



The European Deposit Insurance Scheme: Economic Rationale, Issues and Policy Solutions

By Ettore Panetti¹

Banco de Portugal, SUERF Research Affiliate

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This note summarizes the economic case for completing the European Banking Union with a European Deposit Insurance Scheme (EDIS). The note highlights the role of the EDIS against panic-driven bank runs that might trigger sovereign crises in a doom loop, and spread across the Banking Union via several channels of financial contagion. The main takeaways that we can draw are three. First, the EDIS can be successful only if it acts fast and its commitment to intervene is perceived as credible. Second, there seems to be little evidence that the EDIS could generate an unwarranted cross-subsidization from the less vulnerable to the more vulnerable countries of the Banking Union. Third, there exist several mechanisms to correct bank incentives against the effects of legacy risk and moral hazard that the EDIS might bring about, and some of them are already into place.

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1. Introduction

After the joint bank and sovereign debt crisis of 2010-2012, the European Union acknowledged the need to implement a Banking Union, with the objective of enhancing financial stability and risk sharing, and weakening the link between banks and national sovereign debts.² The organization of the Banking Union started with the introduction of two pillars: The Single Supervisory Mechanism (SSM) in 2014 and the Single Resolution Mechanism (SRM) in 2016.³

In 2012, the European Commission further proposed the introduction of a mandatory scheme of mutual borrowing and lending between national deposit insurance funds, but the European Council rejected the proposal. In 2014, the Deposit Guarantee Scheme Directive was instead introduced to harmonize deposit insurance across the Union. However, some important differences still remained across member States (e.g., on the conditions to declare deposits unavailable, on their eligibility, and on the financing and use of the funds) mainly due to the transposition of the Directive to the national levels. For this reason, in November 2015 the European Commission published a report with a first proposal to complete the Banking Union with a European Deposit Insurance Scheme (EDIS). The EDIS would cover all the deposits below 100,000 euros of all the banks affiliated to any of the current national insurance schemes in the Banking Union, and would intervene when a bank is either in liquidation or resolution, and the transfer of the deposits to another institution needs support. According to the proposal, the introduction of the EDIS would follow three phases:

1. Three years of reinsurance, during which the EDIS would provide liquidity assistance and absorb a certain amount of losses of the national insurance schemes eventually in distress;
2. Four years of coinsurance, during which the national insurance schemes and the EDIS would jointly intervene, and the latter would absorb an increasing share of the costs of intervention;
3. A final phase of full coverage, when the EDIS would substitute the national insurance schemes, and cover all liquidity needs and losses.

The Deposit Insurance Fund would be equivalent to 0.8 percent of total covered deposits by the time it reaches the third phase, and it would be gradually built up over the transition period.

Despite the recognition of both academia and policymakers of the need to implement this plan (Gros, 2015; Juncker et al. 2015) the discussion in the European Parliament and the European Council reached a stalemate. This happened mainly due to disagreements about the design of the system at its final stage, the timing of the transition, and the different degrees of legacy risk and moral hazard that it might bring about in the Banking Union. Against this background, the aim of this note is to briefly summarize the economic case for the introduction of the EDIS. To this end, I will start by discussing the rationale for deposit insurance, as a necessary complement to other types of government interventions against panic-driven bank runs. Then, I will present some arguments in favor of the introduction of a cross-border deposit insurance scheme like the EDIS. Finally, I will outline some of the issues that were raised against the EDIS, and some proposed solutions.

² For a narrative of the EU joint bank and sovereign debt crisis, with an explicit reference to the role of self-fulfilling panics, see Baldwin et al. (2015).

³ The set-up of the SSM and SRM were also accompanied in 2013 by the Capital Requirement Regulation and the Capital Requirement Directive, to adopt the Basel III agreement in the EU legal framework.

2. The economic rationale for deposit insurance: Panic runs

Banks occupy a critical position among the financial institutions that populate the financial system: They operate as intermediaries between savers and borrowers, guaranteeing to the first a safe management of their resources, and to the second a stable flow of funding. To this end, banks engage in maturity transformation, by issuing short-term liabilities in the form of deposits for savers, and use them to finance long-term assets, in the form of loans to borrowers. In this way, the banking system creates value for the whole economy (Diamond and Dybvig, 1983).

Nevertheless, maturity transformation has a “dark side”, as it creates a maturity mismatch in banks' balance sheets, that makes them subject to panic-driven depositors' runs. In fact, the depositors might expect that, independently of the real state of the banks, all the other depositors might withdraw from their accounts, and are afraid that the banks, who serve their customers on a first-come-first-served basis, might liquidate their asset portfolios to serve them, thus leaving little or nothing if they do not withdraw as well. In other words, panic runs are self-fulfilling coordination failures among atomistic depositors who cannot perfectly observe the behavior of their peers. In such a context, a government can and should intervene to calm their expectations and ensure the stability of the whole banking system.⁴

Historically, the first type of intervention in this direction was a commitment of central banks to operate as lenders of last resort for illiquid but solvent banks, possibly at penalty rates and against good collateral (Bagehot, 1873). However, the necessary speed of intervention makes a clear distinction between illiquid and insolvent banks almost impossible, and the willingness to avoid financial contagion might force a central bank to help as many banks as possible (Goodhart, 1987). For these reasons, governments have also introduced interventions that could prevent panic runs instead of just resolving them *ex post*.

First, a government could announce a commitment to suspend the convertibility of deposits and block excessive depositors' withdrawals. The success of this intervention crucially depends on the commitment of the government to suspend convertibility as soon as a run starts. In fact, if the government is not committed (or cannot commit) to such a strong intervention, the depositors will anticipate it and run anyway to anticipate the suspension. This narrative is not a mere possibility, because a government's commitment to an immediate suspension of convertibility is time inconsistent, that is, it makes sense from an *ex ante* point of view, but not from an *ex-post* one: If a run really takes place, a government might be willing to optimally renege on its commitment and postpone suspension, for fear of leaving some depositors without withdrawals (Ennis and Keister, 2009).⁵

Another *ex-ante* intervention that might prevent panic runs is liquidity regulation: The government can force the banks to hold enough liquid reserves to repay all depositors, even in the case of a panic run. The most extreme

⁴ For this argument to hold, it is critical to distinguish panic-driven runs from fundamental-driven runs, i.e. runs induced by shocks to the fundamentals of the real economy. In fact, absent any other friction in the banking system, a fundamental-based run is “efficient” in the sense of Pareto: It is impossible for a regulator to change the allocation of resources in a competitive economy and make some agents better off, while keeping all the others at least as well off (Allen and Gale, 2004).

⁵ For example, writing about the U.S. banking panic of 1933, Friedman and Schwartz (1963) notice that “suspension occurred after, rather than before, liquidity pressures had produced a wave of bank failures without precedent. And far from preventing further bank failures, it brought additional bank failures in its train”. In a similar way, during the crisis of 2001-2002, Argentina suspended full deposit convertibility on December 1, 2001, but its banking system had started experiencing excessive withdrawals already in March 2001. Also Greece imposed capital controls and deposit withdrawal limits on June 29, 2015, but it had experienced excessive withdrawals at least since November 2014.

liquidity regulation is one that forces the banks to be “narrow” and invest all their liabilities in safe liquid assets. However, this policy would destroy maturity transformation (Deidda and Panetti, 2017). More flexible regulations, ensuring that the total liquidation value of a bank’s portfolio is enough to repay all depositors, might also distort the allocation of corporate lending, and generate a credit tightening with potentially large effects on social welfare (Mattana and Panetti, 2020). For these reasons, liquidity regulation is generally implemented, but is never stringent enough to completely rule out panic runs.

All these arguments provide a rationale for complementing government intervention with deposit insurance. Around 111 countries in the world have introduced such a scheme mostly in the last thirty years, with the notable exception of the U.S. that introduced it in 1933 (Demirguc-Kunt et al. 2015). Deposit insurance is everywhere partial: in high- and upper-middle-income countries it covers on average around 50 percent of total bank liabilities, and in lower-middle- and low-income countries less than 20 percent.⁶ In most cases (87 countries) deposit insurance is also privately funded. However, insurance premia are generally not sufficient to cover potential panic runs, especially if systemic: On average, the total amount of covered deposits are about 6 times as large as a country’s GDP. That is the reason why in 29 out of those 87 countries with privately funded schemes, deposit insurance also has a public backstop, and 53 countries in total have either a publicly or jointly funded scheme, or a backstop. Moreover, 98 out of 111 schemes are administered either by a public authority or by a joint private-public one.

These numbers mean that the government plays a critical role to ensure the credibility of deposit insurance. In turn, the government credibility to guarantee deposits raises one further issue: A panic run, especially if systemic, might be too costly to counteract, and become a threat to sovereign solvency. On top of that, the channel of causation can go in the opposite direction, too: A sovereign debt crisis might impair the ability of a government to guarantee deposits in a credible way, and trigger a panic run. Put differently, there exists the possibility of a “doom loop”, i.e. a two-way feedback between panic runs and sovereign debt crises (Leonello, 2018).

3. The economic rationale for the EDIS: Avoid conflicts and contagion

The arguments highlighted so far are not sufficient to justify the introduction of an international deposit insurance scheme like the EDIS. Indeed, the fact that a country is hit by a panic run on its banking system - even if systemic - does not justify per se that other countries should share a deposit insurance scheme with it.

A first economic rationale for an international deposit insurance scheme is the need to complete a banking union between two or more countries. For example, regulatory and supervisory centralization might create agency problems between local deposit insurance schemes and a central authority of a banking union (Carletti et al. 2019) that only the further centralization of deposit insurance can solve. Moreover, the absence of a common deposit insurance scheme in a banking union might distort the corporate governance of multinational banks, especially in their choices of cross-border expansion through subsidiaries rather than branches (Valle-e-Azevedo e Bonfim, 2019).

A second rationale for an international deposit insurance scheme is the possibility of cross-border financial contagion. The economic literature focuses on three ways in which this can happen. First, financial contagion may arise as the “dark side” of financial integration, either via interbank markets or cross-border consolidation in the

⁶ This reflects not only budgetary reasons, but also the fact that higher coverage would lower depositors’ incentives to monitor banks and induce moral hazard and excessive risk taking (Anginer and Demirguc-Kunt, 2018).

banking sector. Then, a panic run on the banking system of a country might spread across borders if it conveys information about impairments in the balance sheets of the banks in other countries (Dasgupta, 2004). Second, there can be contagion of panic runs through national sovereign debts, if banks hold a diversified portfolio of them (Bolton and Jeanne, 2011). Moreover, the sovereign debts of different countries might be connected by a common institutional background. Hence, a panic run on the banks of one country might signal how other governments will intervene in future crises, and possibly trigger other panics. Third, financial contagion might happen even if the national banking systems or national sovereign debts are not well integrated, but capital markets are. Then, panic runs might generate information externalities, and possibly aggregate liquidity shortages, or fire sales and a “flight to quality”. In a similar way, a panic run might spread to other countries because the resulting wealth loss suffered by the investors might make them more risk averse, and push them to withdraw their investments in other countries, too (Goldstein and Pauzner, 2004).

Which of these rationales justify in practice the introduction of the EDIS? On the one hand, the first argument is the strongest: There exists the need to complete the Banking Union to avoid future institutional conflicts.⁷ On the other hand, banks’ portfolios of sovereign debts have not been particularly diversified, either before or after the last crisis. Moreover, cross-border bank consolidation and capital-market integration have lagged behind, and it is not obvious how fast they will improve. Hence, those cannot represent strong channels of financial contagion in the Banking Union, or not yet. Finally, the fact that the national sovereign debts of the EU member States share a common institutional background, despite having resolved redenomination risk in the euro area, may arguably become a critical channel of panic transmission in the future as it was during the last crisis.⁸ This clearly represents a further strong rationale for the introduction of the EDIS.

4. Issues with EDIS and possible solutions

Despite the economic rationales in favor of the EDIS highlighted in the previous sections, after the proposal by the Commission in 2015 several divergences emerged, both within the European Parliament and the Council. The main critiques highlighted a fundamental weakness: Some member States perceived the EDIS as proposing excessive risk sharing and not enough incentives, in particular in the light of the strong heterogeneity still present across the European Banking Union. Risk sharing was deemed excessive with respect to both the level of risk with which the member States would enter the first phase of the transition to the EDIS (the so-called “legacy risk”), the speed and the automatism of the transition itself, and the moral hazard and resulting excessive bank risk taking that might induce in the future.

To address these issues, in 2017 the Commission presented a possible revision to its plan. It suggested to slow down the introduction of the EDIS, and make the transition along the three phases less automatic. In the reinsurance phase, the EDIS would only cover a national insurance scheme’s illiquidity, and only gradually. To address legacy risk and moral hazard, the move to the coinsurance phase would depend on the realization of a set of conditions, that would include an Asset Quality Review to assess non-performing loans and level-III assets,

⁷ The former head of the SRM Danièle Nouy (2017) also stressed this point. She argued that had the Spanish bank Banco Popular Español failed in 2017, instead of being bought by Banco Santander, the Portuguese deposit insurance scheme would have had to refund depositors in the local subsidiary, even if the bank was supervised and resolved at EU level.

⁸ Constâncio (2012) argues that the rise in bond yields during the 2010-2012 crisis for Ireland, Portugal, Spain and Italy “can be largely explained by the concerns raised by the scope and possible extent of the private sector involvement in Greece, which was set as a condition for a second programme [sic] at the euro area summit of 21 July [2011]”.

eventually followed by the solution of the identified problems. The Asset Quality Review would be conducted during the reinsurance phase, so as to ensure that banks address legacy risks within the banking sectors in which they were generated. Once these conditions are met and the coinsurance starts, the EDIS would provide full liquidity assistance. It would also progressively cover bank losses, conditional on all the previous conditions being continuously met.

In a recent book published by the CEPR (Bénassy-Quéré et al. 2019), a group of French and German economists propose a different solution to the possible issues connected the EDIS. Their main argument is the refusal of the trade-off between risk sharing and incentives. This is because a robust Banking Union requires both crisis prevention (through incentives) and mitigation (through risk sharing). Moreover, risk sharing can be designed so as not to harm incentives, and is actually necessary for them to work properly.

In line with the idea of complementarity between risk sharing and incentives, the authors argue that the EDIS should be introduced in parallel with a tighter treatment of non-performing loans, and a sovereign concentration charge. The first would have the effect of attenuating legacy risk during the transition phase. The second would instead break the doom loop by resolving the banks' home bias in sovereign debt holding.

The proposal further supports the gradual disappearance of the national insurance schemes, and their substitution with a common EU-wide scheme that should ensure "country-blind depositors' protection". That is because only a common scheme can establish full trust in the EDIS. In fact, deposit insurance works only if it acts fast, and its commitment is credible. In that sense, a system that merely reinsures the national insurance schemes of its member States (like the one proposed by Gros, 2015) would arguably be slow, and still be subject to uncertainty due to national policies or disagreements at the EU level, as the case of Cyprus in March 2013 illustrated.

Contrarily to the country-blindness of depositors' protection, the Franco-German proposal puts forward a country-specific funding mechanism, through which the EDIS would take into account the still-existing heterogeneity within the Banking Union. In particular, the authors call for two ways to differentiate funding across member States. First, part of the fees raised from the banks should reflect country-specific characteristics, including the quality of a country's legal system and creditors' protection. Second, in the case of a bank failure the corresponding payout should be mutualized only in the case of systemic events, and be levied on the banks of the same country in the case of smaller idiosyncratic shocks. To this end, the EDIS should consist of "national compartments", like in the transition phase of the Single Resolution Fund. The system should achieve the mutualization of the costs of systemic crises either by creating a common compartment or by imposing a joint payout by each compartment in case one of them is depleted. In any case, if a national compartment is depleted, the system would replenish it by levying fees on the banks of the corresponding country, irrespective of their individual risk profiles. If instead the common fund is depleted, the European Stability Mechanism would refill it with a loan, reimbursed ex post by the banks with some appropriate fees.

While the two preceding proposals are both based on sound economic reasoning, it is true that they lack empirical foundations. In a recent paper, Carmassi et al. (2018) try to provide them, by analyzing the possible effectiveness of the EDIS, and whether the fear of excessive risk sharing has some basis. To this end, the authors develop a quantitative early-warning model that accounts for bank- and country-specific risk factors, and use it to calculate the possible exposure of the EDIS to bank failures under different stress scenarios. They find that a fully funded EDIS, targeting 0.8 percent of total covered deposits like in the proposal of the Commission, would be sufficient to offset losses in banking crises even more severe than the 2007-2009 global financial crisis, without imposing excessive costs on either small or large banks. This result hinges only in part on the introduction of the

EDIS per se, but more on the fact that the European banks have already significantly reduced their risk profiles and increased their loss-absorbing capacity. In turn, this is a consequence of higher levels of bank capital, and of the recent introduction of the requirement on Total Loss-Absorbing Capacity (TLAC) for Global Systemically Important Banks and the new Minimum Requirement for own funds and Eligible Liabilities (MREL) for all European banks, that have proved effective at curbing moral hazard and legacy risk.

In the second part of the paper, the authors also calculate the bank-specific risk-based contributions to a common insurance fund based on different indicators, both at bank and country level, and compare them to the EDIS exposures developed in the first part of the paper. Under these assumptions, a fully-fledged EDIS would create cross-subsidization among member States (calculated as the exposure-to-contribution ratio) only for extremely high loss rates, even higher than those that emerged during the global financial crisis. Hence, a systematic unwarranted transfer of resources from the less vulnerable to the more vulnerable countries of the Banking Union seems quite unfounded.

5. Concluding remarks

The present note summarized the economic case for completing the European Banking Union with the EDIS. It highlighted its role against panic-driven bank runs that might trigger sovereign debt crises in a doom loop, and spread across the Banking Union via several channels of financial contagion. Furthermore, the note outlined some of the issues raised against the EDIS within policy circles, and the possible solutions that the Commission and several economists proposed.

The main takeaways that we can draw from the note are three. First, the EDIS can be successful only if it acts fast and its commitment to intervene is perceived as credible. Hence, the mere coordination of national insurance schemes, or the institution of a reinsurance system among them, might not be sufficient to calm depositors' expectations. Second, cross- subsidization across the Banking Union can be a form of desirable risk sharing against severe financial crises. However, this is different from a systematic unwarranted transfer of resources from the less vulnerable to the more vulnerable countries of the Banking Union, for which there seems to be no evidence. Third, there exist several mechanisms to correct bank incentives against the effects of legacy risk and moral hazard that EDIS might bring about, and many of them (like tighter capital regulation, and TLAC and MREL) are already into place. Put differently, risk sharing and incentives are not incompatible, but can complement and reinforce each other.

Finally, I conclude with some words of caution. As the EDIS only aims at “traditional” banking, it does not take into account that financial innovation and an increased regulatory burden might push investors and banks towards the shadow banking system. In principle, institutions operating in this market also issue short-term liabilities akin to bank deposits, thereby engaging in maturity transformation. In that sense, they are prone to panic runs in the same way as traditional banks, and might represent a further channel of financial fragility and contagion, as the global financial crisis famously showed. Hence, the introduction of the EDIS will most probably not resolve panic runs once and for all. More than ever, a continuous monitoring of the financial system, over and above standard banking supervision, will be necessary to guarantee its stability in the future.

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About the author

Ettore Panetti is a research economist at the Economics and Research Department of Banco de Portugal. He is also a research affiliate of SUERF, and a member of UECE-ISEG and REM. His research interests are banking and financial stability, with a special focus on bank liquidity and regulation, the role of expectations as triggers of financial crises, and the real effects of credit shocks. His research has been published, among others, in the *Review of Finance*, the *Journal of Money, Credit and Banking* and in the *Journal of Banking & Finance*. Ettore holds a BA "Summa cum Laude" in Economics from Bocconi University, a MSc in Economics with Distinction from University College London, and a PhD in Economics from IIES-Stockholm University. Before joining Banco de Portugal, he worked as a junior researcher at FEEM (Milan-Italy), as a summer intern at the European Central Bank and the Sveriges Riksbank, and as a postdoctoral fellow at the University of Sassari (IT).

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