redukcji [Bank systemic risk. Sources and reduction tools], Difin, Warsaw 2019, p. 165–174.

- 3 A. K. Nowak, Ryzyko struktury bilansu banku [Risk of bank's balance sheet structure] [in:] Małgorzata Iwanicz-Drozdowska (ed.), Zarządzanie ryzykiem bankowym [Management of bank risk], Poltext, Warsaw 2017, p. 211-258; O. Szczepańska, A. Dobrzańska, B. Zdanowicz, Resolution czyli nowe podejście do banków zagrożonych upadłością [Resolution – new approach to banks threatened by bankruptcy], NBP, Warsaw 2015, p. 8-13.
- 4 The importance of market confidence has also been highlighted in the following studies: D. Piotrowski, Trust in the Banking Sector in Poland in Comparison to Global Trends, *Ekonomia i Prawo*, t. 19, nr 2, 2020, s. 319-322; M. Idzik, Reputacja sektora bankowego w Polsce – wnioski z badania w 2019 roku [Reputation of banking sector in Poland – conclusions from the survey in 2019], *Bezpieczny Bank*, nr 3 (76), 2019, p.75-93.
- 5 P. Smaga, Polityka makroostrożnościowa w sektorze bankowym. Teoria i praktyka [Macroprudential policy in banking sector. Theory and practice], Oficyna Wydawnicza SGH, Warsaw 2020, p. 45-54.
- 6 W.G. Ringe, The Dark Side of Bank Resolution: Counterparty Risk through Bail-in, EBI Working Paper Series, 2019-no. 31, 2019, p. 2-38.
- 7 M. Gruber, S. W. Schmitz, A pragmatic solution for the liquidity in resolution problem, SUERF Policy Note, Issue No 222, February 2021, p. 2-12.

Box 1. Liquidity problem after initiating the resolution of Podkarpacki Bank Spółdzielczy in Sanok

The deteriorated capital situation of PBS in Sanok and the recognition that it fulfills a critical function (by servicing deposits of local government units) forced the Bank Guarantee Fund (BFG) to initiate a resolution procedure against this entity on January 17, 2020. This caused, among others, suspension of customer service. Access to ATMs, electronic services via cards and internet banking was gradually launched from Monday, January 20, 2020. The opening of branches of a specially created bridge bank under the name of Bank Nowy BFG S.A. occurred the next day. Following the opening of the bridge bank, increased withdrawal of customer funds was experienced^a.

- ^a BFG, Przymusowa restrukturyzacja Podkarpackiego Banku Spółdzielczego w Sanoku [Resolution of Podkarpacki Bank Spółdzielczy in Sanok], <https://www.bfg.pl/przymusowa-restrukturyzacja-podkarpackiego-banku-spoldzielczego-w-sanoku/> (accessed 18.03.2021); <https://sanok.naszemiasto.pl/klienci-wy-bieraja-pieniadze-z-banku-i-zamykaja-konta/ar/c3-7527667> (accessed 18.03.2021).

The issue of the behavior of creditors, especially depositors, towards the bank under the resolution is an important success factor of this process. Despite the initial recapitalization, a strong outflow of funds from bank accounts may threaten the effectiveness of the resolution process⁸. Under unfavorable systemic conditions and especially in the situation of growing concern among customers about the stability of the banking sector, the lack of success of the resolution process of a bank or banks due to liquidity problems may activate behaviors typical for a banking panic, and thus result in a disturbance of the financial stability⁹ of the entire banking sector.

In line with the spirit of the regulations adopted after the global financial crisis of 2008–2009, the main source of financing for a bank facing financial problems should be private sources¹⁰, treated as the so-called “first line of defense”. This is primarily about the bank’s own resources (e.g., its liquidity buffers), as well as the

⁸ T. Philippon, A. Salord, *Bail-ins and Bank Resolution in Europe. A Progress Report*, International Center for Monetary and Banking Studies, 2017.

⁹ More about the financial stability in: O. Szczepańska, *Stabilność finansowa jako cel banku centralnego* [Financial stability as central banks' goal], Wydawnictwo Naukowe Scholar, Warsaw 2008, p. 1–243; A. Matysek-Jędrzych, *Bank centralny a stabilność finansowa – wybrane teoretyczne i praktyczne dylematy współczesnych finansów* [Central bank and financial stability – selected theoretical and practical dilemmas for contemporary finance], [in:] Janc A. (ed.), *Bankowość a kryzys na rynkach finansowych* [Banking and the crisis on the Financial markets], *Zeszyty Naukowe* nr 140, Wydawnictwo UE w Poznaniu, Poznań 2010, p. 25–40; K. Jajuga, *Stabilność finansowa – nowe wyzwania dla nauki finansów* [Financial stability – new challenges for the finance science], [in:] Famulska T. (ed.), *Szkice o finansach* [Sketches on finances], Wydawnictwo UE w Katowicach, 2012, p. 117–123; W. Przybylska-Kapuścińska, *Financial stability and stability of prices – dilemmas*, [in:] Guenter H. (ed.), *Challenges, Research and Perspectives*, Berlin 2014, p. 27–40; M. Żukowski, *Rentowność sektora bankowego w niestabilnym otoczeniu* [Profitability of the banking sector in an unstable environment], *Studia Prawno-Ekonomiczne*, t. CV, 2017, p. 381–395; K. Kil, *Stabilność finansowa banków spółdzielczych w Polsce* [Financial stability of cooperative banks in Poland], Poltext, Warsaw 2018, p. 19–47.

¹⁰ J. Koleśnik, *Bank Recovery and Resolution Mechanisms in non-Banking Union Countries*, [in:] Korzeb Z. (ed.), *Comparative Analysis of the Conditions of Banking Operation Inside and Outside the Euro Area*, Delta Publicaciones, Madrid 2017, p. 123–145.

possibility of obtaining capital from the market (e.g., as part of transactions on the interbank market). Theoretically and also based on the first experiences, it can be argued that “first line of defense” sources will be used at an early stage of a bank’s problems (e.g., at the stage of a recovery or early supervisory intervention). Thus, they may no longer be available during the resolution process.

Therefore, the regulations provide for the creation of ex ante special resolution funds from fees regularly paid by banks – participants of a given system. They are managed by institutions with the status of a resolution authority. Resolution funds may be allocated not only to recapitalize the restructured entity, but also to secure its liquidity needs¹¹. However, the formula and the timespan of creating these funds mean that their accumulated financial resources are relatively small in relation to the possible liquidity needs of banks in the event of a non-individual crisis in the banking sector¹². Hence, the problem of maintaining liquidity in the resolution process is currently one of the most important and most discussed challenges in this process¹³.

Individual countries develop various methods of securing the liquidity of entities for which the resolution procedure has been launched. First of all, government budget funds are believed to be the sources of support for resolution. Another source of support for the bank in resolution may be the central bank. However, such a support requires adequate collateral, which the failing bank may not have at this stage.

2. FSB’s guidelines concerning bank’s liquidity in resolution

FSB recommendations on the principles of obtaining and providing liquidity to a bank in the resolution process are included in the following documents:

- i. *Key Attributes of Effective Resolution Regimes for Financial Institutions* (so-called *Key Attributes*)¹⁴ and its 2016 supplement, constituting a set of guidelines for

¹¹ M. Kozińska, J. Michalewicz, J. Pycka, B. Zdanowicz, *Implikacje doświadczeń krajowych i międzynarodowych dla procesu zarządzania kryzysowego w polskim systemie finansowym* [Implications of domestic and international experiences for the crisis management process in the Polish financial system], *Materiały i Studia Narodowego Banku Polskiego*, nr. 336, Warsaw 2020, p. 19.

¹² The target level of resolution funds is 1% of guaranteed deposits in a given banking sector. The largest resolution fund – SRF in the banking union will have the size of approx. EUR 60 billion. Meanwhile, the liquidity needs of large banks in the crisis were at a higher level. Source: Amamou, A. Baumann, D. Chalamandaris, L. Parisi, P. Torstensson, *Liquidity in resolution: estimating possible liquidity gaps for specific banks in resolution and in a systemic crisis*, ECB Occasional Paper Series No. 250, November 2020, p. 4–41.

¹³ Np. Financial Stability Board in its reports: “Resolution Report Keeping the pressure up” from 2018 and “Thematic Review on Bank Resolution Planning Peer Review Report” and “Eight Report on the Implementation of Resolution Reforms Mind the Gap” from 2019. The Single Resolution Board indicates work on the problem of liquidity in resolution as one of the priorities for the coming years in its work plans for 2019 and 2020.

¹⁴ FSB, *Key Attributes of Effective Resolution Regimes for Financial Institutions*, 2011, https://www.fsb.org/wp-content/uploads/r_141015.pdf (accessed 23.09.2020).

- assessing the compliance of the national resolution framework with *Key Attributes*,
- ii. *Guiding principles on the temporary funding needed to support the orderly resolution of a global systemically important bank*¹⁵,
 - iii. *Funding Strategy Elements of an Implementable Resolution Plan*¹⁶.

The documents contain the basic principles of financing liquidity for entities in the resolution process. According to them, each country should establish methods of securing temporary funding, including bank liquidity support¹⁷, that are reliable in terms of their nature, availability and sufficiency.

Pursuant to the Key Attributes Guideline No. 6, the source of financing of entities in resolution should be deposit guarantee funds or resolution funds financed ex ante from contributions of the domestic banking sector entities or other funds based on the mechanism of recovery of resolution temporary financing on an ex post basis (Box 2).

Box 2. Resolution financing without dedicated resolution fund – example of Australia

In Australia, no dedicated resolution fund is created ex ante from contributions made by the domestic banking sector entities. On the other hand, starting from 2017, banks with a total liability exceeding 100 billion Australian dollars pay quarterly bank tax in the amount of 0.015% of the value of selected liabilities^a. The state budget is financing possible restructuring activities^b. The use of public funds for the purpose of restructuring a deposit institution at the risk of insolvency (e.g., in the form of transfer of deposits or other liabilities, transfer of non-working assets to the so-called bad bank, recapitalization or government guarantees) requires the consent of the Minister of Treasury and the Minister of Finance. Government financial support for restructuring processes is provided through the Financial System Stability Special Account (FSSSA)^c.

^a IMF, *Australia Financial Sector Assessment Program. Technical Note – Bank resolution and crisis management*, IMF Country Report No. 19/48, 2019, s. 8 oraz Major Bank Levy Act, No. 63,2017, <https://www.legislation.gov.au/Details/C2017A00063> (accessed 23.09.2020).

^b *Ibidem*, p. 25–26.

^c *Ibidem*, p. 9, 25.

At the same time, in accordance with the Key Attributes guidelines, granting any temporary financing to an institution subject to resolution should fulfill strictly defined requirements, i.e.:

¹⁵ FSB, *Guiding Principles on the temporary funding needed to support the orderly resolution of a global systemically important bank*, 2016, <https://www.fsb.org/wp-content/uploads/Guiding-principles-on-the-temporary-funding-needed-to-support-the-orderly-resolution-of-a-global-systemically-important-bank-%E2%80%9CG-SIB%E2%80%9D.pdf> (accessed 22.05.2020).

¹⁶ FSB, *Funding Strategy Elements of an Implementable Resolution Plan*, 2018, <https://www.fsb.org/wp-content/uploads/P210618-3.pdf> (accessed 22.05.2020).

¹⁷ *Ibidem*.

- temporary financing is necessary to support financial stability and will allow for the implementation of resolution measures that will enable the achievement of its goals to the greatest extent, and the financing from private sources is not available or, using it, the assumed resolution goals would not be achieved,
- all losses and costs are covered by shareholders as well as unsecured and uninsured creditors and the banking sector as a whole.

The FSB has made it clear that the use of this type of temporary financing is possible if it is necessary to maintain financial stability, provided that these funds are returned in a timely manner. An example of the use of government funds in the resolution process is presented in Box 3.

Box 3. Financing of resolution fund by the government – example of Hong Kong

Resolution activities in Hong Kong are financed through the so-called resolution funding account^a, financed by the Exchange Fund, i.e., official reserves or other government funds. This also applies to liquidity support in the form of loans or guarantees. Before using the funds from the account to provide such support, the competent resolution authority must consider the use of the own entity's funds in resolution and the possibility of using financing from market sources. However, there is no requirement that market sources must be used first. Unused funds from the account should be returned to the state budget, while all aid from government funds and remuneration for their use should be fully refunded from the funds obtained from the sale of assets of the entity undergoing restructuring or might covered ex post by entities of a given sector^b.

^a An account from which financial operations related to resolution and other activities stabilizing the banking sector are carried out. Source: FSB, Thematic Review on bank resolution planning. Peer Review Report, 2019, p. 55-56, <https://www.fsb.org/wp-content/uploads/P290419.pdf> (accessed 22.05.2020).

^b FSB, *Peer review of Hong Kong. Review Report*, 2018, s. 6 i 43, <https://www.fsb.org/wp-content/uploads/P280218-1.pdf> (accessed 22.05.2020).

Financing from private sources should also cover liquidity needs, as recapitalization is not a sufficient tool to ensure the continuation of all critical functions, since the entity in resolution may experience an increased outflow of liquidity. For this reason, the above-mentioned FSB document addressed the issue of public liquidity mechanisms for the first time.

As indicated by the FSB, the source of liquidity may be – depending on the national legal framework – resolution authorities (resolution funds), deposit guarantors (deposit guarantee funds), central banks (in the form of liquidity support) or the ministries of finance (budget funds). Financing mechanisms in the resolution process should have specific features:

- the amount of available funds should be reliable even if it is necessary to support the resolution of several entities at the same time and maintain their critical functions, enabling the settlement of liabilities,

- access to finance should be quick; in particular, it should be emphasized that the role of public funding mechanisms may also be to support intraday liquidity (and access to it) in order to meet the obligations resulting from the participation in the payment and settlement system,
- the time of provision the financing should not be longer than the time necessary to maintain the continuation of critical functions, but at the same time long enough for the bank to regain access to private sources of liquidity.

In order to reduce the moral hazard, in addition to the above-mentioned requirements, liquidity support from public financing mechanisms should be granted after meeting several additional conditions:

- the entity in resolution must be recapitalized and meet the minimum capital requirements,
- granting support is accompanied by placing the institution under increased supervision,
- in the case of secured financing, haircuts should be properly calibrated to ensure the possible repayment of financing from the entity's assets in resolution,
- the financing price should be set at a level that will motivate the entity to return to market sources of financing,
- conditions for granting support should create incentives to exit from public financing mechanisms as soon as possible.

In particular, access to liquidity within central bank standard operations is only possible under the conditions set by the central bank. Their fulfillment determines in many countries access to payment and settlement systems, so resolution authorities should plan how the entity could meet them after starting the resolution process. Examples of the use of a central bank in providing liquidity to a crisis bank are presented in Box 4.

**Box 4. Liquidity support from central bank on the request of the government
– example of Great Britain**

Some countries have developed broader solutions for the provision of liquidity from the central bank – they can provide liquidity support at the request of the government.

In United Kingdom, in the circumstances of a threat to the financial stability and the risk of using public funds, the Chancellor of the Treasury has the option of outsourcing certain activities to the central bank, in particular, it may order liquidity support as part of resolution^a. Consequently, the Bank of England (BoE) may:

- carry out specific operations supporting the entire financial system or individual entities on terms other than those publicly available,
- provide emergency liquidity assistance (ELA) to an entity, which the BoE believes is insolvent and may not regain profitability, on terms other than publicly available,
- provide the ELA to the entity on terms other than those publicly available and on terms other than those originally proposed by the BoE.

BoE carries out the above-mentioned actions as an agent of the UK Treasury through a separate special purpose vehicle established, while its detailed financing mechanism is determined by the UK Treasury. BoE liquidity support granted in this way at the request of the Chancellor of the Treasury is secured by the UK Treasury guarantee (indemnification). As a rule, information on the activities of the central bank should be submitted to the Parliament. If disclosure of such information would create a risk to the financial stability, then only the chairs of elected parliamentary committees can be informed, while Parliament is informed of the actions of the BoE and the Treasury if both institutions consider that disclosure of this information no longer poses a risk to the financial stability^b.

In Japan, the Prime Minister may, together with the Minister of Finance – if they deem it particularly necessary for the maintenance of financial stability, apply to the central bank to take measures necessary to maintain the stability of the financial system, for example, to grant an unsecured loan to a financial institution (so-called special loans, tokuyu). When providing such support, the Bank of Japan complies with the following criteria^c:

- high probability of systemic risk materialization;
- no alternative sources of liquidity;
- taking responsibility by all stakeholders in the event of a bank's liquidation (e.g., management board, shareholding structure etc.);
- the financial situation of the central bank must not deteriorate.

^a Chancellor of the Exchequer cannot, in such circumstances, influence the decisions regarding the supervision of the financial system, the decisions of the Monetary Policy Committee (MPC) and the Financial Policy Committee (FPC), and cannot influence the changes to the publicly disclosed conditions for granting liquidity support. Source: HM Treasury, Memorandum of Understanding on resolution planning and financial crisis management, 2017, <https://www.bankofengland.co.uk/-/media/boe/files/memoranda-of-understanding/resolution-planning-and-financial-crisis-management.pdf?la=en&hash=57D8302D2AE09F004E67BEF19A554547CAD2D47B> (accessed 27.04.2020).

^b *Ibidem*.

^c Art. 38 Bank of Japan Act, http://www.boj.or.jp/en/about/boj_law/index.htm/ (accessed 23.03.2021); BoJ, Functions and Operations of Bank of Japan, s. 155 (accessed 23.03.2021); BIS, *Designing frameworks for central bank liquidity assistance: addressing new challenges*, CGFS Papers No. 58, 2017.

In the guidelines, the FSB emphasized that access to the liquidity and adequate collateral to obtain it are important elements of planning resolution. Therefore, resolution authorities should develop in resolution plans the chapters on temporary financing, in which they will identify, inter alia, sources of market financing, assets that can be used quickly as collateral and public funding support mechanisms. As recommended by the FSB, a necessary element of the resolution financing plan that takes into account the use of temporary public financing is its operationalization, indicating the ability of its implementation. For this reason, individual measures and requirements included in the resolution plan should be subject to internal tests, including the identification of the capabilities and limitations in mobilizing collateral. For internationally operating banks, coordination between national authorities is necessary. Home and host authorities should define a clear division of responsibilities with regard to providing temporary financing in resolution. It was indicated that in the case of the SPE strategy¹⁸, the home country authority

¹⁸ *Single Point of Entry* – resolution strategy, in which actions in the field of resolution towards the entire banking group are undertaken at the level of the parent entity by its parent resolution authority.

is responsible for coordinating the provision of liquidity. In the case of an MPE strategy¹⁹ – it should be the responsibility of the host country authority to provide liquidity to group entities operating in a particular jurisdiction.

At the same time, the FSB guidelines clearly indicate that a necessary element of any resolution financing plan should also include the determination of access to operations or instruments of the central bank as well as payment and settlement systems in all countries in which the group operates²⁰. In particular, the resolution financing plan should:

- identify significant operational entities within the group that provide critical functions and should maintain access to central bank tools,
- identify correspondent banks and nostro agents who support access to the central bank and payment and settlement systems,
- identify local requirements that must be met to access finance,
- define the strategy and the next steps of its implementation.

Box 5. G-SIBs' progress in the implementation of FSB's guidelines concerning the access to the temporary financing in resolution

In its 2019 report, the FSB assessed the progress of countries in implementing its guidelines on liquidity in resolution. The FSB indicated that G-SIBs are at very different stages in the preparation of resolution financing plans. Further work is required in the field of, among others, banks' ability to monitor liquidity on an ongoing basis, estimate liquidity needs during resolution (in particular in foreign currencies), provide liquidity to significant subsidiaries when the parent company is in resolution, issues of using collateral in the international dimension and coordination and communication between national home and host authorities^a.

^a FSB, 2019 Resolution Report. Eight Report on the Implementation of Resolution Reforms „Mind the Gap”, 2019, <https://www.fsb.org/wp-content/uploads/P141119-3.pdf> (accessed 17.09.2020).

3. Liquidity for bank in resolution in the EU regulations

The rules for providing liquidity to a bank in resolution in the European Union result primarily from the provisions of the BRR Directive²¹ (BRRD) and *Banking*

¹⁹ *Multiple Point of Entry* – resolution strategy, in which actions in the field of resolution are undertaken at the level of individual resolution entities by the appropriate resolution authorities of countries where entities from the group operate.

²⁰ In the article, the authors do not particularly emphasize the issue of ensuring access to liquidity for all entities from the capital group. Nevertheless, it should be noted that the presented methods of ensuring access to the entity's liquidity during the resolution process can be used both domestically and internationally. In particular, the issue of ensuring liquidity in the group requires an analysis of the resolution financing mechanisms available in individual countries, in which the capital group operates. In the case of the banking union, the analysis may be extended to include available supranational mechanisms.

²¹ 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

*Communication*²². They concern both ensuring internal liquidity in the bank, as well as providing it from the resolution fund and other external sources. The involvement of the central bank in this process is also regulated.

3.1. Internal sources of liquidity delivered by banks

Pursuant to the provisions of the BRRD, resolution plans are prepared for all entities covered by the resolution system. They should contain, in particular, information on how individual resolution options could be financed. The following issues cannot be assumed in the plan:

- extraordinary public financial support, i.e., state aid within the meaning of the Treaty on the Functioning of the European Union or other supranational support that may constitute state aid,
- central bank emergency liquidity support,
- liquidity support provided by the central bank on non-standard terms²³.

The plans should include a comprehensive analysis of the sources of liquidity for the bank. This analysis should include both the assessment of the bank's liquidity needs in a crisis situation (taking into account the planned resolution strategy) as well as a detailed description of all available liquidity sources. Banks, in particular, should have adequate unencumbered assets available to use to obtain liquidity from the market or the central bank.

Actions taken by the resolution authority may also have an impact on the availability of internal sources of liquidity. In this respect, an important tool is, according to the BRRD, the right of the resolution authority to change the maturity dates of debt instruments issued by the bank or introduce so-called moratorium, the purpose of which is to postpone the moment when it is necessary to settle bank's obligations. Such action is aimed at easing the liquidity tensions occurring in a given period.

It should be noted, however, that this solution has some limitations. First, the application of the moratorium is limited in time, which means that when applying it, we only „buy time“, accumulating outflows of funds from the bank for a specified period in the future. Secondly, after the introduction of the moratorium, a nervous reaction of market entities is likely, which will aggravate the bank's liquidity problems in the crisis.

Council Directive 82/891/EEC and Directive of the European Parliament and Council 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 of the European Parliament and of the Council (EU) No 1093/2010 and (EU) No 648/2012 (BRR Directive, BRRD).

²² Communication from the Commission on the application, from 1 August 2013, of State aid rules to support measures in favour of banks in the context of the financial crisis ('Banking Communication').

²³ Art. 10(3) BRRD.

3.2. Financial resources of ex ante resolution fund

The basic, external source of financing in the resolution process are resolution funds. These funds are financed ex ante from bank contributions. The minimum amount of the resolution fund is 1% of the amount of covered deposits collected by banks participating in the national deposit guarantee scheme. This level should be achieved by the end of 2024²⁴.

Funds accumulated in the resolution fund may be used for the purpose of effective implementation of resolution instruments for a bank that is on the brink of bankruptcy, such as bail-in, sale of a bank (in part or in full), creation of a bridge bank or bad bank. Therefore, resources of the resolution fund may be used for²⁵:

- granting a guarantee for assets or liabilities (problem bank, bridge institution or bad bank),
- granting a loan (to a problem bank, its subsidiaries, a bridge institution or a bad bank),
- acquisition of bank assets in resolution,
- making contributions to a bridge institution and bad bank,
- contributing to the institution subject to resolution in place of the write-off or conversion of liabilities in relation to creditors who have been excluded by the resolution authority from the scope of bail-in.

Thus, the catalog of possibilities of using the resolution fund specified in the BRRD indicates that the funds accumulated therein can be used both for capital and liquidity support.

However, as specified in the BRR Directive, in a situation where the use of the resources of the resolution fund causes the transfer (also indirectly) of the entity's losses to the resolution fund (i.e., when the support is of capital nature), the following rules apply²⁶:

- in the absence of exclusions from the scope of bail-in, the support provided is not subject to restrictions, except for the availability of the resolution fund,
- if the resolution authority applies exclusions from the bail-in, the support provided is subject to the following limitations:
 - the minimum contribution to cover losses and recapitalize the bank's from shareholders and creditors is at least 8% of total liabilities, including own funds,
 - the maximum contribution from the resolution fund does not exceed 5% of the total liabilities, including the own funds of the institution subject to resolution.

²⁴ Art. 102 BRRD.

²⁵ Art. 101 BRRD.

²⁶ Art. 44 and 101 BRRD.

As a derogation from the above rules, a loss-absorption and recapitalization contribution of less than 8% of total liabilities, including own funds, is possible, but not less than 20% of the institution's risk-weighted assets. At the same time, such action is possible only when the resolution fund has reached the amount of min. 3% of covered deposits and the institution to be supported has assets of no more than EUR 900 billion²⁷.

The principles set out above do not apply when the resources of the resolution fund are not used to cover losses or recapitalize, i.e., when the support is liquidity. This means that resolution funds can provide liquidity assistance to banks in resolution without the need to meet the requirements for the prior contribution of stakeholders in the amount of 8% of total liabilities, including own funds. However, possible support is limited by the availability of the resolution fund²⁸. Banks' liquidity needs are usually very high, and in the event of a systemically important bank crisis or in the event of a crisis of several banks at the same time – the resources of the resolution fund will most likely be insufficient to adequately secure the bank in resolution.

A way to increase the ability to intervene by resolution authorities, also in the form of providing larger amounts of liquidity, may be to continue collecting funds for the resolution fund from banking sector entities even after reaching the target level specified in the BRRD.

3.3. Extraordinary ex post contributions to the resolution fund

In a situation where the resources available in the resolution fund are not sufficient, the authority may decide to collect extraordinary ex post contributions²⁹. However, they may not exceed three times the annual amount of the ex ante contributions. Moreover, the institution may be subject to the deferral of the payment of these contributions for up to 6 months. The possibility of raising a significant amount of funds in this way is therefore limited.

3.4. Alternative means for financing resolution fund

In view of the above limitations, the BRR Directive provides for additional sources of obtaining funds during the crisis, but they are indicated quite generally. These

²⁷ Art. 44 BRRD.

²⁸ J. Deslandes, C. Dias, M. Magnus, *Liquidation of banks: towards an 'FDIC' for the banking union? In-depth analysis*, Economic Governance Support Unit, Directorate-General for Internal Policies, European Parliament, PE 634.385, February 2019, p. 13, [https://www.europarl.europa.eu/RegData/etudes/IDAN/2019/634385/IPOL_IDA\(2019\)634385_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/IDAN/2019/634385/IPOL_IDA(2019)634385_EN.pdf) (accessed 27.07.2020); [https://www.europarl.europa.eu/RegData/etudes/IDAN/2019/634385/IPOL_IDA\(2019\)634385_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/IDAN/2019/634385/IPOL_IDA(2019)634385_EN.pdf) (accessed 27.07.2020).

²⁹ Art. 104 BRRD.

sources may be loans or agreements regarding other types of support from other entities, including financial ones³⁰.

When implementing BRRD, individual countries were free to clarify this provision, indicating the amount and alternative resources their resolution funds could use.

3.5. Mutual loans between resolution funds

The BRR Directive indicates in particular that the source of the inflow of funds may be a loan from a resolution fund from another country³¹. The terms of granting such loans are agreed between resolution authorities. The national resolution authority may apply for a loan to other resolution systems in the EU, if:

- ex ante contributions collected for the resolution fund are not sufficient,
- extraordinary ex-post contributions cannot be imposed,
- alternative financing methods are not immediately available on reasonable terms.

However, granting / obtaining such a loan is consensual and is conditioned by the borrowing capacity of other funds. In addition, the use of these options requires appropriate arrangements between the parties, prior to the possible application for a loan.

3.6. Government participation in resolution

As a rule, the entire resolution process should be financed by the banking sector. Nevertheless, BRRD does not exclude the use of the so-called government methods of stabilization (recapitalization or nationalization) in a situation where resolution is ineffective or impossible to implement, and the situation threatens the stability of the financial system.

However, in the face of liquidity problems, an alternative use of government funds is possible. The current Banking Communication allows for using government funds to provide a bank with guarantees or assistance for maintaining liquidity. The communication does not specify whether such assistance may be provided only outside resolution or also in parallel to resolution (as one of the elements of actions taken against a bank that meets the conditions for initiating resolution). For this reason, it can be considered as one of the sources of liquidity in resolution. Any liquidity support or guarantees provided should be notified to the European Commission or an approved program for a sector or group of banks is notified. The Communication also sets out the following rules for granting guarantees or liquidity support³²:

³⁰ Art. 105 BRRD.

³¹ Art. 106 BRRD.

³² Banking Communication, points 56–61.

- guarantees can only be granted in respect of the senior and newly issued debt by the credit institution,
- guarantees may be granted in relation to debt instruments with a maturity of between 3 months and 5 years, and the share of guarantees with a longer maturity must be limited to one-third of the outstanding guarantees granted to the bank,
- remuneration is due for granting the guarantee,
- it is necessary to submit a restructuring plan to the EC within 2 months,
- aid beneficiaries may not use the fact of receiving support in their advertising materials.

Additional conditions must be met if the guarantee and liquidity support scheme is launched³³:

- banks participating in the program do not have capital shortages,
- guarantees with a maturity of more than 3 years must be limited to one third of the total amount of guarantees granted to the bank concerned,
- the Member State is obliged to submit to the European Commission (every 3 months) a report on the functioning of the program, debt issuance covered by the program (including the cost of debt not covered by the program) and actual losses,
- the program may be approved for a maximum period of 6 months.

3.7. Liquidity from central bank

A separate method of securing liquidity for a bank in resolution may be obtaining it from the central bank, which in the banking system acts as the Lender of Last Resort (LoLR). In the EU, however, central bank liquidity support is strictly regulated by law and is conditioned by the prohibition of monetary financing³⁴, state aid rules and BRRD provisions.

It should be emphasized that direct financing of the resolution fund by the central bank is unacceptable. The European Central Bank (ECB) clearly indicates in its Convergence Report that “(...) financing of resolution funds and financial arrangements is inconsistent with the prohibition of financing from central bank resources. Where the national central bank concerned is a resolution authority, it should under no circumstances assume or finance liabilities of a bridge institution or asset manager”³⁵. Carrying out a resolution is the task of the government, not the central bank. In particular, the resolution fund may not be supplemented with a loan from the central bank, as is the case with the deposit guarantee fund.

At the same time, EU regulations specify that in resolution plans support from the central bank may only be taken into account on the condition that it will be liquidity

³³ *Ibidem*.

³⁴ Art. 123, Treaty on the functioning of the EU.

³⁵ EBC, Convergence Report, 2018, p. 36.

support taking place as part of standard operations of the central bank (central bank facilities). As mentioned earlier, resolution plans cannot assume the use of central bank support on non-standard terms / conditions different from generally accepted.

However, the fact that the above support is not included in the resolution plan does not exclude its use after the procedure has been launched. The resolved entity may experience increased and sometimes unexpected liquidity problems. It may then apply for support from the central bank not only under standard operations, but also under non-standard conditions. The central bank may provide support as part of a lender of last resort function, which means providing ELA. Launching the ELA may turn out to be necessary from the point of view of the effectiveness of the undertaken resolution activities, but in principle it should complement the financing from the resolution fund and not replace it³⁶. As with any other ELA, however, certain conditions must be met here. They are specified:

- in the Banking Communication³⁷:
 - a) the credit institution has temporarily lost liquidity but is solvent at the time of the liquidity injection, and the injection itself occurred in exceptional circumstances and is not part of a broader relief package;
 - b) the operation is fully collateralized with collateral that has been subject to an appropriate haircut, appropriate to its quality and market value;
 - c) the central bank charges the beneficiary interest at a penalty rate;
 - d) the measure is applied by the central bank on its own initiative and in particular is not backed by any counter-guarantee from the State³⁸;
- and the ECB Convergence Report³⁹:

Emergency liquidity assistance provided by the national central bank independently and on a full discretionary basis to solvent credit institutions against collateral provided by a State guarantee must meet the following criteria:

- a) it must be ensured that the credit provided by the national central bank is as short-term as possible;
- b) there must be a threat to the stability of the system;

³⁶ O. Croitoru, M. Dobler, J. Molin, *Resolution Funding: Who Pays when Financial Institutions Fail?*, IMF Technical Notes and Manuals, 2018.

³⁷ Banking Communication, point 62.

³⁸ This condition should be interpreted in such a way that the decision of the central bank to provide liquidity support is fully independent (the central bank has full discretion), including the possibility for the government to grant a guarantee securing the central bank's claims. In other words, the fact that the government has provided a guarantee for liquidity from the central bank cannot be a decisive factor in providing support. Such interpretation is confirmed by the opinions of the ECB, e.g., the opinion issued in connection with the amendment of the Belgian regulations regarding the government guarantee for liquidity from the central bank: EBC, Opinion of the European Central Bank of 17 November 2016 on a draft law abolishing the State guarantee provided in connection with emergency liquidity assistance, CON/2016/55, 2016, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52016AB0055&from=EN> (accessed 01.10.2020).

³⁹ ECB, Convergence..., *op. cit.*, p. 35.

- c) there is no doubt as to the legal validity and enforceability of the State guarantee under applicable national law and,
- d) there can be no doubt as to the economic adequacy of the State guarantee and the guarantee should cover both the principal of the loan and the interest.

It should be noted that when resolution is launched, the bank's financial situation, including its solvency, will most likely be assessed negatively. This may prevent from the provision of liquidity support from the central bank. It seems, however, that after the implementation of the resolution plan guaranteeing the coverage of losses and appropriate recapitalization of the entity, the central bank will have a sufficient basis to recognize that the capital conditions for granting liquidity support are met again.

Moreover, the requirement to present acceptable collaterals is particularly important from the perspective of the central bank. However, this condition may be difficult to meet, also due to the fact that banks threatened with bankruptcy often use liquidity from the central bank also at an earlier stage, before resolution. The problem of the lack of collateral became apparent, for example, in the case of Banco Popular Español SA (BPE), which eventually had to undergo resolution – see Box 6.

Box 6. Resolution of Spanish Banco Popular Español as an example of the resolution due to liquidity problems

On June 7, 2017 Banco Santander SA announced the acquisition of BPE – the 6th largest bank in Spain – for a price of EUR 1. The takeover of BPE was the first case of the resolution process in the banking union based on the decision of the Single Resolution Board (SRB)^a. The ECB and the national resolution authority in Spain (FROB) were also involved in the process^b. It is also worth noting that the direct cause of the initiation of the resolution process were the bank's liquidity problems, which were caused by a strong outflow of deposits from local administration units^c. The ECB, as the supervisor of BPE, assessed that due to the rapidly deteriorating liquidity situation, the bank will not be able to service its liabilities in the near future and therefore is at risk of failure (failing or likely to fail, FOLTF). Consequently, the SRB, as the bank's resolution authority, assessed the existence of the public interest condition. This assessment was positive due to the need to maintain the continuity of the bank's critical functions and avoid negative effects on financial stability.

Before the launch of resolution, BPE used the emergency liquidity assistance from the Bank of Spain in the amount of EUR 3.6 billion, but the continuation of this support was impossible due to the lack of assets of adequate quality to be presented as ELA collateral. According to some sources, the haircuts used by the ECB were very high, reaching over 90%. The liquidity situation stabilized only after the bank was taken over as part of the resolution procedure^d (without the need for ECB support). In the opinion of E. König, Chair of the SRB, Banco Santander S.A. provided the acquired BPE with more liquidity than the SRB could provide^e, and there were no market entities willing to grant a loan of the required scale^f.

^a In the EU, national resolution authorities have already carried out resolution procedures against smaller entities in the euro area countries (e.g., Cooperative Bank of Peloponnese in Greece) or in countries that do not belong to the banking union (e.g., resolution Andelskassen J.A.K. Slagelse in Denmark). However, these measures did not always apply all the principles contained in the BRRD

- (e.g., no full burden of losses on creditors of banks). Source: <http://www.eba.europa.eu/regulation-and-policy/recovery-and-resolution/notifications-on-resolution-cases-and-use-of-dgs-funds> (accessed 22.05.2020).
- ^b Fondo de reestructuración ordenada bancaria.
 - ^c B. Mesnard, A. Margerit, M. Magnus, *Briefing. The resolution of Banco Popular*, Economic Governance Support Unit, Directorate-General for Internal Policies, European Parliament, PE 602.093, [https://www.europarl.europa.eu/RegData/etudes/BRIE/2017/602093/IPOL_BRI\(2017\)602093_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2017/602093/IPOL_BRI(2017)602093_EN.pdf) (accessed 14.10.2020).
 - ^d Financial Times, Banco Popular faced eurozone's first large-scale bank run, ECB says, <https://www.ft.com/content/467b56e8-1bff-3034-83a4-c91bb5f8ed24> (accessed 23.09.2020); Banco Popular burnt through 3,6bn euro in two days ahead of rescue, <https://www.ft.com/content/f43d182c-4c4f-11e7-a3f4-c742b9791d43> (accessed 23.09.2020); *Briefing: The resolution of Banco Popular*, European Parliament, 2017.
 - ^e <https://luxtimes.lu/economics/33417-ecb-considers-proposal-for-new-cash-line-to-aid-bank-rescues> (accessed 14.10.2020) oraz J. Deslandes, M. Magnus, *Banking Union: Towards new arrangements for the provision of liquidity in resolution?*, Economic Governance Support Unit, Directorate-General for Internal Policies, European Parliament, PE 624.402 – July 2019 s. 9-10, [https://www.europarl.europa.eu/RegData/etudes/BRIE/2018/624402/IPOL_BRI\(2018\)624402_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2018/624402/IPOL_BRI(2018)624402_EN.pdf) (accessed 14.10.2020).
 - ^f M. Demerzis, I. Gonçalves Raposo, P. Hüttl, G. Wolff, *How to provide liquidity to banks after resolution in Europe's banking union*, Economic Governance Support Unit, Directorate-General for Internal Policies of The Union, European Parliament, PE 624.422, s. 6, https://www.bruegel.org/wp-content/uploads/2018/11/IPOL_IDA2018624422_EN.pdf (accessed 14.10.2020).

In the world, the cases are known where the central bank created a special tool (other than standard operations of the central bank or ELA) consisting in providing liquidity to support the bank's resolution process (e.g., in the UK and Canada)⁴⁰.

Box 7. ELA in resolution – example of United Kingdom and Canada

In United Kingdom, a model has been adopted according to which the resolution authority is the central bank, but it has not established a separate resolution fund financed with ex ante contributions by the banking sector. Possible restructuring activities are carried out by the BoE, while they are financed from the Government budget, which is financed annually by banks with two taxes (the so-called levy bank and the profit tax)^a. As part of its mandate as a central bank, the BoE has developed a separate liquidity support mechanism dedicated to entities in resolution, the so-called Resolution Liquidity Framework (RLF). RLF may be used in the case of conducting the resolution of a single bank, building society^b, investment company or capital group. The entity using the RLF must meet the access conditions (including collateral) set out for liquidity support under the Sterling Monetary Framework^c. In accordance with the solutions adopted in the *Memorandum of Understanding on resolution planning and financial crisis management*, any use of public funds in resolution and the use of liquidity support under the RLF requires the authorization of the UK Treasury.

⁴⁰ P. Fioretti, O. Francova, M. Hesketh, N. Mascher, R. Strauch, F. Vancompernelle, *Completing banking union to support Economic and Monetary Union*, European Stability Mechanism, 2019, p. 38.

Box 7 – continued

BoE is obliged to present to the UK Treasury in advance:

- draft resolution plan,
- implications of the application of the resolution plan for public funds, in particular information about the need to secure BoE liquidity support by the UK Treasury (indemnification),
- assessment of the systemic risk of the entity undergoing restructuring,
- all analyzes that, in the opinion of the BoE, are important for assessing the impact of the implementation of the resolution plan on public funds.

The UK Treasury analyzes each case individually in the context of a given resolution plan and the need to use the resolution tool.

Any losses incurred by the BoE and the UK Treasury as a consequence of providing liquidity support under the RLF should be covered ex post by the supported institution and the banking sector in accordance with the FSB guidelines and the provisions of the BRRD. Liquidity support under the RLF may be provided in various currencies, amount and for the period necessary for the entity undergoing forced restructuring to regain access to market financing, as well as under the conditions that support the effectiveness of the resolution process and protect public funds and encourage the entity to return to market financing.

Canada also developed a comprehensive mechanism for granting support from the central bank to a bank in resolution. The rules for granting ELA clearly allow for the possibility of supporting the bank both at the stage of its recovery and resolution. The central bank deems it advisable to support this process within its competences. The decision in this respect is made independently, after it has evaluated that the entity meets the ex ante conditions. They mainly include the statement that the entity applying for the ELA has a credible resolution plan. The central bank must be convinced that the long-term profitability of the entity will be maintained or restored in an orderly manner, without negative systemic consequences. The central bank does not affect the process of recovery or resolution of the entity itself, however, before granting the ELA, it carefully checks whether the conditions for receiving it are met. In particular, the central bank believes that the entity's resolution plan is credible if:

- assumes the maintenance of the entity's functions critical to financial stability,
- contains an appropriate strategy that can be implemented immediately to address the emerging adverse scenarios,
- ensures effective coordination and exchange of information between the involved institutions,
- provides adequate funding so that the ELA is only used when private funding is not available.

^a <https://www.gov.uk/government/publications/summer-budget-2015/summer-budget-2015> (accessed 14.10.2020).

^b A financial institution owned by its members that provides financial and banking services, including the granting of mortgage loans.

^c Bank of England, The Bank of England approach to resolution, 2017, s. 22, <https://www.bankofengland.co.uk/-/media/boe/files/news/2017/october/the-bank-of-england-approach-to-resolution.pdf> (accessed 27.04.2020).

4. Banking union – proposals for ensuring the liquidity in resolution for SRB

4.1. Single Resolution Fund

The basic source of financing the resolution process in the banking union is the Single Resolution Fund (SRF), which is a common resolution fund for all banking union countries. It may participate in the resolution process under the rules set out in the BRR Directive and the SRM Regulation⁴¹, which means that it may provide both capital and liquidity support for the bank in resolution⁴².

Due to the low value of the funds accumulated in the fund (EUR 33bn⁴³ vs. the target of around 60bn⁴⁴) in the transition period, when the fund is just being established, it was decided to establish a mechanism that would complement the value of funds available in resolution to the target value of the SRF during its construction. To this end, individual participating countries in the banking union have signed bilateral Loan Facility Agreements (LFAs) with the Single Resolution Board. The amount of the loan available in a given year is equal to the difference between the target amount to be contributed by the banks in a given jurisdiction to the SRF and the amount actually disbursed. This means that the amount of funding available from the Member States is decreasing from year to year (along with the increase in resources in the SRF). Loans will be available to the SRF until the end of the transitional period, i.e., by the end of 2024, and any national financial support must be reimbursed by contributions from the banking sector.

The temporary resolution financing mechanism described above, which may also be used for liquidity support, will be replaced by the common backstop mechanism. The common backstop provider for the SRF will be the European Stability Mechanism (ESM), which will be empowered to grant a loan by the Board of Directors at the request of the SRB. The agreed consensus stipulates that the backstop will take the form of the ESM's revolving credit line for the SRF⁴⁵ (while

⁴¹ Regulation (EU) No 806/2014 of the European Parliament and of the council of 15 July 2014 establishing 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 Resolution Fund and amending Regulation (EU) No 1093/2010 (SRM Regulation).

⁴² In accordance with the principles set out in the BRR Directive and specified in the SRM Regulation, the deposit guarantee fund may also participate in the financing of the resolution process in the banking union. Nevertheless, no DGS fund common for all countries (parallel to the resolution fund common for countries) has not been created so far in the banking union. Therefore, in the case of resolution, domestic resolution funds, which include banks involved in the resolution process, are responsible for supporting the resolution process.

⁴³ Data according to the last SRB message. Source: SRB, SRF grows to €33 billion after latest round of transfers, <https://srb.europa.eu/en/node/804> (accessed 28.09.2020).

⁴⁴ SRB, Single Resolution Fund Fact Sheet 2020 Contribution Period, https://srb.europa.eu/sites/srb-site/files/2019_fact_sheet.pdf (accessed 29.09.2020).

⁴⁵ Countries participating in the banking union that are not members of the euro area (i.e., not able to use the ESM instruments) will be required to conclude agreements with the SRB for parallel credit

replacing the Direct Recapitalization Instrument currently in the ESM toolbox) with a maturity of 3 years (renewable for a maximum of 2 years at the request of the SRB; funding may also be granted for a period of 5 years if the stability of the euro area is at risk)⁴⁶. The purpose of limiting the maturity of a credit line is to ensure fiscal neutrality of the common backstop fiscal. This facility will initially be available to the SRB for 10 years⁴⁷.

The amount of the available amount is to be „adjusted” to the target size of the SRF after the transition period and was initially proposed at the level of EUR 68 billion⁴⁸. As emphasized, this amount could be used both to cover capital and liquidity needs of entities in resolution⁴⁹. The ESM proposed additional rules that should apply in a situation where a common backstop would be granted to support the liquidity of the resolution process. According to them, the disbursement of such support should be possible in tranches, and a different payment mechanism would also apply (details below). The original maturity should be 12 months. In addition, the liquidity provided by the SRB to banks is expected to be secured⁵⁰.

During the first 3 years of using the credit line, its cost (margin) was set at 35 basis points (bps). In the following years, this margin will grow by 15 bps⁵¹. However, if the ESM granted the SRF the loan to cover the bank’s liquidity needs in resolution, the margin of 35 bps would apply only for the first 6 months, and then it would increase by 15 bps every 3 months. However, the Board of Directors has the power to ease, completely or in part, the margin increase formula⁵². In addition, the SRB may be charged a service fee of EUR 1,140,000 per year for the benefit of the ESM, as well as the commitment fee in the amount of costs that ESM will incur for obtaining funds for the SRB before the payment⁵³.

The decision to make the funds available will be taken by the ESM Board of Directors individually for each resolution case, at the request of the SRB. It was also envisaged that the ESM would have the status of a preferred creditor. As agreed, as a rule, the

lines, the terms of which will be analogous to the credit line with the ESM (the amount of financing provided is to be proportional to ex ante contributions). The aim is to ensure an equivalent treatment of countries inside and outside the euro area.

⁴⁶ Terms of reference of the common backstop to the Single Resolution Fund, https://www.consilium.europa.eu/media/37268/tor-backstop_041218_final_clean.pdf (accessed 15.06.2020).

⁴⁷ ESM, Draft Guideline on the Backstop Facility to the SRB for the SRF, <https://www.consilium.europa.eu/media/41668/20191206-draft-backstop-guideline.pdf> (accessed 22.06.2020).

⁴⁸ ESM, Draft Board of Governors Resolution for the Nominal Cap and the Provisions on the Procedure for the Verification of Compliance with the Condition of the Permanence of the Legal Framework for Bank Resolution, <https://www.consilium.europa.eu/media/41669/20191206-draft-bog-resolution-1-nominal-cap.pdf> (accessed 22.06.2020).

⁴⁹ Terms of reference of the common backstop..., *op. cit.*

⁵⁰ ESM, Draft Guideline on the Backstop..., *op. cit.*

⁵¹ Terms of reference of the common backstop..., *op. cit.*

⁵² ESM, Draft Board of Governors Resolution to Grant the Backstop Facility, <https://www.consilium.europa.eu/media/41670/20191206-draft-bog-resolution-2-key-financial-terms.pdf> (accessed 22.06.2020).

⁵³ *Ibidem.*

decision-making process should take no more than 12 hours and in particularly complex cases a maximum of 24 hours. The initial criteria for the disbursement of support from the ESM under the common backstop have also been defined and they consist of:

- last resort character,
- respecting the principle of fiscal neutrality (obligation to repay the financing granted),
- full compliance of resolution with the principles set out in the BRR Directive and the SRM Regulation,
- availability of the requested amount of support from the ESM perspective,
- no defaults on financing previously provided by the ESM or other financing for which no satisfactory repayment plan has been presented,
- permanence of the legal framework⁵⁴.

The agreement provides for the possibility of introducing the common backstop earlier than after the end of the transitional period (i.e., still during the transitional period in the building of the SRF) by introducing changes to the intergovernmental agreement regulating the principles of transferring and sharing contributions to the SRF (IGA). The condition was, however, sufficient progress in reducing risk in banks, which was to be assessed in 2020, and which, according to decision-makers, had been fulfilled. For this reason, the common backstop is to be available from 2022⁵⁵.

The deposit guarantee system common to all banking union countries has not yet been established, so it is not possible to use funds from the pan-European deposit guarantee system in resolution⁵⁶. Individual countries may consider liquidity assistance from national deposit guarantee funds, if such a possibility is provided for by national solutions.

4.2. Liquidity support from ECB

Another source of liquidity support for a bank operating in the banking union in resolution may be the central bank. The central bank of the euro area countries participating in the banking union is the European Central Bank. This means that

⁵⁴ Terms of reference of the common backstop..., op. cit.

⁵⁵ Statement of the Eurogroup in inclusive format on the ESM reform and the early introduction of the backstop to the Single Resolution Fund, <https://www.consilium.europa.eu/pl/press/press-releases/2020/11/30/statement-of-the-eurogroup-in-inclusive-format-on-the-esm-reform-and-the-early-introduction-of-the-backstop-to-the-single-resolution-fund/> (accessed 10.03.2021).

⁵⁶ This unquestionable disadvantage of the banking union (the risk of its incompleteness, in particular the lack of joint guaranteeing of deposits) has been indicated in the literature for a long time, e.g., L. Pawłowicz, *Unia bankowa – sukces czy klęska jednolitego rynku usług finansowych* [Banking union – success or failure of the single market in financial services], *Zarządzanie i Finanse* 2013, vol. 11, nr 2, part 1, p. 457–467; M. Zaleska, *Zintegrowane ramy finansowe – koncepcja i wyzwania* [Integrated financial framework – concept and challenges], [in:] Zaleska M. (ed.), *Europejska unia bankowa* [European banking union], Difin, Warsaw 2015, p. 30–31.

the bank's possible liquidity support in resolution, which would take place as part of standard operations, will be provided by the ECB. Nevertheless, the function of the lender of last resort of ELA has not been centralized in the euro area and is still the responsibility of the national central banks. However, rules for the granting of the ELA by Eurosystem central banks have been laid down. They were included in the document of November 9, 2020 (the earlier version of the document was published on May 17, 2017) – the so-called ELA agreement⁵⁷. In particular, the following requirements are foreseen to be met by the ELA provided by a Eurosystem central bank:

- the beneficiary bank should be considered solvent,
- the time of granting support should not exceed 12 months,
- a penalty interest rate applies, in the amount of the standard credit operations rate published by the ECB (currently 0.25%) increased by 100 basis points,
- liquidity support may be provided for a period of up to 12 months (if this period is longer than 6 months, the president of a given central bank must present to the president of the ECB a strategy to exit the ELA; at the same time, the rules provide for the possibility of extending the period of support beyond a year, if justified and the Governing Council of the ECB will not raise an objection),
- each bank that has been granted the ELA is required to submit a financing plan within 2 months, which should be updated when using the ELA; in addition, the ELA beneficiary institution must submit monthly information on the bank's capital level, as well as prepare a recapitalization plan if it did not meet the own funds requirements when granting the ELA.

The ECB has also defined what it understands by a solvent bank. It is an entity that meets the CET1, AT1 and T2 capital requirements or does not meet them but has realistic prospects of fulfilling them within 24 weeks of the end of the quarter in which the capital shortage was identified. This period may be extended by the Governing Council of the ECB in exceptional cases. At the same time, the ECB cannot provide support to insolvent banks, as this would violate the monetary financing prohibition. Nevertheless, it seems that such a flexible approach to the assessment of a bank's solvency allows to provide support also to those banks whose solvency is weaker and is only being rebuilt, e.g., in the resolution process.

The conditions for granting a standard ELA may, however, limit the application of this instrument, which is why some countries have developed separate mechanisms to support liquidity resolution, e.g., the United Kingdom and Canada (Box 7). Also, the ECB, after its experience with resolution BPE (Box 6), is considering introducing a comprehensive solution dedicated to liquidity support for entities in resolution⁵⁸.

⁵⁷ ECB, Agreement on emergency liquidity assistance, <https://www.ecb.europa.eu/pub/pdf/other/ecb.agreementemergencyliquidityassistance202012~ba7c45c170.en.pdf?dca797da3212289956ac24df607eb168> (accessed 26.02.2021).

⁵⁸ A. Weber, A. Speciale, *ECB Weighs Emergency Cash Injections to Smooth Bank Rescues*, Bloomberg, <https://www.bloomberg.com/news/articles/2018-04-09/ecb-considers-proposal-for-new-cash-line-to-aid-bank-rescues> (accessed 23.09.2020) and <https://www.bankofgreece.gr/en/news-and->

Working assumptions of the so-called The Eurosystem Resolution Liquidity Framework (ERL) is as follows⁵⁹:

- the bank should be deemed to be at risk of bankruptcy (FOLTF),
- the SRB should adopt a resolution scheme towards the bank,
- resolution should not lead to the bank's liquidation (no liquidity should be provided to the bank that is to leave the market),
- the bank should be admitted to Eurosystem monetary policy operations,
- liquidity support should bear interest at least at the level of a marginal lending facility,
- liquidity support should be guaranteed by public authorities at EU level, due to the likely lower quality of assets accepted by the ECB as collateral under the ERL or, in exceptional circumstances, by providing liquidity support without other collateral.

The tool considered by the ECB is to be of a permanent nature, i.e., it will become a new, permanent tool in the ECB's toolkit. It is worth noting that, unlike the traditional ELA, the ERL should be a centralized tool at the ECB level and not under the responsibility of national central banks⁶⁰.

5. Alternative ways for enhancing the access to the sources of liquidity

The previously described sources of liquidity in resolution are subject to numerous restrictions (e.g., as to the maximum amount that can be made available to a specific bank) or conditions (e.g., as to the solvency of the entity receiving support). The availability of individual sources is highly dependent on the situation of a given bank as well as the overall situation in the financial sector. The resolution fund's ability to obtain financing will depend on the financial outlook for the entire banking sector. Contributions from banks will constitute a potential source of repayment of market financing. It means, therefore, that the more difficult the financial situation of the sector, the worse the prospects for repayment of financing, and therefore the lower availability of market sources in a situation when these funds are most needed. Moreover, obtaining financing on the markets would also involve the necessity of ratings to resolution funds and developing human resources that would ensure the fund's regular activity on the markets (in order to stabilize the level of financing costs and create a potential investor base).

Even if various sources of financing can be used in the resolution process, it may turn out that they will be insufficient, in particular taking into account the fact that banks in a crisis often do not immediately regain access to the market. Moreover, banks'

media/press-office/news-list/news?announcement=65699610-fe6-48b1-b93f-aa471568568f (accessed 14.10.2020).

⁵⁹ <https://luxtimes.lu/economics/33417-ecb-considers-proposal-for-new-cash-line-to-aid-bank-rescues> (accessed 14.10.2020) and J. Deslandes, M. Magnus, *Banking Union: Towards...*, *op. cit.*, p. 9–10.

⁶⁰ J. Deslandes, M. Magnus, *Banking Union: Towards...*, *op. cit.*, p. 9–10.

restructuring efforts usually take time. Both regaining credibility and building a buffer of assets that can serve as collateral for transactions with other banks may not be quick. This means that liquidity support must be provided not only on the day of launching resolution, but also in the period after its implementation. This in turn requires significant resources from the potential liquidity providers.

Due to the above-mentioned problems and limitations related to the available sources of liquidity, it becomes necessary to search for new, additional sources of financing banks in the resolution process. The proposals for additional measures that have recently appeared in studies devoted to the issue of liquidity in resolution are presented below.

5.1. Enhancement of banks' liquidity sources in case of resolution

The basic method of securing liquidity that can be used in the resolution process is a further attempt to strengthen internal liquidity resources of banks.

These activities could include negotiating agreements by the bank with other market participants, under which, at the resolution stage, the bank would be granted access to an additional source of financing (in the form of a stand-by arrangement). It seems that such a market solution would be beneficial for banks instead of imposing subsequent regulations. On the other hand, however, it may be difficult to implement due to the potential lack of private entities willing to provide new financing at a time when the financial situation of the bank deteriorates significantly.

On the other hand, to ensure assets that could be used as collateral for refinancing operations with market entities or the central bank, banks could establish collateral pools – in the form of a network of banks with separate pools or in the form of a private fund, similar to the resolution fund, which would accumulate assets from banking sector. An asset fund created in this way could lend to the bank in resolution the collateral or submit it on its behalf to the central bank (provided that these assets would meet its requirements). To compensate for the impact of such a solution on other banks, entities transferring assets or contributing to an asset fund would receive a fee from the beneficiary bank⁶¹. However, it is difficult to assess whether the banks would be interested in cooperating in this respect.

An idea worth considering is also to increase the amount of assets owned by the bank that can be used as collateral in market operations, by introducing a maximum level of the so-called asset encumbrance ratio. This would ensure greater availability of unencumbered assets at banks⁶². Such limits could be set individually for each bank in a recovery or resolution plan (based on the MREL requirement).

⁶¹ P. Fioretti, O. Francova, M. Hesketh, N. Mascher, R. Strauch, F. Vancompernelle, *Completing banking union...*, *op. cit.*, p. 38.

⁶² P. Fioretti, *Alternative options of a euro area resolution liquidity framework*, https://cepr.org/sites/default/files/Session%203_2.%20Paolo%20Fioretti_0.pdf (accessed 10.06.2020).

Another solution could be an additional requirement to keep a portfolio of unencumbered assets on the balance sheet to be used as collateral for refinancing transactions only as part of the resolution process. However, both of the above solutions would be new requirements for banks.

5.2. Fiscal backstop for the resolution fund

As a rule, in line with resolution objectives, government funds should not finance the resolution of a specific bank (the source of financing the bank's crisis should be its shareholders and creditors or the sector in the form of a resolution fund). Resolution funds may provide liquidity support to a bank in resolution without restrictions, but the amount of funds at their disposal is strongly limited. For this reason, it is important to create an effective fiscal backstop for resolution funds, which will increase the amount of their funds.

In the EU, public support to a specific bank is subject to the burden-sharing principles and the need to notify the European Commission. On the other hand, the support granted by the state to the resolution fund does not constitute state aid, because:

- the resolution fund is not an economic entity within the meaning of the state aid rules,
- the decision of the resolution authority to launch the resolution procedure is not dependent on the fact of granting aid from government funds, i.e., the resolution authority is not a state agent that implements a guarantee for a specific bank, but a separate entity that makes an independent decision to take action against the bank⁶³.

Undoubtedly, the fiscal backstop as a security mechanism should be used as a last resort after all other market sources of financing the resolution process have been used. In order to ensure the fiscal neutrality of such a solution in the medium term, aid granted under the fiscal backstop should be reimbursed from the funds raised by the banking sector⁶⁴. Proposed principles of fiscal backstop result from the fact that the purpose of resolution is, inter alia, protection of public finances, and its main rule is financing from the banking sector⁶⁵.

⁶³ State aid control, https://ec.europa.eu/competition/state_aid/overview/index_en.html (accessed 05.06.2020); Department for Business Innovation & Skills, State Aid: The Basics Guide, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/443686/BIS-15-417-state-aid-the-basics-guide.pdf (accessed 09.06.2020).

⁶⁴ European Commission, COMPLETING EUROPE'S ECONOMIC AND MONETARY UNION The Commission's Contribution to the Leaders' Agenda, https://ec.europa.eu/commission/sites/beta-political/files/backstop-banking-union_en.pdf (accessed 05.06.2020).

⁶⁵ Art. 31 BRRD.

It is worth noting that some countries – e.g., Denmark (Box 8) – decided to explicitly include in the regulations the resolution fund's access to fiscal backstop in a significant or even unlimited amount.

Box 8. Fiscal backstop – example of Denmark

In Denmark, the functions of the resolution authority are shared between the supervisory authority and the Financial Stability Company (FSC). The target level of resolution fund amounts to 1% of guaranteed deposits and is financed mainly by contributions. It is also possible to obtain financing through loans from the market and – as a last resort – from the FSC and the state budget. There is no limit for loans from the budget. They do not require parliamentary approval, and they are given very quickly – within one day^a.

^a Denmark's Nationalbank, Government Guarantees and Re-lending, http://www.nationalbanken.dk/en/governmentdebt/centralgovernment_debt/Pages/Government-Guarantees-and-Re-lending.aspx (accessed 27.04.2020) and Denmark: Financial Sector Assessment Program-Technical Note-Financial Safety Net and Crisis Management Arrangements, 2020. p. 24-25, <https://www.imf.org/en/Publications/CR/Issues/2020/08/07/Denmark-Financial-Sector-Assessment-Program-Technical-Note-Financial-Safety-Net-and-Crisis-49667?cid=em-COM-123-41936> (accessed 30.09.2020).

In the case of the EU, the law does not specify how this type of backstop should work. Nevertheless, at least a few potential solutions can be identified. As regards the fiscal backstop form, it is possible to provide support to the resolution fund in the form of a credit line or guarantee that could be applied to the debt issued by the resolution fund. This is due to the fact that the fund has the ability to obtain funds on its own for the purposes of resolution from alternative sources (e.g., on the market in the form of bond issues or from the banking sector in the form of loans from banks). Obtaining a government guarantee would significantly increase the lending capacity of the fund.

Above-mentioned solutions may be financed directly from the budget of a given country or through a separate institution that may be specially established to perform the function of fiscal backstop by the resolution fund. In the case of resolution funds operating in the area of many countries (e.g., SRF – in the area of the banking union), the backstop function may also be performed by international institutions responsible for obtaining financing for groups of countries.

An example of the use of the fiscal backstop mechanism in resolution is described in Box 9.

Box 9. Fiscal backstop in the form of the purchase of the bonds issued by the resolution authority – example of the USA

In principle, the authority responsible for operationalization of resolution processes in the USA is the Federal Deposit Insurance Company (FDIC). The following institutions might be restructured^a:

- pursuant to the Federal Deposit Insurance Act: banks covered by the deposit guarantee protection, where the alternative to restructuring is the payout of guaranteed funds and liquidation in bankruptcy proceedings,
- on the basis of the Dodd-Frank Act (FDIS as the so-called Orderly Liquidation Authority, OLA):
 - domestic banking holding companies and foreign banking groups with consolidated assets of at least USD 50 billion, if their liquidation in bankruptcy would pose a threat to financial stability,
 - non-bank financial institutions, if their systemic importance is determined by the Financial Stability Oversight Council (FSOC).

In the event that OLA is launched, the Dodd-Frank Act entitles the FDIC to provide liquidity support to entities undergoing restructuring^b. The financing of this support takes the form of the issuance of the FDIC bonds acquired by the US Department of the Treasury. The volume of issuances is agreed between the FDIC, the Treasury Department and the FSOC^c. Funds from each issue go to the separate Orderly Liquidation Fund (OLF) managed by the Treasury Department, from which the FDIC can then borrow only to provide liquidity support to the restructured entity. The OLF is therefore not an ex-ante resolution fund^d.

^a J. Deslandes, C. Dias, M. Magnus, *Liquidation of banks...*, *op. cit.*, p. 5–6.

^b FED, Resolution Regimes in Europe: Implementation of effective resolution regimes in the region. Funding in resolution, <http://pubdocs.worldbank.org/en/467851493605058815/S3-Keith-Ligon-BR-Wkshop-19Apr-2017.pdf>, p. 3 (accessed 27.07.2020).

^c IMF, United States Financial Sector Assessment Program. Technical Note – Financial crisis preparedness and deposit insurance, IMF Country Report No. 20/245, 2020, p. 15.

^d *Ibidem*, p. 4.

5.3. Use of government money in gaining access to the liquidity on the market or from the central bank

Another way of using government funds in the resolution process is the direct securing by the government the bank's access to liquidity from the market or emergency liquidity from the central bank⁶⁶. From this perspective, we can imagine at least two forms of involvement of government institutions.

First, it is possible for the government to provide a guarantee. Where the provision by the government of a guarantee (or insurance) is the only form of collateral, then when the bank fails, the government must fully cover the losses that the lender has incurred when providing liquidity to the bank. A solution is also acceptable when, in addition to the guarantee, the creditor accepts additional collateral, usually

⁶⁶ In the case of the EU, actions are always assessed in terms of compliance with state aid rules. If they are not undertaken under market conditions, then they are treated as state aid and must meet additional requirements, e.g., in terms of burden sharing.

from the bank itself in the form of assets (most often credit claims). In such a case, collateral received from the government and the bank may be of equal importance (i.e., at the time of bankruptcy of the bank, they are used simultaneously) or may be used sequentially (i.e., the collateral received from the bank is utilized first, and then the guarantee or insurance granted by government). However, the provision of a guarantee by the government for liquidity from the central bank may involve additional conditions imposed on the bank by the government (e.g., the submission of a security). An example of the use of government guarantees in the resolution process is presented in Box 10.

The second form of direct use of government funds to obtain liquidity from other entities may be the transfer of assets (e.g., issued bonds) to the bank, most often under returnable title, which the bank may provide as collateral for the obtained liquidity assistance.

Box 10. Government guarantee for ELA – example of Australia and New Zealand

In Australia, in a crisis situation, after consultation with the institutions represented in The Council of Financial Regulators^a, the central bank, i.e., the Reserve Bank of Australia (RBA), may, as the lender of last resort, provide to a restructured depository institution that can no longer provide adequate collateral, liquidity support backed only by a government guarantee^b. Similarly, in New Zealand – the central bank, i.e., Reserve Bank of New Zealand (RBNZ), may, as the lender of last resort, provide liquidity support to the bank under the so-called Open Bank Resolution if necessary to maintain financial stability^c. The extraordinary liquidity support under this procedure should be guaranteed by the New Zealand Government (the Crown Guarantee) if the bank is unable to provide other collateral required by the RBNZ. Interestingly, at the same time, this procedure assumes freezing part of the bank's deposits and other liabilities in resolution in order to cover potential losses (write-down)^d. This allows for the assumption that the supported bank is solvent^e. At the same time, OBR does not provide for a mechanism to recover the bank's restructuring costs incurred by the government^f.

^a The CFR is chaired by the President of the RBA and it is composed of other representatives of the RBA, as well as heads and representatives of the State Treasury and supervisory authorities over the financial and capital sector. Consultation may include providing liquidity support along with other restructuring measures for a problem bank.

^b IMF, Australia Financial Sector Assessment Program, p. 17, <https://www.imf.org/en/Publications/CR/Issues/2019/02/13/Australia-Financial-System-Stability-Assessment-46611> (accessed 14.07.2020).

^c IMF, New Zealand. Financial sector assessment program. Technical note – contingency planning and crisis management framework, IMF Country Report No. 17/116, <https://www.imf.org/en/Publications/CR/Issues/2017/05/10/New-Zealand-Financial-Sector-Assessment-Program-Technical-Note-Contingency-Planning-and-44899> (accessed 14.07.2020), p. 17; Reserve Bank of New Zealand Act 1989, <http://www.legislation.govt.nz/act/public/1989/0157/latest/whole.html#DLM199364> (accessed 14.07.2020).

^d IMF, New Zealand. Financial sector assessment..., *op. cit.*, p. 23.

^e *Ibidem*, p. 18.

^f *Ibidem*, p. 27.

It should be noted that having additional government collateral significantly increases the bank's ability to obtain liquidity in resolution, especially when applying for emergency liquidity from the central bank.

5.4. Use of resolution funds in gaining access to the liquidity on the market or from the central bank

An alternative method of strengthening the bank's ability to obtain additional liquidity may be to use the resolution fund to provide or improve the quality of collateral available to the bank in resolution.

Firstly, the resolution authority may provide a guarantee for the bank's assets in resolution (guarantee to cover losses on assets) in order to improve their credit quality⁶⁷. As a result, it may be possible to obtain a larger amount, for example, as part of an operation with the central bank, due to the potentially lower haircuts that the central bank will use when accepting assets as collateral. Nevertheless, such a guarantee also has limitations, because its amount should not exceed the financial capacity of the resolution fund, i.e., the amount of funds that the resolution authority has or will have at its disposal within a specified time horizon.

Secondly, in the case of operations with a central bank, the assets at the bank's disposal may not be an acceptable collateral for the central bank. Then, it is possible for the resolution authority to provide support⁶⁸ to the bank in the form of a loan or asset swap for those assets that are acceptable for the central bank.

In the absence of them, it might also be permissible to apply a mechanism according to which the resolution authority would issue debt. However, the issued bonds would not go to the market, and would remain on the books of the authority, and then they could be lent to an entity in resolution⁶⁹, which would use them as collateral in transactions with market entities or with central bank. However, such a solution makes sense only when the resolution authority has a high and stable rating, thanks to which the valuation of securities will be high and relatively stable (which will translate into low haircuts). Nevertheless, the ratings of the resolution authority will most likely be lowered in a crisis situation, due to its declining financial power (by using some of the contributions for actions under resolution).

It is worth adding, however, that the ability of the resolution authority to provide a sufficient amount of collateral of appropriate quality has not yet been tested. This puts into question the amount of liquidity support that the bank is able to obtain

⁶⁷ P. Fioretti, O. Francova, M. Hesketh, N. Mascher, R. Strauch, F. Vancompernelle, *Completing banking union...*, *op. cit.*, p. 37.

⁶⁸ *Ibidem*.

⁶⁹ European Parliament, Public hearing with Elke König, Chair of the Single Resolution Board, [https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/634376/IPOL_BRI\(2019\)634376_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/634376/IPOL_BRI(2019)634376_EN.pdf) (accessed 09.06.2020).

thanks to such solutions⁷⁰. For this reason, the use of an entity other than the resolution authority may be considered for this purpose. In this case, a national government institution or an institution of an international nature (e.g., the ESM in the euro area) could lend assets to banks for use as collateral in the financial market or in transactions with the central bank⁷¹.

A possible solution is also the resolution authority granting a guarantee for the obligations of the bank in resolution towards another entity, including the central bank⁷². It should be noted that thanks to this solution, the resources of the resolution fund are not directly used for liquidity support, which may significantly limit the resources of the resolution fund to be used, taking into account the potential liquidity and capital needs of the banking sector in a crisis situation. However, it should be borne in mind that such a guarantee may also require appropriate collateral.

Summary

The tools available under the resolution procedure put emphasis on improving the capital situation of a problem bank. Meanwhile, the decisive factor for the effectiveness of resolution is maintaining liquidity. A bank threatened by bankruptcy may experience an increased outflow of funds due to the loss of confidence. Obtaining additional financing on the market may be difficult or even impossible. Resolution funds – as a natural source of financing for banks in resolution – are, however, limited in their amount. The liquidity available within the operations with the central bank is in turn conditioned by the fulfillment of numerous requirements (e.g., with regard to collateral). These limitations make it necessary to have mechanisms that are a reliable source of liquidity for the bank in the resolution process. For this reason, it is advisable for the European Union to supplement the crisis management framework with solutions of this type, for which a good opportunity might be the consultations on the review of the EU crisis management and deposit insurance framework initiated in 2020.

The study presents a number of examples of solutions that the EU or individual countries may consider as an additional liquidity support mechanism for the bank in resolution. The following belong to them:

- **Pillar I: strengthening banks' liquidity resources:**
 - interbank arrangements (stand-by arrangements),
 - creating sectoral pools of assets to be used as collateral in a crisis situation of one of the banks (collateral pools),
 - introducing a requirement for a maximum level of encumbered assets,

⁷⁰ P. Fioretti, O. Francova, M. Hesketh, N. Mascher, R. Strauch, F. Vancompernelle, *Completing banking union...*, *op. cit.*

⁷¹ *Ibidem.*

⁷² S. Fernandez de Lis, J. Garcia, *Funding before and in resolution. A proposal for a funding in resolution mechanism*, BBVA Research, Regulation Watch – 31 May, 2018, p. 6.

- determination of a separate pool of unencumbered assets for the purposes of resolution,
- strengthening the banks' collateral portfolio (in the form of an asset swap or guarantee from a resolution fund, government or other institution) to be used in transactions with other entities.
- **Pillar II: strengthening the potential of resolution funds – fiscal backstop:**
 - credit lines for the resolution fund,
 - guarantees for the resolution fund.
- **Pillar III: securing liquidity from central banks:**
 - a guarantee for liquidity support from the central bank granted by the government and / or the resolution fund,
 - a transfer of assets to a bank for access to liquidity from the central bank by the government and / or a resolution fund.

The first pillar is very important, including solutions aimed at improving liquidity by the banks themselves. It includes proposals for market solutions that they can introduce themselves without the need to impose new regulations on them by supervisory institutions.

At the same time, financial safety net institutions should, within their powers, actively participate in securing sources of liquidity in the event of crisis situations. In particular, fiscal support for the resolution fund is important, as it strengthens its financial capacity. At the same time, the involvement of the government or the resolution authority may be crucial for the effectiveness of liquidity support from the market or the central bank – to provide the entity with adequate security.

Table 1. Catalogue of potential banks' and safety net institutions' actions in securing the bank liquidity in resolution

Entity	Potential actions
Banks	<ul style="list-style-type: none"> – stand-by arrangements – creation of sectoral pools of assets to be used as collateral by the bank in the resolution process (collateral pools)
Supervisor	<ul style="list-style-type: none"> – introduction of a requirement for a maximum level of encumbered bank assets – introduction of a requirement to separate a pool of unencumbered assets for the purposes of resolution
Government	<ul style="list-style-type: none"> – asset guarantees for banks – asset swaps for banks – credit lines for the resolution fund – guarantees for the debt of the resolution fund – guarantees for liquidity support from the central bank

Table 1 – continued

Entity	Potential actions
Resolution authority	<ul style="list-style-type: none"> – guarantee for the bank's assets – asset swap (using e.g., bonds issued by the resolution authority) of banks – a guarantee for a commercial loan taken out by the bank – a guarantee for a liquidity loan from the central bank to the bank
Central bank	<ul style="list-style-type: none"> – extension of the catalog of acceptable collaterals in operations with banks (e.g., resolution authority bonds transferred to the bank).

Source: own work.

The responsibility for financial stability rests on all participants of the financial system, therefore, various combinations of the above-mentioned pillars for securing liquidity may be developed in parallel.

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