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# The Single Resolution Mechanism in the European Union: Good Intentions and Unintended Evil

Jean Dermine INSEAD, <u>jean.dermine@insead.edu</u>

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Following the global financial crisis of 2008, a new architecture for global financial markets has emerged. It aims to sever the link between bank losses, state aid and sovereign risk, and put an end to the doctrine of "too-big-to fail" and moral hazard thanks to the privatization of losses. As of January 2016, the European Union operates the single resolution mechanism (SRM) for banks in the euro-zone countries. In our opinion, in its current form the SRM creates a unintended evil: a significant increase in the likelihood of bank runs. Since this is the prime cause of financial crises around the world, there is an urgent need to address this shortcoming. Five alternative solutions are discussed.

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#### Introduction

Stability in banking markets is a key- objective of policy makers around the world. To this end, the industry is heavily regulated. The strengthening of capital and liquidity buffers as well as limitations on activities such as proprietary trading have followed the global financial crisis of 2007-2008. They should reduce the likelihood of future crises. However, policy makers have recognized uncertainty, their inability to identify *ex ante* every future sources of risk and their severity. Banks in financial distress will show up again and a mechanism is needed to deal with institutions that are failing or likely to fail.

Since 1 January 2016, the European Union has set up for the 19 members of the euro-zone<sup>1</sup> a banking union and a single resolution mechanism (SRM). Whether or not the SRM will ensure greater stability in Eurozone banking markets is the question explored in this essay.

I begin by reviewing the main services offered by banks and identify the market failures that lead to public interventions in Section 1. In the second section, I present the single resolution mechanism and argue that, in its current form, it is likely to exacerbate instability in banking markets, thereby increasing the likelihood of bank runs, which are at the root of financial crises around the world. Calling for urgent action to correct the shortcomings of the SRM, I evaluate five potential solutions.

I wish to acknowledge Professor Ernst Baltensperger, who was an early contributor to this debate.

### Section 1. Banking Services and Market Failures

The six main services offered by universal banks are described below, followed by an analysis of market failures and the potential need for public interventions.

<sup>&</sup>lt;sup>1</sup>Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia and Spain.

#### Six Banking Services

Although the services provided by banks are interrelated, they fall into six main categories: underwriting and placement of securities, portfolio management, advisory services, payment (transmission) services, monitoring or information-related services, and risk sharing.

*Underwriting and placement*: A first service provided by banks is to bring together savers and borrowers. Underwriting and placement of securities – bonds or shares –helps borrowers to meet surplus units, and design the securities to meet the risk/return requirements of borrowers and lenders. In a pure underwriting and placement service, it is assumed that the return and risk of the securities can be properly defined, so that there is no major information asymmetry (or *agency problem*) between lenders and borrowers. In this case, monitoring is less of an issue. With the underwriting and placement service, the end-investor directly holds a claim on deficit units.

**Portfolio management:** At low cost, investors can acquire a diversified portfolio of securities issued by deficit spending units. Mutual funds and unit trusts supply a diversified portfolio to the holders of their shares. The reason for the existence of these funds is threefold: to reduce the divisional costs incurred in issuing many securities, to provide a diversified portfolio to investors, and to delegate asset management to specialists who can assess economic prospects.

**Advisory services**: Advisory services to corporations and individuals are a significant source of fee income. Advices on mergers and acquisitions, risk management advice to corporations or advices on asset management, tax or succession planning to individuals are all illustrations of these.

**Payment mechanism:** payment systems facilitate and keep track of transfers of wealth among individuals. This is the 'bookkeeping' activity of banks realized by debiting and crediting accounts. The centralized payment function, a traditional pillar of banking, may be competed away with the new blockchain decentralized ledger technology (Banque de France, 2016).

**Monitoring and information-related services:** Private information held by borrowers leads to contracting problems, because it is costly to assess the solvency of a borrower or to monitor his/her actions after lending has taken place. Sometimes, it is useful to package these claims in a portfolio, and banks perform a useful function in reducing the costs of screening and monitoring borrowers.

This has been shown to be an efficient mechanism (Diamond, 1984). While this service is linked to the first one (underwriting and placement), it is regarded as separate because it corresponds to cases where significant information asymmetries make it difficult to issue financial claims traded on securities markets. While portfolio management refers to the management of liquid assets, this function refers to the management of an illiquid loan portfolio.

**Risk-sharing service:** An important function of banks is to make the market more complete, i.e. to provide some form of insurance against various sources of risk. Banks not only supply diversified assets, but also efficiently organize the distribution of risky income earned on the asset pool. The debt holders receive a fixed payment while the shareholders receive the residual income. A main function of banks is maturity transformation and liquidity insurance, with the option for a deposit holder or the holder of a line of credit to withdraw funds quickly at face value (Diamond and Dybvig, 1983).

#### Market Failures in Banking Services

The banking literature has focused on the last two services -monitoring of credit risk and the supply of liquidity (Baltensperger and Dermine, 1987<sub>a</sub>). It has identified two potential sources of market failures and need for public intervention: investor protection and instability in banking markets with the likelihood of bank runs.<sup>2</sup>

A first potential source of market failure is imperfect (asymmetric) information, which can prevent the proper functioning of unregulated private markets. Confronted with opacity, for instance, depositors find it costly to evaluate the solvency of their bank. The economic literature recognizes that the inability of consumers to evaluate the quality of a product can lead to a market failure. Inefficiency may arise because the quality of a service is not valued properly by the market and reflected into higher prices, hence there is insufficient incentives for firms to produce quality. Regulation (e.g., minimal qualifications in the legal or medical profession) is a way of ensuring a minimum level of quality. In banking, imperfect asymmetric information can create the so-called *moral hazard*. Finance theory has shown that bank shareholders benefit from an increase in risk,

<sup>&</sup>lt;sup>2</sup>Two additional public policy issues related to the eventual need to protect borrowers and avoid excessive concentration will not be discussed.

such as higher leverage or riskiness of assets. This provides a rationale for protecting for the 'uninformed widows and orphans' depositors.

Protection comes from the regulation of bank risk and/or the provision of deposit insurance by a public agency. The control of banks' riskiness is transferred from uninformed depositors to an informed deposit insurer. In principle, other private mechanisms could be used to reduce the need to protect uninformed investors, such as the mandatory disclosure of information possibly screened by rating agencies; the creation of risk-free banks that invest only in safe government bonds, leaving investors free to choose between risk-free banks and risky banks; self-regulatory organizations with the banking industry providing deposit insurance and regulating itself, and the preservation of reputation which should balance the benefits of risk-taking and short-term profit against a potential loss of reputation and its associated franchise value of future profits.

In international banking and cross-border supply of services, an additional issue is raised. The possibility of competitive deregulation raises the question of the need to harmonize international regulations or to create a single regulator. The answer is again related to imperfect information. Competition among national regulators is desirable whenever the parties can evaluate the quality of regulatory systems. Harmonization of rules to ensure minimal quality would be necessary only if the market could not discriminate. An alternative to the harmonization of prudential regulation is to grant some supervisory powers to the host state, whenever it is felt that domestic investors are not adequately protected by foreign regulations or supervision.

The second market failure is the potential for bank runs and systemic crises. Banks are special because of the nature of the financial contract –illiquid loans funded by short-term deposits. The maturity mismatch between assets and deposits and a lack of coordination among depositors creates the risk of a run on the bank, depositors rushing to withdraw their savings. A run can be triggered by bad news about the value of bank assets or by any unexplained fear. In either cases, there may be a loss, since illiquid assets will be sold at a discount. The failure of one bank may in turn trigger a signal on the solvency of other banks, leading to a systemic crisis. At its core the global financial crisis was a systemic run and the central task for a regulatory response should be to eliminate runs (Cochrane, 2014; King, 2016).

This market failure – bank runs – explains the introduction of banking regulations and the creation of safety nets to guarantee the stability of banking markets. These have taken the form of deposit

insurance, lender- of-last-resort interventions, and public (treasury-led) bail-outs. Deposit insurance funds are unlikely to contribute much to reducing systemic risk in the European Union because they guarantee deposits of  $\leq 100,000$  per depositor per bank. Runs are likely to be initiated by large firms or financial institutions. Therefore, lender-of-last-resort interventions by central banks or public bail out have been used to avoid bank runs and systemic crises.

A government bailout of banks can lead to sovereign risk. A recent case was that of the Republic of Ireland which granted a broad guarantee to Irish banks in September 2008. Moreover it leads to moral hazard as *de facto* insured creditors will not worry about bank risk-taking since the losses are transferred to the state: 'Heads the bank wins, tails the state losses'.

To reduce the likelihood of future crises ("never again!"), stricter regulations have been applied to the banking sector, including the following:

- Control of liquidity risk
- Control of market risk
- Control of capital
- Control of counterparty risk
- Control of compensation schemes
- Control of systemic banks
- Control of permissible activities
- Control of corporate structure

As these regulations increase the cost of undertaking banking business, banks have reacted by moving part of the business, hence the risk, of the balance sheet into so-called *shadow banking*. This includes non-bank credit intermediation with maturity/liquidity transformation and leverage. Examples include money market funds or brokers-dealers. In the 26 jurisdictions surveyed by the Financial Stability Board (2015), total shadow banking assets in 2014 amounted to \$36 trillion, compared to banks' total balance sheet assets of \$135 trillion. Credit and liquidity risks are transferred to other segments of financial markets. In addition, regulators have recognized uncertainty and their inability to identify and measure *ex ante* all risks and their severity. Financial institutions will fail in the future and it is imperative that such cases be dealt with efficiently.

As explained below, special resolution regimes have been put in place around the world to handle financial institutions in distress.

#### Section 2. The Single Resolution Mechanism

After the financial crisis, countries of the Euro-zone opted to create a banking union. Multiple objectives were cited for this: to have a single 'rulebook' and a single supervisor, the European Central Bank that would level the playing field; to have a single entity to deal with institutions operating with branches or subsidiaries in several countries; to have a single resolution regime to internalize the cross-border effects of handling banks in distress; and to have a larger fund, the single resolution fund, available to deal with large pan-Europe banking institutions. A significant piece of the banking union is the single resolution mechanism (SRM) which came into operations on 1 January 2016.

The Bank Recovery and Resolution Directive (BRRD)<sup>3</sup> of 15 May 2014 established the framework for the recovery and resolution of credit institutions and investment firms. A regulation<sup>4</sup> of 15 July 2014 established uniform rules and a uniform procedure for resolution. The single resolution mechanism works as follows. The main-decision-making body is the single resolution board. Those members with voting rights in *executive sessions* of the board include the executive chairperson (currently Dr Elke König), four full-time members and a representative from member states in which the troubled banks and its branches or subsidiaries are located. Observers include a representative from the European Central Bank, one representative of the European Commission and ad hoc invited observers.<sup>5</sup>

Once a bank has been identified by the ECB, the supervisory authority, as failing or likely to fail, the *executive session* of the board decides whether a private solution is possible or if the resolution is in the public interest. The single resolution board then adopts a resolution scheme which enters into force 24 hours after its approval by the board. During this period of time, the European Commission can decide to object during the first 12 hours, leaving the next 12 hours to the Council to take a decision. The board then ensures that the necessary resolution actions are taken by the national

 $<sup>^3</sup>$  Directive 2014/59/EU of 15 May 2014 , (OJ L173/190) (158 pages)

 $<sup>^4</sup>$  Regulation N $^\circ$  806/214 (90 pages)

<sup>&</sup>lt;sup>5</sup>Plenary sessions of the resolution board, which includes in addition to the permanent members one representative of each country, take decisions of a more general nature, such as rules of procedure or annual budget.

resolution authorities.

Three main objectives in handling a failing bank are (I) swiftness of decisions to minimize the impact on the economy, (ii) privatization of losses to stop the linkage between public bail-out, budget deficit and sovereign risk, (iii) elimination of moral hazard with bail-in debt held by private creditors who bear losses.

Article 44 of the BRRD defines the scope of the bail-in tool which may be applied to all liabilities of an institution that are not excluded. The resolution authorities shall not exercise a write-down or conversion powers to the following liabilities:

- deposits covered by deposit insurance
- secured liabilities, including covered bonds
- liabilities with a remaining maturity of less than seven days

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In exceptional circumstances, such as trying to avoid widespread contagion, the resolution authority may exclude or partially exclude certain liabilities from the application of the write-down or conversion powers.

A privately funded single resolution fund may make a contribution to cover the losses but only after a minimum contribution of 8% of total liabilities, including own funds, has been made by shareholders and other liabilities. In principle, the contribution of the resolution fund is limited to a maximum of 5% of total liabilities, including own funds. But Article 44 paragraph 7 states explicitly that "in extraordinary circumstances, the resolution authority may seek further funding".

To ensure that there are enough bail-in securities in the liability structure of banks, Article 45 of BRRD sets the principle of a minimum requirement for own funds and eligible liabilities (MREL). This is equivalent to the total loss absorbing capacity (TLAC) proposed by the Financial Stability Board.

There can be no doubt that the creation of the single resolution mechanism is a fundamental change in the way banking markets function. The authorities have finally succeeded in privatizing risk and losses. Economic welfare would be ensured with all costs and risks being priced by the market, avoiding an unjustified public subsidy for bailed-out banks. In addition, the link between bank losses, state aid, budget deficits and sovereign risk would be severed.

However, in our opinion the current single resolution mechanism is incomplete and a potential contributor to future panic and disruption of the banking system –for three reasons. These concern the ability of the private market to bear losses, the implicit cap on losses that would be passed to creditors and a much increased likelihood of a run on fragile banks.

Losses on loans do not disappear with a resolution mechanism: they are simply transferred to shareholders and creditors. The objective is not to avoid losses but to mitigate the breakdown of confidence in the banking system. If creditors who bear losses happen to be 'widows and orphans', pension funds or insurance companies, one can imagine the political uproar that would arise. A recent example occurred in Italy in November 2015. Pre-empting the bail-in rules, the Bank of Italy imposed losses on bond holders of four small local banks. A customer of Banca Etruria committed suicide after losing his life savings: He had invested all his wealth in bonds, a 'safe investment' distributed by his bank. It would seem imperative to know who are the investors – individual or institutional – holding bail-in securities to ensure that they can bear the losses. This also raises questions about the distribution of a bank's own bail-in debt to its clients. One can easily imagine a situation in which the placement of bail-in bonds by a fragile institution would take priority over the bank's fiduciary duty to its clients.

A second criticism of the SRM is the explicit reference that losses could be covered by the single resolution fund after a minimum loss absorption of 8% of total liabilities, including shareholders funds. Although there is some ambiguity in the implication of the fund, one wonders why such an explicit reference to a potential 8% cap has been made. Full exposure to losses would further increase the incentives to monitor a bank.

Last but not least, the fact that unsecured deposits with more than seven days maturity are potentially exposed creates the risk of a bank run. Any treasurer with the slightest fear of a resolution will not renew deposits and banks will face major increase in liquidity risk and probability of bank run. Note that the directive states explicitly that in special circumstances some deposits might be excluded but, given the ambiguity, any prudent treasurer will run to withdraw deposits. In such cases, the European Central Bank could act as a lender-of-last-resort to solvent banks, but, again, in the presence of ambiguity, there is a significant increase in the likelihood of a run by short-term

depositors There is thus in our opinion a urgent need to address this shortcoming.

#### Section 3. An Urgent Need for Reform

The attempt to severe the link between bank losses and sovereign risk, to make investors accountable for the risks taken by banks, and to eliminate public bail-outs and moral hazard are all well intended. However, in its current form, the single resolution mechanism creates an unintended evil, a significant increase in the probability of bank runs, which is the major cause of market disruptions and financial crises.<sup>6</sup>

State support or public guarantees of private debt must be ruled out to meet the above objectives. Below I discuss five ways to mitigate the risk of a bank run while preserving the above objectives: an increase in the maturity threshold, a change of seniority of short- term debt, a 'corralito' whereby the doors of the bank can be closed, the creation of a private fund to guarantee all short-term debt, and finally a proposal put forward by Ernst Baltensperger and myself several years ago, the *ex post* imposition of losses on depositors even if they have run.<sup>7</sup>

A first way would be to exclude short-term debt with a maturity longer than seven days (up to, say, one year). This would largely reduce the risk of a run as information on bank fragility is unlikely to filter out twelve months ahead. The cost implication is that this debt would not be accountable for the risk taken by the institution, which would not be desirable. I have argued elsewhere that short-term interbank debt is very special (Dermine, 2013). The creditors are banks, presumably well informed about the riskiness of other banks as they compete in the same product markets. Their comparative information advantage should prompt them to bear the counterparty risk.

A second way would be to impose rules on seniority for short-term debt. Debt with less than one year maturity would rank as senior, with other debt being junior. The risk of losses for the senior

<sup>&</sup>lt;sup>6</sup>According to the press (Financial Times, 16 May 2016), the European Commission is currently reviewing the single resolution mechanism. At the time of writing, it was not known in which direction.

<sup>&</sup>lt;sup>7</sup>A sixth and complementary proposal is the imperative need to increase transparency of banks' accounts. Due to opacity, the probability of a bank run can increase considerably (Dermine, 2015).

debt being reduced would lessen the probability of a bank run. In this case, regulations on the minimum requirement for own funds and eligible liabilities (MREL) should include a large cushion of junior securities that can absorb losses. An alternative (King, 2016) would be to impose the collateralization of short-term debt.

A third way –applied in Latin America – is the 'corralito'. In the event of a run, the bank is closed and deposits cannot be withdrawn. Great imagination has been applied to create contingent convertible bonds (dubbed *co-cos*) with bonds converting into equity once a capital level trigger is reached. If it is maturity transformation and bank runs that are at the core of a financial crises it would seem logical to consider maturity-convertible securities. In normal time, they would have a short maturity. In a crisis, they would convert automatically into longer-term debt. To ensure a minimum of liquidity, this debt would need to be tradable.

A fourth proposal is the creation of a private industry fund that would guarantee short-term or all deposits. An example of this occurred in 2016 when the Italian privately-backed € 4.25bn *Atlante* fund was used to bail out a weak regional bank, Banca Popolare di Vicenza. This type of funds effectively mutualizes losses among the banks that back the fund. To prevent moral hazard, it requires an industry self-regulatory organization to monitor risks taken by its members. But if this type of funds can deal with smaller weak institutions, it is unlikely to be large enough to deal with large pan-European institutions.

A fifth proposal is an *ex post* penalty (Baltensperger and Dermine, 1987<sub>b</sub>) which attempts to reduce the risk of a systemic run while increasing the incentive for bank monitoring by depositors. When a bank enters the resolution mechanism, losses or haircuts could be imposed on current and former depositors. The incentives to run would be reduced since there would be no place to hide to avoid the losses. To work properly, the system requires a definition of the timing of resolution and the instruments to enforce penalties on former depositors. Some measures of abnormal deposit outflows could be used to define the exact timing of resolution entry. The only depositors not liable for losses would be those who have withdrawn their funds before the resolution date. As to its enforcement, one would need the means to reach non-residents. Although difficult to implement when it was proposed in 1987, the recent international measures for bank transparency and automatic exchange of information should make it easier to track depositors who run.

#### **Conclusion**

The single resolution mechanism with the privatization of bank losses is a welcome step towards increasing accountability in banking markets which will lead to better pricing of risk. The end of public bail-out will eliminate moral hazard and reduce sovereign risk. However, in its current form, the single resolution mechanism involves, in our opinion, an unacceptable increase in the likelihood of bank runs, which are the prime cause of financial crises. Urgent measures must be adopted to reduce the risk of bank runs. Imposing higher seniority rank or collaterization for short-term (say one-year) debt, or imposing losses on depositors who have run could mitigate the risk of bank runs while maintaining the goals of increasing accountability in the industry.

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